



免费电子书

学习

ionic2

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#ionic2

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1: ionic2

Ionic 2。 。 。 Web /JavaScript / TypescriptAngular 2HTMLCSSCSS / LESS。 Ionic2>=android 4.4 android 4.1 android 4.3。

Examples

Ionic 2。

NodeJSIonic 2。 npmlionic 2。

1.Ionic 2

Ionic 1Ionic CLIGUI。 Ionic 1

Ionic 2npm

```
$ npm install -g ionic
```

EACCES。

2.

CLI

```
$ ionic start MyIonic2Project
```

。

```
$ ionic start MyIonic2Project tutorial  
$ cd MyIonic2Project  
$ npm install
```

。

ionic serve -lc

```
$ ionic serve -lc
```

-l-c。 package.jsonionic2-app-base

3.

◦ [Cordova](#)◦

Cordova

```
$ npm install -g cordova
```

iOS [iOS](#) [OSX](#) [iOS](#) [Genymotion](#) [Android](#)◦

iOS

iOS [OSX](#) [cocoapods](#) [cordova](#)

```
$ ionic cordova platform add ios
```

Xcode [iOS](#)◦

```
$ ionic cordova run ios
```

Android

Android◦

```
$ ionic cordova platform add android
```

[Android SDK](#) [Android](#)◦ [Android SDK](#)◦ [Genymotion](#)◦

```
$ ionic cordova run android
```

Ionic 2

Ionic◦ /

iOS

```
$ ionic cordova emulate ios -lcs
```

iOS 9.2.2 [livereload](#)◦ [livereloadconfig.xml](#)

```
<allow-navigation href="*"/>
```

```
<platform name="ios">
```

```
<config-file parent="NSAppTransportSecurity" platform="ios" target="*-Info.plist">
  <dict>
    <key>NSAllowsArbitraryLoads</key>
    <true/>
  </dict>
</config-file>
```

Android

```
$ ionic cordova run android -lcs
```

live-reload 重生 /o

Windows

WindowsWindows。 windowsionic2

```
$ionic cordova platform add windows
```

```
$ionic cordova run windows
```

```
$ionic serve
```

chrome。 chrome

```
chrome://inspect/#devices
```

ionic2 <https://riptutorial.com/zh-CN/ionic2/topic/3632/ionic2>

2: “show-delete”

Examples

Angular 22.

◦ ◦

show-deleteshow-reorder 2. ◦

◦ ◦

2.

.html

```
<ion-header>
  <ion-navbar>
    <ion-buttons start (click)="manageSlide()">
      <button>
        <ion-icon name="ios-remove"></ion-icon>
      </button>
    </ion-buttons>
    <ion-title>PageName</ion-title>
  </ion-navbar>
</ion-header>
```

```
<ion-list #list1>
  <ion-item-sliding #slidingItem *ngFor="let contact of contacts | sortOrder">
    <button #item ion-item>
      <p>{{ item.details }}</p>
      <ion-icon id="listIcon" name="arrow-forward" item-right></ion-icon>
    </button>
    <ion-item-options side="left">
      <button danger (click)="doConfirm(contact, slidingItem)">
        <ion-icon name="ios-remove-circle-outline"></ion-icon>
        Remove
      </button>
    </ion-item-options>
  </ion-item-sliding>
</ion-list>
```

.ts

```
import { ViewChild } from '@angular/core';
import { Item } from 'ionic-angular';
import { ItemSliding, List } from 'ionic-angular';
```

ViewChildhtml

```
@ViewChild(List) list: List;
```

```

public manageSlide() {
    //loop through the list by the number retrieved of the number of ion-item-sliding in the
list
    for (let i = 0; i < this.list.getElementRef().nativeElement.children.length; i++) {

        // retreive the current ion-item-sliding
        let itemSlide = this.list.getElementRef().nativeElement.children[i].$ionComponent;

        // retreive the button to slide within the ion-item-sliding
        let item = itemSlide.item;

        // retreive the icon
        let ic = item._elementRef.nativeElement.children[0].children[1];

        if (this.deleteOpened) {
            this.closeSlide(itemSlide);
        } else {
            this.openSlide(itemSlide, item, ic);
        }
    }

    if (this.deleteOpened) {
        this.deleteOpened = false;
    } else {
        this.deleteOpened = true;
    }
}

```

```

private openSlide(itemSlide: ItemSliding, item: Item, inIcon) {
    itemSlide.setCssClass("active-sliding", true);
    itemSlide.setCssClass("active-slide", true);
    itemSlide.setCssClass("active-options-left", true);
    item.setCssStyle("transform", "translate3d(72px, 0px, 0px)");
}

```

```

private closeSlide(itemSlide: ItemSliding) {
    itemSlide.close();
    itemSlide.setCssClass("active-sliding", false);
    itemSlide.setCssClass("active-slide", false);
    itemSlide.setCssClass("active-options-left", false);
}

```

}

◦

.....

