

 무료 전자 책

배우기

Ruby on Rails

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#ruby-on-
rails

.....	1
1: Ruby on Rails	2
.....	2
.....	2
Examples.....	2
Ruby on Rails	2
RSpec Testing Tool Rails	4
.....	5
.....	6
Rails	6
JSON Rails API	7
.....	7
2: ActionController	10
.....	10
Examples.....	10
HTML JSON	10
().....	10
.....	11
().....	11
.....	11
.....	12
404.....	13
REST	13
.....	15
.....	15
.....	17
Rescue ActiveRecord :: RecordNotFound redirect_to	18
3: ActionMailer	19
.....	19
.....	19
Examples.....	19
.....	19

null	35
.....	35
hstore	36
.....	36
.....	36
NOT NULL	37
5: ActiveRecord	38
Examples.....	38
.....	38
.....	38
.....	38
.....	39
.....	39
.....	39
.....	39
.....	40
ActiveModel::Validator validates_with.....	40
ActiveModel::EachValidator validate.....	40
.....	40
.....	41
.....	41
.....	41
.....	42
: on	42
6: ActiveRecord	43
Examples.....	43
.....	43
.....	43
7: ActiveRecord	44
.....	44
Examples.....	44
.....	44
.....	44
.....	45

.....	46
.....	46
ActiveRecord Bang (!)	47
.find_by.....	47
.....	47
ActiveRecord	47
.....	48
.group .count.....	49
.distinct (.uniq).....	49
.....	49
.....	50
.....	50
8: ActiveSupport.....	51
.....	51
Examples.....	51
: String Access.....	51
String at.....	51
String # from.....	51
# ~.....	51
String # first.....	52
#	52
: /	52
# to_time.....	52
# to_date.....	52
# to_datetime.....	53
:	53
String # exclude?.....	53
:	53
# squish.....	53
# remove.....	53
String # truncate.....	53

# truncate_words	54
# strip_heredoc	54
: String Inflection	55
#	55
# singularize	55
# constantize	55
String # safe_constantize	55
String # camelize	56
#	56
#	56
# dasherize	56
# demodulize	56
# deconstantize	57
String # parameterize	57
# tableize	57
#	57
String # humanize	58
# upcase_first	58
# foreign_key	58
9: CanCan	59
.....	59
.....	59
Examples	59
CanCan	59
.....	60
.....	60
.....	61
10: Devise Api	63
.....	63
Examples	63
.....	

.....	63
11: GoogleMaps	65
Examples.....	65
google maps javascript	65
.....	65
Google	66
.....	67
.....	68
.....	69
/	69
json	70
.....	70
.....	70
.....	70
12: Heroku Rails	72
Examples.....	72
.....	72
Heroku	74
13: l18n -	76
.....	76
Examples.....	76
l18n	76
l18n.....	76
.....	77
.....	77
URL	78
.....	78
.....	79
HTTP	79
.....	79

()	89
17: Rails	92
Examples	92
	92
	92
18: Rails - /	93
Examples	93
	93
-	93
- `where` for #	94
19: RSpec Ruby on Rails	95
	95
Examples	95
RSpec	95
20: Ruby on Rails	96
	96
Examples	96
,	96
21: Ruby on Rails	97
Examples	97
Ruby on Rails	97
22:	99
Examples	99
	99
23:	100
	100
	100
	100
Examples	100
rails_admin gem	100
24:	104

Examples.....	104
.....	104
25:	106
Examples.....	106
.....	106
.....	106
Rails	106
.....	107
.....	107
26: Rails	108
.....	108
Examples.....	108
.....	108
.....	108
27:	109
.....	109
Examples.....	109
Active Record UTC	109
Rails	109
28: ActiveRecord	110
.....	110
Examples.....	110
.....	110
.....	110
.....	110
.....	110
29:	111
.....	111
Examples.....	111
.....	111
.....	111
STI	112

30:	.....	113
	.....	113
Examples	.....	113
	.....	113
31:	.....	115
Examples	.....	115
	.....	115
IDE	.....	115
Ruby on Rails +	.....	117
Ruby / Rails :	.....	117
1. : Exception .inspect	.....	117
2. Fallback : byebug pry IRB	.....	117
	.....	117
: Ruby :	.....	117
pry ruby-on-rails	.....	118
32:	.....	120
	.....	120
	.....	120
Examples	.....	120
()	.....	120
	.....	122
	.....	123
	.....	126
	.....	127
	.....	127
URL	.....	128
	.....	128
RESTful	.....	128
	.....	129
	.....	129
	.....	129
	.....	130

.....	130
33:	132
Examples.....	132
Rails.logger.....	132
34: Amazon RDS	133
.....	133
Examples.....	133
MYSQL RDS	133
35:	134
Examples.....	134
Rails 4.2 Rails 5.0	134
36:	136
Examples.....	136
101	136
1 : Rails	136
2 :	136
3 : AngularJS	136
4 :	137
5 :	137
37:	139
.....	139
.....	139
Examples.....	139
Stripe	139
.....	139
.....	139
.....	139
.....	140
38: -	141
.....	141

.....	141
.....	141
.....	141
Examples.....	141
.....	141
39: 5.....	142
Examples.....	142
Ruby on Rails 5 API	142
RVM Ruby on Rails 5	143
40: -	145
.....	145
.....	145
Examples.....	145
.....	145
Todo	146
41:	148
.....	148
.....	148
.....	148
.....	148
Examples.....	148
.....	148
.....	149
.....	149
.....	150
42:	152
.....	152
.....	152
Examples.....	152
Devise	152
.....	152
.....	152
.....	152

153	
has_secure_password.....	153
.....	153
has_secure_password	153
has_secure_token.....	153
43: : AASM.....	155
Examples.....	155
AASM	155
44:	157
Examples.....	157
.....	157
.....	157
.....	157
.....	158
.....	158
.....	159
45:	160
Examples.....	160
rails_react gem	160
react_rails	160
.....	161
46:	162
.....	162
.....	162
Examples.....	162
.....	162
.....	162
Rails	162
.....	162
Gemfile.lock.....	162
.....	162
.....	162
.....	163

.....	163
47: PDF	166
Examples.....	166
.....	166
.....	167
.....	167
.....	167
.....	167
48:	168
.....	168
Examples.....	168
Rails ?.....	168
Rails 1.x Rails	168
Rails 2.x	168
Rails 3.x	168
49:	169
.....	169
Examples.....	169
.....	169
.....	169
50: Constantize	172
Examples.....	172
safe_constantize.....	172
_.....	172
51:	173
.....	173
Examples.....	173
[]	173
[] (CoffeeScript).....	173
app / assets / javascripts / channels / notifications.coffee	173
app / assets / javascripts / application.js #	173

app / assets / javascripts / cable.js #	174
.....	174
52:	175
Examples.....	175
.....	175
.....	175
.....	176
/	176
.....	176
.....	176
.....	177
.....	177
.....	178
.....	178
.....	179
53:	180
.....	180
Examples.....	180
.....	180
ActiveRecord	180
.....	180
.....	180
.....	181
.....	181
54:	182
.....	182
Examples.....	182
.....	182
55:	183
Examples.....	183
belongs_to.....	183

has_one	183
.....	183
.....	184
has_many : through	184
has_one : through	184
has_and_belongs_to_many	185
.....	185
56:	186
.....	186
Examples.....	186
ActiveModel :: Validations	186
57:	187
.....	187
Examples.....	187
.....	187
58:	188
.....	188
Examples.....	188
.....	188
.....	188
59:	189
.....	189
.....	189
Examples.....	189
.....	189
.....	189
.....	189
.....	189
.....	190
.....	190
.....	190
.....	190
.....	190

.....	190
.....	190
.....	190
.....	191
60:	192
Examples.....	192
1.	192
61:	193
.....	193
Examples.....	193
.....	193
62:	199
Examples.....	199
.....	199
.....	199
.....	199
.....	199
.....	200
63:	201
.....	201
Examples.....	201
Figaro	201
64:	202
.....	202
Examples.....	202
.....	202
.....	202
.....	203
65:	204
.....	204
Examples.....	204

SimpleDelegator	204
Draper	205
66:	206
Examples.....	206
.....	206
.....	206
.....	206
AssetTagHelper.....	206
.....	206
image_path.....	206
image_url.....	207
image_tag.....	207
.....	207
javascript_include_tag.....	207
javascript_path.....	207
javascript_url.....	207
.....	207
stylesheet_link_tag.....	207
stylesheet_path.....	207
stylesheet_url.....	208
.....	208
.....	208
HTML	209
HAML -	209
67:	211
.....	211
Examples.....	211
.....	211
.....	211
app / models / user.rb	211
h11	211

h12	211
68:	213
Examples.....	213
.....	213
SQL	213
.....	214
.....	214
HTTP	215
.....	215
69:	216
Examples.....	216
.....	216
.....	216
.....	216
.....	217
70:	218
.....	218
.....	218
:	218
Examples.....	218
.....	218
.....	218
:	218
.....	219
.....	219
:	219
.....	220
71: CSV	221
.....	221
Examples.....	221
CSV	221

72:	.....	223
Examples	.....	223
Carrierwave	.....	223
-	.....	223
73: React.js	.....	225
	.....	225
	.....	225
Examples	225
Rails ()	225
()	225
HTML	226
	226
	226
	226
74:	228
Examples	228
	228
	228
	228
	229

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1: Ruby on Rails



Ruby on Rails (RoR) Rails . Rails Ruby, HTML, CSS JavaScript . Rails MVC (Model-View-Controller) .

5.1.2	2017-06-26
5.0	2016-06-30
4.2	2014-12-19
4.1	2014-04-08
4.0	2013-06-25
3.2	2012-01-20
3.1	2011 8 31
3.0	2010-08-29
2.3	2009-03-16
2.0	2007-12-07
1.2	2007-01-19
1.1	2006-03-28
1.0	2005-12-13

Examples

Ruby on Rails

Ruby Ruby on Rails . . .

. rails new .

```
$ rails new my_app
```

Rails Rails . rails _version_ new :

```
$ rails _4.2.0_ new my_app
```

my_app MyApp Rails bundle install Gemfile gem bundle install .

change directory cd .

```
$ cd my_app
```

my_app Rails . . .

/	
/	, , , , .
/	, , .
config /	, .
config.ru	.
db /	.
Gemfile Gemfile.lock	Rails . Bundler gem .
lib /	.
/	.
/	. .
	. Rails .
README.md	. , .
/	, .
/	(pid).
/	3 . Rails .

database.yml .

5.0

```
rake db:create  
# OR  
rails db:create
```

5.0

```
rake db:create
```

5.0

```
rake db:migrate  
# OR  
rails db:migrate
```

5.0

```
rake db:migrate
```

```
$ rails server  
# OR  
$ rails s
```

3000 . .

```
$ rails s -p 3010
```

<http://localhost:3000> Rails .

- `config/database.yml` `config/database.yml`
- `Gemfile` .
- `. rails db:migrate rails db:migrate`
- `rails db:rollback`

```
config/database.yml config/database.yml
```

RSpec Testing Tool Rails

```
sqlite3 . -d .
```

```
$ rails new MyApp -T -d postgresql
```

- MySQL
-
- postgresql
- sqlite3
-
- ibm_db
- sqlserver
- jdbcmysql
- jdbcsqlite3
- jdbcpostgresql
- jdbc

-T minitest . **RSpec** Gemfile

```
group :development, :test do
  gem 'rspec-rails',
end
```

.

```
rails generate rspec:install
```

(:Posts) .

```
$ rails generate controller Posts
```

generate g . .

```
$ rails g controller Posts
```

app / controllers / **posts_controller.rb** .

```
class PostsController < ApplicationController
  # empty
end
```

.

```
$ rails g controller ControllerName method1 method2
```

parent_module/controller_name . :

```
$ rails generate controller CreditCards open debit credit close
# OR
$ rails g controller CreditCards open debit credit close
```

.

```
Controller: app/controllers/credit_cards_controller.rb
Test:      test/controllers/credit_cards_controller_test.rb
Views:    app/views/credit_cards/debit.html.erb [...etc]
Helper:   app/helpers/credit_cards_helper.rb
```

ApplicationController .

.

guides.rubyonrails.org :

... . Rails , , , .

Task .

```
rails generate scaffold Task name:string description:text
```

.

```
Controller: app/controllers/tasks_controller.rb
Test:      test/models/task_test.rb
           test/controllers/tasks_controller_test.rb
Routes:    resources :tasks added in routes.rb
Views:    app/views/tasks
           app/views/tasks/index.html.erb
           app/views/tasks/edit.html.erb
           app/views/tasks/show.html.erb
           app/views/tasks/new.html.erb
           app/views/tasks/_form.html.erb
Helper:   app/helpers/tasks_helper.rb
JS:      app/assets/javascripts/tasks.coffee
CSS:    app/assets/stylesheets/tasks.scss
        app/assets/stylesheets/scaffolds.scss
```

Task

```
rails destroy scaffold Task
```

Rails

Rails ORM (Object Relational Mapping) ActiveRecord .

ORM , SQL SQL .

Rails .

1..

```
$ rails app new MyApp --skip-active-record
```

2. Gemfile

```
gem 'mongoid', '~> 5.0'
```

3. `bundle install` .

```
mongoid MongoDB - - ActiveRecord ActiveModel .ActiveRecord ,, ..
```

.

-
-

JSON Rails API

Rails .

Rails 5 API

```
rails new name-of-app --api
```

Gemfile `active_model_serializers` .

```
gem 'active_model_serializers'
```

```
bundle install
```

```
ActiveModelSerializer :json_api
```

```
# config/initializers/active_model_serializer.rb
ActiveModelSerializers.config.adapter = :json_api
Mime::Type.register "application/json", :json, %w( text/x-json application/jsonrequest
application/vnd.api+json )
```

```
rails generate scaffold Task name:string description:text
```

.

`: app / controllers / tasks_controller.rb`

```
Test:          test/models/task_test.rb
               test/controllers/tasks_controller_test.rb
Routes:        resources :tasks added in routes.rb
Migration:     db/migrate/_create_tasks.rb
Model:         app/models/task.rb
Serializer:    app/serializers/task_serializer.rb
Controller:    app/controllers/tasks_controller.rb
```

, .

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

Ruby Rails

```
sudo apt-get install git-core curl zlib1g-dev build-essential libssl-dev libreadline-dev  
libyaml-dev libsqlite3-dev sqlite3 libxml2-dev libxslt1-dev libcurl4-openssl-dev python-  
software-properties libffi-dev
```

. rbenv .

```
git clone https://github.com/rbenv/rbenv.git ~/.rbenv  
echo 'export PATH="$HOME/.rbenv/bin:$PATH"' >> ~/.bashrc  
echo 'eval "$(rbenv init -)"' >> ~/.bashrc
```

```
git clone https://github.com/rbenv/ruby-build.git ~/.rbenv/plugins/ruby-build  
echo 'export PATH="$HOME/.rbenv/plugins/ruby-build/bin:$PATH"' >> ~/.bashrc
```

```
exec $SHELL
```

```
rbenv install 2.3.1  
rbenv global 2.3.1  
rbenv rehash
```

```
gem install rails
```

Windows

1 :

Ruby . RubyInstaller Ruby .

- rubyinstaller.org Ruby Installer .
- ."Ruby PATH" .
- Windows " " . . ruby -v Enter Ruby .

2 : **Ruby**

Ruby Rails . Windows . Rails Gem::InstallError: The '[gem name]' native gem
requires installed build tools. . Gem::InstallError: The '[gem name]' native gem requires
installed build tools. Ruby Development Kit .

- [DevKit](#)
- .
- DevKit . C:\RubyDevKit . .

DevKit Ruby .

- DevKit . cd C:\RubyDevKit .
- DevKit Ruby . ruby dk.rb init . Ruby DevKit . ruby dk.rb install .

Ruby DevKit .

3 :

Rails . Rails . .

```
gem install rails
```

Enter `gem Rails` `gem Rails` .

4 : **Node.js**

Rails . Node.js .

- Node.js .
- `node-v4.4.7.pkg` .
- .
- . "" .
- Rails Node.js .

Windows " " Ruby "Ruby " .

Ruby on Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/225/ruby-on-rails->

2: ActionController

MVC C.

.

Examples

HTML JSON

```
class UsersController < ApplicationController
  def index
    hashmap_or_array = [{ name: "foo", email: "foo@example.org" }]

    respond_to do |format|
      format.html { render html: "Hello World" }
      format.json { render json: hashmap_or_array }
    end
  end
end
```

```
resources :users, only: [:index]
```

/users /users .

- /users /users.html Hello World **html** .
- /users.json **JSON** .

```
[
  {
    "name": "foo",
    "email": "foo@example.org"
  }
]
```

JSON format.html { render inline: "Hello World" } .

()

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html { render html: "Hello World" }
    end
  end
end
```

route (routes.rb) .

```
resources :users, only: [:index]
```

URL /users Hello World .

HTTP (URL ?name=foo Ruby on Rails !). GET POST .

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html do
        if params[:name] == "john"
          render html: "Hello John"
        else
          render html: "Hello someone"
        end
      end
    end
  end
end
```

:

```
resources :users, only: [:index]
```

URL /users?name=john Hello John , **access** /users?name=whatever Hello someone

()

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html do
        render html: "Hello #{ user_params[:name] } user_params[:sentence]"
      end
    end
  end

  private

  def user_params
    if params[:name] == "john"
      params.permit(:name, :sentence)
    else
      params.permit(:name)
    end
  end
end
```

() .

/users?name=john&sentence=developer Hello john developer /users?name=john&sentence=developer
/users?name=smith&sentence=spy /users?name=smith&sentence=spy Hello smith . :sentence john .

:


```
resources :users, only: [:index]
```

URL .

```
class UsersController
  def index
    redirect_to "http://stackoverflow.com/"
  end
end
```

.

```
redirect_to :back
```

Rails 5 .

```
redirect_back fallback_location: "http://stackoverflow.com/"
```

(HTTP_REFERER) :fallback_location

:

```
resources :users, only: [:index]
```

:

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html { render }
    end
  end
end
```

app/users/index.html.erb . :

```
Hello <strong>World</strong>
```

"Hello World " .

.

```
render "pages/home"
```

app/views/pages/home.html.erb .

.

```
class UsersController < ApplicationController
```

```
def index
  @name = "john"

  respond_to do |format|
    format.html { render }
  end
end
end
```

app/views/users/index.html.erb @name :

```
Hello <strong><%= @name %></strong>
```

"Hello john ".

render . Rails .:

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html { render }
    end
  end
end
```

.

```
class UsersController < ApplicationController
  def index
    respond_to do |format|
      format.html
    end
  end
end
```

Rails app/views/users/index.html.erb .

404

:

```
class ApplicationController < ActionController::Base

  # ... your other stuff here

  rescue_from ActiveRecord::RecordNotFound do |exception|
    redirect_to root_path, 404, alert: 'Record not found'
  end
end
```

REST

```

class PostsController < ApplicationController
  before_action :set_post, only: [:show, :edit, :update, :destroy]

  def index
    @posts = Post.all
  end

  def show

  end

  def new
    @post = Post.new
  end

  def edit

  end

  def create
    @post = Post.new(post_params)

    respond_to do |format|
      if @post.save
        format.html { redirect_to @post, notice: 'Post was successfully created.' }
        format.json { render :show, status: :created, location: @post }
      else
        format.html { render :new }
        format.json { render json: @post.errors, status: :unprocessable_entity }
      end
    end
  end

  def update
    respond_to do |format|
      if @post.update(post_params)
        format.html { redirect_to @post.company, notice: 'Post was successfully updated.' }
        format.json { render :show, status: :ok, location: @post }
      else
        format.html { render :edit }
        format.json { render json: @post.errors, status: :unprocessable_entity }
      end
    end
  end

  def destroy
    @post.destroy
    respond_to do |format|
      format.html { redirect_to posts_url, notice: 'Post was successfully destroyed.' }
      format.json { head :no_content }
    end
  end

  private

  def set_post
    @post = Post.find(params[:id])
  end

  def post_params
    params.require(:post).permit(:title, :body, :author)
  end
end

```

```
end
```

"," Rails .

app/controllers/application_controller.rb .

```
class ApplicationController < ActionController::Base
  protect_from_forgery with: :exception
end
```

rescue_from .

```
class ApplicationController < ActionController::Base
  protect_from_forgery with: :exception
  rescue_from ActiveRecord::RecordNotFound, with: :record_not_found

  private

  def record_not_found
    render html: "Record <strong>not found</strong>", status: 404
  end
end
```

Exception StandardError . Rails .

"" , "" "" . ApplicationController .

(/). .

```
class ApplicationController < ActionController::Base
  before_action :authenticate_user!

  def authenticate_user!
    redirect_to some_path unless user_signed_in?
  end
end
```

. .

before . . .

"before"

, .

. . . .

.

. . , . . yield . . yield before yield after . yield . . false .

.

```

around_filter :catch_exceptions

private
def catch_exceptions
  begin
    yield
  rescue Exception => e
    logger.debug "Caught exception! #{e.message}"
  end
end
end

```

• , •

:only :except .

```

class ProductsController < ApplicationController
  before_action :set_product, only: [:show, :edit, :update]

  # ... controller actions

  # Define your filters as controller private methods
  private

  def set_product
    @product = Product.find(params[:id])
  end
end
end

```

() .

```

class ApplicationController < ActionController::Base
  before_action :authenticate_user!

  def authenticate_user!
    redirect_to some_path unless user_signed_in?
  end
end

class HomeController < ApplicationController
  skip_before_action :authenticate_user!, only: [:index]

  def index
  end
end
end

```

```

namespace "" . admin . .

```

```

# config/routes.rb
namespace :admin do
  resources :products
end

# app/controllers/admin_controller.rb
class AdminController < ApplicationController
  before_action :authenticate_admin_user!

  private

```

```

def authenticate_admin_user!
  redirect_to root_path unless current_user.admin?
end
end

# app/controllers/admin/products_controller.rb
class Admin::ProductsController < AdminController
  # This controller will inherit :authenticate_admin_user! filter
end

```

Rails 4.x `before_filter` `before_action` `before_filter` **Rails 5.0.0** **5.1** .

Rails .

.

```
rails generate controller NAME [action action] [options]
```

```
: rails g rails generate
```

```
#index #show Product
```

```
rails generate controller products index show
```

app/controllers/products_controller.rb .

```

class ProductsController < ApplicationController
  def index
  end

  def show
  end
end

```

```
(:index.html.erb show.html.erb) app/views/ products . 'slim index.html.slim
show.html.slim)
```

routes

```

# config/routes.rb
get 'products/show'
get 'products/index'

```

Rails app/helpers/products_helper.rb **helper** app/assets/javascripts/products.js
app/assets/stylesheets/products.css . Gemfile Gemfile ., Coffeescript Sass
products.coffee products.sass products.sass .

Rails, .

Rails .

```
--no- --skip, :
```

```
rails generate controller products index show --no-assets --no-helper
```

```
assets helper .
```

```
namespace NAME .
```

```
rails generate controller admin/products
```

```
app/controllers/admin/products_controller.rb
```

Rails RESTful .

```
rails generate scaffold_controller MODEL_NAME # available from Rails 4  
rails generate scaffold_controller Product
```

Rescue ActiveRecord :: RecordNotFound redirect_to

RecordNotFound .

