



免费电子书

学习

dart

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1:



DartGoogleWeb◦ Dart

- Web◦
- Dart◦
- DartWeb◦

Dart◦

Dart

- ◦
- ◦
- **DOMCSSjQuery**
- **Dart IDEIDEDart WebStorm** ◦
- **Dartium Chromium WebDart**
- [Dart](#)
- [Dart](#)
- [Dartosphere](#) - Dart
- Google+[Dartisans](#) Dartisans
- [Dart Web Development - Google Groups Page](#)
- [Dart Language Misc - Google](#)
- [DartLangReddit](#)
- ◦
- ◦
- ◦
- [Dart API](#)
- ◦

1.22.1	2017222
1.22.0	2017214
1.21.1	2016113
1.21.0	2016127
1.20.1	20161013

1.20.0	20161011
1.19.1	201697
1.19.0	2016826
1.18.1	201682
1.18.0	2016727
1.17.1	2016610
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1.16.1	2016523
1.16.0	2016426
1.15.0	201639
1.14.2	201629
1.14.1	201623
1.14.0	2016128
1.13.2	201615
1.13.1	20151217
1.13.0	
1.12.2	20151021
1.12.1	2015-09-08
1.12.0	2015831
1.11.3	201583
1.11.1	201572
1.11.0	2015624
1.10.1	2015511
1.10.0	2015424
1.9.3	2015413
1.9.1	2015325

1.8.5	2015113
1.8.3	2014121
1.8.0	
1.7.2	20141014
1.6.0	2014827
1.5.8	2014729
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1.3.3	2014416
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1.2.0	2014225
1.1.3	201426
1.1.1	2014115
1.0.0.10_r30798	2013122
1.0.0.3_r30188	20131112
0.8.10.10_r30107	2013118
0.8.10.6_r30036	2013117
0.8.10.3_r29803	2013114

Examples

Dart SDK Dart VM doc. Web Dartium.

- WindowsDart
- MacDart
- LinuxDart

SDK

hello_world.dart

```
void main() {  
  print('Hello, World!');  
}
```

hello_world.dart

```
dart hello_world.dart
```

Hello, World!

Http

HTML

```
<img id="cats"></img>
```

```
import 'dart:html';  
  
/// Stores the image in [blob] in the [ImageElement] of the given [selector].  
void setImage(selector, blob) {  
  FileReader reader = new FileReader();  
  reader.onLoad.listen((fe) {  
    ImageElement image = document.querySelector(selector);  
    image.src = reader.result;  
  });  
  reader.readAsDataUrl(blob);  
}  
  
main() async {  
  var url = "https://upload.wikimedia.org/wikipedia/commons/2/28/Tortoiseshell_she-cat.JPG";  
  
  // Initiates a request and asynchronously waits for the result.  
  var request = await HttpRequest.request(url, responseType: 'blob');  
  var blob = request.response;  
  setImage("#cats", blob);  
}
```

<https://dartpad.dartlang.org/a0e092983f63a40b0b716989cac6969a>

```
void main() {  
  var cat = new Cat();  
  
  print("Is cat hungry? ${cat.isHungry}"); // Is cat hungry? true
```

```
print("Is cat cuddly? ${cat.isCuddly}"); // Is cat cuddly? false
print("Feed cat.");
cat.isHungry = false;
print("Is cat hungry? ${cat.isHungry}"); // Is cat hungry? false
print("Is cat cuddly? ${cat.isCuddly}"); // Is cat cuddly? true
}

class Cat {
  bool _isHungry = true;

  bool get isCuddly => !_isHungry;

  bool get isHungry => _isHungry;
  bool set isHungry(bool hungry) => this._isHungry = hungry;
}
```

DartgettersetterAPI。

[dartpad https://dartpad.dartlang.org/c25af60ca18a192b84af6990f3313233](https://dartpad.dartlang.org/c25af60ca18a192b84af6990f3313233)

<https://riptutorial.com/zh-CN/dart/topic/843/>

2: Dart-JavaScript

Dart-JavaScript Dart JavaScript

js Dart° JavaScript° Dart JavaScript°

Examples

JavaScript JSON.stringify JSON°

external @JS @JS

```
@JS("JSON.stringify")
external String stringify(obj);
```

@JS JavaScript Dart°

JavaScript/

Google Maps JavaScript API google.maps

```
@JS('google.maps')
library maps;

import "package:js/js.dart";

@JS()
class Map {
  external Map(Location location);
  external Location getLocation();
}
```