“show-delete” <https://riptutorial.com/zh-CN/ionic2/topic/6620/-show-delete--ion-list->

3: AngularFire2Ionic2

AngularFire2Ionic App。

Examples

AngularFire

appangularfire

```
const firebaseConfig = {
  apiKey: 'XXXXXXXXXXXX',
  authDomain: 'XXXXXXXXXXXX',
  databaseURL: 'XXXXXXXXXXXX',
  storageBucket: 'XXXXXXXXXXXX',
  messagingSenderId: 'XXXXXXXXXXXX'
};
```

firebase。

```
imports: [
  AngularFireModule.initializeApp(firebaseConfig),
  AngularFireDatabaseModule,
  AngularFireAuthModule
],
```

AngularFire2

```
import { AngularFireDatabase } from 'angularfire2/database';
constructor (private _af: AngularFireDatabase) {}
```

Observable Listroot / items / food

```
this._af.list('root/items/food');
```

firebase。

```
this._af.list('root/items/food').push(myItemData);
this._af.list('root/items/food').update(myItem.$key, myNewItemData);
```

```
this._af.list('root/items/food').remove(myItem.$key);
```

Angularfire2Ionic2 <https://riptutorial.com/zh-CN/ionic2/topic/10918/angularfire2ionic2>

4: InAppBrowser

WebInAppBrowser/ webAppInAppBrowser。

Examples

InAppBrowser。 / webapp。

InAppBrowser

```
platform.ready().then(() => {
  // Okay, so the platform is ready and our plugins are available.
  // Here you can do any higher level native things you might need.
  var url= "https://blog.knoldus.com/";
  var browserRef = window.cordova.InAppBrowser.open(url, "_self", "location=no",
"toolbar=no");
  browserRef.addEventListener("exit", (event) => {
    return navigator["app"].exitApp();
  }
);
```

InAppBrowser <https://riptutorial.com/zh-CN/ionic2/topic/9801/inappbrowser>

5: Ionic2 CSS

Examples

IonicflexboxIonicCSS◦ - . .

| | |
|-----|---------|
| -10 | 10 |
| -20 | 20 |
| -25 | 25 |
| -33 | 33.3333 |
| -50 | 50 |
| -67 | 66.6666 |
| -75 | 75 |
| -80 | 80 |
| -90 | 90 |

◦

```
<ion-grid>
  <ion-row>
    <ion-col width-10>This column will take 10% of space</ion-col>
  </ion-row>
</ion-grid>
```

◦ ◦ ◦

◦

```
<ion-card>
  <ion-card-header>
    Header
  </ion-card-header>
  <ion-card-content>
    The British use the term "header", but the American term "head-shot" the English
    simply refuse to adopt.
  </ion-card-content>
</ion-card>
```

Ionic2 CSS <https://riptutorial.com/zh-CN/ionic2/topic/8011/ionic2-css>

6: App Store - Android

Google Play°

Examples

Androidionic start--appname|-a--appname|-a --id|-i°

cli°

```
$ ionic start --v2 -a "App Example" -i "com.example.app" -t "tabs"
```

1.

config.xml ° config.xml °

/widget id name descriptionauthor°

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<widget id="com.example.app" version="1.0.0" xmlns="http://www.w3.org/ns/widgets"
xmlns:cdv="http://cordova.apache.org/ns/1.0">
  <name>Example App</name>
  <description>Example app for stackoverflow users</description>
  <author email="admin@example.com" href="http://example.com/">Your name or team</author>
  ...
</widget>
```

2.

pngpsdaiiconsplash° 192x192° ° 2208x2208°

ionic resources --iconionic resources --splash

3.

--release--prod

ionic build android --release --prod

@ ionic / app-scripts

4.

APK android-release-unsigned.apk ° °

/platforms/android/build/outputs/apk/APKandroid-release-unsigned.apkkeytoolsapk°

```
$ keytool -genkey -v -keystore my-release-key.keystore -alias androidKey -keyalg RSA -keysize
2048 -validity 10000
```

my-release-key.keystore。

JDKkeytool。

◦ my-release-key.keystore◦

5.APK

APKjarsignerJDK

```
$ jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore my-release-key.keystore  
HelloWorld-release-unsigned.apk alias_name
```

apk◦ zipAPK◦ zipalign/ path / to / Android / sdk / build-tools / VERSION / zipalign◦

```
$ zipalign -v 4 HelloWorld-release-unsigned.apk HelloWorld.apk
```

HelloWorld.apkGoogle Play

Google Play◦ Google PlayAPKPlayAPK◦ Google Play◦ 25◦

“Google PlayAndroid”◦

App Store - Android <https://riptutorial.com/zh-CN/ionic2/topic/9659/app-store----android>

7: AngularFire2 / Firebase

Examples

FacebookAngularfire2 / Firebase

app.ts

```
import {Component} from '@angular/core';
import {Platform, ionicBootstrap} from 'ionic-angular';
import {StatusBar} from 'ionic-native';
import {LoginPage} from './pages/login/login';
import {FIREBASE_PROVIDERS, defaultFirebase, AuthMethods, AuthProviders, firebaseAuthConfig}
from 'angularfire2';