```
class ApplicationController < ActionController::Base  
  
  # your other stuff  
  
  rescue_from ActiveRecord::RecordNotFound do |exception|  
    redirect_to root_path, 404, alert: I18n.t("errors.record_not_found")  
  end  
end
```

ActionController : <https://riptutorial.com/ko/ruby-on-rails/topic/2838/actioncontroller>

3: ActionMailer

`class ActionMailer << Base` `app / mailer` `app / views` `end`

`def delayed_job` `end`

Examples

.

-
-
- `html`
-

`approved` `approved` `post` (`approved`, `post`). `post` (`:`) `html` (`'`).

user_mailer.rb

```
class UserMailer < ActionMailer::Base
  default from: "donotreply@example.com"

  def approved(post)
    @title = post.title
    @user = post.user
    mail(to: @user.email, subject: "Your Post was Approved!")
  end
end
```

user.rb

```
def approved(post)
  UserMailer.new.approved(post)
end
```

approved.html.erb

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <title>Post Approved</title>
  </head>
  <body>
    <h2>Congrats <%= @user.name %>! Your post (<%= @title %>) has been approved!</h2>
```



```
<p>We look forward to your future posts!</p>
</body>
</html>
```

approved.text.erb

```
Congrats <%= @user.name %>! Your post (#<%= @title %>) has been approved!
We look forward to your future posts!
```

```
rails generate mailer PostMailer
```

```
app/mailers/post_mailer.rb app app/mailers/post_mailer.rb .
```

```
class PostMailer < ApplicationMailer
end
```

```
. HTML .
```

```
. ActionMailer::Base ActionMailer::Base .
```

```
ActionMailer .
```

```
attachments['filename.jpg'] = File.read('/path/to/filename.jpg')
```

```
Base64 . .
```

```
attachments['filename.jpg'] = {
  mime_type: 'application/gzip',
  encoding: 'SpecialEncoding',
  content: encoded_content
}
```

```
attachments.inline['image.jpg'] = File.read('/path/to/image.jpg')
```

ActionMailer

```
ActionMailer .
```

- before_action
- after_action
- around_action

```
Mailer .
```

```
class UserMailer < ApplicationMailer
```

```
after_action :set_delivery_options, :prevent_delivery_to_guests, :set_business_headers
```

```
private .
```

```
private
  def set_delivery_options
  end

  def prevent_delivery_to_guests
  end

  def set_business_headers
  end
end
```

```
:
```

```
rails g model Newsletter name:string email:string

subl app/models/newsletter.rb

validates :name, presence: true
validates :email, presence: true
```

```
:
```

```
rails g controller Newsletters create

class NewslettersController < ApplicationController
  skip_before_action :authenticate_user!
  before_action :set_newsletter, only: [:destroy]

  def create
    @newsletter = Newsletter.create(newsletter_params)
    if @newsletter.save
      redirect_to blog_index_path
    else
      redirect_to root_path
    end
  end

  private

  def set_newsletter
    @newsletter = Newsletter.find(params[:id])
  end

  def newsletter_params
    params.require(:newsletter).permit(:name, :email)
  end
end
```

```
create.html.erb nex . . _form.html.erb .
```

```
app / views / newsletters / create.html.erb // / _form.html.erb
```

```
subl app/config/routes.rb  
resources :newsletters
```

```
subl app/views/newsletters/_form.html.erb  
  
<%= form_for (Newsletter.new) do |f| %>  
  <div class="col-md-12" style="margin: 0 auto; padding: 0;">  
    <div class="col-md-6" style="padding: 0;">  
      <%= f.text_field :name, class: 'form-control', placeholder:'Nombre' %>  
    </div>  
    <div class="col-md-6" style="padding: 0;">  
      <%= f.text_field :email, class: 'form-control', placeholder:'Email' %>  
    </div>  
  </div>  
  <div class="col-md-12" style="margin: 0 auto; padding:0;">  
    <%= f.submit class:"col-md-12 tran3s s-color-bg hvr-shutter-out-horizontal",  
style:'border: none; color: white; cursor: pointer; margin: 0.5em auto; padding: 0.75em;  
width: 100%;' %>  
  </div>  
<% end %>
```

```
subl app/views/layouts/_footer.html.erb  
  
<%= render 'newsletters/form' %>
```

- letter_opener -

gem bundle .

```
subl your_project/Gemfile  
  
gem "letter_opener", :group => :development
```

```
subl your_project/app/config/environments/development.rb  
  
config.action_mailer.delivery_method = :letter_opener
```

```
rails generate mailer UserMailer newsletter_mailer
```

UserMailer Newsletter Mailer Rake . .

```
subl your_project/app/mailers/user_mailer.rb

class UserMailer <'your_gmail_account@gmail.com'

  def newsletter_mailer
    @newsletter = Newsletter.all
    @post = Post.last(3)
    emails = @newsletter.collect(&:email).join(", ")
    mail(to: emails, subject: "Hi, this is a test mail.")
  end

end
```

```
subl your_project/app/views/user_mailer/newsletter_mailer.html.erb

<p> Dear Followers: </p>
<p> Those are the latest entries to our blog. We invite you to read and share everything we
did on this week. </p>

<br/>
<table>
<% @post.each do |post| %>
  <%= link_to blog_url(post) do %>
    <tr style="display:flex; float:left; clear:both;">
      <td style="display:flex; float:left; clear:both; height: 80px; width: 100px;">
        <% if post.cover_image.present? %>
          <%= image_tag post.cover_image.fullsize.url, class:"principal-home-image-slider"
%>
        <%# else %>
          <%= image_tag 'http://your_site_project.com' + post.cover_video,
class:"principal-home-image-slider" %>
          <%= raw(video_embed(post.cover_video)) %>
        <% end %>
      </td>
      <td>
        <h3>
          <%= link_to post.title, :controller => "blog", :action => "show", :only_path =>
false, :id => post.id %>
        </h3>
        <p><%= post.subtitle %></p>
      </td>
      <td style="display:flex; float:left; clear:both;">

    </td>
  </tr>
<%# end %>
<% end %>
</table>
```

. email_tasks.rake Rails lib / tasks .

```
touch lib/taks/email_tasks.rake
```

```
desc 'weekly newsletter email'
task weekly_newsletter_email: :environment do
  UserMailer.newsletter_mailer.deliver!
end
```

send_digest_email :: Rails UserMailer .

rake -T Rake . .

rake .

```
rake weekly_newsletter_email
```

crontab . cron **Whenever Gem** .

```
subl your_project/Gemfile

gem 'whenever', require: false
```

config / schedule.rb (config).

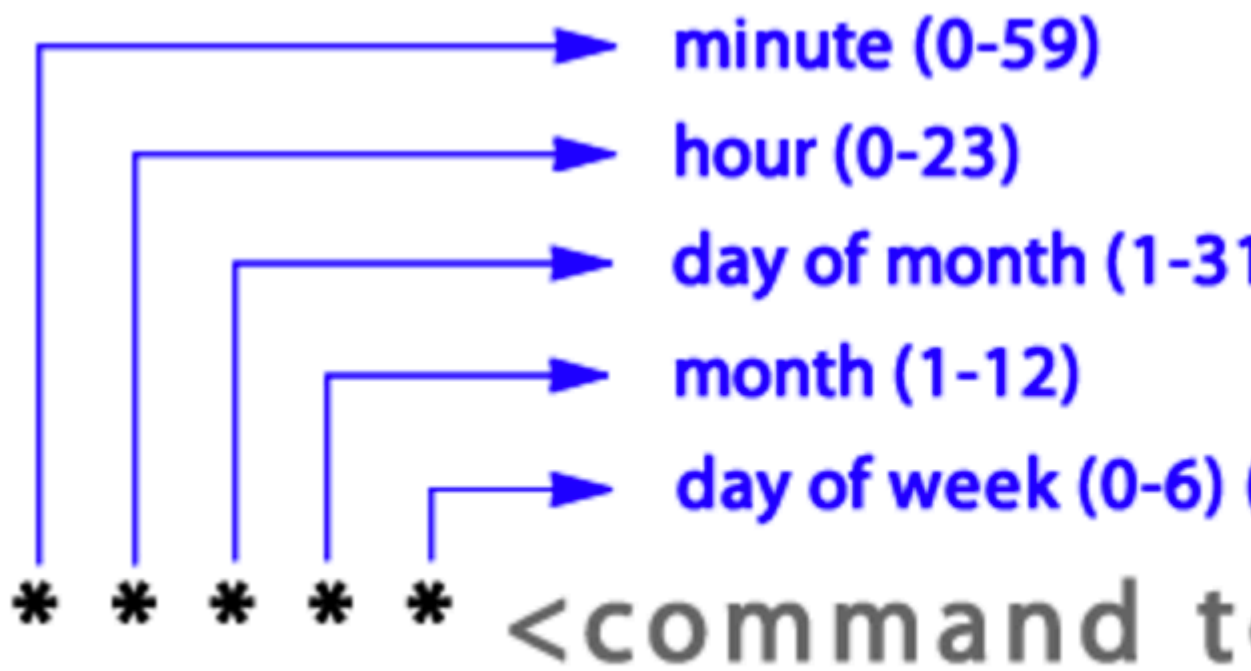
```
wheneverize .

[add] writing `./config/schedule.rb'
[done] wheneverized!
```

CRON JOB CRON JOB mailer . .

```
subl your_project/config/schedule.rb

every 1.day, :at => '4:30 am' do
  rake 'weekly_newsletter_email'
end
```



```
every 3.hours do # 1.minute 1.day 1.week 1.m
  runner "MyModel.some_process"
  rake "my:rake:task"
  command "/usr/bin/my_great_command"
end

every 1.day, :at => '4:30 am' do
  runner "MyModel.task_to_run_at_four_thirty"
end

every :hour do # Many shortcuts available: :
  runner "SomeModel.ladeeda"
end

every :sunday, :at => '12pm' do # Use any da
  runner "Task.do_something_great"
end

every '0 0 27-31 * *' do
  command "echo 'you can use raw cron syntax'"
end

# run this task only on servers with the :ap
# see Capistrano roles section below
every :day, :at => '12:20am', :roles => [:ap
  rake "app_server:task"
end
```

```
30 4 * * * /bin/bash -l -c 'cd /Users/your_mac_user/Desktop/your_project &&
RAILS_ENV=production bundle exec rake weekly_newsletter_email --silent'
```

application.rb

```
subl your_project/config/application.rb

config.action_mailer.default_url_options = { :host => "http://localhost:3000/" }
```

Capistrano V3 Cron

```
subl your_project/Capfile

require 'whenever/capistrano'
```

CRON JOB ID

```
subl your_project/config/deploy.rb

set :whenever_identifier, ->{ "#{fetch(:application)}_#{fetch(:rails_env)}" }
```

capistrano deploy

```
cap production deploy
```

ActionMailer

deliver_email (message) . Mail :: Message .

actionmailer :

```
# config/initializers/override_mail_recipient.rb

if Rails.env.development? or Rails.env.test?
  class OverrideMailRecipient
    def self.delivering_email(mail)
      mail.subject = 'This is dummy subject'
      mail.bcc = 'test_bcc@noemail.com'
      mail.to = 'test@noemail.com'
    end
  end
  ActionMailer::Base.register_interceptor(OverrideMailRecipient)
end
```


ActionMailer : <https://riptutorial.com/ko/ruby-on-rails/topic/2481/actionmailer>

4: ActiveRecord

<code>:primary_key</code>	
<code>:string</code>	<code>. limit .</code>
<code>:text</code>	<code>. limit .</code>
<code>:integer</code>	<code>. limit .</code>
<code>:bigint</code>	
<code>:float</code>	
<code>:decimal</code>	<code>. precision scale .</code>
<code>:numeric</code>	<code>precision scale .</code>
<code>:datetime</code>	<code>/ DateTime .</code>
<code>:time</code>	<code>.</code>
<code>:date</code>	<code>Date .</code>
<code>:binary</code>	<code>. limit .</code>
<code>:boolean</code>	

- `db/migrate/ . UTC (YYYYMMDDHHMMSS_create_products.rb .`
- `rails generate rails g .`
- `a :type .`

Examples

```
db:migrate:up db:migrate:down .
```

```
:
```

5.0

```
rake db:migrate:up VERSION=20090408054555
```

5.0

```
rails db:migrate:up VERSION=20090408054555
```

:

5.0

```
rake db:migrate:down VERSION=20090408054555
```

5.0

```
rails db:migrate:down VERSION=20090408054555
```

```
. 20160515085959_add_name_to_users.rb 20160515085959 .
```

```
students courses .
```

```
$ rails g migration CreateJoinTableStudentCourse student course
```

.

```
class CreateJoinTableStudentCourse < ActiveRecord::Migration[5.0]
  def change
    create_join_table :students, :courses do |t|
      # t.index [:student_id, :course_id]
      # t.index [:course_id, :student_id]
    end
  end
end
```

```
test .
```

```
rake db:migrate RAILS_ENV=test
```

5.0

Rails 5.0 rake rails .

```
rails db:migrate RAILS_ENV=test
```

```
users name .
```

```
rails generate migration AddNameToUsers name
```

.

```
class AddNameToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :name, :string
  end
end
```

```
AddXXXXToTABLE_NAME add_column .
```

```
email users .
```

```
rails generate migration AddEmailToUsers email:string:index
```

```
class AddEmailToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :email, :string
    add_index :users, :email
  end
end
```

```
users name .
```

```
rails generate migration RemoveNameFromUsers name:string
```

```
class RemoveNameFromUsers < ActiveRecord::Migration[5.0]
  def change
    remove_column :users, :name, :string
  end
end
```

```
RemoveXXXFromYYY remove_column .
```

```
(:string) remove_column . , .
```

```
team users .
```

```
$ rails generate migration AddTeamRefToUsers team:references
```

```
class AddTeamRefToUsers < ActiveRecord::Migration[5.0]
  def change
    add_reference :users, :team, foreign_key: true
  end
end
```

```
users team_id .
```

```
index foreign_key rails generate migration AddTeamRefToUsers team:references:index . .
```

```
class AddTeamRefToUsers < ActiveRecord::Migration
  def change
    add_reference :users, :team, index: true
    add_foreign_key :users, :teams
  end
end
```

```
, (: User Post Author Post)
```

```
class AddAuthorRefToPosts < ActiveRecord::Migration
  def change
    add_reference :posts, :author, references: :users, index: true
  end
end
```

```
name salary users .
```

```
rails generate migration CreateUsers name:string salary:decimal
```

.

```
class CreateUsers < ActiveRecord::Migration[5.0]
  def change
    create_table :users do |t|
      t.string :name
      t.decimal :salary
    end
  end
end
```

```
CreateXXX , XXX .
```

```
rails generate migration field:type .
```

.

```
rails generate migration NAME [field[:type][:index] field[:type][:index]] [options]
```

```
, name, salary email users .
```

```
rails generate migration AddDetailsToUsers name:string salary:decimal email:string
```

.

```
class AddDetailsToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :name, :string
    add_column :users, :salary, :decimal
    add_column :users, :email, :string
  end
end
```

```
:
```

5.0

```
rake db:migrate
```

5.0

```
rails db:migrate
```

(,,). version number .

5.0

```
rake db:migrate VERSION=20080906120000
```

5.0

```
rails db:migrate VERSION=20080906120000
```

change down rollback . :

5.0

```
rake db:rollback
```

5.0

```
rails db:rollback
```

3

5.0

```
rake db:rollback STEP=3
```

5.0

```
rails db:rollback STEP=3
```

STEP .

5.0

```
rake db:rollback VERSION=0
```

5.0

```
rails db:rollback VERSION=0
```

, change_table . .

```
change_table :orders do |t|
  t.remove :ordered_at # removes column ordered_at
  t.string :skew_number # adds a new column
  t.index :skew_number #creates an index
  t.rename :location, :state #renames location column to state
end
```

```
orders .
```

1. `t.remove :ordered_at orders ordered_at .`
2. `t.string :skew_number orders skew_number .`
3. `t.index :skew_number orders skew_number .`
4. `t.rename :location, :state location orders state .`

```
users email .
```

```
rails generate migration AddEmailToUsers email:string:uniq
```

```
class AddEmailToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :email, :string
    add_index :users, :email, unique: true
  end
end
```

```
rails g migration change_column_in_table
```

```
db/migration ( ).
```

```
def change
  change_column(:table_name, :column_name, :new_type)
end
```

```
.change up down .
```

```
def up
  change_column :my_table, :my_column, :new_type
end

def down
  change_column :my_table, :my_column, :old_type
end
```

```
redo . rollback migrate .
```

```
:
```

5.0

```
rake db:migrate:redo
```

5.0

```
rails db:migrate:redo
```

STEP .

3 .

5.0

```
rake db:migrate:redo STEP=3
```

5.0

```
rails db:migrate:redo STEP=3
```

```
users admin false .
```

```
class AddDetailsToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :admin, :boolean, default: false
  end
end
```

PostgreSQL

1. `add_column -migration` .
2. `./` .
3. `change_column`

null

```
null :null :null .
```

```
class AddPriceToProducts < ActiveRecord::Migration
  def change
    add_column :products, :float, null: false
  end
end
```

.

3.0 5.0

```
rake db:migrate:status
```

5.0

```
rails db:migrate:status
```

.

Status	Migration ID	Migration Name
up	20140711185212	Create documentation pages
up	20140724111844	Create nifty attachments table
up	20140724114255	Create documentation screenshots
up	20160213170731	Create owners
up	20160218214551	Create users
up	20160221162159	***** NO FILE *****
up	20160222231219	***** NO FILE *****

status up down .

hstore

Hstore . PostgreSQL .

```
class CreatePages < ActiveRecord::Migration[5.0]
  def change
    create_table :pages do |t|
      enable_extension 'hstore' unless extension_enabled?('hstore')
      t.hstore :settings
      t.timestamps
    end
  end
end
```

. add_reference .

```
class AddParentPages < ActiveRecord::Migration[5.0]
  def change
    add_reference :pages, :pages
  end
end
```

pages_id .

```
class AddParentPages < ActiveRecord::Migration[5.0]
  def change
    add_column :pages, :parent_id, :integer, null: true, index: true
    add_foreign_key :pages, :pages, column: :parent_id
  end
end
```

array PostgreSQL . Rails PostgreSQL Ruby , .

array .

```
create_table :products do |t|
  t.string :name
  t.text :colors, array: true, default: []
end
```

array .

```
add_column :products, :colors, array: true, default: []
```

```
array .
```

```
add_index :products, :colors, using: 'gin'
```

NOT NULL

```
users company_id NOT NULL company_id.users .
```

```
class AddCompanyIdToUsers < ActiveRecord::Migration
  def up
    # add the column with NULL allowed
    add_column :users, :company_id, :integer

    # make sure every row has a value
    User.find_each do |user|
      # find the appropriate company record for the user
      # according to your business logic
      company = Company.first
      user.update!(company_id: company.id)
    end

    # add NOT NULL constraint
    change_column_null :users, :company_id, false
  end

  # Migrations that manipulate data must use up/down instead of change
  def down
    remove_column :users, :company_id
  end
end
```

ActiveRecord : <https://riptutorial.com/ko/ruby-on-rails/topic/1087/activerecord->

5: ActiveRecord

Examples

```
class Player < ApplicationRecord
  validates :points, numericality: true
  validates :games_played, numericality: { only_integer: true }
end
```

```
:only_integer,

  • :greater_than - . " % {count} ".
  • :greater_than_or_equal_to - . "% {count} ".
  • :equal_to - . " % {count} () ".
  • :less_than - . "% {count} ".
  • :less_than_or_equal_to - . "% {count} ".
  • :other_than - :other_than . "% {count} ".
  • :odd - . " ".
  • :even - true . " ".

  nil . allow_nil : true .
```

```
class Account < ApplicationRecord
  validates :email, uniqueness: true
end
```

```
:scope .
```

```
class Holiday < ApplicationRecord
  validates :name, uniqueness: { scope: :year,
    message: "should happen once per year" }
end
```

```
:case_sensitive . true .
```

```
class Person < ApplicationRecord
  validates :name, uniqueness: { case_sensitive: false }
end
```

```
class Person < ApplicationRecord
  validates :name, presence: true
end
```

```
Person.create(name: "John").valid? # => true
Person.create(name: nil).valid? # => false
```

```
absence . present? nil .
```

```
class Person < ApplicationRecord
  validates :name, :login, :email, absence: true
end
```

```
: boolean, ( false ).
```

```
validates :attribute, inclusion: [true, false]
```

.

- !
-
- !
- increment_counter
- !
-
-
- update_attribute
- update_column
- update_columns
- update_counters

```
validate save
```

```
User.save(validate: false)
```

```
class Person < ApplicationRecord
  validates :name, length: { minimum: 2 }
  validates :bio, length: { maximum: 500 }
  validates :password, length: { in: 6..20 }
  validates :registration_number, length: { is: 6 }
end
```

.

- :minimum - .
- :maximum - .
- :in (:within) - . .
- :is - .

```
. with_options .
```

```
class User < ApplicationRecord
```

```

with_options if: :is_admin? do |admin|
  admin.validates :password, length: { minimum: 10 }
  admin.validates :email, presence: true
end
end

```

with_options **..:is_admin?**

ActiveModel::Validator ActiveModel::EachValidator . .

ActiveModel::Validator validates_with

validate validate . validates_with.

```

# app/validators/starts_with_a_validator.rb
class StartsWithAValidator < ActiveModel::Validator
  def validate(record)
    unless record.name.starts_with? 'A'
      record.errors[:name] << 'Need a name starting with A please!'
    end
  end
end

class Person < ApplicationRecord
  validates_with StartsWithAValidator
end

```

ActiveModel::EachValidator validate

validate validate ActiveModel::EachValidator record, attribute value validate_each .

```

class EmailValidator < ActiveModel::EachValidator
  def validate_each(record, attribute, value)
    unless value =~ /\A([\^@\s]+)@((?[-a-z0-9]+\.)+[a-z]{2,})\z/i
      record.errors[attribute] << (options[:message] || 'is not an email')
    end
  end
end

class Person < ApplicationRecord
  validates :email, presence: true, email: true
end

```

Rails .

▪

format with .

```

class User < ApplicationRecord
  validates :name, format: { with: /\A\w{6,10}\z/ }
end

```

with: . .

```
PHONE_REGEX = /\A(\d{3})\d{3}-\d{4}\z/
validates :phone, format: { with: PHONE_REGEX }
```

is invalid. :message .

```
validates :bio, format: { with: /\A\D+\z/, message: "Numbers are not allowed" }
```

, without:

▪

inclusion: **helper** .:in :within .

```
class Country < ApplicationRecord
  validates :continent, inclusion: { in: %w(Africa Antartica Asia Australia
                                           Europe North America South America) }
end
```

exclusion: exclusion:

```
class User < ApplicationRecord
  validates :name, exclusion: { in: %w(admin administrator owner) }
end
```

▪

```
class User < ApplicationRecord
  validates :name, presence: true, if: :admin?

  def admin?
    conditional here that returns boolean value
  end
end
```

Proc .

```
class User < ApplicationRecord
  validates :first_name, presence: true, if: Proc.new { |user| user.last_name.blank? }
end
```

unless unless .

```
class User < ApplicationRecord
  validates :first_name, presence: true, unless: Proc.new { |user| user.last_name.present? }
end
```

instance_eval .

```
class User < ApplicationRecord
  validates :first_name, presence: true, if: 'last_name.blank?'
end
```

```
.      .  _confirmation _confirmation  .
```

```
class Person < ApplicationRecord
  validates :email, confirmation: true
end
```

```
email_confirmation nil .
```

```
.
```

```
class Person < ApplicationRecord
  validates :email, confirmation: true
  validates :email_confirmation, presence: true
end
```

: on

```
:on . ( ).
```

```
class Person < ApplicationRecord
  # it will be possible to update email with a duplicated value
  validates :email, uniqueness: true, on: :create

  # it will be possible to create the record with a non-numerical age
  validates :age, numericality: true, on: :update

  # the default (validates on both create and update)
  validates :name, presence: true
end
```

ActiveRecord : <https://riptutorial.com/ko/ruby-on-rails/topic/2105/activerecord-->

6: ActiveRecord

Examples

```
user_one = User.find(1)
user_two = User.find(1)

user_one.name = "John"
user_one.save
# Run at the same instance
user_two.name = "Doe"
user_two.save # Raises a ActiveRecord::StaleObjectError
```

```
appointment = Appointment.find(5)
appointment.lock!
#no other users can read this appointment,
#they have to wait until the lock is released
appointment.save!
#lock is released, other users can read this account
```

ActiveRecord : <https://riptutorial.com/ko/ruby-on-rails/topic/3866/activerecord->

7: ActiveRecord

ActiveRecord MVC Model Object Relational Mapper (ORM).

ActiveRecord . ActiveRecord .

Examples

```
where ActiveRecord .
```

```
where .
```

```
class Person < ActiveRecord::Base
  #attribute :first_name, :string
  #attribute :last_name, :string
end
```

Sven

```
people = Person.where(first_name: 'Sven')
people.to_sql # "SELECT * FROM people WHERE first_name='Sven'"
```

Sven Schrodinger :

```
people = Person.where(first_name: 'Sven', last_name: 'Schrodinger')
people.to_sql # "SELECT * FROM people WHERE first_name='Sven' AND last_name='Schrodinger'"
```

```
sql first_name last_name .
```

OR

```
first_name == 'Bruce' last_name == 'Wayne' ,
```

```
User.where('first_name = ? or last_name = ?', 'Bruce', 'Wayne')
# SELECT "users".* FROM "users" WHERE (first_name = 'Bruce' or last_name = 'Wayne')
```

ActiveRecord where WHERE column_name IN (a, b, c, ...) SQL . .

```
class Person < ActiveRecord::Base
  #attribute :first_name, :string
  #attribute :last_name, :string
end
```

```
people = Person.where(first_name: ['Mark', 'Mary'])
people.to_sql # "SELECT * FROM people WHERE first_name IN ('Mark', 'Mary')"
```

nil **SQL** null .

```
people = Person.where(first_name: ['Mark', 'Mary', nil])
people.to_sql # "SELECT * FROM people WHERE first_name IN ('Mark', 'Mary') OR first_name IS NULL"
```

ActiveRecord .

scope .

```
class Person < ActiveRecord::Base
  #attribute :first_name, :string
  #attribute :last_name, :string
  #attribute :age, :integer

  # define a scope to get all people under 17
  scope :minors, -> { where(age: 0..17) }

  # define a scope to search a person by last name
  scope :with_last_name, ->(name) { where(last_name: name) }
end
```

```
minors = Person.minors
```

```
peters_children = Person.minors.with_last_name('Peters')
```

where .

```
mary_smith = Person.with_last_name('Smith').where(first_name: 'Mary')
```

```
scope :with_last_name, ->(name) { where(name: name) }

# This ^ is the same as this:

def self.with_last_name(name)
  where(name: name)
end
```

```
scope .scope nil ActiveRecord::Relation .
```

```
where where.not :
```

```
class Person < ApplicationRecord
  #attribute :first_name, :string
end

people = Person.where.not(first_name: ['Mark', 'Mary'])
# => SELECT "people".* FROM "people" WHERE "people"."first_name" NOT IN ('Mark', 'Mary')
```

ActiveRecord 4.0 .

```
.order ActiveRecord .
```

```
User.order(:created_at)
#=> => [#<User id: 2, created_at: "2015-08-12 21:36:23">, #<User id: 11, created_at: "2015-08-15 10:21:48">]
```

```
User.order(created_at: :asc)
#=> => [#<User id: 2, created_at: "2015-08-12 21:36:23">, #<User id: 11, created_at: "2015-08-15 10:21:48">]
```

```
User.order(created_at: :desc)
#=> [#<User id: 7585, created_at: "2016-07-13 17:15:27">, #<User id: 7583, created_at: "2016-07-13 16:51:18">]
```

```
.order
```

```
User.order("created_at DESC")
#=> [#<User id: 7585, created_at: "2016-07-13 17:15:27">, #<User id: 7583, created_at: "2016-07-13 16:51:18">]
```

SQL .role users .

```
Class User < ActiveRecord::Base
  belongs_to :role
end

Class Role < ActiveRecord::Base
  has_many :users
end

User.includes(:role).order("roles.name ASC")
```

```
order Arel :
```

```
User.includes(:role).order(User.arel_table[:name].asc)
```

ActiveRecord Bang (!)

false **ActiveRecord** ! . . / ! (). ActiveRecord .

```
Class User < ActiveRecord::Base
  validates :last_name, presence: true
end

User.create!(first_name: "John")
#=> ActiveRecord::RecordInvalid: Validation failed: Last name can't be blank
```

(!) ActiveRecord .

- .create!
- .take!
- .first!
- .last!
- .find_by!
- .find_or_create_by!
- #save!
- #update!
- AR

.find_by

find_by .

first_name User .

```
User.find_by(first_name: "John")
#=> #<User id: 2005, first_name: "John", last_name: "Smith">
```

find_by **throw** find_by . , find nil .

find_by! find ActiveRecord::RecordNotFound ActiveRecord::RecordNotFound .

.

ActiveRecord .delete_all . , , . .delete_all (before_* after_destroy).

```
User.delete_all
#=> 39 <-- .delete_all return the number of rows deleted

User.where(name: "John").delete_all
```

ActiveRecord

ActiveRecord LIKE ILIKE . .

ActiveRecord Arel matches .

```
addresses = Address.arel_table
Address.where(addresses[:address].matches("%street%"))
```

Arel LIKE ILIKE .

```
first last .
```

```
users first .
```

```
User.first
```

```
sql :
```

```
SELECT `users`.* FROM `users` ORDER BY `users`.`id` ASC LIMIT 1
```

```
:
```

```
#<User:0x007f8a6db09920 id: 1, first_name: foo, created_at: Thu, 16 Jun 2016 21:43:03 UTC +00:00, updated_at: Thu, 16 Jun 2016 21:43:03 UTC +00:00 >
```

```
users last .
```

```
User.last
```

```
sql :
```

```
SELECT `users`.* FROM `users` ORDER BY `users`.`id` DESC LIMIT 1
```

```
:
```

```
#<User:0x007f8a6db09920 id: 10, first_name: bar, created_at: Thu, 16 Jun 2016 21:43:03 UTC +00:00, updated_at: Thu, 16 Jun 2016 21:43:03 UTC +00:00 >
```

LIMIT .

```
User.first(5)
```

```
sql .
```

```
SELECT "users".* FROM "users" ORDER BY "users"."id" ASC LIMIT 5
```

```
User.last(5)
```

```
sql .
```

```
SELECT "users".* FROM "users" ORDER BY "users"."id" DESC LIMIT 5
```

.group .count

Product .category .

```
Product.select(:category).group(:category)
```

.

```
SELECT "product"."category" FROM "product" GROUP BY "product"."category"
```

.categories () .

```
Product.select(:category).group(:category).count
```

.

```
SELECT COUNT("products"."category") AS count_categories, "products"."category" AS products_category FROM "products" GROUP BY "products"."category"
```

.distinct (.uniq)

.distinct() .

```
Customers.select(:country).distinct
```

.

```
SELECT DISTINCT "customers"."country" FROM "customers"
```

.uniq() . Rails 5.0 5.1 Rails . unique unique . distinct SQL .

joins() . .

```
User.joins(:posts)
```

SQL .

```
"SELECT "users".* FROM "users" INNER JOIN "posts" ON "posts"."user_id" = "users"."id"
```

.

```
User.joins(:posts).where(posts: { title: "Hello world" })
```

. :has_many , joins() . .

joins :

```
User.joins(posts: :images).where(images: { caption: 'First post' })
```

:

```
"SELECT "users".* FROM "users" INNER JOIN "posts" ON "posts"."user_id" = "users"."id" INNER JOIN "images" ON "images"."post_id" = "images"."id"
```

ActiveRecord with includes . . .

```
@authors = Author.includes(:books).where(books: { bestseller: true } )

# this will print results without additional db hitting
@authors.each do |author|
  author.books.each do |book|
    puts book.title
  end
end
```

Author.joins(:books).where(books: { bestseller: true }) . joins .

```
@authors = Author.joins(:books).where(books: { bestseller: true } )

# this will print results without additional queries
@authors.each { |author| puts author.name }

# this will print results with additional db queries
@authors.each do |author|
  author.books.each do |book|
    puts book.title
  end
end
```

limit offset .

```
User.limit(3) #returns first three records
```

SQL .

```
"SELECT `users`.* FROM `users` LIMIT 3"
```

.

```
User.limit(5).offset(30) #returns 5 records starting from 31th i.e from 31 to 35
```

SQL .

```
"SELECT `users`.* FROM `users` LIMIT 5 OFFSET 30"
```

ActiveRecord : <https://riptutorial.com/ko/ruby-on-rails/topic/2154/activerecord-->

8: ActiveSupport

ActiveSupport Rails .

Ruby Monkeypatching . .

Examples

: String Access

String at

. String#[] .

```
str = "hello"
str.at(0) # => "h"
str.at(1..3) # => "ell"
str.at(-2) # => "l"
str.at(-2..-1) # => "lo"
str.at(5) # => nil
str.at(5..-1) # => ""
```

String # from

.

```
str = "hello"
str.from(0) # => "hello"
str.from(3) # => "lo"
str.from(-2) # => "lo"
```

~

.

.

```
str = "hello"
str.to(0) # => "h"
str.to(3) # => "hell"
str.to(-2) # => "hell"
```

from to .

```
str = "hello"
```



```
str.from(0).to(-1) # => "hello"
str.from(1).to(-2) # => "ell"
```

String # first

```
str = "hello"
str.first      # => "h"
str.first(1)   # => "h"
str.first(2)   # => "he"
str.first(0)   # => ""
str.first(6)   # => "hello"
```

#

```
str = "hello"
str.last       # => "o"
str.last(1)    # => "o"
str.last(2)    # => "lo"
str.last(0)    # => ""
str.last(6)    # => "hello"
```

: /

to_time

Time .form :utc :local :local .

```
"13-12-2012".to_time      # => 2012-12-13 00:00:00 +0100
"06:12".to_time          # => 2012-12-13 06:12:00 +0100
"2012-12-13 06:12".to_time # => 2012-12-13 06:12:00 +0100
"2012-12-13T06:12".to_time # => 2012-12-13 06:12:00 +0100
"2012-12-13T06:12".to_time(:utc) # => 2012-12-13 06:12:00 UTC
"12/13/2012".to_time     # => ArgumentError: argument out of range
```

to_date

Date .

```
"1-1-2012".to_date # => Sun, 01 Jan 2012
"01/01/2012".to_date # => Sun, 01 Jan 2012
"2012-12-13".to_date # => Thu, 13 Dec 2012
```

```
"12/13/2012".to_date # => ArgumentError: invalid date
```

to_datetime

DateTime .

```
"1-1-2012".to_datetime # => Sun, 01 Jan 2012 00:00:00 +0000
"01/01/2012 23:59:59".to_datetime # => Sun, 01 Jan 2012 23:59:59 +0000
"2012-12-13 12:50".to_datetime # => Thu, 13 Dec 2012 12:50:00 +0000
"12/13/2012".to_datetime # => ArgumentError: invalid date
```

:

String # exclude?

String#include? String#include?

```
"hello".exclude? "lo" # => false
"hello".exclude? "ol" # => true
"hello".exclude? ?h # => false
```

:

squish

, . squish! .

ASCII Unicode .

```
%{ Multi-line
  string }.squish # => "Multi-line string"
"foo bar \n \t boo".squish # => "foo bar boo"
```

remove

. remove! .

```
str = "foo bar test"
str.remove(" test") # => "foo bar"
str.remove(" test", /bar/) # => "foo "
```

String # truncate

```
'Once upon a time in a world far far away'.truncate(27)
# => "Once upon a time in a wo..."
```

regexp :separator .

```
'Once upon a time in a world far far away'.truncate(27, separator: ' ')
# => "Once upon a time in a..."

'Once upon a time in a world far far away'.truncate(27, separator: /\s/)
# => "Once upon a time in a..."
```

truncate_words

```
'Once upon a time in a world far far away'.truncate_words(4)
# => "Once upon a time..."
```

```
'Once<br>upon<br>a<br>time<br>in<br>a<br>world'.truncate_words(5, separator: '<br>')
# => "Once<br>upon<br>a<br>time<br>in..."
```

:omission ("...").

```
'And they found that many people were sleeping better.'.truncate_words(5, omission: '...
(continued)')
# => "And they found that many... (continued)"
```

strip_heredoc

heredocs . .

```
if options[:usage]
  puts <<-USAGE.strip_heredoc
  This command does such and such.

  Supported options are:
    -h          This message
    ...
  USAGE
end
```

```
This command does such and such.
```

```
Supported options are:
```

```
-h      This message
... 
```

: String Inflection

#

```
. count count == 1 . locale .
```

```
'post'.pluralize      # => "posts"
'octopus'.pluralize   # => "octopi"
'sheep'.pluralize     # => "sheep"
'words'.pluralize     # => "words"
'the blue mailman'.pluralize # => "the blue mailmen"
'CamelOctopus'.pluralize # => "CamelOctopi"
'apple'.pluralize(1)  # => "apple"
'apple'.pluralize(2)  # => "apples"
'ley'.pluralize(:es)  # => "leyes"
'ley'.pluralize(1, :es) # => "ley"
```

singularize

```
. locale .
```

```
'posts'.singularize   # => "post"
'octopi'.singularize  # => "octopus"
'sheep'.singularize   # => "sheep"
'word'.singularize    # => "word"
'the blue mailmen'.singularize # => "the blue mailman"
'CamelOctopi'.singularize # => "CamelOctopus"
'leyes'.singularize(:es) # => "ley"
```

constantize

```
. CamelCase NameError .
```

```
'Module'.constantize # => Module
'Class'.constantize  # => Class
'blargle'.constantize # => NameError: wrong constant name blargle
```

String # safe_constantize

```
constantize NameError nil .
```

```
'Module'.safe_constantize # => Module
```

```
'Class'.safe_constantize # => Class
'blargle'.safe_constantize # => nil
```

String # camelize

UpperCamelCase :lower lowerCamelCase param .

: camelcase

: / to :: .

```
'active_record'.camelize # => "ActiveRecord"
'active_record'.camelize(:lower) # => "activeRecord"
'active_record/errors'.camelize # => "ActiveRecord::Errors"
'active_record/errors'.camelize(:lower) # => "activeRecord::Errors"
```

#

.

: titlecase

```
'man from the boondocks'.titleize # => "Man From The Boondocks"
'x-men: the last stand'.titleize # => "X Men: The Last Stand"
```

#

. camelize .

: underscore :: to / .

```
'ActiveModel'.underscore # => "active_model"
'ActiveModel::Errors'.underscore # => "active_model/errors"
```

dasherize

.

```
'puni_puni'.dasherize # => "puni-puni"
```

demodulize

```
'ActiveRecord::CoreExtensions::String::Inflections'.demodulize # => "Inflections"
'Inflections'.demodulize # => "Inflections"
'::Inflections'.demodulize # => "Inflections"
''.demodulize # => ''
```

deconstantize

```
'Net::HTTP'.deconstantize # => "Net"
'::Net::HTTP'.deconstantize # => "::Net"
'String'.deconstantize # => ""
'::String'.deconstantize # => ""
''.deconstantize # => ""
```

String # parameterize

"URL" .

```
"Donald E. Knuth".parameterize # => "donald-e-knuth"
```

:preserve_case / .

```
"Donald E. Knuth".parameterize(preserve_case: true) # => "Donald-E-Knuth"
```

parameterize ActiveRecord to_param URL .

```
class Person < ActiveRecord::Base
  def to_param
    "#{id}-#{name.parameterize}"
  end
end

Person.find(1).to_param # => "1-donald-e-knuth"
```

tableize

Rails . Pluralizes.

```
'RawScaledScorer'.tableize # => "raw_scaled_scorers"
'ham_and_egg'.tableize # => "ham_and_eggs"
'fancyCategory'.tableize # => "fancy_categories"
```

#

Rails

```
'ham_and_eggs'.classify # => "HamAndEgg"
'posts'.classify       # => "Post"
```

String # humanize

_id .

```
'employee_salary'.humanize      # => "Employee salary"
'author_id'.humanize            # => "Author"
'author_id'.humanize(capitalize: false) # => "author"
'_id'.humanize                  # => "Id"
```

upcase_first

```
'what a Lovely Day'.upcase_first # => "What a Lovely Day"
'w'.upcase_first                 # => "W"
''.upcase_first                  # => ""
```

foreign_key

. id _ false param .

```
'Message'.foreign_key      # => "message_id"
'Message'.foreign_key(false) # => "messageid"
'Admin::Post'.foreign_key  # => "post_id"
```

ActiveSupport : <https://riptutorial.com/ko/ruby-on-rails/topic/4490/activesupport>

9: CanCan

CanCan Rails . . .

CanCan . CanCan .

Examples

CanCan

CanCan Ruby on Rails . (CanCanCan) CanCan .

Ability , , .

CanCanCan Gemfile :

```
gem 'cancancan'
```

```
# app/models/ability.rb
class Ability
  include CanCan::Ability

  def initialize(user)
    end
end
```

load_and_authorize_resource .

```
class ArticlesController < ApplicationController
  load_and_authorize_resource

  def show
    # @article is already loaded and authorized
  end
end
```

authorize!

```
def show
  @article = Article.find(params[:id])
  authorize! :read, @article
end
```

can? , .

```
<% if can? :update, @article %>
  <%= link_to "Edit", edit_article_path(@article) %>
```



```
<% end %>
```

```
: current_user .
```

```
can cannot Ability . .
```

```
class Ability
  include CanCan::Ability

  def initialize(user)
    # for any visitor or user
    can :read, Article

    if user
      if user.admin?
        # admins can do any action on any model or action
        can :manage, :all
      else
        # regular users can read all content
        can :read, :all
        # and edit, update and destroy their own user only
        can [:edit, :destroy], User, id: user_id
        # but cannot read hidden articles
        cannot :read, Article, hidden: true
      end
    else
      # only unlogged visitors can visit a sign_up page:
      can :read, :sign_up
    end
  end
end
```

▪
.
.

```
class Ability
  include CanCan::Ability

  def initialize(user)
    anyone_abilities

    if user
      if user.admin?
        admin_abilities
      else
        authenticated_abilities
      end
    else
      guest_abilities
    end
  end

  private
end
```

```

def anyone_abilities
  # define abilities for everyone, both logged users and visitors
end

def guest_abilities
  # define abilities for visitors only
end

def authenticated_abilities
  # define abilities for logged users only
end

def admin_abilities
  # define abilities for admins only
end
end

```

```

# app/models/ability.rb
class Ability
  include CanCan::Ability

  def initialize(user)
    self.merge Abilities::Everyone.new(user)

    if user
      if user.admin?
        self.merge Abilities::Admin.new(user)
      else
        self.merge Abilities::Authenticated.new(user)
      end
    else
      self.merge Abilities::Guest.new(user)
    end
  end
end

```

```

# app/models/abilities/guest.rb
module Abilities
  class Guest
    include CanCan::Ability

    def initialize(user)
      # Abilities for anonymous visitors only
    end
  end
end

```

```
Abilities::Authenticated, Abilities::Admin .
```

```

test_ability = Ability.new(User.first)
test_ability.can?(:show, Post) #=> true

```

```
other_ability = Ability.new(RestrictedUser.first)
other_ability.cannot?(:show, Post) #=> true
```

: <https://github.com/ryanb/cancan/wiki/> -

CanCan : <https://riptutorial.com/ko/ruby-on-rails/topic/3021/cancan--->

10: Devise Api

Devise Rails . API . API () . . , . API Devise .

Examples

```
rails new devise_example
```

```
'Gemfile' .
```

```
bundle install .
```

```
rails generate devise:install
```

```
rails generate devise MODEL
```

```
rake db:migrate rake db:migrate
```

: Devise Gem

```
auth_token Devise
```

```
rails g migration add_authentication_token_to_users

class AddAuthenticationTokenToUsers < ActiveRecord::Migration
  def change
    add_column :users, :auth_token, :string, default: ""
    add_index :users, :auth_token, unique: true
  end
end
```

```
rake db:migrate rake db:migrate
```

```
auth_token .
```

```
app/controllers/application_controllers.rb
```

```
respond_to :html, :json
```

html json .

```
protect_from_forgery with: :null
```

:null .

application_controller .

Devise . user_email auth_token .

```
before_filter do
  user_email = params[:user_email].presence
  user      = user_email && User.find_by_email(user_email)

  if user && Devise.secure_compare(user.authentication_token, params[:auth_token])
    sign_in user, store: false
  end
end
```

: . .

6 store: false store: false stateless re .

Devise Api : <https://riptutorial.com/ko/ruby-on-rails/topic/9787/devise--api->

11: GoogleMaps

Examples

google maps javascript .

Google javascript .

```
# app/views/layouts/my_layout.html.haml
!!!
%html{:lang => 'en'}
  %head
    - # ...
    = google_maps_api_script_tag
```

google_maps_api_script_tag .

```
# app/helpers/google_maps_helper.rb
module GoogleMapsHelper
  def google_maps_api_script_tag
    javascript_include_tag google_maps_api_source
  end

  def google_maps_api_source
    "https://maps.googleapis.com/maps/api/js?key=#{google_maps_api_key}"
  end

  def google_maps_api_key
    Rails.application.secrets.google_maps_api_key
  end
end
```

Google [Google API](#) API . Google [API](#) [API](#) [API](#) [API](#) .

api secrets.yml .

```
# config/secrets.yml
development:
  google_maps_api_key: '...'
  # ...
production:
  google_maps_api_key: '...'
  # ...
```

.gitignore config/secrets.yml api .

/ Google .

```
# app/models/profile_fields/address.rb
class ProfileFields::Address < ProfileFields::Base
  # Attributes:
```

```
# label, e.g. "Work address"
# value, e.g. "Willy-Brandt-Straße 1\n10557 Berlin"
end
```

```
, longitude latitude .
```

Geocoder Gemfile bundle .

```
# Gemfile
gem 'geocoder', '~> 1.3'
```

```
latitude longitude . . .
```

```
→ bin/rails generate migration add_latitude_and_longitude_to_profile_fields \
  latitude:float longitude:float
→ bin/rails db:migrate # Rails 5, or:
→ rake db:migrate # Rails 3,4
```

```
. value . .
```

```
# app/models/profile_fields/address.rb
class ProfileFields::Address < ProfileFields::Base
  geocoded_by :value
  after_validation :geocode, if: ->(address_field){
    address_field.value.present? and address_field.value_changed?
  }
end
```

Google . . [README](#) .

Google

Google .

```
- # app/views/profiles/show.html.haml
%h1 Contact Information
.profile_fields
  = render @profile_fields
.google_map{data: address_fields: @address_fields.to_json }
```

```
@profile_fields @address_fields .
```


```
# app/controllers/profiles_controller.rb
class ProfilesController < ApplicationController
  def show
    # ...
    @profile_fields = @user_or_group.profile_fields
    @address_fields = @profile_fields.where(type: 'ProfileFields::Address')
  end
end
```

, , / .

Info **Contact** Corporate Vita Work & Study More

Contact Information

Email	doe@example.com
Work address	John Doe Willy-Brandt-Straße 1 10557 Berlin
Work address	John Doe 1-6 Chesham Pl London SW1X 8PZ United Kingdom
Phone	123 456



```
.google_map div data .google_map .
```

:

```
<!-- http://localhost:3000/profiles/123 -->  
<div class="google_map" data-address-fields="  
  {label: 'Work address', value: 'Willy-Brandt-Straße 1\n10557 Berlin',  
  position: {lng: ..., lat: ...}},  
  ...  
]"></div>
```

```
turbolinks turbolinks $(document).ready jquery.turbolinks gem .
```

.

```
# app/assets/javascripts/google_maps.js.coffee  
window.App = {} unless App?  
class App.GoogleMap  
  constructor: (map_div)->  
    # TODO: initialize the map
```



```
# TODO: set the markers
```

App .

(`.google_map` `div` `App.GoogleMap` `App.GoogleMap` .

```
# app/assets/javascripts/google_maps.js.coffee
# ...
$(document).ready ->
  App.google_maps = []
  $('.google_map').each ->
    map_div = $(this)
    map = new App.GoogleMap map_div
    App.google_maps.push map
```

▪

`App.GoogleMap` **Google** .

```
# app/assets/javascripts/google_maps.js.coffee
# ...
class App.GoogleMap
  map_div: {}
  map: {}

  constructor: (map_div)->
    @map_div = map_div
    @init_map()
    @reference_the_map_as_data_attribute

  # To access the GoogleMap object or the map object itself
  # later via the DOM, for example
  #
  #   $('.google_map').data('GoogleMap')
  #
  # store references as data attribute of the map_div.
  #
  reference_the_map_as_data_attribute: ->
    @map_div.data 'GoogleMap', this
    @map_div.data 'map', @map

  init_map: ->
    @map = new google.maps.Map(@dom_element, @map_configuration) if google?

  # `@map_div` is the jquery object. But google maps needs
  # the real DOM element.
  #
  dom_element: ->
    @map_div.get(0)

  map_configuration: -> {
    scrollWheel: true
  }
```

`map_configuration` **google** `MapOptions` .

[google.maps.Map](#) .

App.GoogleMap .google_map **div** data-address-fields .google_map .

```
# app/assets/javascripts/google_maps.js.coffee
# ...
class App.GoogleMap
  # ...
  markers: []

  constructor: (map_div)->
    # ...
    @init_markers()

  address_fields: ->
    @map_div.data('address-fields')

  init_markers: ->
    self = this # to reference the instance as `self` when `this` is redefined.
    self.markers = []
    for address_field in self.address_fields()
      marker = new google.maps.Marker {
        map: self.map,
        position: {
          lng: address_field.longitude,
          lat: address_field.latitude
        },
        # # or, if `position` is defined in `ProfileFields::Address#as_json`:
        # position: address_field.position,
        title: address_field.value
      }
      self.markers.push marker
```

[Google MarkerOptions](#) .

/

App.GoogleMap google.maps.Map @map google.maps.Marker @markers , , ::

```
# app/assets/javascripts/google_maps.js.coffee
# ...
class App.GoogleMap
  # ...
  bounds: {}

  constructor: (map_div)->
    # ...
    @auto_zoom()

  auto_zoom: ->
    @init_bounds()
    # TODO: Maybe, adjust the zoom to have a maximum or
    # minimum zoom level, here.

  init_bounds: ->
    @bounds = new google.maps.LatLngBounds()
    for marker in @markers
      @bounds.extend marker.position
```

```
@map.fitBounds @bounds
```

google [LatLngBounds](#) .

json

Google [json](#) javascript .

```
ApplicationRecord to_json .
```

```
label, value, longitude latitude ProfileFields::Address address_field.as_json Hash (:)
```

```
address_field.as_json # =>
  {label: "Work address", value: "Willy-Brandt-Straße 1\n10557 Berlin",
   longitude: ..., latitude: ...}
```

```
to_json json .
```

```
address_field.to_json # =>
  "{\"label\":\"Work address\",\"value\":\"Willy-Brandt-Straße 1\\n
  10557 Berlin\",\"longitude\":...,\"latitude\":...}"
```

```
, label value .
```

```
as_json .
```

```
title as_json .
```

```
# app/models/profile_fields/address.rb
class ProfileFields::Address < ProfileFields::Base
  # ...

  # For example: "John Doe, Work address"
  def title
    "#{self.parent.name}, #{self.label}"
  end

  def as_json
    super.merge {
      title: self.title
    }
  end
end
```

```
super as_json .
```

```
as_json to_json as_json .
```

Google api lng lat position .

json javascript, later here .

position json as_json .

```
# app/models/profile_fields/address.rb
class ProfileFields::Address < ProfileFields::Base
  # ...

  def as_json
    super.merge {
      # ...
      position: {
        lng: self.longitude,
        lat: self.latitude
      }
    }
  end
end
```

GoogleMaps : <https://riptutorial.com/ko/ruby-on-rails/topic/2828/googlemaps-->

12: Heroku Rails

Examples

Rails Heroku .

```
$ heroku create example
Creating ☐ example... done
https://example.herokuapp.com/ | https://git.heroku.com/example.git
```

URL <http://example.herokuapp.com> . URL `git@heroku.com : example.git` URL.