@Component({
  template: '<ion-nav [root]="'rootPage'"></ion-nav>'
})

export class MyApp {

  private rootPage: any;

  constructor(private platform: Platform) {
    this.rootPage = LoginPage;

    platform.ready().then(() => {
      // Okay, so the platform is ready and our plugins are available.
      // Here you can do any higher level native things you might need.
      StatusBar.styleDefault();
    });
  }
}

ionicBootstrap(MyApp, [
  FIREBASE_PROVIDERS,
  defaultFirebase({
    apiKey: myAppKey,
    authDomain: 'myapp.firebaseio.com',
    databaseURL: 'https://myapp.firebaseio.com',
    storageBucket: 'myapp.appspot.com',
  }),
  firebaseAuthConfig({})
]);
```

login.html

```
<ion-header>
  <ion-navbar>
    <ion-title>Home</ion-title>
  </ion-navbar>
</ion-header>

<ion-content padding class="login">
  <button (click)="facebookLogin()">Login With Facebook</button>
```

```
</ion-content>
```

login.ts

```
import {Component} from '@angular/core';
import {Platform} from 'ionic-angular';
import {AngularFire, AuthMethods, AuthProviders} from 'angularfire2';
import {Facebook} from 'ionic-native';

declare let firebase: any; // There is currently an error with the Firebase files, this will
fix it.

@Component({
  templateUrl: 'build/pages/login/login.html'
})
export class LoginPage {

  constructor(private platform: Platform, public af: AngularFire) {

  }

  facebookLogin() {
    Facebook.login(['public_profile', 'email', 'user_friends'])
      .then(success => {
        console.log('Facebook success: ' + JSON.stringify(success));
        let creds =
          firebase.auth.FacebookAuthProvider.credential(success.authResponse.accessToken);
        this.af.auth.login(creds, {
          provider: AuthProviders.Facebook,
          method: AuthMethods.OAuthToken,
          remember: 'default',
          scope: ['email']
        }).then(success => {
          console.log('Firebase success: ' + JSON.stringify(success));
        }).catch(error => {
          console.log('Firebase failure: ' + JSON.stringify(error));
        });
      })
      .catch(error => {
        console.log('Facebook failure: ' + JSON.stringify(error));
      });
  }
}
```

Angularfire2 / Firebase <https://riptutorial.com/zh-CN/ionic2/topic/5518/angularfire2---firebase>

8:

providers.

Component providers MyService.

```
@Component({  
  templateUrl:"page1.html",  
  providers: [MyService]  
})
```

```
@Component({  
  templateUrl:"page2.html",  
  providers: [MyService]  
})
```

◦ ◦

App Component

```
@Component({  
  template: '<ion-nav [root]="rootPage"></ion-nav>',  
  providers: [MyService]  
})
```

ionicBootstrap(MyApp, [MyService]); MyService ionicBootstrap(MyApp, [MyService]); **Angular2**

Angular 2.

Angular 2.

◦

◦

◦ ◦

◦ ◦ **Angular** ◦

... App Component.

Examples

◦

◦ ◦

MyService saveMessage() getMessage() ◦ [plunker](#) ◦

```

import { Injectable } from '@angular/core';

@Injectable()
export class MyService {

  private message: string;

  constructor() { }

  public saveMessage(theMessage: string): void {
    this.message = theMessage;
  }

  public getMessage(): string {
    return this.message;
  }
}

```

saveMessage(theMessageWeWantToSave);MyServiceservice。

```

import { Component } from "@angular/core";
import { MyService } from 'service.ts';

@Component({
  templateUrl:"page1.html"
})
export class Page1 {

  message: string;

  // ...

  public saveSecretMessage(): void {
    this.service.saveMessage(this.message);
  }
}

```

getMessage()

```

import { Component } from "@angular/core";
import { MyService } from 'service.ts';

@Component({
  templateUrl:"page2.html"
})
export class Page2 {

  enteredMessage: string;

  constructor(private service: MyService) {
    this.enteredMessage = this.service.getMessage();
  }

  // ...
}

```

MyService。

<https://riptutorial.com/zh-CN/ionic2/topic/4407/>

Ionic 2 Tab。

Examples

[Plunker](#)。

◦ ◦

TabService

```
import { Injectable } from '@angular/core';
import { Platform } from 'ionic-angular/index';
import { Observable } from 'rxjs/Observable';

@Injectable()
export class TabService {

  private tabChangeObserver: any;
  public tabChange: any;

  constructor(private platform: Platform) {
    this.tabChangeObserver = null;
    this.tabChange = Observable.create(observer => {
      this.tabChangeObserver = observer;
    });
  }

  public changeTabInContainerPage(index: number) {
    this.tabChangeObserver.next(index);
  }
}
```

TabServiceObservabletabschangeTabInContainerPage()。

click

Page1.html

```
<ion-content class="has-header">
  <h1>Page 1</h1>
  <button secondary (click)="changeTab()">Select next tab</button>
</ion-content>
```

Page1.ts

```
import { Component } from '@angular/core';
import { Observable } from 'rxjs/Observable';
import { TabService } from 'tabService.ts';