`git . heroku create URL "heroku" git .`

`('example') . . Heroku "" "wiki" . . .`

```
$ git push heroku master
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Ruby app detected
remote: -----> Compiling Ruby/Rails
remote: -----> Using Ruby version: ruby-2.3.1
remote: -----> Installing dependencies using bundler 1.11.2
remote:           Running: bundle install --without development:test --path vendor/bundle --
binstubs vendor/bundle/bin -j4 --deployment
remote:           Warning: the running version of Bundler is older than the version that created
the lockfile. We suggest you upgrade to the latest version of Bundler by running `gem install
bundler`.
remote:           Fetching gem metadata from https://rubygems.org/.....
remote:           Fetching version metadata from https://rubygems.org/...
remote:           Fetching dependency metadata from https://rubygems.org/..
remote:           Installing concurrent-ruby 1.0.2
remote:           Installing i18n 0.7.0
remote:           Installing rake 11.2.2
remote:           Installing minitest 5.9.0
remote:           Installing thread_safe 0.3.5
remote:           Installing builder 3.2.2
remote:           Installing mini_portile2 2.1.0
remote:           Installing erubis 2.7.0
remote:           Installing pkg-config 1.1.7
remote:           Installing rack 2.0.1
remote:           Installing nio4r 1.2.1 with native extensions
remote:           Installing websocket-extensions 0.1.2
remote:           Installing mime-types-data 3.2016.0521
remote:           Installing arel 7.0.0
remote:           Installing coffee-script-source 1.10.0
remote:           Installing execjs 2.7.0
remote:           Installing method_source 0.8.2
remote:           Installing thor 0.19.1
remote:           Installing multi_json 1.12.1
remote:           Installing puma 3.4.0 with native extensions
remote:           Installing pg 0.18.4 with native extensions
```

```
remote:      Using bundler 1.11.2
remote:      Installing sass 3.4.22
remote:      Installing tilt 2.0.5
remote:      Installing turbolinks-source 5.0.0
remote:      Installing tzinfo 1.2.2
remote:      Installing nokogiri 1.6.8 with native extensions
remote:      Installing rack-test 0.6.3
remote:      Installing sprockets 3.6.3
remote:      Installing websocket-driver 0.6.4 with native extensions
remote:      Installing mime-types 3.1
remote:      Installing coffee-script 2.4.1
remote:      Installing uglifier 3.0.0
remote:      Installing turbolinks 5.0.0
remote:      Installing activesupport 5.0.0
remote:      Installing mail 2.6.4
remote:      Installing globalid 0.3.6
remote:      Installing activemodel 5.0.0
remote:      Installing jbuilder 2.5.0
remote:      Installing activejob 5.0.0
remote:      Installing activerecord 5.0.0
remote:      Installing loofah 2.0.3
remote:      Installing rails-dom-testing 2.0.1
remote:      Installing rails-html-sanitizer 1.0.3
remote:      Installing actionview 5.0.0
remote:      Installing actionpack 5.0.0
remote:      Installing actionmailer 5.0.0
remote:      Installing railties 5.0.0
remote:      Installing actioncable 5.0.0
remote:      Installing sprockets-rails 3.1.1
remote:      Installing coffee-rails 4.2.1
remote:      Installing jquery-rails 4.1.1
remote:      Installing rails 5.0.0
remote:      Installing sass-rails 5.0.5
remote:      Bundle complete! 15 Gemfile dependencies, 54 gems now installed.
remote:      Gems in the groups development and test were not installed.
remote:      Bundled gems are installed into ./vendor/bundle.
remote:      Bundle completed (31.86s)
remote:      Cleaning up the bundler cache.
remote:      Warning: the running version of Bundler is older than the version that created
remote:      the lockfile. We suggest you upgrade to the latest version of Bundler by running `gem install
remote:      bundler`.
remote:      -----> Preparing app for Rails asset pipeline
remote:      Running: rake assets:precompile
remote:      I, [2016-07-08T17:08:57.046245 #1222] INFO -- : Writing
remote:      /tmp/build_49ba6c877f5502cd4029406e981f90b4/public/assets/application-
remote:      1bf5315c71171ad5f9cbef00193d56b7e45263ddc64caf676ce988cfbb6570bd.js
remote:      I, [2016-07-08T17:08:57.046951 #1222] INFO -- : Writing
remote:      /tmp/build_49ba6c877f5502cd4029406e981f90b4/public/assets/application-
remote:      1bf5315c71171ad5f9cbef00193d56b7e45263ddc64caf676ce988cfbb6570bd.js.gz
remote:      I, [2016-07-08T17:08:57.060208 #1222] INFO -- : Writing
remote:      /tmp/build_49ba6c877f5502cd4029406e981f90b4/public/assets/application-
remote:      e3b0c44298fcl1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855.css
remote:      I, [2016-07-08T17:08:57.060656 #1222] INFO -- : Writing
remote:      /tmp/build_49ba6c877f5502cd4029406e981f90b4/public/assets/application-
remote:      e3b0c44298fcl1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855.css.gz
remote:      Asset precompilation completed (4.06s)
remote:      Cleaning assets
remote:      Running: rake assets:clean
remote:
remote: ##### WARNING:
remote:      No Procfile detected, using the default web server.
```

```

remote:      We recommend explicitly declaring how to boot your server process via a
remote:      Procfile.
remote:      https://devcenter.heroku.com/articles/ruby-default-web-server
remote:
remote: -----> Discovering process types
remote:      Procfile declares types      -> (none)
remote:      Default types for buildpack -> console, rake, web, worker
remote:
remote: -----> Compressing...
remote:      Done: 29.2M
remote: -----> Launching...
remote:      Released v5
remote:      https://example.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/example.git
 * [new branch]      master -> master

```

```
$ heroku run rake db:migrate
```

heroku run **Heroku dyno** heroku run . .

```
$ heroku run bash
```

dyno .

```
$ heroku ps:scale web=1
```

heroku ps dynos .

```

$ heroku ps
=== web (Standard-1X): bin/rails server -p $PORT -e $RAILS_ENV (1)
web.1: starting 2016/07/08 12:09:06 -0500 (~ 2s ago)

```

heroku open .

```
$ heroku open
```

Heroku herokuapp.com **URL** herokuapp.com . .

Heroku

Heroku : Heroku () (). (). ., . Windows Mac Heroku Linux

. **Heroku** . .

Heroku . , . .

```
$ heroku create --remote staging
Creating strong-river-216.... done
http://strong-river-216.herokuapp.com/ | https://git.heroku.com/strong-river-216.git
Git remote staging added
```

heroku CLI heroku git remote . --remote Heroku git push heroku .

```
$ git push staging master
...
$ heroku ps --remote staging
=== web: `bundle exec puma -C config/puma.rb`
web.1: up for 21s
```

```
$ heroku create --remote production
Creating fierce-ice-327.... done
http://fierce-ice-327.herokuapp.com/ | https://git.heroku.com/fierce-ice-327.git
Git remote production added
$ git push production master
...
$ heroku ps --remote production
=== web: `bundle exec puma -C config/puma.rb`
web.1: up for 16s
```

Heroku () . '--remote' .

Heroku Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/4485/heroku-rails--->

13: I18n -

- `I18n.t ("")`
- `I18n.translate ("key") # I18n.t("key") I18n.t("key")`
- `I18n.t ("", : 4)`
- `I18n.t ("key", param1 : "Something", param2 : "Else")`
- `I18n.t ("doesnt_exist", default : "key") #`
- `I18n.locale # => : en`
- `I18n.locale = : en`
- `I18n.default_locale # => : ko`
- `I18n.default_locale = : ko`
- `t (". key") # I18n.t ("key")` action / template

Examples

I18n

YAML .

```
# config/locales/en.yml
en:
  header:
    title: "My header title"
```

```
# in ERB files
<%= t('header.title') %>

# in SLIM files
= t('header.title')
```

I18n

t :

```
# Example config/locales/en.yml
en:
  page:
    users: "%{users_count} users currently online"

# In models, controller, etc...
I18n.t('page.users', users_count: 12)

# In views

# ERB
<%= t('page.users', users_count: 12) %>
```

```

#SLIM
= t('page.users', users_count: 12)

# Shortcut in views - DRY!
# Use only the dot notation
# Important: Consider you have the following controller and view page#users

# ERB Example app/views/page/users.html.erb
<%= t('.users', users_count: 12) %>

```

```
"12 users currently online"
```

I18n .count .

```

# config/locales/en.yml
en:
  online_users:
    one: "1 user is online"
    other: "%{count} users are online"

```

count I18n.t I18n.t :

```

I18n.t("online_users", count: 1)
#=> "1 user is online"

I18n.t("online_users", count: 4)
#=> "4 users are online"

```

I18n . , URL . before_action ApplicationController .

```

class ApplicationController < ActionController::Base
  before_action :set_locale

  protected

  def set_locale
    # Remove inappropriate/unnecessary ones
    I18n.locale = params[:locale] || # Request parameter
    session[:locale] || # Current session
    (current_user.preferred_locale if user_signed_in?) || # Model saved configuration
    extract_locale_from_accept_language_header || # Language header - browser
    config
    I18n.default_locale # Set in your config files, english by super-default
  end

  # Extract language from request header
  def extract_locale_from_accept_language_header
    if request.env['HTTP_ACCEPT_LANGUAGE']
      lg = request.env['HTTP_ACCEPT_LANGUAGE'].scan(/^[a-z]{2}/).first.to_sym
      lg.in?([:en, YOUR_AVAILABLE_LANGUAGES]) ? lg : nil
    end
  end
end

```

```
end
```

URL

locale URL .

```
http://yourapplication.com/products?locale=en
```

```
http://yourapplication.com/en/products
```

scope routes .

```
# config/routes.rb
scope "(:locale)", locale: /en|fr/ do
  resources :products
end
```

```
http://yourapplication.com/en/products :en . http://yourapplication.com/fr/products :fr .
http://yourapplication.com/products I18n :locale param .
```

/ . ()

```
class SetLanguageController < ApplicationController
  skip_before_filter :authenticate_user!
  after_action :set_preferred_locale

  # Generic version to handle a large list of languages
  def change_locale
    I18n.locale = sanitize_language_param
    set_session_and_redirect
  end
end
```

sanitize_language_param .

```
def fr
  I18n.locale = :fr
  set_session_and_redirect
end

def en
  I18n.locale = :en
  set_session_and_redirect
end

private

def set_session_and_redirect
  session[:locale] = I18n.locale
end
```

```

    redirect_to :back
  end

  def set_preferred_locale
    if user_signed_in?
      current_user.preferred_locale = I18n.locale.to_s
      current_user.save if current_user.changed?
    end
  end
end
end

```

```

: change_language .

```

```

. config/application.rb .

```

```

config.i18n.default_locale = :de

```

```

config/initializers .

```

```

# config/initializers/locale.rb
I18n.default_locale = :it

```

HTTP

```

IP . Geocoder . Geocoder request location .

```

```

Geocoder Gemfile Gemfile

```

```

# Gemfile
gem 'geocoder'

```

```

Geocoder IP HTTP Rack::Request location safe_location . ApplicationController
before_action :

```

```

class ApplicationController < ActionController::Base
  before_action :set_locale_from_request

  def set_locale_from_request
    country_code = request.location.data["country_code"] #=> "US"
    country_sym = country_code.underscore.to_sym #=> :us

    # If request locale is available use it, otherwise use I18n default locale
    if I18n.available_locales.include? country_sym
      I18n.locale = country_sym
    end
  end
end

```

```

0.0.0.0 localhost IP development test .

```

Geocoder ().

.

1.

GeoIP () .

2. CloudFlare

CloudFlare (HTTP_CF_IPCOUNTRY) .

ActiveRecord

globalize gem ActiveRecord . Gemfile :

```
gem 'globalize', '~> 5.0.0'
```

Rails 5 activemodel-serializers-xml .

```
gem 'activemodel-serializers-xml'
```

.

```
class Post < ActiveRecord::Base
  translates :title, :text
end
```

```
I18n.locale = :en
post.title # => Globalize rocks!
```

```
I18n.locale = :he
post.title # => טלוש זיילאבולג!
```

. **globalize** create_translation_table! create_translation_table! drop_translation_table! .

up down , change . . Post .

```
class CreatePostsTranslationTable < ActiveRecord::Migration
  def up
    Post.create_translation_table! title: :string, text: :text
  end

  def down
    Post.drop_translation_table!
  end
end
```

.

```

class CreatePostsTranslationTable < ActiveRecord::Migration
  def up
    Post.create_translation_table! title: :string,
      text: { type: :text, null: false, default: "Default text" }
  end

  def down
    Post.drop_translation_table!
  end
end

```

```

class CreatePostsTranslationTable < ActiveRecord::Migration
  def up
    Post.create_translation_table!({
      title: :string,
      text: :text
    }, {
      migrate_data: true
    })
  end

  def down
    Post.drop_translation_table! migrate_data: true
  end
end

```

remove_source_columns .

```

class CreatePostsTranslationTable < ActiveRecord::Migration
  def up
    Post.create_translation_table!({
      title: :string,
      text: :text
    }, {
      migrate_data: true,
      remove_source_columns: true
    })
  end

  def down
    Post.drop_translation_table! migrate_data: true
  end
end

```

```

class Post < ActiveRecord::Base
  # Remember to add your attribute here too.
  translates :title, :text, :author
end

class AddAuthorToPost < ActiveRecord::Migration
  def up

```

```
    Post.add_translation_fields! author: :text
  end

  def down
    remove_column :post_translations, :author
  end
end
```

HTML I18n

```
# config/locales/en.yml
en:
  stackoverflow:
    header:
      title_html: "Use <strong>I18n</strong> with Tags & Symbols"
```

```
title_html .
```

Views,

```
# ERB
<h2><%= t(:title_html, scope: [:stackoverflow, :header]) %></h2>
```

I18n - : <https://riptutorial.com/ko/ruby-on-rails/topic/2772/i18n--->

14: Rails 5 API Authentication

Examples

Rails `authenticate_with_http_token`

```
authenticate_with_http_token do |token, options|  
  @user = User.find_by(auth_token: token)  
end
```

`curl` .

```
curl -IH "Authorization: Token token=my-token" http://localhost:3000
```

Rails 5 API Authentication : <https://riptutorial.com/ko/ruby-on-rails/topic/7852/rails-5-api-authentication>

15: Rails API

Examples

API

API Rails Rails 5 Rails .

Rails API .

```
rails new my_api --api
```

--api API . , , Rails .

, .

```
ApplicationController ApplicationController API ActionController::Base API  
ActionController::API .
```

Rails API : <https://riptutorial.com/ko/ruby-on-rails/topic/4305/rails-api>

16: Rails

Examples

(DRY).

Rails DRY .

(:)

Fat Model, Skinny Controller DRY. .

```
# Post model
scope :unpublished, ->(timestamp = Time.now) { where('published_at IS NULL OR published_at > ?', timestamp) }

# Any controller
def index
  ....
  @unpublished_posts = Post.unpublished
  ....
end

def others
  ...
  @unpublished_posts = Post.unpublished
  ...
end
```

API API .

Rails , .

Rails

.

. . . .

id orders order orders_controller orders_controller . new edit new edit .

rails new app_name rails new app_name . 70 .

:

- (),
-
- Javascript CSS
- HTTP 400 (,)
-

,

"Fat Model, Skinny Controller" MVC M C ., . ., " " .

, . .
.

```
def index
  @published_posts = Post.where('published_at <= ?', Time.now)
  @unpublished_posts = Post.where('published_at IS NULL OR published_at > ?', Time.now)
end
```

.

```
def index
  @published_posts = Post.published
  @unpublished_posts = Post.unpublished
end
```

.

```
scope :published, ->(timestamp = Time.now) { where('published_at <= ?', timestamp) }
scope :unpublished, ->(timestamp = Time.now) { where('published_at IS NULL OR published_at > ?', timestamp) }
```

default_scope.

ActiveRecord default_scope .

```
class Post
  default_scope ->{ where(published: true).order(created_at: :desc) }
end
```

.

```
Post.all # will only list published posts
```

, .

default_scope order

default_scope order default_scope Post order .

```
Post.order(updated_at: :desc)
```

```
SELECT "posts".* FROM "posts" WHERE "posts"."published" = 't' ORDER BY "posts"."created_at"
DESC, "posts"."updated_at" DESC
```

. order .

```
Post.except(:order).order(updated_at: :desc)
```

```
SELECT "posts".* FROM "posts" WHERE "posts"."published" = 't' ORDER BY "posts"."updated_at"
DESC
```

default_scope

ActiveRecord::Relation default_scope .

Post where(published: true) Post .

```
Post.new # => <Post published: true>
```

unscoped

default_scope unscoped . STI .

```
class Post < Document
  default_scope ->{ where(published: true).order(created_at: :desc) }
end
```

Post 'Post' type . unscoped default_scope unscoped .

```
Post.unscoped.where(type: 'Post').order(updated_at: :desc)
```

unscoped

Post User .

```
class Post < ApplicationRecord
  belongs_to :user
  default_scope ->{ where(published: true).order(created_at: :desc) }
end

class User < ApplicationRecord
  has_many :posts
end
```

User User .

```
user = User.find(1)
user.posts
```

```
SELECT "posts".* FROM "posts" WHERE "posts"."published" = 't' AND "posts"."user_id" = ? ORDER
```

```
BY "posts"."created_at" DESC [{"user_id", 1}]
```

```
posts default_scope unscoped .
```

```
user.posts.unscoped
```

```
SELECT "posts".* FROM "posts"
```

```
default_scope user_id default_scope .
```

default_scope

```
default_scope .
```

```
. default_scope . .
```

```
class ApplicationRecord < ActiveRecord::Base
  def self.inherited(subclass)
    super

    return unless subclass.superclass == self
    return unless subclass.column_names.include? 'tenant_id'

    subclass.class_eval do
      default_scope ->{ where(tenant_id: Tenant.current_id) }
    end
  end
end
```

```
Tenant.current_id Tenant.current_id tenant_id . ID .
```

```
. unscoped unscoped .
```

(YAGNI)

```
"YAGNI"( ) . . .
```

Overengineering

```
. " " . , , .
```

```
Code Bloat . , . , .
```

```
Feature Creep .
```

```
. .
```

KISS - , .

KISS, . . "Single Responsibility Principle ()" .

YAGNI - .

. . ? YAGNI . .

. . .

()

"Fat Model, Skinny Controller" .

[Single Responsibility](#) . ? ? ?

. . .

.

. " " .

, , . .

15 % . 15 % 2.9 % + 30 ¢ .

$amount * 0.15 - (amount * 0.029 + 0.30)$.

.

```
# app/models/order.rb
class Order < ActiveRecord::Base
  SERVICE_COMMISSION = 0.15
  STRIPE_PERCENTAGE_COMMISSION = 0.029
  STRIPE_FIXED_COMMISSION = 0.30

  ...

  def commission
    amount * SERVICE_COMMISSION - stripe_commission
  end

  private

  def stripe_commission
    amount * STRIPE_PERCENTAGE_COMMISSION + STRIPE_FIXED_COMMISSION
  end
end
```

.

Order .

```

# app/models/order.rb
class Order < ActiveRecord::Base
  ...
  # No reference to commission calculation
end

# lib/commission.rb
class Commission
  SERVICE_COMMISSION = 0.15

  def self.calculate(payment_method, model)
    model.amount * SERVICE_COMMISSION - payment_commission(payment_method, model)
  end

  private

  def self.payment_commission(payment_method, model)
    # There are better ways to implement a static registry,
    # this is only for illustration purposes.
    Object.const_get("#{payment_method}Commission").calculate(model)
  end
end

# lib/stripe_commission.rb
class StripeCommission
  STRIPE_PERCENTAGE_COMMISSION = 0.029
  STRIPE_FIXED_COMMISSION = 0.30

  def self.calculate(model)
    model.amount * STRIPE_PERCENTAGE_COMMISSION
    + STRIPE_PERCENTAGE_COMMISSION
  end
end

# app/controllers/orders_controller.rb
class OrdersController < ApplicationController
  def create
    @order = Order.new(order_params)
    @order.commission = Commission.calculate("Stripe", @order)
    ...
  end
end

```

- .
- amount .
- .
- .
- **Ruby on Rails** User .

```
lib . autoload_paths .
```

```

# config/application.rb
config.autoload_paths << Rails.root.join('lib')

```

/ . app app/commands .

Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/1207/rails-->

17: Rails

Examples

Unit . . .

```
let(:gift) { create :gift }

describe '#find' do
  subject { described_class.find(user, Time.zone.now.to_date) }
  it { is_expected.to eq gift }
end
```

```
it 'allows the user to set their preferences' do
  check 'Ruby'
  click_on 'Save and Continue'
  expect(user.languages).to eq ['Ruby']
end
```

Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/7853/rails-->

18: Rails - /

Examples

```
ActiveRecord::Base.connection.tables
```

.

```
ActiveRecord::Base.connection.drop_table("users")
-----OR-----
ActiveRecord::Migration.drop_table(:users)
-----OR-----
ActiveRecord::Base.connection.execute("drop table users")
```

```
ActiveRecord::Migration.remove_index(:users, :name => 'index_users_on_country')
```

```
country users .
```

```
t.string :country, add_index: true
```

```
ActiveRecord::Base.connection.remove_foreign_key('food_items', 'menus')
```

```
menus has_many food_items .
```

```
ActiveRecord::Migration.remove_column :table_name, :column_name
```

:-

```
ActiveRecord::Migration.add_column :profiles, :profile_likes, :integer, :default => 0
```

-

Rails .

-

```
##this method return ActiveRecord::Relation
def check_if_user_profile_is_complete
  User.includes( :profile_pictures, :address, :contact_detail).where("user.id = ?", self)
end
```

-

```
##this method return Boolean(NOTE THE !! signs before result)
def check_if_user_profile_is_complete
```

```
!!User.includes(:profile_pictures,:address,:contact_detail).where("user.id = ?",self)
end
```

, boolean .:)

- `where` for

ActiveRecord::Relation where .Heause Where ActiveRecord Array .

Joins .

:-

id = 10 (User) (UserProfile) .

```
UserProfiles.includes(:user=>:profile_pictures).where(:active=>true).map(&:user).where.not(:id=>10)
```

map map array where .

▪

```
UserProfiles.includes(:user=>:profile_pictures).where(:active=>true).joins(:user).where.not(:id=>10)
```

joins map ,Array ActiveRecord .

Rails - / : <https://riptutorial.com/ko/ruby-on-rails/topic/7259/rails----->

19: RSpec Ruby on Rails

RSpec Ruby , *RSpec Ruby Behavior-Driven Development* .

Ruby on Rails [RSpec](#) . RSpec [RSpec](#) .

Examples

RSpec

RSpec Rails [rspec-rails](#) gem . gem (:rails generate , rails generate).

```
Gemfile :development :test rspec-rails .
```

```
group :development, :test do
  gem 'rspec-rails', '~> 3.5'
end
```

```
bundle .
```

```
:
```

```
rails generate rspec:install
```

```
spec/ .
```

- .rspec rspec .
- spec/spec_helper.rb RSpec .
- spec/rails_helper.rb RSpec Rails .

```
.
```

[RSpec Ruby on Rails](https://riptutorial.com/ko/ruby-on-rails/topic/5335/rspec-ruby-on-rails) : <https://riptutorial.com/ko/ruby-on-rails/topic/5335/rspec-ruby-on-rails>

20: Ruby on Rails

Rails . , .

Examples

, ' ' .
N + 1 . . .

Rails

Rails . ; , , . .

Rubocop

Ruby Ruby . , Object # to_s .

100 % ().

4 () : , , .

Ruby on Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/8713/ruby-on-rails----->

21: Ruby on Rails

Examples

Ruby on Rails

```
: has_many .
```

```
class Project < ApplicationRecord
  has_many :todos
end

class Todo < ApplicationRecord
  belongs_to :project
end
```

```
ProjectsController:
```

```
class ProjectsController < ApplicationController
  def new
    @project = Project.new
  end
end
```

```
<%= nested_form_for @project do |f| %>
  <%= f.label :name %>
  <%= f.text_field :name %>

  <% # Now comes the part for `Todo` object %>
  <%= f.fields_for :todo do |todo_field| %>
    <%= todo_field.label :name %>
    <%= todo_field.text_field :name %>
  <% end %>
<% end %>
```

```
Project.new @project Project Todo . :
```

```
1. Projectscontroller new .@todo = @project.todos.build @todo = @project.todos.new Todo
```

```
2. : <%= f.fields_for :todos, @project.todos.build %>
```

```
def project_params
  params.require(:project).permit(:name, todo_attributes: [:name])
end
```

```
, Todo Project, Project :
```

```
accepts_nested_attributes_for :todos
```

Ruby on Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/8203/ruby-on-rails--->

22:

Examples

ActiveRecord User FactoryGirl .

```
FactoryGirl.define do
  factory :user do # it will guess the User class
    name      "John"
    email     "john@example.com"
  end
end
```

```
FactoryGirl.define do
  factory :user_jack, class: User do
    name      "Jack"
    email     "jack@example.com"
  end
end
```

FactoryGirl .

```
# To create a non saved instance of the User class filled with John's data
build(:user)
# and to create a non saved instance of the User class filled with Jack's data
build(:user_jack)
```

```
# Build returns a non saved instance
user = build(:user)

# Create returns a saved instance
user = create(:user)

# Attributes_for returns a hash of the attributes used to build an instance
attrs = attributes_for(:user)
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/8330/>

23:

1. 'rails_admin', '~> 1.0'
- 2.
3. rails g rails_admin : install
4. Enter .
5. app / config / initializers / rails_admin.rb : config.authorize_with redirect_to
main_app.root_path do current_user.try (: admin?) end admin yoursite.com/admin other .
6. . https://github.com/sferik/rails_admin/wiki

. active_admin . 4 . cancan .

Examples

rails_admin gem .


NAVIGATION

[Blogs](#)


[Users](#)

Site Administration

Dashboard

 Dashboard

Model name	Last created	Records
------------	--------------	---------

Blogs	about 7 hours ago	
-----------------------	-------------------	---

Users	about 23 hours ago	
-----------------------	--------------------	---

NAVIGATION

Blogs

Users

List of Users

Dashboard / Users

List

+ Add new

Export

Filter

Refresh

x

<input type="checkbox"/>	Id	Email	Reset password sent at	Remember c
<input type="checkbox"/>	2	2@gmail.com	-	-
<input type="checkbox"/>	1	1@gmail.com	-	-

2 users

NAVIGATION


Blogs

Users

List of Blogs


[Dashboard](#) / [Blogs](#)

 List

 Add new

 Export

Filter

 Refresh



<input type="checkbox"/>	Id	Title	Content	Created at
<input type="checkbox"/>	7	Post 3	Test content	December 07, 2016 08:19
<input type="checkbox"/>	6	Post 2	test content	December 06, 2016 16:16
<input type="checkbox"/>	5	Post 1	test content	December 06, 2016 16:16

3 blogs

: <https://riptutorial.com/ko/ruby-on-rails/topic/8128/-->

24:

Examples

config/ YAML (: config/neo4j.yml

neo4j.yml (default).

```
default: &default
  host: localhost
  port: 7474
  username: neo4j
  password: root

development:
  <<: *default

test:
  <<: *default

production:
  <<: *default
```

config/application.rb :

```
module MyApp
  class Application < Rails::Application
    config.neo4j = config_for(:neo4j)
  end
end
```

```
Rails.configuration.neo4j['host']
#=> localhost
Rails.configuration.neo4j['port']
#=> 7474
```

Rails API config_for .

Rails config / foo.yml .

yaml

config.x Rails .

```
config.x.payment_processing.schedule = :daily
config.x.payment_processing.retries = 3
config.x.super_debugger = true
```

```
Rails.configuration.x.payment_processing.schedule # => :daily
Rails.configuration.x.payment_processing.retries # => 3
Rails.configuration.x.super_debugger           # => true
Rails.configuration.x.super_debugger.not_set   # => nil
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/2558/>

25:

Examples

```
config/environments/development.rb . 3 , development , production test . .
```

Rails config/application.rb . .

```
Rails.application.configure do . Rails.application.configure do config. config.
```

```
config/database.yml config/database.yml . rails new sqlite . database.yml .
```

```
# SQLite version 3.x
# gem install sqlite3
#
# Ensure the SQLite 3 gem is defined in your Gemfile
# gem 'sqlite3'
#
default: &default
  adapter: sqlite3
  pool: 5
  timeout: 5000

development:
  <<: *default
  database: db/development.sqlite3

# Warning: The database defined as "test" will be erased and
# re-generated from your development database when you run "rake".
# Do not set this db to the same as development or production.
test:
  <<: *default
  database: db/test.sqlite3

production:
  <<: *default
  database: db/production.sqlite3
```

```
. rails new hello_world --database=mysql
```

Rails

```
Rails::Railtie .
```

- **config.after_initialize** : .
- **config.asset_host** : . . config.action_controller.asset_host .
- **config.autoload_once_paths** : Rails . .
- **config.autoload_paths** : Rails . app app
- **config.cache_classes** : . false true
- **config.action_view.cache_template_loading** : . config.cache_classes .
- **config.beginning_of_week** : . (:monday) .

- **config.cache_store** : . :file_store , :memory_store , mem_cache_store null_store .
- **config.colorize_logging** : .
- **config.eager_load** : Eager-
- **config.encoding** : . UTF-8
- **config.log_level** : Rails Logger . :debug .
- **config.middleware** : .
- **config.time_zone** : .

- **config.assets.enabled** : . true.
- **config.assets.raise_runtime_errors** : . development mode development mode
- **config.assets.compress** : . true.
- **config.assets.js_compressor** : JS . :closure , :uglifyer :yui :closure
- **config.assets.paths** : .
- **config.assets.precompile** : rake assets:precompile rake assets:precompile
- **config.assets.digest** : MD-5 . true.
- **config.assets.compile** : Sprockets

Rails rails generate . , config.generators

```
config.generators do |g|
  g.orm :active_record
  g.test_framework :test_unit
end
```

force_plural		
integration_tool		test_unit
javascript_engine	JS	:js
resource_route		
stylesheet_engine		:cs
scaffold_stylesheet	CSS	
test_framework		Minitest
template_engine		:erb

: <https://riptutorial.com/ko/ruby-on-rails/topic/2841/>

26: Rails

```
. rails s .
```

Examples

```
. development .
```

```
rails s
```

```
-e .
```

```
rails s -e test
```

```
.
```

```
~/bashrc .
```

```
export RAILS_ENV=production in your
```

Passenger `apache.conf` `RailsEnv production .`

```
<VirtualHost *:80>
  ServerName application_name.rails.local
  DocumentRoot "/Users/rails/application_name/public"
  RailsEnv production ## This is the default
</VirtualHost>
```

Rails : <https://riptutorial.com/ko/ruby-on-rails/topic/9915/-rails--->

27:

`config.active_record.default_timezone = Time.local (local) Time.utc (utc) . utc`
<http://guides.rubyonrails.org/configuring.html>

Active Record UTC .

```
# application.rb
config.time_zone = 'Eastern Time (US & Canada)'
```

```
# application.rb
config.time_zone = 'Eastern Time (US & Canada)'
config.active_record.default_timezone = :local
```

: UTC , .

application.rb Rails .

`config.active_record.default_timezone`

- : **local** (`config.time_zone`)
 - : **utc** (UTC)
-

```
rake time:zones:all
```

Examples

Active Record UTC .

```
# application.rb
config.time_zone = 'Eastern Time (US & Canada)'
```

Rails .

```
# application.rb
config.time_zone = 'Eastern Time (US & Canada)'
config.active_record.default_timezone = :local
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/3367/-->

28: ActiveRecord

- `serialize: <field_plural_symbol>`

Examples

```
serialize :preferences
```

```
text :tags
```

```
(Hash Array)
```

: [serialize >> apidock.com](#)

```
class Users < ActiveRecord::Migration[5.0]
  def change
    create_table :users do |t|
      ...
      t.text :preference
      t.text :tag
      ...
      t.timestamps
    end
  end
end
```

```
class User < ActiveRecord::Base
  serialize :preferences, Hash
  serialize :tags, Array
end
```

ActiveRecord : <https://riptutorial.com/ko/ruby-on-rails/topic/7602/-activerecord->

29:

(STI)

Examples

```
class CreateUsers < ActiveRecord::Migration
  def change
    create_table :users do |t|
      t.string :name
      t.string :password
      t.string :type # <- This makes it an STI

      t.timestamps
    end
  end
end
```

```
class User < ActiveRecord::Base
  validates_presence_of :password
  # This is a parent class. All shared logic goes here
end

class Admin < User
  # Admins must have more secure passwords than regular users
  # We can add it here
  validates :custom_password_validation
end

class Guest < User
  # Lets say that we have a guest type login.
  # It has a static password that cannot be changed
  validates_inclusion_of :password, in: ['guest_password']
end
```

`Guest.create(name: 'Bob')` **ActiveRecord** type: 'Guest' **Users** .

`bob = User.where(name: 'Bob').first` `Guest` `bob.becomes(User)` **User** .

/ .

STI type . inheritance_column . :

```
class User < ActiveRecord::Base
  self.inheritance_column = :entity_type # can be string as well
end

class Admin < User; end
```

```
class CreateUsers < ActiveRecord::Migration
  def change
    create_table :users do |t|
      t.string :name
      t.string :password
      t.string :entity_type

      t.timestamps
    end
  end
end
```

```
Admin.create entity_type = "Admin" USERS .
```

STI

STI Rails type :_type_disabled inheritance_column :_type_disabled .

```
class User < ActiveRecord::Base
  self.inheritance_column = :_type_disabled
end
```

[: https://riptutorial.com/ko/ruby-on-rails/topic/9125/--](https://riptutorial.com/ko/ruby-on-rails/topic/9125/--)

30:

Docker Rails .

Examples

Dockerfile . Nick Janetakis .

. Puma (RoR dev server)

```
# Use the barebones version of Ruby 2.3.
FROM ruby:2.3.0-slim

# Optionally set a maintainer name to let people know who made this image.
MAINTAINER Nick Janetakis <nick.janetakis@gmail.com>

# Install dependencies:
# - build-essential: To ensure certain gems can be compiled
# - nodejs: Compile assets
# - libpq-dev: Communicate with postgres through the postgres gem
RUN apt-get update && apt-get install -qq -y --no-install-recommends \
    build-essential nodejs libpq-dev git

# Set an environment variable to store where the app is installed to inside
# of the Docker image. The name matches the project name out of convention only.
ENV INSTALL_PATH /mh-backend
RUN mkdir -p $INSTALL_PATH

# This sets the context of where commands will be running in and is documented
# on Docker's website extensively.
WORKDIR $INSTALL_PATH

# We want binstubs to be available so we can directly call sidekiq and
# potentially other binaries as command overrides without depending on
# bundle exec.
COPY Gemfile* $INSTALL_PATH/

ENV BUNDLE_GEMFILE $INSTALL_PATH/Gemfile
ENV BUNDLE_JOBS 2
ENV BUNDLE_PATH /gembox

RUN bundle install

# Copy in the application code from your work station at the current directory
# over to the working directory.
COPY . .

# Ensure the static assets are exposed to a volume so that nginx can read
# in these values later.
VOLUME ["$INSTALL_PATH/public"]

ENV RAILS_LOG_TO_STDOUT true

# The default command that gets run will be to start the Puma server.
```

```
CMD bundle exec puma -C config/puma.rb
```

`docker-compose . docker-compose.yml . Rails .`

```
version: '2'

services:
  backend:
    links:
      - #whatever you need to link like db
    build: .
    command: ./scripts/start.sh
    ports:
      - '3000:3000'
    volumes:
      - ../backend
    volumes_from:
      - gembox
    env_file:
      - .dev-docker.env
    stdin_open: true
    tty: true
```

```
docker-compose up docker-compose up .
```

[: https://riptutorial.com/ko/ruby-on-rails/topic/10933/-](https://riptutorial.com/ko/ruby-on-rails/topic/10933/)

31:

Examples

. (1.9.2 1.9.3) [byebug](#) (> = 2.x).

.rb .

1. `debugger byebug byebug development Gemfile`
2. `bundle install`
3. `debugger byebug .`
4. .
- 5.
6. `rails console`
7. , next enter
8. c enter

.html.erb .html.erb `<% debugger %>`

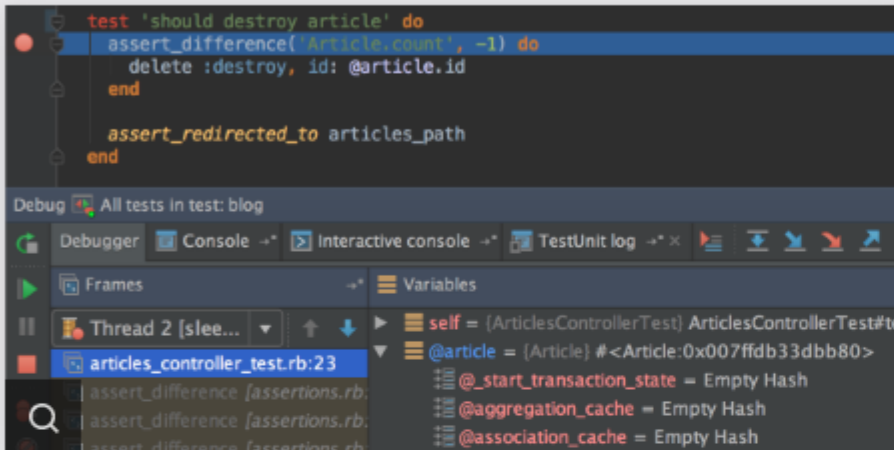
IDE

[IDE](#) ,, [Ruby \(\)](#) [GUI](#) .

Ruby IDE, RubyMine

Powerful Debugger

RubyMine brings a clever debugger with a graphical UI for Ruby, JS, and CoffeeScript. Set breakpoints and run your code step by step with all the information at your fingertips.



Smart, flexible breakpoints

- Place a breakpoint on a line of code and define the hit conditions—a set of Boolean expressions that are evaluated to determine whether to stop the code execution or not.
- If you have multiple breakpoints in your code, you can set dependencies between them to define the order in which they can be hit.
- Setting a breakpoint is just a matter of a single mouse click on the gutter or invoking a shortcut.
- Breakpoints are also available in Rails views, so you can use them for debugging Rails code as well.

Built-in expression evaluator

Evaluate any expression while your debugging session is paused. Type an expression or a code fragment, with coding assistance available in the dialog. All expressions are evaluated against the current context.

Frames and call stack

When a breakpoint is hit or code execution is suspended, you can use the Frames panel to examine the current threads, their state, call stack, methods, and variables along with their values.

Convenient user interface

- Look under the hood of any object with the Variables and Watches views.
- The UI is fully customizable: you can select toolbar commands, project code while stepping through it, and so on.
- The debugger UI is also tightly integrated with the IDE, so you can navigate between the debugger and the code editor, etc.
- You also get the complete set of debugging views.

Debugging JavaScript

- RubyMine provides an advanced JavaScript debugger, which works with Google Chrome and Firefox.
- You can easily debug ECMAScript code running on RubyMine debugger's server.
- A full-featured debugger for JavaScript, so you can debug apps running locally or remotely.

Dedicated Watches

Track any number of expressions and variables in the current stack frame context. The Watches view is available through your debugging session.

Remote debugging

As you connect to a remote host, you can use the mapping between the local source code and the remote debug processes can be launched.

Ruby on Rails +

```
print squinting . pry byebug irb . .
```

Ruby / Rails :

1. : Exception .inspect .

```
() raise .inspect (, foo):
```

```
raise foo.inspect
```

```
raise Exception / (foo) .inspect .
```

```
( :nil) .
```

2. Fallback : byebug pry **IRB** .

```
pry byebug irb .
```

```
Rails byebug gem .
```

```
1. gem 'byebug' gem 'byebug' .
```

```
2. bundle install
```

```
3. , byebug .
```

```
byebug IRB .
```

```
Byebug IRB . .
```

. @\$# (RTFM)

```
, . .
```

```
1. ? (, nil ?)
```

```
2. ? (, . / ?)
```

```
3. , ? (: .)
```

```
(: Rails app/... ). 99 %.
```

...

: Ruby :

```
@foo = Foo.new
...
@foo.bar
```

:

undefined method "bar" for Nil:nilClass

```
bar . . .
```

```
for Nil:nilClass
```

```
for Nil:nilClass @foo Nil for Nil:nilClass !@foo Foo ! Nil . , Nil bar .(, Foo Nil ).
, ( undefined method "bar" for Nil:nilClass ) bar undefined. Foo bar Foo ( nil).
```

.

:

```
. : , .5 5 .
```

tl; dr : . . .

pry ruby-on-rails

[pry](#) . . .

pry

- Gemfile gem 'pry' .

```
group :development, :test do
  gem 'pry'
end
```

- bundle install bundle install. . .

pry binding.pry . Ruby (app / controllers, app / models, app / views) binding.pry .

i)

app / controllers / users_controller.rb

```
class UsersController < ApplicationController
  def show
    use_id = params[:id]
    // breakpoint to inspect if the action is receiving param as expected
    binding.pry
    @user = User.find(user_id)
  end
end
```

```
    respond_to do |format|
      format.html
    end
  end
end
end
```

```
UsersController show .params User ActiveRecord .
```

ii)

app / views / users / show.html.haml

```
%table
  %tbody
    %tr
      %td ID
      %td= @user.id
    %tr
      %td email
      %td= @user.email
    %tr
      %td logged in ?
      %td
        - binding.pry
        - if @user.logged_in?
          %p= "Logged in"
        - else
          %p= "Logged out"
```

```
, users/show . @user.logged_in? @user.logged_in? .
```

ii)

```
app/models/user.rb

class User < ActiveRecord::Base
  def full_name
    binding.pry
    "#{self.first_name} #{self.last_name}"
  end
end
```

```
User full_name .
```

```
, pry . .
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/3877/>

32:

Rails URL . URL .

"" URL "" . Rails , URL . Rails config/routes.rb .

Examples

()

config/routes.rb . resources resource .

resources :users 7 UsersController .

```
get    '/users',          to: 'users#index'
post   '/users',          to: 'users#create'
get    '/users/new',      to: 'users#new'
get    '/users/:id/edit', to: 'users#edit'
get    '/users/:id',      to: 'users#show'
patch/put '/users/:id',    to: 'users#update'
delete '/users/:id',      to: 'users#destroy'
```

to # . app/controllers/users_controller.rb .

```
class UsersController < ApplicationController
  def index
  end

  def create
  end

  # continue with all the other methods..
end
```

only except .

```
resources :users, only: [:show]
resources :users, except: [:show, :index]
```

5.0

```
$ rake routes
```

5.0

```
$ rake routes
# OR
$ rails routes
```

```

users      GET    /users(&:format)      users#index
           POST   /users(&:format)      users#create
new_user   GET    /users/new(&:format)  users#new
edit_user  GET    /users/:id/edit(&:format) users#edit
user       GET    /users/:id(&:format)  users#show
           PATCH  /users/:id(&:format)  users#update
           PUT    /users/:id(&:format)  users#update
           DELETE /users/:id(&:format)  users#destroy

```

:

5.0

```

$ rake routes -c static_pages
static_pages_home GET    /static_pages/home(&:format)  static_pages#home
static_pages_help GET    /static_pages/help(&:format)  static_pages#help

```

5.0

```

$ rake routes -c static_pages
static_pages_home GET    /static_pages/home(&:format)  static_pages#home
static_pages_help GET    /static_pages/help(&:format)  static_pages#help

```

OR

```

$ rails routes -c static_pages
static_pages_home GET    /static_pages/home(&:format)  static_pages#home
static_pages_help GET    /static_pages/help(&:format)  static_pages#help

```

-g . helper , URL HTTP .

5.0

```

$ rake routes -g new_user      # Matches helper method
$ rake routes -g POST          # Matches HTTP Verb POST

```

5.0

```

$ rake routes -g new_user      # Matches helper method
$ rake routes -g POST          # Matches HTTP Verb POST
# OR
$ rails routes -g new_user     # Matches helper method
$ rails routes -g POST         # Matches HTTP Verb POST

```

rails <hostname>/rails/info/routes . .

	HTTP		#
/ URL		[]	
users_path		/users(&:format)	users # index
		/users(&:format)	users # create

	HTTP		#
new_user_path		/users/new(.:format)	#
edit_user_path		/users/:id/edit(.:format)	#
user_path		/users/:id(.:format)	#
		/users/:id(.:format)	#
		/users/:id(.:format)	#
		/users/:id(.:format)	#

```
routes.rb resources resource ( ) .resource index .
```

```
resource :orders, only: [:index, :create, :show]
```

.

.

- ,
-
-

IP :

```
constraints(ip: /127\.0\.0\.1$/) do
  get 'route', to: "controller#action"
end
```

[. ActionController :: Routing :: Mapper :: Scoping .](#)

.

```
# lib/api_version_constraint.rb
class ApiVersionConstraint
  def initialize(version:, default:)
    @version = version
    @default = default
  end

  def version_header
    "application/vnd.my-app.v#{@version}"
  end

  def matches?(request)
    @default || request.headers["Accept"].include?(version_header)
  end
end

# config/routes.rb
```

```
require "api_version_constraint"

Rails.application.routes.draw do
  namespace :v1, constraints: ApiVersionConstraint.new(version: 1, default: true) do
    resources :users # Will route to app/controllers/v1/users_controller.rb
  end

  namespace :v2, constraints: ApiVersionConstraint.new(version: 2) do
    resources :users # Will route to app/controllers/v2/users_controller.rb
  end
end
```

```
,
. (" ") javascript URL routes.rb . , commit\_param\_routing gem submit_tag
```

Rails submit_tag .

```
# app/views/orders/mass_order.html.erb
<%= form_for(@orders, url: mass_create_order_path do |f| %>
  <!-- Big form here -->
  <%= submit_tag "Preview" %>
  <%= submit_tag "Submit" %>
  # => <input name="commit" type="submit" value="Preview" />
  # => <input name="commit" type="submit" value="Submit" />
  ...
<% end %>

# config/routes.rb
resources :orders do
  # Both routes below describe the same POST URL, but route to different actions
  post 'mass_order', on: :collection, as: 'mass_order',
    constraints: CommitParamRouting.new('Submit'), action: 'mass_create' # when the user
  presses "submit"
  post 'mass_order', on: :collection,
    constraints: CommitParamRouting.new('Preview'), action: 'mass_create_preview' # when the
  user presses "preview"
  # Note the `as:` is defined only once, since the path helper is mass_create_order_path for
  the form url
  # CommitParamRouting is just a class like ApiVersionConstraint
end
```

Rails .

URL :

```
scope 'admin' do
  get 'dashboard', to: 'administration#dashboard'
  resources 'employees'
end
```

```
get      '/admin/dashboard',      to: 'administration#dashboard'
post     '/admin/employees', to: 'employees#create'
get      '/admin/employees/new', to: 'employees#new'
```



```

get      '/admin/employees/:id/edit', to: 'employees#edit'
get      '/admin/employees/:id',      to: 'employees#show'
patch/put '/admin/employees/:id',     to: 'employees#update'
delete   '/admin/employees/:id',     to: 'employees#destroy'

```

```

scope module: :admin do
  get 'dashboard', to: 'administration#dashboard'
end

```

module .

```

get      '/dashboard',                to: 'admin/administration#dashboard'

```

as

```

scope 'admin', as: :administration do
  get 'dashboard'
end

# => administration_dashboard_path

```

Rails namespace . .

```

namespace :admin do
end

```

```

scope 'admin', module: :admin, as: :admin

```

```

scope controller: :management do
  get 'dashboard'
  get 'performance'
end

```

```

get      '/dashboard',                to: 'management#dashboard'
get      '/performance',              to: 'management#performance'

```

URL :shallow . . . URL . :index, :create :new . URL . .

- **: shallow_path :** .

```

scope shallow_path: "sekret" do
  resources :articles do
    resources :comments, shallow: true
  end
end

```

- **: shallow_prefix :**

```
scope shallow_prefix: "sekret" do
  resources :articles do
    resources :comments, shallow: true
  end
end
```

shallow .

```
resources :auctions, shallow: true do
  resources :bids do
    resources :comments
  end
end
```

().

```
resources :auctions do
  shallow do
    resources :bids do
      resources :comments
    end
  end
end
```

.

	URI
bid_comments	/bids/:bid_id/comments(..:format)
	/bids/:bid_id/comments(..:format)
new_bid_comment	/bids/:bid_id/comments/new(..:format)
edit_comment	/comments/ : id/edit(..:format)
	/comments/ : id(..:format)
	/comments/ : id(..:format)
	/comments/ : id(..:format)
	/comments/ : id(..:format)
auction_bids	/auctions/:auction_id/bids(..:format)
	/auctions/:auction_id/bids(..:format)
new_auction_bid	/auctions/:auction_id/bids/new(..:format)
edit_bid	/bids/ : id / edit(..:format)

	URI
	/bids/:id(.:format)
	/bids/:id(.:format)
	/bids/:id(.:format)
	/bids/:id(.:format)
	/auctions(.:format)
	/auctions(.:format)
new_auction	/auctions/new(.:format)
edit_auction	/auctions/:id/edit(.:format)
	/auctions/:id(.:format)
	/auctions/:id(.:format)
	/auctions/:id(.:format)
	/auctions/:id(.:format)

URL

```
routes.rb concern . .
```

```
concern :commentable do
  resources :comments
end
```

```
:concerns . .
```

```
resource :page, concerns: :commentable
```

```
.
```

```
resource :page do
  resource :comments
end
```

```
.
```

```
/pages/#{page_id}/comments
/pages/#{page_id}/comments/#{comment_id}
```

```
. .
```

```
resource :post, concerns: %i(commentable)
resource :blog do
  concerns :commentable
end
```

Rails

4.0

```
get '/stories', to: redirect('/posts')
```

4.0

```
match "/abc" => redirect("http://example.com/abc")
```

4.0

```
match '*path' => redirect('/'), via: :get
# or
get '*path' => redirect('/')
```

4.0

```
match '*path' => redirect('/')
```

```
resources :posts do
  member do
    get 'preview'
  end
end
```

```
get '/posts/:id/preview', to: 'posts#preview'
# preview_post_path
```

```
resources :posts do
  collection do
    get 'search'
  end
end
```

```
get '/posts/search', to: 'posts#search'
```

```
# search_posts_path
```

```
:
```

```
resources :posts do
  get 'preview', on: :member
  get 'search', on: :collection
end
```

URL

ID url . (, json, xml) .

.

, url :

```
resources :users, constraints: { id: /.*/ }
```

root .

```
# config/routes.rb
Rails.application.routes.draw do
  root "application#index"
  # equivalent to:
  # get "/", "application#index"
end

# app/controllers/application_controller.rb
class ApplicationController < ActionController::Base
  def index
    render "homepage"
  end
end
```

rake routes (Rails 5 rails routes) .

```
root GET / application#index
```

root .