@Component({
  templateUrl:"page1.html"
```

```

})
export class Page1 {

    constructor(private tabService: TabService) { }

    public changeTab() {
        this.tabService.changeTabInContainerPage(1);
    }
}

```

```
TabsPage this.tabRef.select(index);this.tabRef.select(index);
```

```

import { Component, ViewChild } from '@angular/core';
import { Page1 } from './page1.ts';
import { Page2 } from './page2.ts';
import { TabService } from 'tabService.ts';

@Component({
    templateUrl: 'tabs.html'
})
export class TabsPage {
    @ViewChild('myTabs') tabRef: Tabs;

    tab1Root: any = Page1;
    tab2Root: any = Page2;

    constructor(private tabService: TabService){
        this.tabService.tabChange.subscribe((index) => {
            this.tabRef.select(index);
        });
    }
}

```

```
ion-tabs#myTabs Tabs@ViewChild('myTabs') tabRef: Tabs;@ViewChild('myTabs') tabRef: Tabs;
```

```

<ion-tabs #myTabs>
    <ion-tab [root]="tab1Root" tabTitle="Tab 1"></ion-tab>
    <ion-tab [root]="tab2Root" tabTitle="Tab 2"></ion-tab>
</ion-tabs>

```

selectedIndex

ion-tabs selectedIndex DOM

HTML

```

<ion-tabs [selectedIndex]="tabIndex" class="tabs-icon-text" primary >
    <ion-tab tabIcon="list-box" [root]="tabOne"></ion-tab>
    <ion-tab tabIcon="contacts" [root]="tabTwo"></ion-tab>
    <ion-tab tabIcon="chatboxes" [tabBadge]="messagesReceived" [root]="tabFive"></ion-tab>
</ion-tabs>

```

TS

```
import { Events} from "ionic-angular";
```

```
export class tabs {
  public tabIndex: number;
  constructor(e: Events) {
    tabs.mySelectedIndex = navParams.data.tabIndex || 0;
    e.subscribe("tab:change", (newIndex) => this.tabIndex = newIndex);
  }
}
```

```
e.publish("tab:change", 2);
```

<https://riptutorial.com/zh-CN/ionic2/topic/5569/>

10:

。“”。 QA。

<https://github.com/driftyco/ionic-unit-testing-example>

Examples

Karma / Jasmine

-
-

Karma -

Jasmine -

PhantomJS - javascript

package.json dev◦

```
"@ionic/app-scripts": "1.1.4",
"@ionic/cli-build-ionic-angular": "0.0.3",
"@ionic/cli-plugin-cordova": "0.0.9",
"@types/jasmine": "^2.5.41",
"@types/node": "^7.0.8",
"angular2-template-loader": "^0.6.2",
"html-loader": "^0.4.5",
"jasmine": "^2.5.3",
"karma": "^1.5.0",
"karma-chrome-launcher": "^2.0.0",
"karma-jasmine": "^1.1.0",
"karma-jasmine-html-reporter": "^0.2.2",
"karma-sourcemap-loader": "^0.3.7",
"karma-webpack": "^2.0.3",
"null-loader": "^0.1.1",
"ts-loader": "^2.0.3",
"typescript": "2.0.9"
```

"angular2-template-loader": "^0.6.2", - will load and compile the angular2 html files.

"ts-loader": "^2.0.3", - will compile the actual typescript files

"null-loader": "^0.1.1", - will not load the assets that will be missing, such as fonts and images. We are testing, not image lurking.

package.json

```
"test": "karma start ./test-config/karma.conf.js"
```

tsconfigspec.ts

```
"exclude": [
  "node_modules",
  "src/**/*spec.ts"
],
```

◦ test-config◦ package.json3

webpack.test.js - webpack

```
var webpack = require('webpack');
var path = require('path');

module.exports = {
  devtool: 'inline-source-map',

  resolve: {
    extensions: ['.ts', '.js']
  },

  module: {
    rules: [
      {
        test: /\.ts$/,
        loaders: [
          {
            loader: 'ts-loader'
          }, 'angular2-template-loader'
        ]
      },
      {
        test: /\.html$/,
        loader: 'html-loader'
      },
      {
        test: /\.(png|jpe?g|gif|svg|woff|woff2|ttf|eot|ico)$/,
        loader: 'null-loader'
      }
    ]
  },
  plugins: [
    new webpack.ContextReplacementPlugin(
      // The (\\\|\\) piece accounts for path separators in *nix and Windows
      /angular(\\\|\\)core(\\\|\\)(esm(\\\|\\)src|src)(\\\\|\\)linker/,
      root('./src'), // location of your src
      {} // a map of your routes
    )
  ]
};

function root(localPath) {
  return path.resolve(__dirname, localPath);
}
```

karma-test-shim.js - ◦