RESTful

```
resources :photos do
  member do
    get 'preview'
  end
  collection do
    get 'dashboard'
  end
end
```

7 RESTful

```
get '/photos/:id/preview', to: 'photos#preview'
get '/photos/dashboards', to: 'photos#dashboard'
```

```
resources :photos do
  get 'preview', on: :member
  get 'dashboard', on: :collection
end
```

/new

```
resources :photos do
  get 'preview', on: :new
end
```

?

```
get '/photos/new/preview', to: 'photos#preview'
```

RESTful

URL

```
scope '(/:locale)', locale: /#{I18n.available_locales.join('|')}/ do
  root 'example#root'
  # other routes
end
```

I18n.available_locales

mount ()

:

```
mount SomeRackApp, at: "some_route"
```

route helper some_rack_app_path some_rack_app_url

.

```
mount SomeRackApp, at: "some_route", as: :myapp
```

myapp_path myapp_url

URL URL . :

```
# config/routes.rb
TestApp::Application.routes.draw do
  get 'courses/:course_name' => redirect('/courses/{course_name}/lessons'), :as => "course"
end
```

```
, . #redirect . . %{here} . .
```

```
: as . #_ . , $ rake routes .
```

Ruby `require_relative` .

config/routes.rb:

```
YourAppName::Application.routes.draw do
  require_relative 'routes/admin_routes'
  require_relative 'routes/sidekiq_routes'
  require_relative 'routes/api_routes'
  require_relative 'routes/your_app_routes'
end
```

config/routes/api_routes.rb:

```
YourAppName::Application.routes.draw do
  namespace :api do
    # ...
  end
end
```

routes.rb .

```
resources :admins do
  resources :employees
end
```

.

admin_employees	GET	/admins/:admin_id/employees{.:format}	employees#index
	POST	/admins/:admin_id/employees{.:format}	
employees#create			
new_admin_employee	GET	/admins/:admin_id/employees/new{.:format}	employees#new
edit_admin_employee	GET	/admins/:admin_id/employees/:id/edit{.:format}	employees#edit
admin_employee	GET	/admins/:admin_id/employees/:id{.:format}	employees#show
	PATCH	/admins/:admin_id/employees/:id{.:format}	
employees#update			
	PUT	/admins/:admin_id/employees/:id{.:format}	
employees#update			
	DELETE	/admins/:admin_id/employees/:id{.:format}	
employees#destroy			
admins	GET	/admins{.:format}	admins#index
	POST	/admins{.:format}	admins#create
new_admin	GET	/admins/new{.:format}	admins#new
edit_admin	GET	/admins/:id/edit{.:format}	admins#edit
admin	GET	/admins/:id{.:format}	admins#show
	PATCH	/admins/:id{.:format}	admins#update
	PUT	/admins/:id{.:format}	admins#update

DELETE /admins/:id(.:format)

admins#destroy

: <https://riptutorial.com/ko/ruby-on-rails/topic/307/>

33:

Examples

Rails.logger

puts Rails.logger.{debug|info|warn|error|fatal} puts . log/ . like :
development.log production.log staging.log

LogRotate

/etc/logrotate.conf vim nano .

```
/YOUR/RAILSAPP/PATH/log/*.log {  
  daily  
  missingok  
  rotate 7  
  compress  
  delaycompress  
  notifempty  
  copytruncate  
}
```

- **daily** - . . .
- **missingok** - .
- **7 - 7**
- **compress** - GZip.
- **delaycompress** - .
- **notifempty** - .
- **copytruncate** - . Rails . Rails .

Logrotate

logrotate . sudo /usr/sbin/logrotate -f /etc/logrotate.conf

: <https://riptutorial.com/ko/ruby-on-rails/topic/3904/>

34: Amazon RDS

AWS RDS database.yml .

Examples

MYSQL RDS .

MYSQL

1. RDS .
2. Launch DB Instance .
3. Defaul MYSQL Community Edition select .
4. , production next step .
5. mysql version, storage size, DB Instance Identifier, Master Username and Password next step .
6. Database Name Launch DB Instance .
7. . , () ,

MySQL gemfile .

```
gem 'mysql2'
```

```
bundle install
```

- PostgreSQL gem 'pg'
- gem 'activerecord-oracle_enhanced-adapter' Oracle
- gem 'sql_server' SQL Server)

database.yml config / database.yml .

```
production:
  adapter: mysql2
  encoding: utf8
  database: <%= RDS_DB_NAME %> # Which you have entered you creating database
  username: <%= RDS_USERNAME %> # db master username
  password: <%= RDS_PASSWORD %> # db master password
  host: <%= RDS_HOSTNAME %> # db instance endpoint
  port: <%= RDS_PORT %> # db post. For MYSQL 3306
```

Amazon RDS : <https://riptutorial.com/ko/ruby-on-rails/topic/10922/--amazon-rds->

35:

Examples

Rails 4.2 Rails 5.0

`: Rails` `Git` .

Rails 4.2 Rails 5.0 Ruby 2.2.2 . Ruby Gemfile .

```
gem 'rails', '4.2.X'
```

:

```
gem 'rails', '~> 5.0.0'
```

.

```
$ bundle update
```

.

```
$ rake rails:update
```

.

- -, .
- n -, .
- a - all, .
- q -, .
- d - diff .
- h -

.

Rails 5.0 ActiveRecord ActiveRecord::Base ApplicationRecord . ApplicationRecord

ApplicationController . application_record.rb app/models/ **rb** application_record.rb .

```
class ApplicationRecord < ActiveRecord::Base
  self.abstract_class = true
end
```

Rails 5.0 . false . Rails 4.2 . Rails 4.2 Rails 5.0 .

```
ActiveSupport.halt_callback_chains_on_return_false = false
```

```
config/application.rb .throw(:abort) .
```

Rails 5.0 `ActiveJob` **Rails 4.2** `ActiveJob::Base` `ApplicationJob` **Rails 5.0** `app/jobs/application_job.rb` . .

```
class ApplicationJob < ActiveJob::Base
end
```

```
ActiveJob::Base ApplicationJob .
```

Rails 5.0 **Rails** . `bin/rails`, `rails` . `$ rake db:migrate` `$ rails db:migrate` `$ rails db:migrate` . `$ bin/rails` . `bin/rails` `rake` .

: <https://riptutorial.com/ko/ruby-on-rails/topic/3496/>

36:

Examples

101

1 : Rails

```
gem install rails -v 4.1
rails new angular_example
```

2 :

Gemfile .

```
gem 'turbolinks'
```

app/assets/javascripts/application.js require .

```
//= require turbolinks
```

3 : AngularJS

Angular Rails Gemfile .

```
gem 'angular-rails-templates'
gem 'bower-rails'
```

.

```
bundle install
```

AngularJS bower .

```
rails g bower_rails:initialize json
```

bower.json .

```
{
  "name": "bower-rails generated dependencies",
```

```
"dependencies": {  
  
  "angular": "latest",  
  "angular-resource": "latest",  
  "bourbon": "latest",  
  "angular-bootstrap": "latest",  
  "angular-ui-router": "latest"  
}  
}
```

bower.json bower.json .

```
bundle exec rake bower:install
```

4 :

app/assets/javascript/angular-app/ .

```
templates/  
modules/  
filters/  
directives/  
models/  
services/  
controllers/
```

app/assets/javascripts/application.js Angular require , Angular app . :

```
//= require jquery  
//= require jquery_ujs  
  
//= require angular  
//= require angular-rails-templates  
//= require angular-app/app  
  
//= require_tree ./angular-app/templates  
//= require_tree ./angular-app/modules  
//= require_tree ./angular-app/filters  
//= require_tree ./angular-app/directives  
//= require_tree ./angular-app/models  
//= require_tree ./angular-app/services  
//= require_tree ./angular-app/controllers
```

5 :

app/assets/javascripts/angular-app/app.js.coffee .

```
@app = angular.module('app', [ 'templates' ])  
  
@app.config([ '$httpProvider', ($httpProvider)->  
  $httpProvider.defaults.headers.common['X-CSRF-Token'] =
```

```
$('#meta[name=csrf-token]').attr('content') ]) @app.run(-> console.log 'angular app running' )
```

app/assets/javascripts/angular-app/modules/example.js.coffee :

```
@exampleApp = angular.module('app.exampleApp', [ # additional dependencies here ])
.run(-> console.log 'exampleApp running' )
```

app/assets/javascripts/angular-app/controllers/exampleCtrl.js.coffee .

```
angular.module('app.exampleApp').controller("ExampleCtrl", [ '$scope', ($scope)->
console.log 'ExampleCtrl running' $scope.exampleValue = "Hello angular and rails" ])
```

Rails `Angular` . config/routes.rb :

```
Rails.application.routes.draw do get 'example' => 'example#index' end
```

Rails .

```
rails g controller Example
```

app/controllers/example_controller.rb .

```
class ExampleController < ApplicationController
  def index
    end
end
```

. app/views/example/index.html.erb :

```
<div ng-app='app.exampleApp' ng-controller='ExampleCtrl'>
  <p>Value from ExampleCtrl:</p>
  <p>{{ exampleValue }}</p>
</div>
```

Rails <http://localhost:3000/example> .

: <https://riptutorial.com/ko/ruby-on-rails/topic/3902/--->

37:

Ruby on Rails .

Stripe Braintree .

.

[Braintree](#)

Examples

Stripe

Gemfile [Stripe gem](#) .

```
gem 'stripe'
```

initializers/stripe.rb . .

```
require 'require_all'

Rails.configuration.stripe = {
  :publishable_key => ENV['STRIPE_PUBLISHABLE_KEY'],
  :secret_key      => ENV['STRIPE_SECRET_KEY']
}

Stripe.api_key = Rails.configuration.stripe[:secret_key]
```

```
Stripe::Customer.create({email: email, source: payment_token})
```

Stripe .

payment_token . : [Stripe.js](#)

```
Stripe::Plan.retrieve(stripe_plan_id)
```

ID Stripe .

Stripe .

```
Stripe::Subscription.create(customer: customer.id, plan: plan.id)
```


• [Stripe](#) • [Stripe Subscription lifecycle](#) •

————

• •

```
Stripe::Charge.create(amount: amount, customer: customer, currency: currency)
```

Google •

:

- •, 2000 20 • •
- • EUR USD •
- () •

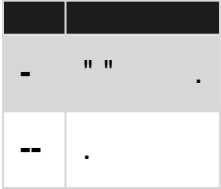
: <https://riptutorial.com/ko/ruby-on-rails/topic/10929/-->

38: -

. Rails Rails :: Application Rails :: Engine "".

/ . . , (Spree) .

- rails plugin new [engine name] --mountable



Examples

```
rails plugin new [engine name] --mountable
```

.
(gem)

Spree ()

- : <https://riptutorial.com/ko/ruby-on-rails/topic/10881/--->

39: 5

Examples

Ruby on Rails 5 API

Rails 5 API

```
rails new app_name --api
```

```
create
create  README.rdoc
create  Rakefile
create  config.ru
create  .gitignore
create  Gemfile
create  app
create  app/assets/javascripts/application.js
create  app/assets/stylesheets/application.css
create  app/controllers/application_controller.rb
create  app/helpers/application_helper.rb
create  app/views/layouts/application.html.erb
create  app/assets/images/.keep
create  app/mailers/.keep
create  app/models/.keep
create  app/controllers/concerns/.keep
create  app/models/concerns/.keep
create  bin
create  bin/bundle
create  bin/rails
create  bin/rake
create  bin/setup
create  config
create  config/routes.rb
create  config/application.rb
create  config/environment.rb
create  config/secrets.yml
create  config/environments
create  config/environments/development.rb
create  config/environments/production.rb
create  config/environments/test.rb
create  config/initializers
create  config/initializers/assets.rb
create  config/initializers/backtrace_silencers.rb
create  config/initializers/cookies_serializer.rb
create  config/initializers/filter_parameter_logging.rb
create  config/initializers/inflections.rb
create  config/initializers/mime_types.rb
create  config/initializers/session_store.rb
create  config/initializers/wrap_parameters.rb
create  config/locales
create  config/locales/en.yml
create  config/boot.rb
```

```
create config/database.yml
create db
create db/seeds.rb
create lib
create lib/tasks
create lib/tasks/.keep
create lib/assets
create lib/assets/.keep
create log
create log/.keep
create public
create public/404.html
create public/422.html
create public/500.html
create public/favicon.ico
create public/robots.txt
create test/fixtures
create test/fixtures/.keep
create test/controllers
create test/controllers/.keep
create test/mailers
create test/mailers/.keep
create test/models
create test/models/.keep
create test/helpers
create test/helpers/.keep
create test/integration
create test/integration/.keep
create test/test_helper.rb
create tmp/cache
create tmp/cache/assets
create vendor/assets/javascripts
create vendor/assets/javascripts/.keep
create vendor/assets/stylesheets
create vendor/assets/stylesheets/.keep
```

```
app_name app_name . .
```

.

```
cd app_name
bundle install
```

. Rails SQLite . :

```
rake db:setup
```

.

```
$ rails server
```

<http://localhost:3000> () API !

RVM Ruby on Rails 5

RVM .

RVM , .

```
$ rvm get stable
$ rvm install ruby --latest
```

:

```
$ ruby -v
> ruby 2.3.0p0
```

Rails 5 gemset .

```
$ rvm use ruby-2.3.0@my_app --create
$ gem install rails
```

.

```
$ rails -v
> Rails 5.0.0
```

5 : <https://riptutorial.com/ko/ruby-on-rails/topic/3019/-5>

40: -

Rails

Rails . Ruby on Rails Rails::Engine Rails::Application . .

- new my_module --mountable

Examples

#

Ruby on Rails .

```
rails new ModularTodo
```

!

```
cd ModularTodo && rails plugin new todo --mountable
```

" (!).

```
mkdir engines && mv todo ./engines
```

. .

```
#ModularTodo/engines/todo/todo.gemspec
$:push File.expand_path("../lib", __FILE__)

#Maintain your gem's version:
require "todo/version"

#Describe your gem and declare its dependencies:
Gem::Specification.new do |s|
  s.name           = "todo"
  s.version        = Todo::VERSION
  s.authors        = ["Thibault Denizet"]
  s.email          = ["bo@samurails.com"]
  s.homepage       = "http://samurails.com"
  s.summary        = "Todo Module"
  s.description    = "Todo Module for Modular Rails article"
  s.license        = "MIT"

  #Moar stuff
  #...
end
```

Gemfile Todo .

```
#ModularTodo/Gemfile
#Other gems
gem 'todo', path: 'engines/todo'
```

```
bundle install . .
```

```
Using todo 0.0.1 from source at engines/todo
```

```
, Todo ! :Todo . routes.rb .
```

```
Rails.application.routes.draw do
  mount Todo::Engine => "/", as: 'todo'
end
```

```
/ /todo . ,/.
```

```
. / .!
```

Todo

```
Todo Task engine.rb .
```

```
#ModularTodo/engines/todo/lib/todo/engine.rb
module Todo
  class Engine < ::Rails::Engine
    isolate_namespace Todo

    initializer :append_migrations do |app|
      unless app.root.to_s.match(root.to_s)
        config.paths["db/migrate"].expanded.each do |p|
          app.config.paths["db/migrate"] << p
        end
      end
    end
  end
end
```

```
Todo .
```

```
Task . scaffold .
```

```
cd engines/todo && rails g scaffold Task title:string content:text
```

```
rake db:migrate
```

Todo .

```
#ModularTodo/engines/todo/config/routes.rb
Todo::Engine.routes.draw do
  resources :tasks
  root 'tasks#index'
end
```

, , ., , !?! JQuery application.js .

```
// ModularTodo/engines/todo/app/assets/javascripts/todo/application.js
//= require jquery
//= require jquery_ujs
//= require_tree .
```

, !

- : <https://riptutorial.com/ko/ruby-on-rails/topic/9080/----->

41: .

```
: rails generate GENERATOR_NAME [args] [options] .
```

```
rails generate rails generate . : rails g .
```

-h / --help	
-p / --pretend	: .
field:type	'field-name' 'type' . field:type 'type' "

```
field:type 'type' .
```

:string	(255)
:text	
:binary	,
:boolean	true false
:date	
:time	
:datetime	
:float	
:decimal	
:integer	

Examples

db migration & booleanplate ActiveRecord

```
rails generate model NAME column_name:column_type
```

```
'NAME' . 'field' DB 'type' (: name:string body:text ).
```

```
belongs_to:model_name .
```

```
User username , email School User
```

```
rails generate model User username:string email:string school:belongs_to
```

```
rails g rails generate . .
```

```
rails g model User username:string email:string school:belongs_to
```

.

```
rails generate migration NAME [field[:type][:index] field[:type][:index]] [options]
```

```
rails generate migration .
```

```
, first_name last_name users .
```

```
rails generate migration AddNamesToUsers last_name:string first_name:string
```

:

```
class AddNamesToUsers < ActiveRecord::Migration[5.0]
  def change
    add_column :users, :last_name, :string
    add_column :users, :first_name, :string
  end
end
```

.

5.0

```
rake db:migrate
```

5.0

```
rails db:migrate
```

```
: generate g .
```

.

```
: CRUD / . (//) (:()).
```

```
,,, rails g scaffold .
```

```
$ rails g scaffold Widget name:string price:decimal
  invoke active_record
  create db/migrate/20160722171221_create_widgets.rb
  create app/models/widget.rb
  invoke test_unit
  create test/models/widget_test.rb
  create test/fixtures/widgets.yml
  invoke resource_route
  route resources :widgets
  invoke scaffold_controller
```

```

create    app/controllers/widgets_controller.rb
invoke   erb
create   app/views/widgets
create   app/views/widgets/index.html.erb
create   app/views/widgets/edit.html.erb
create   app/views/widgets/show.html.erb
create   app/views/widgets/new.html.erb
create   app/views/widgets/_form.html.erb
invoke   test_unit
create   test/controllers/widgets_controller_test.rb
invoke   helper
create   app/helpers/widgets_helper.rb
invoke   jbuilder
create   app/views/widgets/index.json.jbuilder
create   app/views/widgets/show.json.jbuilder
invoke   assets
invoke   javascript
create   app/assets/javascripts/widgets.js
invoke   scss
create   app/assets/stylesheets/widgets.scss

```

```
rake db:migrate .
```

<http://localhost:3000/widgets> **CRUD** .

```
rails g controller .
```

```
$ bin/rails generate controller controller_name
```

```
generate controller ControllerName action1 action2 .
```

hello .

```
$ bin/rails generate controller Greetings hello
```

```

create    app/controllers/greetings_controller.rb
route    get "greetings/hello"
invoke   erb
create   app/views/greetings
create   app/views/greetings/hello.html.erb
invoke   test_unit
create   test/controllers/greetings_controller_test.rb
invoke   helper
create   app/helpers/greetings_helper.rb
invoke   assets
invoke   coffee
create   app/assets/javascripts/greetings.coffee
invoke   scss
create   app/assets/stylesheets/greetings.scss

```

	greetings_controller.rb
	hello.html.erb
	greetings_controller_test.rb
	greetings_helper.rb
	greetings.coffee

routes.rb .

. : <https://riptutorial.com/ko/ruby-on-rails/topic/2540/--->

42:

Devise . . . Devise . . . Devise . . .

```
rails generate devise:install devise configs , devise .
```

```
USER rails generate devise USER USER .
```

```
before_action :authenticate_user! before_action :authenticate_user! user . .
```

Examples

Devise

Gemfile gem :

```
gem 'devise'
```

```
bundle install .
```

```
$ rails generate devise:install .
```

Devise URL .

```
config.action_mailer.default_url_options = { host: 'localhost', port: 3000 }
```

```
config/environments/development.rb .
```

```
config/environments/production.rb
```

```
config.action_mailer.default_url_options = { host: 'your-site-url' }
```

```
.$ rails generate devise USER , USER .
```

```
, rake db:migrate .
```

```
rails generate devise:views . . .
```

```
(:User Admin) Devise Devise . Devise . config/initializers/devise.rb
```

```
config.scoped_views = true .
```

```
. rails generate devise:views users
```

```
-V . rails generate devise:views -v registrations confirmations
```

```
devise before_action ( " ).
```

```
before_action :authenticate_user!
```

```
.  
user_signed_in?
```

```
.  
current_user
```

```
.  
user_session
```

- `Devise User) Member) , user member`

`auth` Gemfile . <https://github.com/intridea/omniauth/wiki/List-of-Strategies>

```
gem 'omniauth-github', :github => 'intridea/omniauth-github'  
gem 'omniauth-openid', :github => 'intridea/omniauth-openid'
```

```
Rails.application.config.middleware.use OmniAuth::Builder do  
  require 'openid/store/filesystem'  
  provider :github, ENV['GITHUB_KEY'], ENV['GITHUB_SECRET']  
  provider :openid, :store => OpenID::Store::FileSystem.new('/tmp')  
end
```

`OmniAuth /auth/:provider .`

`omniauth /auth/failure .`

has_secure_password

```
rails generate model User email:string password_digest:string
```

has_secure_password

```
class User < ActiveRecord::Base  
  has_secure_password  
end
```

```
.  
user = User.new email: 'bob@bob.com', password: 'Password1', password_confirmation:  
'Password1'
```

```
user.authenticate('somepassword')
```

has_secure_token

```
# Schema: User(token:string, auth_token:string)
```

```
class User < ActiveRecord::Base
  has_secure_token
  has_secure_token :auth_token
end
```

`auth_token` .

```
user = User.new
user.save
user.token # => "pX27zsMN2ViQKta1bGfLmVJE"
user.auth_token # => "77TMHrHJFvFDwodq8w7Ev2m7"
```

`regenerate_token regenerate_auth_token` .

```
user.regenerate_token # => true
user.regenerate_auth_token # => true
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/1794/-->

43: : AASM

Examples

AASM

.

AASM

Rails [Fat Model, Skinny Controller](#) . , .

Gemfile

```
gem 'aasm'
```

.

```
class Quote

  include AASM

  aasm do
    state :requested, initial: true # User sees a product and requests a quote
    state :priced # Seller sets the price
    state :payed # Buyer pays the price
    state :canceled # The buyer is not willing to pay the price
    state :completed # The product has been delivered.

    event :price do
      transitions from: :requested, to: :priced
    end

    event :pay do
      transitions from: :priced, to: :payed, success: :set_payment_date
    end

    event :complete do
      transitions from: :payed, to: :completed, guard: product_delivered?
    end

    event :cancel do
      transitions from: [:requested, :priced], to: :canceled
      transitions from: :payed, to: :canceled, success: :reverse_charges
    end

  end

  private

  def set_payment_date
    update payed_at: Time.zone.now
  end
end
```



```
end
```

```
Quote .
```

```
(: , , ). . . .
```

```
: . valid , end , being .
```

```
AASM .
```

```
:
```

```
Quote.priced # Shows all Quotes with priced events  
quote.priced? # Indicates if that specific quote has been priced  
quote.price! # Triggers the event the would transition from requested to priced.
```

```
. . .
```

```
(:
```

```
guard: product_delivered?
```

```
product_delivered? product_delivered? . . .
```

```
success: :reverse_charges
```

```
:reverse_charges .
```

```
AASM .
```

: AASM : <https://riptutorial.com/ko/ruby-on-rails/topic/7826/----aasm>

44:

Examples

, Mongoid Gemfile :

```
gem "mongoid", "~> 4.0.0"
```

bundle install . .

```
$ gem install mongoid
```

.

```
$ rails g mongoid:config
```

(myapp)/config/mongoid.yml .

(User).

```
$ rails g model User
```

app/models/user.rb .

```
class User
  include Mongoid::Document
end
```

(id) . ActiveRecord , . . .

. created_at updated_at .

```
include Mongoid::Timestamps
```

```
include Mongoid::Document :
```

```
class User
  include Mongoid::Document
  include Mongoid::Timestamps
end
```

Mongoid 16 .

-
- **BigDecimal**
-

-
-
-
-
-
- BSON :: ObjectId
- BSON ::
-
-
-
-
-
- TimeWithZone

(name String) .

```
field :name, type: String
```

default .

```
field :name, type: String, default: ""
```

Mongoid ActiveRecord :

- :has_one / belongs_to
- :has_many / belongs_to
- :has_and_belongs_to_many

(User has_many posts) User .

```
has_many :posts
```

Post :

```
belongs_to :user
```

user_id Post , user Post posts User .

.

- :embeds_one / embedded_in
- :embeds_many / embedded_in

(embeds_many) User .

```
embeds_many :addresses
```

Address :

```
embedded_in :user
```

```
Address User addresses User .
```

Mongoid ActiveRecord . ().

```
User.first #Gets first user from the database

User.count #Gets the count of all users from the database

User.find(params[:id]) #Returns the user with the id found in params[:id]

User.where(name: "Bob") #Returns a Mongoid::Criteria object that can be chained
                        #with other queries (like another 'where' or an 'any_in')
                        #Does NOT return any objects from database

User.where(name: "Bob").entries #Returns all objects with name "Bob" from database

User.where(:name.in => ['Bob', 'Alice']).entries #Returns all objects with name "Bob" or
" Alice" from database

User.any_in(name: ["Bob", "Joe"]).first #Returns the first object with name "Bob" or "Joe"
User.where(:name => 'Bob').exists? # will return true if there is one or more users with name
bob
```

: [https://riptutorial.com/ko/ruby-on-rails/topic/3071/-](https://riptutorial.com/ko/ruby-on-rails/topic/3071/)

45: .

Examples

rails_react gem

Gemfile :

```
gem 'react-rails'
```

:

```
bundle install
```

.

```
rails g react:install
```

:

components.js app / assets / javascripts / components / . application.js .

```
//= require react  
//= require react_ujs  
//= require components
```

react_rails

React.js

React.js (, ,) . .

```
# config/environments/development.rb  
MyApp::Application.configure do  
  config.react.variant = :development  
end
```

```
# config/environments/production.rb  
MyApp::Application.configure do  
  config.react.variant = :production  
end
```

.

```
MyApp::Application.configure do  
  config.react.addons = true # defaults to false  
end
```

Rails , // react React.js .

react-rails React.js . React.js VERSIONS.md .

JSX

. .jsx .

BabelTransformer

:

```
config.react.jsx_transform_options = {
  blacklist: ['spec.functionName', 'validation.react', 'strict'], # default options
  optional: ["transformerName"], # pass extra babel options
  whitelist: ["useStrict"] # even more options[enter link description here][1]
}
```

, - . .

react-rails (react_component) (react_ujs) React . () UJS .

div . :

```
<%= react_component('HelloMessage', name: 'John') %>
<!-- becomes: -->
<div data-react-class="HelloMessage" data-react-
props="{&quot;name&quot;:&quot;John&quot;}"></div>
```

, react_ujs data-react-class data-react-props .

Turbolinks : : . Turbolinks> = 2.4.0 .

Ajax UJS javascript .

ReactRailsUJS.mountComponents () .

```
react_component(component_class_name, props={}, html_options={})
```

component_class_name . (: "MyApp.Header.MenuItem") .

`props` is either an object that responds to `#to_json` or an already-stringified JSON object (eg, made with Jbuilder, see note below).

html_options : tag: data-react-class data-react-props div . prerender: true prerender: true . **other (: class :, id :) content_tag .

. : <https://riptutorial.com/ko/ruby-on-rails/topic/7032/----->

46:

```
Gemfile . 2 .
```

```
.  
:
```

```
# temporary downgrade for TeamCity  
gem 'rake', '~> 10.5.0'  
# To upload invoicing information to payment provider  
gem 'net-sftp'
```

Examples

?

.

```
. ( ) .
```

Rails

```
Rails Gemfile Gemfile. . bundler ( ).
```

Gemfile.lock

```
Gemfile.lock . .
```

```
GEM  
remote: https://rubygems.org/  
specs:  
devise (4.0.3)  
bcrypt (~> 3.0)  
orm_adapter (~> 0.1)  
railties (>= 4.1.0, < 5.1)  
responders  
warden (~> 1.2.3)
```

```
devise . Gemfile.lock 4.0.3 .
```

```
, . issues issues features .
```

[Semantic Versioning 2.0.0](#) .

```
bundler . Bundler bower .
```

```
gem install bundler
```

Gemfile Gemfile .

```
bundle
```

, gemfiles RubyGems URL .

```
bundle init rubygems.org Gemfile . SSL https .
```

```
source 'https://rubygems.org'
```

```
gem 'rails', '4.2.6'  
gem 'rack', '>=1.1'  
gem 'puma', '~>3.0'
```

> = 1.0 . ~> . ~ 2.0.3> 2.0.3 <2.1 . ~ 2.1> 2.1 <3.0 . ~ 2.2.beta 2.2.12 .

Git repo . :tag, :branch :ref. master .

```
gem 'nokogiri', :git => 'https://github.com/sparklemotion/nokogiri', :branch => 'master'
```

:path gem .

```
gem 'extracted_library', :path => './vendor/extracted_library'
```

. (--without) Bundler.require .

```
gem 'rails_12factor', group: :production  
  
group :development, :test do  
  gem 'byebug'  
  gem 'web-console', '~> 2.0'  
  gem 'spring'  
  gem 'dotenv-rails'  
end
```

Gemfile ruby . Gemfile Ruby Bundler .

```
ruby '2.3.1'
```


RVM(Ruby Version Manager) gemset .gemset . gemset () . .

RVM @global gemset (> = 0.1.8). @global gemset . .

ruby-2.3.1 .

```
rvm use ruby-2.3.1
```

gemset :

```
rvm gemset create new_gemset
```

new_gemset new_gemset . **gemsets :**

```
rvm gemset list
```

:

```
rvm gemset list_all
```

gemset (new_gemset gemset new_gemset):

```
rvm gemset use new_gemset
```

gemset .

```
rvm use ruby-2.1.1@new_gemset
```

gemset :

```
rvm use 2.1.1@new_gemset --default
```

:

```
rvm gemset empty new_gemset
```

gemset .

```
rvm gemset copy 2.1.1@rails4 2.1.2@rails4
```

.

```
rvm gemset delete new_gemset
```

gemset :

```
rvm gemset name
```

gemset :

```
rvm @global do gem install ...
```

Gemset

RVM (gemset) .

```
~/.rvm/gemsets ~/.rvm/gemsets global.gems default.gems .ree-1.8.7-p2010.02 rvm .
```

```
~/.rvm/gemsets/ree/1.8.7/p2010.02/global.gems
~/.rvm/gemsets/ree/1.8.7/p2010.02/default.gems
~/.rvm/gemsets/ree/1.8.7/global.gems
~/.rvm/gemsets/ree/1.8.7/default.gems
~/.rvm/gemsets/ree/global.gems
~/.rvm/gemsets/ree/default.gems
~/.rvm/gemsets/global.gems
~/.rvm/gemsets/default.gems
```

```
~/.rvm/gemsets/global.gems :
```

```
bundler
awesome_print
```

gemset . default.gems global.gems rvm .

: <https://riptutorial.com/ko/ruby-on-rails/topic/3130/>

47: PDF

Examples

```
class FundsController < ApplicationController

  def index
    @funds = Fund.all_funds(current_user)
  end

  def show
    @fund = Fund.find(params[:id])
    respond_to do |format|
      format.html
      format.pdf do
        pdf = FundsPdf.new(@fund, view_context)
        send_data pdf.render, filename:
          "fund_#{@fund.created_at.strftime("%d/%m/%Y")}.pdf",
          type: "application/pdf"
      end
    end
  end
end
```

FundsPdf.new(@fund, view_context) . FundsPdf helper @fund view_context FundsPdf . FundsPdf

```
class FundPdf < Prawn::Document

  def initialize(fund, view)
    super()
    @fund = fund
    @view = view
    upper_half
    lower_half
  end

  def upper_half
    logopath = "#{Rails.root}/app/assets/images/logo.png"
    image logopath, :width => 197, :height => 91
    move_down 10
    draw_text "Receipt", :at => [220, 575], size: 22
    move_down 80
    text "Hello #{@invoice.customer.profile.first_name.capitalize},"
  end

  def thanks_message
    move_down 15
    text "Thank you for your order.Print this receipt as
confirmation of your order.",
      :indent_paragraphs => 40, :size => 13
  end
end
```

PDF .

Gem PDF MIME . mime_types.rb PDF mime .

Pdf .



```
pdf = Prawn::Document.new
pdf.text "Hello World"
pdf.render_file "assignment.pdf"
```



```
Prawn::Document.generate("implicit.pdf") do
  text "Hello World"
end
```



```
Prawn::Document.generate("explicit.pdf") do |pdf|
  pdf.text "Hello World"
end
```

PDF : <https://riptutorial.com/ko/ruby-on-rails/topic/4163/-pdf>

48:

Rails Rails . Rails .

Examples

Rails ?

config.frameworks

Symbol .

Rails 1.x Rails

- ActionMailer
-
- ActionWebService
-
- ActiveSupport
-

Rails 2.x

- ActionMailer
-
-
- ActiveSupport (*ActiveWebService* ActiveSupport , *Rails SOAP REST*)
- ActiveSupport
-

Rails 3.x

- ActionMailer
-
-
-
- ActiveSupport
- ActiveSupport
-

: <https://riptutorial.com/ko/ruby-on-rails/topic/8107/---->

49:

Examples

```
class Post < ActiveRecord::Base
  belongs_to :user
  has_many :comments

  validates :user, presence: true
  validates :title, presence: true, length: { in: 6..40 }

  scope :topic, -> (topic) { joins(:topics).where(topic: topic) }

  before_save :update_slug
  after_create :send_welcome_email

  def publish!
    update(published_at: Time.now, published: true)
  end

  def self.find_by_slug(slug)
    find_by(slug: slug)
  end

  private

  def update_slug
    self.slug = title.join('-')
  end

  def send_welcome_email
    WelcomeMailer.welcome(self).deliver_now
  end
end
```

-
-
-
-

-
-
-
-

. " , " . ? User , Cart Product - ?

ActiveRecord::Base . , . .

Ruby . . (:UserCreation UserCreationService CreateUserAccount . app / services . , Rails .

.

() . . .

```
# app/services/accept_invite.rb
class AcceptInvite
  def self.call(invite, user)
    invite.accept!(user)
    UserMailer.invite_accepted(invite).deliver
  end
end
```

.

app/services directory app/services directory . . :

- app/services/invite/accept.rb Invite::Accept app/services/invite/create.rb Invite::Create
- : ApproveTransaction , SendTestNewsletter , ImportUsersFromCsv
- call . . ApproveTransaction.approve() . , call lambda , procs .

.

: ApproveTransaction , CancelTransaction , BlockAccount , SendTransactionApprovalReminder ...

., ActiveRecord " " .

(params, session, cookies) .

```
class InviteController < ApplicationController
  def accept
    invite = Invite.find_by_token!(params[:token])
    if AcceptInvite.call(invite, current_user)
      redirect_to invite.item, notice: "Welcome!"
    else
      redirect_to '/', alert: "Oopsy!"
    end
  end
end
```

, , .

```
class Invite < ActiveRecord::Base
  def accept!(user, time=Time.now)
    update_attributes!(
      accepted_by_user_id: user.id,
      accepted_at: time
    )
  end
end
```

!

:

- (:)
- (: Order, CreditCard Customer)
- (:)
- (:).
- (:).

[Adam Niedzielski](#)

[BREW](#)

[: https://riptutorial.com/ko/ruby-on-rails/topic/7623/-](https://riptutorial.com/ko/ruby-on-rails/topic/7623/)

50: Constantize

Examples

safe_constantize

User ActiveRecord Mongoid::User Rails (Integer Array).

```
my_string = "User" # Capitalized string
# => 'User'
my_constant = my_string.safe_constantize
# => User
my_constant.all.count
# => 18

my_string = "Array"
# => 'Array'
my_constant = my_string.safe_constantize
# => Array
my_constant.new(4)
# => [nil, nil, nil, nil]
```

—

. "array" .

```
my_string = "not_a_constant"
# => 'not_a_constant'
my_string.safe_constantize
# => nil

my_string = "array" #Not capitalized!
# => 'array'
my_string.safe_constantize
# => nil
```

Constantize : <https://riptutorial.com/ko/ruby-on-rails/topic/3015/-constantize>

51:

ActionCable Rails 4.x Rails 5 .

Examples



```
# app/channels/appearance_channel.rb
class NotificationsChannel < ApplicationCable::Channel
  def subscribed
    stream_from "notifications"
  end

  def unsubscribed
  end

  def notify(data)
    ActionCable.server.broadcast "notifications", { title: 'New things!', body: data }
  end
end
```

☐ (CoffeeScript)

app / assets / javascripts / channels / notifications.coffee

```
App.notifications = App.cable.subscriptions.create "NotificationsChannel",
  connected: ->
    # Called when the subscription is ready for use on the server
    $(document).on "change", "input", (e)=>
      @notify(e.target.value)

  disconnected: ->
    # Called when the subscription has been terminated by the server
    $(document).off "change", "input"

  received: (data) ->
    # Called when there's incoming data on the websocket for this channel
    $('body').append(data)

  notify: (data)->
    @perform('notify', data: data)
```

app / assets / javascripts / application.js # .

```
//= require jquery
```

```
//= require jquery_ujs
//= require turbolinks
//= require_tree .
```

app / assets / javascripts / cable.js # .

```
//= require action_cable
//= require_self
//= require_tree ./channels

(function() {
  this.App || (this.App = {});

  App.cable = ActionCable.createConsumer();

}).call(this);
```

```
# app/channels/application_cable/connection.rb
module ApplicationCable
  class Connection < ActionCable::Connection::Base
    identified_by :current_user

    def connect
      self.current_user = find_verified_user
      logger.add_tags 'ActionCable', current_user.id
      # Can replace current_user.id with usernames, ids, emails etc.
    end

    protected

    def find_verified_user
      if verified_user = env['warden'].user
        verified_user
      else
        reject_unauthorized_connection
      end
    end
  end
end
```

: [https://riptutorial.com/ko/ruby-on-rails/topic/1498/-](https://riptutorial.com/ko/ruby-on-rails/topic/1498/)

52:

Examples

`rails generate model name` (`rails g model name`).

`rails generate model name` .

`ActiveRecord < ActiveRecord::Base` .

```
class User < ActiveRecord::Base
end
```

`rails generate model name` .

```
# user
app/models/user.rb

# SomeModel
app/models/some_model.rb
```

`ActiveRecord.find(id)` (`ActiveRecord.find(id)`).

```
# Searches the User with ID 1
User.find(1)
```

`rails generate model name` .

`rails generate model column_name1:data_type1, column_name2:data_type2, ...`

`rails generate model name` .

```
rails generate model column_name:data_type, model_name:references
```

Ruby on Rails ActiveRecord `rails generate model name` .

```
$ rails generate model user
```

`rails generate model name` .

- `test/models/user_test.rb`
- `test/fixtures/users.yml`
- `db/migrate/XXX_create_users.rb`

`rails generate model name` .

```
$ rails g model user email:string sign_in_count:integer birthday:date
```

email, sign_in_count birthday .

```
rails generate migration AddTitleToCategories title:string
```

categories title categories .

```
class AddTitleToCategories < ActiveRecord::Migration[5.0]
  def change
    add_column :categories, :title, :string
  end
end
```

```
, rails generate migration RemoveTitleFromCategories title:string
```

categories title categories .

```
class RemoveTitleFromCategories < ActiveRecord::Migration[5.0]
  def change
    remove_column :categories, :title, :string
  end
end
```

```
(:string :string) , .
```

```
rails g CreateUsers name bio
```

Create . :

```
class CreateUsers < ActiveRecord::Migration
  def change
    create_table :users do |t|
      t.string :name
      t.string :bio
    end
  end
end
```

creation string .

```
rails g CreateJoinTableParticipation user:references group:references
```

Rails JoinTable . . .

```
class CreateJoinTableParticipation < ActiveRecord::Migration
  def change
    create_join_table :users, :groups do |t|
      # t.index [:user_id, :group_id]
      # t.index [:group_id, :user_id]
    end
  end
end
```

index .

CreateJoinTableParticipation .Create . create_table . () .

- (Add|Remove)<ignored>(To|From)<table_name>
- <ignored>JoinTable<ignored>
- Create<table_name>

(,,, ,) .

, 30 .

```
class Listing < ApplicationRecord
  after_create :set_expiry_date

  private

  def set_expiry_date
    expiry_date = Date.today + 30.days
    self.update_column(:expires_on, expiry_date)
  end
end
```

- before_validation
- after_validation
- before_save
- around_save
- before_create
- around_create
- after_create

- after_save
- after_commit / after_rollback
- before_validation
- after_validation
- before_save
- around_save
- before_update
- around_update
- after_update
- after_save
- after_commit / after_rollback
- before_destroy
- around_destroy
- after_destroy
- after_commit / after_rollback

: after_save after_create after_update .

has_and_belongs_to_many .create_table . Tags Projects has_and_belongs_to_many Projects . .

```
class CreateProjectsTagsJoinTableMigration < ActiveRecord::Migration
  def change
    create_table :projects_tags, id: false do |t|
      t.integer :project_id
      t.integer :tag_id
    end
  end
end
```

. . **P**roject **T**ags projects_tags.

ID .id: false id: false

, Rails .

Active Record . app rails console Rails . .

, name:string email:string **Users** .

```
User.create name: "John", email: "john@example.com"
```

:

```
User.find_by email: "john@example.com"
```

.

```
User.first
```

```
User .
```

```
class User < ActiveRecord::Base  
end
```

```
id = 1 first_name last_name .
```

```
user = User.find(1)  
user.update(first_name: 'Kashif', last_name: 'Liaqat')
```

```
update (), (transaction) . true, false.
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/828/>

53:

SQL

Examples

:

```
ActiveRecord::Base.transaction do
  david.withdrawal(100)
  mary.deposit(100)
end
```

. ROLLBACK .

ActiveRecord

ActiveRecord .

.

```
Account.transaction do
  balance.save!
  account.save!
end
```

. .

```
balance.transaction do
  balance.save!
  account.save!
end
```

. . .

```
Student.transaction do
  Course.transaction do
    course.enroll(student)
    student.units += course.units
  end
end
```

ActiveRecord .

.

#save #destroy . after_*

. , after_save . after_commit .

```

(after_commit after_rollback .

after_commit .after_rollback .

. ,after_commit .

ActiveRecord::Base.transaction ActiveRecord::Rollback . .transaction .
ActiveRecord::Rollback ActiveRecord::Rollback .

, .

```

```

class BooksController < ActionController::Base
  def create
    Book.transaction do
      book = Book.new(params[:book])
      book.save!
      if today_is_friday?
        # The system must fail on Friday so that our support department
        # won't be out of job. We silently rollback this transaction
        # without telling the user.
        raise ActiveRecord::Rollback, "Call tech support!"
      end
    end
    end
    # ActiveRecord::Rollback is the only exception that won't be passed on
    # by ActiveRecord::Base.transaction, so this line will still be reached
    # even on Friday.
    redirect_to root_url
  end
end

```

[: https://riptutorial.com/ko/ruby-on-rails/topic/4688/--](https://riptutorial.com/ko/ruby-on-rails/topic/4688/--)

54:

Examples

Model Model . . . :

```
User.transaction do
  account.save!
  profile.save!
  print "All saves success, returning 1"
  return 1
end
rescue_from ActiveRecord::RecordInvalid do |exception|
  print "Exception thrown, transaction rolledback"
  render_error "failure", exception.record.errors.full_messages.to_sentence
end
```

bang save . ! .

save! save raise ActiveRecord::Rollback . . .

```
User.transaction do
  if account.save && profile.save
    print "All saves success, returning 1"
    return 1
  else
    raise ActiveRecord::Rollback
  end
end
print "Transaction Rolled Back"
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/9326/-->

55:

Examples

belongs_to

```
belongs_to :user
```

```
.
```

```
class Post < ApplicationRecord
  belongs_to :user
end
```

```
create_table "posts", force: :cascade do |t|
  t.integer "user_id", limit: 4
end
```

has_one

```
has_one :account
```

```
,
```

```
class User < ApplicationRecord
  has_one :account
end
```

```
has_one :account
```

```
user_id :account_id, null: true
```

```
user = User.first
user.build_account(name: "sample")
user.save # [Saves it successfully, and creates an entry in accounts table with user_id 1]
user.build_account(name: "sample1") # [automatically makes the previous entry's foreign key null]
user.save # [creates the new account with name sample 1 and user_id 1]
```

```
has_many :posts, belongs_to :user
```

```
0
```

```
.
```

```
class User < ApplicationRecord
  has_many :posts
end
```

Post belongs_to :User .

User (,).

```
class User < ApplicationRecord
  has_many :published_posts, -> { where("posts.published IS TRUE") }, class_name: "Post"
end
```

ActiveRecord . :

```
class Human < ActiveRecord::Base
  has_one :address, :as => :addressable
end

class Company < ActiveRecord::Base
  has_one :address, :as => :addressable
end

class Address < ActiveRecord::Base
  belongs_to :addressable, :polymorphic => true
end
```

(Human Company) . .

```
class Address < ActiveRecord::Base
  belongs_to :human
  belongs_to :company
end
```

has_many : through

has_many :through many-to-many . 0 .

. .

```
class Physician < ApplicationRecord
  has_many :appointments
  has_many :patients, through: :appointments
end

class Appointment < ApplicationRecord
  belongs_to :physician
  belongs_to :patient
end

class Patient < ApplicationRecord
  has_many :appointments
  has_many :physicians, through: :appointments
end
```

has_one : through

has_one :through **association** one-to-one one-to-one . .

```
supplier account .
```

```
class Supplier < ApplicationRecord
  has_one :account
  has_one :account_history, through: :account
end

class Account < ApplicationRecord
  belongs_to :supplier
  has_one :account_history
end

class AccountHistory < ApplicationRecord
  belongs_to :account
end
```

has_and_belongs_to_many

```
has_and_belongs_to_many many-to-many many-to-many .
```

```
assemblies parts .
```

```
class Assembly < ApplicationRecord
  has_and_belongs_to_many :parts
end

class Part < ApplicationRecord
  has_and_belongs_to_many :assemblies
end
```

```
.
.
```

```
rails g model friendship user_id:references friend_id:integer
```

```
.
```

```
class User < ActiveRecord::Base
  has_many :friendships
  has_many :friends, :through => :friendships
  has_many :inverse_friendships, :class_name => "Friendship", :foreign_key => "friend_id"
  has_many :inverse_friends, :through => :inverse_friendships, :source => :user
end
```

```
.
```

```
class Friendship < ActiveRecord::Base
  belongs_to :user
  belongs_to :friend, :class_name => "User"
end
```

[: https://riptutorial.com/ko/ruby-on-rails/topic/1820/--](https://riptutorial.com/ko/ruby-on-rails/topic/1820/--)

56:

ActiveModel ActiveRecord . ActiveRecord ActiveModel .

ActiveRecord .

Examples

ActiveModel :: Validations

```
class User
  include ActiveModel::Validations

  attr_reader :name, :age

  def initialize(name, age)
    @name = name
    @age = age
  end

  validates :name, presence: true
  validates :age, numericality: { only_integer: true, greater_than: 12 }
end
```

```
User.new('John Smith', 28).valid? #=> true
User.new('Jane Smith', 11).valid? #=> false
User.new(nil, 30).valid?          #=> false
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/1773/>

57:

ActiveModelSerializers AMS JSON ' '. ActiveModelSerializers serializers . . .

Examples

```
class SomeSerializer < ActiveModel::Serializer
  attribute :title, key: :name
  attributes :body
end
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/9000/--->

58:

• , , • •

Examples

```
class GuestsCleanupJob < ApplicationJob
  queue_as :default

  def perform(*guests)
    # Do something later
  end
end
```

```
# Enqueue a job to be performed as soon as the queuing system is free.
GuestsCleanupJob.perform_later guest
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/8996/>

59:

Rails .

- date , datetime , datetime-local , time , month week Firefox .
- input<type="telephone"> Safari 8 .
- input<type="email"> Safari .

Examples

form_tag .

```
<%= form_tag do %>
  Form contents
<% end %>
```

HTML .

```
<form accept-charset="UTF-8" action="/" method="post">
  <input name="utf8" type="hidden" value="&#x2713;" />
  <input name="authenticity_token" type="hidden"
value="J7CBxfHalt49OSHp27hblqK20c9PgWJ108nDHX/8Cts=" />
  Form contents
</form>
```

hidden .

authenticity_token cross-site request forgery .

```
<%= form_tag("/search", method: "get") do %>
  <%= label_tag(:q, "Search for:") %>
  <%= text_field_tag(:q) %>
  <%= submit_tag("Search") %>
<% end %>
```

- form_tag : /search HTTP . get .
- label_tag : html <label> .
- text_field_tag : text .
- submit_tag : submit input .

```
<%= check_box_tag(:pet_dog) %>
<%= label_tag(:pet_dog, "I own a dog") %>
<%= check_box_tag(:pet_cat) %>
<%= label_tag(:pet_cat, "I own a cat") %>
```

html .

```
<input id="pet_dog" name="pet_dog" type="checkbox" value="1" />
<label for="pet_dog">I own a dog</label>
<input id="pet_cat" name="pet_cat" type="checkbox" value="1" />
<label for="pet_cat">I own a cat</label>
```

```
<%= radio_button_tag(:age, "child") %>
<%= label_tag(:age_child, "I am younger than 18") %>
<%= radio_button_tag(:age, "adult") %>
<%= label_tag(:age_adult, "I'm over 18") %>
```

HTML .

```
<input id="age_child" name="age" type="radio" value="child" />
<label for="age_child">I am younger than 18</label>
<input id="age_adult" name="age" type="radio" value="adult" />
<label for="age_adult">I'm over 18</label>
```

text_area_tag .

```
<%= text_area_tag(:message, "This is a longer text field", size: "25x6") %>
```

HTML .

```
<textarea id="message" name="message" cols="25" rows="6">This is a longer text
field</textarea>
```

input<type="number">

```
<%= number_field :product, :rating %>
```

in: in:

```
<%= number_field :product, :rating, in: 1..10 %>
```

. <input type="password">

```
<%= password_field_tag(:password) %>
```

<input type="email">

```
<%= email_field(:user, :email) %>
```

<input type="tel"> .

```
<%= telephone_field :user, :phone %>
```

- input [type="date"]

```
<%= date_field(:user, :reservation) %>
```

- `input [type="week"]`

```
<%= week_field(:user, :reservation) %>
```

- `input [type="year"]`

```
<%= year_field(:user, :reservation) %>
```

- `input [type="time"]`

```
<%= time_field(:user, :check_in) %>
```

```
: @models = Model.all select_tag "models", options_from_collection_for_select (@ , "id", "name"),  
{ }
```

HTML . David

```
. {multiple : false, disabled : false, include_blank : false, prompt : false}
```

: http://apidock.com/rails/ActionView/Helpers/FormTagHelper/select_tag

: [https://riptutorial.com/ko/ruby-on-rails/topic/4509/-](https://riptutorial.com/ko/ruby-on-rails/topic/4509/)

60:

Examples

1.