```

Error.stackTraceLimit = Infinity;

require('core-js/es6');
require('core-js/es7/reflect');

require('zone.js/dist/zone');
require('zone.js/dist/long-stack-trace-zone');
require('zone.js/dist/proxy');
require('zone.js/dist/sync-test');
require('zone.js/dist/jasmine-patch');
require('zone.js/dist/async-test');
require('zone.js/dist/fake-async-test');

var appContext = require.context('../src', true, /\.spec\.ts/);

appContext.keys().forEach(appContext);

var testing = require('@angular/core/testing');
var browser = require('@angular/platform-browser-dynamic/testing');

testing.TestBed.initTestEnvironment(browser.BrowserDynamicTestingModule,
browser.platformBrowserDynamicTesting());

```

karma.conf.js - 。 ChromePhantomJS。

```

var webpackConfig = require('./webpack.test.js');

module.exports = function (config) {
  var _config = {
    basePath: '',
    frameworks: ['jasmine'],
    files: [
      {pattern: './karma-test-shim.js', watched: true}
    ],
    preprocessors: {
      './karma-test-shim.js': ['webpack', 'sourcemap']
    },
    webpack: webpackConfig,
    webpackMiddleware: {
      stats: 'errors-only'
    },
    webpackServer: {
      noInfo: true
    },
    browserConsoleLogOptions: {
      level: 'log',
      format: '%b %T: %m',
      terminal: true
    },
    reporters: ['kjhtml', 'dots'],
    port: 9876,
    colors: true,
  };

```

```

    logLevel: config.LOG_INFO,
    autoWatch: true,
    browsers: ['Chrome'],
    singleRun: false
};

config.set(_config);
};

```

- **app.component**◦ <https://github.com/driftyco/ionic-unit-testing-example/blob/master/src/pages/page1/page1.spec.ts>

◦ **app.component**

```

beforeEach(async(() => {
  TestBed.configureTestingModule({
    declarations: [MyApp],
    imports: [
      IonicModule.forRoot(MyApp)
    ],
    providers: [
      StatusBar,
      SplashScreen
    ]
  })
)));

```

- **Imports**◦

- **app.componentPlatformIonicModule**◦

```

beforeEach(() => {
  fixture = TestBed.createComponent(MyApp);
  component = fixture.componentInstance;
});

it ('should be created', () => {
  expect(component instanceof MyApp).toBe(true);
});

it ('should have two pages', () => {
  expect(component.pages.length).toBe(2);
});

```

```

import { async, TestBed } from '@angular/core/testing';
import { IonicModule } from 'ionic-angular';

import { StatusBar } from '@ionic-native/status-bar';
import { SplashScreen } from '@ionic-native/splash-screen';

import { MyApp } from './app.component';

describe('MyApp Component', () => {
  let fixture;
  let component;

```

```

beforeEach(async(() => {
  TestBed.configureTestingModule({
    declarations: [MyApp],
    imports: [
      IonicModule.forRoot(MyApp)
    ],
    providers: [
      StatusBar,
      SplashScreen
    ]
  })
}));

beforeEach(() => {
  fixture = TestBed.createComponent(MyApp);
  component = fixture.componentInstance;
});

it ('should be created', () => {
  expect(component instanceof MyApp).toBe(true);
});

it ('should have two pages', () => {
  expect(component.pages.length).toBe(2);
});

));

```

```
npm run test
```

- **TestBed**◦

<https://riptutorial.com/zh-CN/ionic2/topic/9561/>

11: Visual Studio Ionic 2

Visual Studio IDE。 IDE Ionic CC Angular Js TypeScript Android。 VSCode。 VSCode。

Examples

VSCode

VSCode。 VSCode。 VSCode。

Introduction of Extensions in VSCode

VSCode。 **yourVSCodeionic2-vscode**。 VSCode5。 **ctrl + shift + X**。

Add Extension for Ionic2 in VsCode

ctrl + shift + X ...。 .iN(ionic2-vscode), npm

VSCode Ionic

VsCode。 **CLI cmd**。

```
$ ionic start appName blank
```

◦ Ionic2。 ◦ ◦

Ionic。 VSCode。 ◦

1. VScode“ ”。
2. ◦
3. ◦

ctrl + O ctrl + k

Ionic

> Chrome

terminal cmd CLI ionic

```
$ ionic serve
```

chrome launch.json。

```
{
  "version": "0.2.0",
  "configurations": [
    {
      "name": "Launch in Chrome",
      "type": "chrome",
      "request": "launch",
      "url": "http://localhost:8100",
      "sourceMaps": true,
      "webRoot": "${workspaceRoot}/src"
    }
  ]
}
```

> Android

AndroidRun ioniccmdCLl android

```
$ ionic cordova platform add android
```

Android

```
$ ionic cordova build android
```

android

```
$ ionic cordova run android
```

Android◦

AndroidVSCodeCordovaAndroid Extension◦ launch.json◦

```
{
  "version": "0.2.0",
  "configurations": [
    {
      "name": "Run Android on device",
      "type": "cordova",
      "request": "launch",
      "platform": "android",
      "target": "device",
      "port": 9222,
      "sourceMaps": true,
      "cwd": "${workspaceRoot}",
      "ionicLiveReload": false
    },
    {
      "name": "Run iOS on device",
      "type": "cordova",
      "request": "launch",
      "platform": "ios",
      "target": "device",
      "port": 9220,
      "sourceMaps": true,
      "deviceName": "iPhone 6s"
    }
  ]
}
```