() ., .

```
resources :articles, shallow: true do
  resources :comments
  resources :quotes
  resources :drafts
end
```

DSL . .

```
shallow do
  resources :articles do
    resources :comments
    resources :quotes
    resources :drafts
  end
end
```

. : shallow_path .

```
scope shallow_path: "sekret" do
  resources :articles do
    resources :comments, shallow: true
  end
end
```

Rake Command .

```
rake routes
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/7775/>

61:

Examples

- ADDITIONAL_LOAD_PATHS
- ARGF
- ARGV
- ActionController
- ActionView
-
- ArgumentError
-
- BasicSocket
-
-
-
- CGI
- CGIMethods
- CROSS_COMPILING
-
- ClassInheritableAttributes
-
- ConditionVariable
-
-
- DRb
- DRbIdConv
- DRbObject
- DRbUndumped
-
-
-
-
-
-
-
-
- ENV
- EOFError
- ERB
-
- Errno
-
-
- FalseClass
- Fcntl
-

- FileList
- FileTask
- FileTest
- FileUtils
- Fixnum
-
- FloatDomainError
- GC
-
- GetoptLong
-
-
- IOError
- IPSocket
- IP
- IndexError
-
-
-
-
- LN_SUPPORTED
- LoadError
- LocalJumpError
-
-
- MatchData
- MatchingData
-
-
-
-
- MySQL
- MysqlError
- MysqlField
- MysqlRes
-
- NameError
- NilClass
- NoMemoryError
- NoMethodError
- NoWrite
- NotImplementedError
-
- OPT_TABLE
-
- ObjectSpace
-
-
- PGError

- PGconn
- PGLarge
- PG
-
- PStore
- ParseDate
-
- Proc
-
-
- RAKEVERSION
-
-
- RUBY_PLATFORM
- RUBY_RELEASE_DATE
- RUBY_VERSION
-
-
- RakeApp
- RakeFileUtils
-
- RangeError
- Rational
-
- RegexpError
-
-
-
-
-
- ScanError
- ScriptError
- SecurityError
-
- SignalException
- SimpleDelegater
- SimpleDelegator
-
- SizedQueue
-
-
-
-
- StringScanner
-
-
- SyntaxError
- SystemCallError
- SystemExit
- SystemStackError

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
- ~ tos
-
- URI
-
-
- created_at
-
- updated_at
- updated_on
- deleted_at
- (
-)
- lock_version
-
-
- # {table_name} _count
-
- parent_id
-
-
- quote_value
-
-
-
-
-
-
-
-
- def
- ?
-
-
- elsif
-
-
-
-
-
- ...
-
-

62:

Examples

```
. .  
  
: OrdersController orders . Rails /app/controllers orders_controller.rb .  
  
: PostsController posts .  
  
. .  
  
: PendingOrdersController pending_orders_controller.rb pending_orders_controller.rb .
```

MixedCase .

```
: orders , Order  
  
: posts Post
```

Rails /app/models order.rb .

```
. .  
  
: BlogPost blog_posts .
```

Rails .

app/views .

PeopleController#index RAILS .

- app/views/layouts/people app/views/layouts/ (application)
- index.html.erb app/views/people/ .
- index_new.html.erb PeopleController#index render 'index_new' .
- render 'index_new', layout: 'your_layout_name' action layouts render 'index_new', layout: 'your_layout_name'

Rails Ruby lower_snake_case lower_snake_case . :

```
app/controllers/application_controller.rb
```

```
ApplicationController . PascalCase lower_snake_case .
```

Rails application_controller ApplicationController "inflection" .

Rails BlogPost (), blog_post.rb blog_post.rb .

```
. blog_post.rb just Post LoadError: Expected [some path]/blog_post.rb to define BlogPost .
```

app/something/ (: / models / products /) dir

- **dir** . app/models/products/ you would need to wrap your class in app/models/products/ you would need to wrap your class in .
- **dir** config.autoload_paths += %W(#{config.root}/app/models/products) application.rb application.rb .

. "Foot" "" () "FootsController" "FeetController" .

Model (Controller).

```
class MyModelController < ActionController::Base

  # Returns corresponding model class for this controller
  # @return [ActiveRecord::Base]
  def corresponding_model_class
    # ... add some validation
    controller_name.classify.constantize
  end
end
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/1493/-->

63:

API . . .

Examples

Figaro

```
gem 'figaro' bundle install . bundle exec figaro install ; config / application.yml .gitignore .  
application.yml .
```

```
SECRET_NAME: secret_value
```

SECRET_NAME secret_value API .

config / secrets.yml . . .

```
development:  
  secret_name: <%= ENV["SECRET_NAME"] %>  
test:  
  secret_name: <%= ENV["SECRET_NAME"] %>  
production:  
  secret_name: <%= ENV["SECRET_NAME"] %>
```

some_component secret_name secret_name . config / environments / development.rb .

```
Rails.application.configure do  
  config.some_component.configuration_hash = {  
    :secret => Rails.application.secrets.secret_name  
  }  
end
```

Heroku . config / environments / production.rb Heroku .

```
$ figaro heroku:set -e production
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/9711/--->

64:

JavaScript CSS . CoffeeScript, Sass ERB . . , jquery-rails jquery.js AJAX .

Examples

sprockets-rails .

- assets:clean[keep] : .
- assets:clobber : .
- assets:environment :
- assets:precompile : config.assets.precompile .

assets initializer (config/initializers/assets.rb) .

```
# Precompile additional assets.
# application.coffee, application.scss, and all non-JS/CSS in app/assets folder are already
added.
# Rails.application.config.assets.precompile += %w( search.js )
```

application.coffee application.scss '. JavaScript CSS . .

- require <path> : Ruby require require require . .
- require_directory <path> : . path/* .
- require_tree <path> : . glob equivalent path/**/* .
- require_self : require . CSS .
- stub <path> : .
- depend_on <path> : . . .

application.scss .

```
/*
*= require bootstrap
*= require_directory .
*= require_self
*/
```

application.coffee . jquery Turbolinks :

```
#= require jquery2
#= require jquery_ujs
#= require turbolinks
#= require_tree .
```

CoffeeScript JavaScript .

```
//= require jquery2
//= require jquery_ujs
```

```
//= require turbolinks
//= require_tree .
```

.

1..

2., . .

```
bundle exec rake assets:precompile
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/3386/-->

65:

Decorator

stdlib Ruby Draper

Examples

SimpleDelegator

Rails

```
<h1><%= "#{ @user.first_name } #{ @user.last_name }" %></h1>
<h3>joined: <%= @user.created_at.in_time_zone(current_user.timezone).strftime("%A, %d %b %Y
%l:%M %p") %></h3>
```

stdlib SimpleDelegator

SimpleDelegator

SimpleDelegator __getobj__ __setobj__

```
class UserDecorator < SimpleDelegator
  attr_reader :view
  def initialize(user, view)
    __setobj__ @user
    @view = view
  end

  # new methods can call methods on the parent implicitly
  def full_name
    "#{ first_name } #{ last_name }"
  end

  # however, if you're overriding an existing method you need
  # to use __getobj__
  def created_at
    Time.use_zone(view.current_user.timezone) do
      __getobj__.created_at.strftime("%A, %d %b %Y %l:%M %p")
    end
  end
end
```

```
<% user = UserDecorator.new(@user, self) %>
<h1><%= user.full_name %></h1>
<h3>joined: <%= user.created_at %></h3>
```

Draper

Draper .

```
# app/decorators/user_decorator.rb
class UserDecorator < Draper::Decorator
  def full_name
    "#{object.first_name} #{object.last_name}"
  end

  def created_at
    Time.use_zone(h.current_user.timezone) do
      object.created_at.strftime("%A, %d %b %Y %l:%M %p")
    end
  end
end
```

ActiveRecord @user #decorate #decorate @user Draper .

```
<% user = @user.decorate %><!-- OR -->
<% user = UserDecorator.decorate(@user) %>
<h1><%= user.full_name %></h1>
<h3>joined: <%= user.created_at %></h3>
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/5694/>

66:

Examples

(partial) . Partials .

```
, _form.html.erb
```

```
render .<%= render "form" %>
```

- .

- .

.

```
<%= render :partial => 'form', locals: { post: @post } %>
```

(DRY) .

```
, <head> _html_header.html.erb _html_header.html.erb , <head> .<%= render 'html_header' %> .
```

```
<%= render @post %> to_partial_path <%= render @post %> to_partial_path . ActiveRecord  
posts/post @post views/posts/_post.html.erb .
```

```
post . <%= render @post %> <%= render 'posts/post', post: @post %> .
```

```
<%= render @posts %> to_partial_path . .
```

partial views/application . .

```
, app/views/application/_html_header.html.erb: app/views/application/_html_header.html.erb:
```

```
<%= render 'html_header' %>
```

AssetTagHelper

(CSS / js /) . ()

image_path

app/assets/images .

```
image_path("edit.png") # => /assets/edit.png
```

image_url

app/assets/images URL .

```
image_url("edit.png") # => http://www.example.com/assets/edit.png
```

image_tag

 .

```
image_tag("icon.png") # => 
```

javascript_include_tag

JavaScript .

```
javascript_include_tag "application" # => <script src="/assets/application.js"></script>
```

javascript_path

JavaScript .

```
javascript_path "application" # => /assets/application.js
```

javascript_url

JavaScript URL .

```
javascript_url "application" # => http://www.example.com/assets/application.js
```

stylesheet_link_tag

CSS

```
stylesheet_link_tag "application" # => <link href="/assets/application.css" media="screen" rel="stylesheet" />
```

stylesheet_path

.

```
stylesheet_path "application" # => /assets/application.css
```

stylesheet_url

URL .

```
stylesheet_url "application" # => http://www.example.com/assets/application.css
```

app/views/layouts/application.html.erb app/views/layouts/application.html.erb

```
<%= stylesheet_link_tag    'application', media: 'all', 'data-turbolinks-track': 'reload' %>
<%= javascript_include_tag 'application', 'data-turbolinks-track': 'reload' %>
```

```
// CSS
<link rel="stylesheet" media="all" href="/assets/application.self-
e19d4b856cacba4f6fb0e5aa82a1ba9aa4ad616f0213a1259650b281d9cf6b20.css?body=1" data-turbolinks-
track="reload" />
// JavaScript
<script src="/assets/application.self-
619d9bf310b8eb258c67de7af745cafbf2a98f6d4c7bb6db8e1b00aed89eb0b1.js?body=1" data-turbolinks-
track="reload"></script>
```

Rails MVC Views .

articles_controller.rb . app/views/articles .

```
app
|-- controllers
|    '-- articles_controller.rb
|
'-- views
    |-- articles
        |-- index.html.erb
        |-- edit.html.erb
        |-- show.html.erb
        |-- new.html.erb
        |-- _partial_view.html.erb
    |
    '-- [...]
```

```
// articles_controller.rb
class ArticlesController < ActionController::Base
  def show
  end
end

// show.html.erb
```

```
<h1>My show view</h1>
```

HTML

html . content_for . . .

content_for

```
<div>
  <%= yield :header %>
</div>

<% content_for :header do %>
  <ul>
    <li>Line Item 1</li>
    <li>Line Item 2</li>
  </ul>
<% end %>
```

HAML -

HAML (HTML) HTML . HAML . , . HAML .

:

```
#myview.html.erb
<h1><%= @the_title %></h1>
<p>This is my form</p>
<%= render "form" %>
```

HAML :

```
#myview.html.haml
%h1= @the_title
%p
  This is my form
= render 'form'
```

HTML ERB .

```
gem install haml
```

gemfile gem .

```
gem "haml"
```

HTML / ERB HAML , something.html.haml something.html.erb .

div .

HTML

```
<div class="myclass">My Text</div>
```

```
%div.myclass
```

,

```
.myclass
```

HTML

```
<p class="myclass" id="myid">My paragraph</p>
```

```
%p{:class => "myclass", :id => "myid"} My paragraph
```

= - .

```
= link_to "Home", home_path
```

= .

- .

HAML .

: <https://riptutorial.com/ko/ruby-on-rails/topic/850/>

67:

FriendlyId Active Record "Swiss Army Bulldozer". URL ID . FriendlyId URL .

<http://example.com/states/washington>

Examples

```
rails new my_app
cd my_app
```

```
gem 'friendly_id', '~> 5.1.0' # Note: You MUST use 5.0.0 or greater for Rails 4.0+
rails generate friendly_id
rails generate scaffold user name:string slug:string:uniq
rake db:migrate
```

app / models / user.rb .

```
class User < ApplicationRecord
  extend FriendlyId
  friendly_id :name, use: :slugged
end

User.create! name: "Joe Schmoe"

# Change User.find to User.friendly.find in your controller
User.friendly.find(params[:id])
```

```
rails server
GET http://localhost:3000/users/joe-schmoe
```

```
# If you're adding FriendlyId to an existing app and need
# to generate slugs for existing users, do this from the
# console, runner, or add a Rake task:
User.find_each(&:save)
```

Finders are no longer overridden by default. If you want to do friendly finds, you must do `Model.friendly.find` rather than `Model.find`. You can however restore FriendlyId 4-style finders by using the `:finders` addon

```
friendly_id :foo, use: :slugged # you must do MyClass.friendly.find('bar')
#or...
friendly_id :foo, use: [:slugged, :finders] # you can now do MyClass.find('bar')
```


"" :

```
class Restaurant < ActiveRecord::Base
  extend FriendlyId
  friendly_id :slug_candidates, use: :slugged

  # Try building a slug based on the following fields in
  # increasing order of specificity.
  def slug_candidates
    [
      :name,
      [:name, :city],
      [:name, :street, :city],
      [:name, :street_number, :street, :city]
    ]
  end
end
```

friendly_id ?

```
def normalize_friendly_id(string)
  super[0..40]
end
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/9664/>

68:

Examples

. Russian doll caching .

Russian doll caching .

updated_at . .

.

```
<% cache product do %>
  <%= render product.games %>
<% end %>
```

.

```
<% cache game do %>
  <%= render game %>
<% end %>
```

updated_at .

updated_at . .

```
class Product < ApplicationRecord
  has_many :games
end

class Game < ApplicationRecord
  belongs_to :product, touch: true
end
```

SQL

Rails . Rails .

:

```
class ProductsController < ApplicationController

  def index
    # Run a find query
    @products = Product.all

    ...

    # Run the same query again
    @products = Product.all
  end
end
```

```
end
```

```
. () .
```

```
. .
```

ActiveSupport `Rails.cache` .

```
cache.read cache.read .
```

```
Rails.cache.read('city')  
# => nil
```

```
cache.write .
```

```
Rails.cache.write('city', 'Duckburgh')  
Rails.cache.read('city')  
# => 'Duckburgh'
```

```
cache.fetch .
```

```
Rails.cache.fetch('user') do  
  User.where(:is_awesome => true)  
end
```

```
.
```

```
.
```

```
Rails.cache.fetch('user', :expires_in => 30.minutes) do  
  User.where(:is_awesome => true)  
end
```

[ActionPack page_caching gem](#) . [HTML](#) . [HTML](#) . [README](#) . [caches_page](#) .

```
class UsersController < ActionController::Base  
  caches_page :index  
end
```

```
expire_page HTML .
```

```
class UsersController < ActionController::Base  
  caches_page :index  
  
  def index  
    @users = User.all  
  end  
  
  def create  
    expire_page :action => :index  
  end
```

```
end
```

```
expire_page url_for .
```

HTTP

```
Rails> = 3 HTTP . Cache-Control ETag (: CDN) .
```

```
expires_in .
```

```
def show
  @user = User.find params[:id]
  expires_in 30.minutes, :public => true
end
```

```
expires_now .
```

```
def show
  @users = User.find params[:id]
  expires_now if params[:id] == 1
end
```

, . Rails [actionpack-action_caching](#) .

```
class SecretIngredientsController < ApplicationController
  before_action :authenticate_user!, only: :index, :show
  caches_action :index

  def index
    @secret_ingredients = Recipe.find(params[:recipe_id]).secret_ingredients
  end
end
```

```
:expires_in, custom :cache_path( :if ) :if / :unless :unless :if .
```

```
class RecipesController < ApplicationController
  before_action :authenticate_user!, except: :show
  caches_page :show
  caches_action :archive, expires_in: 1.day
  caches_action :index, unless: { request.format.json? }
end
```

```
layout: false .
```

: <https://riptutorial.com/ko/ruby-on-rails/topic/2833/>

69:

Examples

ElasticSearch . Java . .

- Mac OS X : brew install elasticsearch
- : sudo apt-get install elasticsearch

.

- Mac OS X : brew services start elasticsearch
- : sudo service elasticsearch start

, curl . .

curl localhost:9200

:

```
{
  "name" : "Hydro-Man",
  "cluster_name" : "elasticsearch_gkbonetti",
  "version" : {
    "number" : "2.3.5",
    "build_hash" : "90f439ff60a3c0f497f91663701e64ccd01edbb4",
    "build_timestamp" : "2016-07-27T10:36:52Z",
    "build_snapshot" : false,
    "lucene_version" : "5.5.0"
  },
  "tagline" : "You Know, for Search"
}
```

ElasticSearch (ES) . [elasticsearch-head](#) . . .

- ES : ls -l \$(which elasticsearch)
- cd elasticsearch/bin/plugin -install mobz/elasticsearch-head
- http://localhost:9200/_plugin/head/ http://localhost:9200/_plugin/head/

GUI .

ElasticSearch JSON API .

- [Elasticsearch](#) - HTTP API
- [Elasticsearch-rails](#) - ActiveRecord Repository Rails ElasticSearch
- [Chewy](#) - Rails

.

```
gem install elasticsearch
```

```
require 'elasticsearch'

client = Elasticsearch::Client.new log: true
# by default it connects to http://localhost:9200

client.transport.reload_connections!
client.cluster.health

client.search q: 'test'
```

```
elasticsearch searchkick gem .
```

```
gem 'searchkick'
```

```
class Product < ActiveRecord::Base
  searchkick
end
```

```
Product.reindex
```

```
products = Product.search "apples"
products.each do |product|
  puts product.name
end
```

```
, elasticsearch ;~)
```

<https://github.com/ankane/searchkick> .

: <https://riptutorial.com/ko/ruby-on-rails/topic/6500/>-

70:

Turbolinks . Turbolinks <body> <head> .

., .

-
-

- turbolinks:load turbolinks:load document.ready turbolinks:load
- data-turbolinks=false .
- data-turbolinks-permanent .

[github](#) .

github .

Examples

.

```
$(document).ready(function() {  
  // awesome code  
});
```

. \$(document).ready() . <body> <head> ajax . "" . document.ready()
turboLink .

```
// pure js  
document.addEventListener("turbolinks:load", function() {  
  // awesome code  
});  
  
// jquery  
$(document).on('turbolinks:load', function() {  
  // your code  
});
```

. [turbolinks](#) :

data-turbolinks = "false" .

-
-

```
// disables turbolinks for this one link  
<a href="/" data-turbolinks="false">Disabled</a>
```

```
// disables turbolinks for all links nested within the div tag
<div data-turbolinks="false">
  <a href="/">I'm disabled</a>
  <a href="/">I'm also disabled</a>
</div>

// re-enable specific link when ancestor has disabled turbolinks
<div data-turbolinks="false">
  <a href="/">I'm disabled</a>
  <a href="/" data-turbolinks="true">I'm re-enabled</a>
</div>
```

Turbolinks

```
Turbolinks.visit(location)
```

```
". , "" . turbolink history.pushState . . .
```

```
visit 'replace' .
```

```
// using links
<a href="/edit" data-turbolinks-action="replace">Edit</a>

// programatically
Turbolinks.visit("/edit", { action: "replace" })
```

.

```
"" . .
```

```
Turbolinks . turbolinks:before-visit .
```

.

```
// pure javascript
event.data.url
```

```
// jQuery
$event.originalEvent.data.url
```

```
. :
```

```
event.preventDefault()
```

-
-

turbolinks :

.

. . . 3 . . . 4 . . 4 3.

"friend-count" ID <div> .

```
<div id="friend-count" data-turbolinks-permanent>3 friends</div>
```

data-turbolinks-permanent . . .

HTML ID . ID .

: <https://riptutorial.com/ko/ruby-on-rails/topic/9331/>-

71: CSV

CSV . CSV . .

Examples

CSV

:

```
rails g model Product name:string quantity:integer price:decimal{12,2}
rake db:migrate
```

.

:

```
rails g controller Products
```

:

```
class HistoriesController < ApplicationController
  def create
    file = Dir.glob("#{Rails.root}/public/products/**/*.csv") #=> This folder directory
    where read the CSV files
    file.each do |file|
      Product.import(file)
    end
  end
end
```

:

```
class Product < ApplicationRecord
  def self.import(file)
    CSV.foreach(file.path, headers: true) do |row|
      Product.create! row.to_hash
    end
  end
end
```

routes.rb

```
resources :products
```

app / config / application.rb

```
require 'csv'
```

console run

```
=> ProductsController.new.create #=> Uploads your whole CSV files from your folder directory
```

CSV : <https://riptutorial.com/ko/ruby-on-rails/topic/8658/---csv--->

72:

Examples

Carrierwave

Rails . . . **Carrierwave Paperclip** . . .

Carrierwave .

Carrierwave bundle install console .

```
$ rails generate uploader ProfileUploader
```

/app/uploaders/profile_uploader.rb .

(,), (, MiniMagick)

user_pic tipe *user.rb* uploader .

```
mount_uploader :user_pic, ProfileUploader
```

, ().

```
<% form_for @user, html: { multipart: true } do |f| %>
  <%= f.file_field :user_pic, accept: 'image/png, image/jpg' %>
  <%= f.submit "update profile pic", class: "btn" %>
<% end %>
```

{multipart : true} . Accept .

```
<%= image_tag @user.user_pic.url %>
```

-

.

Product . belongs_to .

```
rails g model ProductPhoto

#product.rb
has_many :product_photos, dependent: :destroy
accepts_nested_attributes_for :product_photos

#product_photo.rb
belongs_to :product
mount_uploader :image_url, ProductPhotoUploader # make sure to include uploader (Carrierwave
```

example)

accepts_nested_attributes_for

(/)

```
<%= form_for @product, html: { multipart: true } do |product|%>

  <%= product.text_field :price # just normal type of field %>

  <%= product.fields_for :product_photos do |photo| # nested fields %>
    <%= photo.file_field :image, :multiple => true, name:
"product_photos[image_url][]" %>
    <% end %>
  <%= p.submit "Update", class: "btn" %>
<% end %>
```

```
# create an action
def upload_file
  printer = Product.find_by_id(params[:id])
  @product_photo = printer.prodcut_photos.create(photo_params)
end

# strong params
private
def photo_params
  params.require(:product_photos).permit(:image)
end
```

```
<% @product.product_photos.each do |i| %>
  <%= image_tag i.image.url, class: 'img-rounded' %>
<% end %>
```

: [https://riptutorial.com/ko/ruby-on-rails/topic/2831/-](https://riptutorial.com/ko/ruby-on-rails/topic/2831/)

73: React.js

[Hyperlink](#) gem React.js Rails .

react_on_rails .

javascript .

javascript .

Hyperloop " " ERB HAML . , , HTTP DOM DOM .

Hyperloop Components Stores, Operations, AR ActiveRecord .

: <http://ruby-hyperloop.io/>

Examples

Rails ()

1. (4.0 - 5.1) . Gemfile
2. bundle install
3. application.js .

```
// app/assets/javascripts/application.js
...
//= hyperloop-loader
```

4. hyperloop/components .

```
# app/hyperloop/components/hello_world.rb
class HelloWorld < Hyperloop::Component
  after_mount do
    every(1.second) { mutate.current_time(Time.now) }
  end
  render do
    "Hello World! The time is now: #{state.current_time}"
  end
end
```

5. . render_component "".

```
# somewhere in a controller:
...
def hello_world
  render_component # renders HelloWorld based on method name
end
```

()

```

class Hello < Hyperloop::Component
  # params (= react props) are declared using the param macro
  param :guest
  render do
    "Hello there #{params.guest}"
  end
end

# to "mount" Hello with guest = "Matz" say
Hello(guest: 'Matz')

# params can be given a default value:
param guest: 'friend' # or
param :guest, default: 'friend'

```

HTML

```

# HTML tags are built in and are UPCASE
class HTMLExample < Hyperloop::Component
  render do
    DIV do
      SPAN { "Hello There" }
      SPAN { "Welcome to the Machine!" }
    end
  end
end

```

```

# Event handlers are attached using the 'on' method
class ClickMe < Hyperloop::Component
  render do
    DIV do
      SPAN { "Hello There" }
      A { "Click Me" }.on(:click) { alert('you did it!') }
    end
  end
end

```

```

# States are read using the 'state' method, and updated using 'mutate'
# when states change they cause re-render of all dependent dom elements

class StateExample < Hyperloop::Component
  state count: 0 # by default states are initialized to nil
  render do
    DIV do
      SPAN { "Hello There" }
      A { "Click Me" }.on(:click) { mutate.count(state.count + 1) }
      DIV do
        "You have clicked me #{state.count} #{'time'.pluralize(state.count)}"
      end unless state.count == 0
    end
  end
end

```

Hyperloop :: Stores

```

# all react callbacks are supported using active-record-like syntax

```

```
class SomeCallbacks < Hyperloop::Component
  before_mount do
    # initialize stuff - replaces normal class initialize method
  end
  after_mount do
    # any access to actual generated dom node, or window behaviors goes here
  end
  before_unmount do
    # any cleanups (i.e. cancel intervals etc)
  end

  # you can also specify a method the usual way:
  before_mount :do_some_more_initialization
end
```

React.js : <https://riptutorial.com/ko/ruby-on-rails/topic/9809/---react-js-->

74:

Examples

Rails 4.2 Active Job

```
class UserUnsubscribeJob < ApplicationJob
  queue_as :default

  def perform(user)
    # this will happen later
    user.unsubscribe
  end
end
```

```
$ rails g job user_unsubscribe
```

: [https://riptutorial.com/ko/ruby-on-rails/topic/8033/-](https://riptutorial.com/ko/ruby-on-rails/topic/8033/)

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