```
        "cwd": "${workspaceRoot}",
        "ionicLiveReload": false
    },
    {
        "name": "Attach to running android on device",
        "type": "cordova",
        "request": "attach",
        "platform": "android",
        "target": "device",
        "port": 9222,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    },
    {
        "name": "Attach to running iOS on device",
        "type": "cordova",
        "request": "attach",
        "platform": "ios",
        "target": "device",
        "port": 9220,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    },
    {
        "name": "Run Android on emulator",
        "type": "cordova",
        "request": "launch",
        "platform": "android",
        "target": "emulator",
        "port": 9222,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}",
        "ionicLiveReload": false
    },
    {
        "name": "Run iOS on simulator",
        "type": "cordova",
        "request": "launch",
        "platform": "ios",
        "target": "emulator",
        "port": 9220,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}",
        "ionicLiveReload": false
    },
    {
        "name": "Attach to running android on emulator",
        "type": "cordova",
        "request": "attach",
        "platform": "android",
        "target": "emulator",
        "port": 9222,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    },
    {
        "name": "Attach to running iOS on simulator",
        "type": "cordova",
        "request": "attach",
        "platform": "ios",
        "target": "emulator",
        "port": 9220,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    }
]
```

```

        "port": 9220,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    },
    {
        "name": "Serve to the browser (ionic serve)",
        "type": "cordova",
        "request": "launch",
        "platform": "serve",
        "cwd": "${workspaceRoot}",
        "devServerAddress": "localhost",
        "sourceMaps": true,
        "ionicLiveReload": true
    },
    {
        "name": "Simulate Android in browser",
        "type": "cordova",
        "request": "launch",
        "platform": "android",
        "target": "chrome",
        "simulatePort": 8000,
        "livereload": true,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    },
    {
        "name": "Simulate iOS in browser",
        "type": "cordova",
        "request": "launch",
        "platform": "ios",
        "target": "chrome",
        "simulatePort": 8000,
        "livereload": true,
        "sourceMaps": true,
        "cwd": "${workspaceRoot}"
    }
]
}

```

1.。

2.。

Short keys

- - F5
- StepOver - F10
- - F11
- - Shift + F5
- -ctrl + shift_F5

Visual Studio Ionic 2 <https://riptutorial.com/zh-CN/ionic2/topic/10559/visual-studioionic-2>

12:

Examples

package.json

```
{  
  ...  
  "dependencies": {  
    ...  
    "ionic-native": "^1.3.10",  
    ...  
  },  
  ...  
}
```

```
// custom-component.ts  
  
import {Geolocation} from 'ionic-native';  
import template from './custom-component.html';  
  
@Component({  
  selector: 'custom-component',  
  template: template  
})  
export class CustomComponent {  
  
  constructor() {  
  
    // get the geolocation through a promise  
    Geolocation.getCurrentPosition().then((position:Geoposition)=> {  
      console.log(  
        position.coords.latitude,  
        position.coords.longitude);  
    });  
  }  
}
```

GeolocationwatchPosition getCurrentPositionwatchPositionObservable

```
import {Geolocation} from 'ionic-native';  
import template from './custom-component.html';  
  
@Component({  
  selector: 'custom-component',  
  template: template  
})  
export class CustomComponent {  
  constructor() {  
  
    // get the geolocation through an observable  
    Geolocation.watchPosition(<GeolocationOptions>{  
      maximumAge: 5000, // a maximum age of cache is 5 seconds  
      timeout: 10000, // time out after 10 seconds  
      enableHighAccuracy: true // high accuracy  
    })  
  }  
}
```

```
}).subscribe((position) => {
  console.log('Time:' + position.timestamp);
  console.log(
    'Position:' + position.coords.latitude + ',' +
    position.coords.longitude);
  console.log('Direction:' + position.coords.heading);
  console.log('Speed:' + position.coords.speed);

});
}
```

<https://riptutorial.com/zh-CN/ionic2/topic/5840/>

13:

.apk◦ ID◦

<https://view.ionic.io/>

Examples

app.ionic.io

1.

2. “”

```
I named my app as 'MyIonicApp'
```

3. ID◦

```
MyIonicApp ID is 4c5051c1
```

Node.js

1. \$ ionic login

2. app◦

3. ID◦

```
$ ionic link [your-app-id]
```

MyIonicApp

```
$ ionic link 4c5051c1
```

MyIonicApp app id◦

4. \$ ionic upload

◦

“”ID◦

<https://riptutorial.com/zh-CN/ionic2/topic/10542/>

14:

Examples

UI。

```
import { ModalController } from 'ionic-angular';
import { ModalPage } from './modal-page';

export class MyPage {
  constructor(public modalCtrl: ModalController) {}

  presentModal() {
    let modal = this.modalCtrl.create(ModalPage);
    modal.present();
  }
}
```

◦

```
Modal.create()。 NavParams。 "" NavParams。
```

```
import { ModalController, NavParams } from 'ionic-angular';

export class HomePage {

  constructor(public modalCtrl: ModalController) {}

  presentProfileModal() {
    let profileModal = this.modalCtrl.create(Profile, { userId: 8675309 });
    profileModal.present();
  }
}
```

```
import { NavParams } from 'ionic-angular';
export class Profile {

  constructor(params: NavParams) {
    console.log('UserId', params.get('userId'));
  }
}
```

<https://riptutorial.com/zh-CN/ionic2/topic/6415/>

15:

Examples

ModalUI

◦ ◦ ◦ ◦

Message.html

```
<ion-header>
  <ion-toolbar>
    <ion-title>
      Modal
    </ion-title>
    <ion-buttons start>
      <button (click)="dismiss()">
        <span primary showWhen="ios">Cancel</span>
        <ion-icon name="md-close" showWhen="android,windows"></ion-icon>
      </button>
    </ion-buttons>
  </ion-toolbar>
</ion-header>
<ion-content padding>
  <h1>Modal Without Params is created successfully.</h1>
  <button full (click)="dismiss()"> Exit </button>
</ion-content>
```

Message.ts

```
import { Component } from '@angular/core';
import { ViewController } from 'ionic-angular';
@Component({
  templateUrl: 'build/pages/message/message.html',
})
export class MessagePage {
  navCtrl;
  constructor(navCtrl: ViewController) {
    this.navCtrl = navCtrl;
  }
  dismiss() {
    this.navCtrl.dismiss();
  }
}
```

View“”。

Home.html

```
<ion-header>
  <ion-navbar>
    <ion-title>
      Modal Example
    </ion-title>
  </ion-navbar>
</ion-header>
```

```

</ion-title>
</ion-navbar>
</ion-header>
<ion-content padding>
  <button full (click)="openModal()">ModalWithoutParams-Message</button>
</ion-content>

```

Home.ts

```

import { Component } from '@angular/core';
import { ModalController } from 'ionic-angular';
import { MessagePage } from '../message/message';
@Component({
  templateUrl: 'build/pages/home/home.html'
})
export class HomePage {
  modalCtrl;
  data;
  constructor(modalCtrl: ModalController) {
    this.modalCtrl = modalCtrl;
    this.data = [{name: "aaa", email: "aaa.a@som.com", mobile: "1234567890", nickname: "zzz"}, 
      {name: "bbb", email: "bbb.a@som.com", mobile: "1234567890", nickname: "yyy"}, 
      {name: "ccc", email: "ccc.a@som.com", mobile: "1234567890", nickname: "xxx"}]
  }
  openModal() {
    let myModal = this.modalCtrl.create(MessagePage);
    myModal.present();
  }
}

```

ModalControllerMessagePage。 ModalController**create**myModalMessagePage。 **Present**。

- modalRegister。

Register.html

```

<ion-header>
  <ion-toolbar>
    <ion-title>
      Login
    </ion-title>
    <ion-buttons start>
      <button (click)="dismiss()">
        <span primary showWhen="ios">Cancel</span>
        <ion-icon name="md-close" showWhen="android,windows"></ion-icon>
      </button>
    </ion-buttons>
  </ion-toolbar>
</ion-header>
<ion-content padding>
  <ion-list>
    <ion-item>
      <ion-label>Name</ion-label>
      <ion-input type="text" [(ngModel)]="name"></ion-input>
    </ion-item>
    <ion-item>
      <ion-label>Email</ion-label>
      <ion-input type="text" [(ngModel)]="email"></ion-input>
    </ion-item>
  </ion-list>
</ion-content>

```

```
</ion-item>
<ion-item>
  <ion-label>Mobile</ion-label>
  <ion-input type="number" [(ngModel)]="mobile"></ion-input>
</ion-item>
<ion-item>
  <ion-label>Nickname</ion-label>
  <ion-input type="text" [(ngModel)]="nickname"></ion-input>
</ion-item>
</ion-list>
<button full (click)="add()">Add</button>
</ion-content>
```

Register.ts

```
import { Component } from '@angular/core';
import { ViewController } from 'ionic-angular';
@Component({
  templateUrl: 'build/pages/register/register.html',
})
export class ResisterPage {
  viewCtrl;
  name;
  email;
  mobile;
  nickname;
  constructor(viewCtrl: ViewController) {
    this.viewCtrl = viewCtrl;
    this.name = "";
    this.email = "";
    this.mobile = "";
    this.nickname = "";
  }
  dismiss() {
    this.viewCtrl.dismiss();
  }
  add() {
    let data = {"name": this.name, "email": this.email, "mobile": this.mobile, "nickname": this.nickname};
    this.viewCtrl.dismiss(data);
  }
}
```

viewControllers dismiss.

○ ○

```
Home.html

<ion-list>
  <ion-item *ngFor="let datum of data">
    <h1>{{datum.name}}</h1>
  </ion-item>
</ion-list>
<button full secondary (click)="openModalParams()">ModalWithParams-Register</button>
```

Home ts

```

import {ResisterPage} from '../register/register';

openModalParams () {
  let modalWithParams = this.modalCtrl.create(ResisterPage);
  modalWithParams.present();

  modalWithParams.onDidDismiss((result) =>{
    if(result){
      this.data.unshift(result);
    }
  });
}

```

ViewController **onDidDismiss**。 modalonDidDismiss。 。 null。

NavController。 home.html**create**。

Home.html

```

<ion-list>
  <ion-item *ngFor="let datum of data" (click)="openModalwithNavParams(datum)">
    <h1>{{datum.name}}</h1>
  </ion-item>
</ion-list>

```

Home.ts

```

import {EditProfilePage} from '../edit-profile/edit-profile';

openModalwithNavParams(data) {
  let modalWithNavParams = this.modalCtrl.create(EditProfilePage, {Data: data});
  modalWithNavParams.present();
}

```

NavParams。

Profile.html

```

<ion-header>
  <ion-toolbar>
    <ion-title>
      Login
    </ion-title>
    <ion-buttons start>
      <button (click)="dismiss()">
        <span primary showWhen="ios">Cancel</span>
        <ion-icon name="md-close" showWhen="android,windows"></ion-icon>
      </button>
    </ion-buttons>
  </ion-toolbar>
</ion-header>
<ion-content padding>
  <h2>Welcome {{name}}</h2>
  <ion-list>
    <ion-item>
      <ion-label>Email</ion-label>

```

```

<ion-input type="text" value="{{email}}></ion-input>
</ion-item>
<ion-item>
  <ion-label>Mobile</ion-label>
  <ion-input type="number" value="{{mobile}}></ion-input>
</ion-item>
<ion-item>
  <ion-label>Nickname</ion-label>
  <ion-input type="text" value="{{nickname}}></ion-input>
</ion-item>
</ion-list>
<button full (click)="dismiss()">Close</button>
</ion-content>

```

Profile.ts

```

import { Component } from '@angular/core';
import { ViewController, NavParams } from 'ionic-angular';
@Component({
  templateUrl: 'build/pages/edit-profile/edit-profile.html',
})
export class EditProfilePage {
  navCtrl;
  navParams;
  data;
  name;
  email;
  mobile;
  nickname;
  constructor(viewCtrl: ViewController, navParams: NavParams) {
    this.navCtrl = viewCtrl;
    this.navParams = navParams;
    this.data = this.navParams.get('Data');
    this.name = this.data.name;
    this.email = this.data.email;
    this.mobile = this.data.mobile;
    this.nickname = this.data.nickname;
  }
  dismiss() {
    this.navCtrl.dismiss();
  }
}

```

<https://riptutorial.com/zh-CN/ionic2/topic/6612/>

16:

SenderIdDgcmID。

```
ionic plugin add phonegap-plugin-push --variable SENDER_ID="XXXXXXX"
```

<https://github.com/phonegap/phonegap-plugin-push/blob/master/docs/TYPESCRIPT.md>

Examples

ID。

```
let push = Push.init({
  android: {
    senderID: "-----",
  },
  ios: {
    alert: "true",
    badge: true,
    sound: "false",
  },
  windows: {},
});
```

ID

```
import { Push, RegistrationEventResponse} from "ionic-native";

//the push element is created in the initialization example
push.on("registration", async (response: RegistrationEventResponse) => {
  //The registration returns an id of the registration on your device
  RegisterWithWebApi(response.registrationId);

});
```

◦

```
import { Push, NotificationEventResponse} from "ionic-native";

//the push element is created in the initialization example
push.on("notification", (response: NotificationEventResponse) => {
  let chatMessage: ChatMessage = <ChatMessage>{
    title: response.title,
    message: response.message,
    receiver: response.additionalData.replyTo,
    image: response.image
  };
  DoStuff(chatMessage));
});
```

<https://riptutorial.com/zh-CN/ionic2/topic/5874/>

17: OnInit

ionic2 constructor jsonhttp.getjson http

Examples

HttpStudent Service

```
import {Http} from '@angular/http';
@Injectable()
export class StudentService{
  constructor(public http: Http){}
  getAllStudents(): Observable<Students[]>{
    return this.http.get('assets/students.json')
      .map(res => res.json().data)
  }
}
```

/

```
import {StudentService} from './student.service';
import { SocialSharing } from '@ionic-native/social-sharing';
export class HomePage implements OnInit {

  constructor(public _studentService: StudentService, public socialSharing: SocialSharing) {
  }
```

StudentServicesocialSharing。

ngOnInit

onInit ionic2AngularJs2。 ngOnInit。 /。 OnInitngOnInit。

ngOnInit/

```
export class HomePage implements OnInit {
  ...
  ....
  constructor(...){}

  ngOnInit() {
    this._studentService.getAllStudents().subscribe(
      (students: Students[]) => this.students = students,
    )
  }
}
```

OnInit <https://riptutorial.com/zh-CN/ionic2/topic/9907/oninit>

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| 2 | "show-delete" | Amr ElAdawy, Roman Lee |
| 3 | Angularfire2Ionic2 | Fernando Del Olmo |
| 4 | InAppBrowser | niks |
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