Map Dart JavaScript google.maps.Map°

Dart new Map(someLocation) JavaScript new google.maps.Map(location) °

Dart JavaScript

```
@JS("LatLng")
class Location {
  external Location(num lat, num lng);
}
```

Location Dart google.maps.LatLng°

°

JavaScript

```
// JavaScript
printOptions({responsive: true});
Unfortunately we cannot pass Dart Map objects to JavaScript in these cases.
```

Dart

```
// Dart
@JS()
@anonymous
class Options {
  external bool get responsive;

  external factory Options({bool responsive});
}
```

Options DartJavaScript @anonymous

printOptionsOptions

```
// Dart
@JS()
external printOptions(Options options);

printOptions(new Options(responsive: true));
```

Dart-JavaScript <https://riptutorial.com/zh-CN/dart/topic/9240/dart-javascript>

3:

Dart◦◦◦

JavaDart◦◦

DartExceptionError◦◦ Dartnull - ExceptionError - ◦

Examples

```
class CustomException implements Exception {  
    String cause;  
    CustomException(this.cause);  
}  
  
void main() {  
    try {  
        throwException();  
    } on CustomException {  
        print("custom exception is been obtained");  
    }  
}  
  
throwException() {  
    throw new CustomException('This is my first custom exception');  
}
```

<https://riptutorial.com/zh-CN/dart/topic/3334/>

4:

Dart `List.whereList.retainWhere` `where` `true` `list;false` `◦`

`theList.retainWhere(foo)` `theList = theList.where(foo) ◦`

Examples

`[-1, 0, 2, 4, 7, 9].where((x) => x > 2) --> [4, 7, 9]`

<https://riptutorial.com/zh-CN/dart/topic/10948/>

5:

DartFunction^o . Dart^o

Examples

{param1param2...}

```
void enableFlags({bool bold, bool hidden}) {  
    // ...  
}
```

paramNamevalue

```
enableFlags(bold: true, hidden: false);
```

Dart^o

```
void outerFunction() {  
  
    bool innerFunction() {  
        // Does stuff  
    }  
}
```

innerFunctionouterFunction^o .

Dart^o Listsort^o

```
int compare(E a, E b)
```

ab0◦ -1a < b1a > b◦

◦

```
List<int> numbers = [4,1,3,5,7];  
  
numbers.sort((int a, int b) {  
    if(a == b) {  
        return 0;  
    } else if (a < b) {  
        return -1;  
    } else {  
        return 1;  
    }  
});
```

```
Function intSorter = (int a, int b) {  
    if(a == b) {
```

```
        return 0;
    } else if (a < b) {
        return -1;
    } else {
        return 1;
    }
}
```

◦

```
numbers.sort(intSorter);
```

<https://riptutorial.com/zh-CN/dart/topic/2965/>

6:

```
importlibrary Dartlibrary . . pubSDKPub PackageAsset Manager .
```

Examples

```
import.
```

```
import 'dart:html';
```

```
importURI. URIdart: scheme. package: scheme. package: schemepub.
```

```
import 'dart:io';
import 'package:mylib/mylib.dart';
import 'package:utils/utils.dart';
```

```
JavaDartpublic protectedprivate. _.
```

```
other.dart A
```

```
library other;

class A {
    int _private = 0;

    testA() {
        print('int value: ${_private}'); // 0
        _private = 5;
        print('int value: ${_private}'); // 5
    }
}
```

```
import 'other.dart';

void main() {
    var b = new B();
    b.testB();
}

class B extends A {
    String _private;

    testB() {
        _private = 'Hello';
        print('String value: ${_private}'); // Hello
        testA();
        print('String value: ${_private}'); // Hello
    }
}
```

```
String value: Hello
```

```
int value: 0
int value: 5
String value: Hello
```

- **library1library2Element**

```
import 'package:lib1/lib1.dart';
import 'package:lib2/lib2.dart' as lib2;
// ...
var element1 = new Element(); // Uses Element from lib1.
var element2 =
    new lib2.Element(); // Uses Element from lib2.
```

◦

```
// Import only foo and bar.
import 'package:lib1/lib1.dart' show foo, bar;

// Import all names EXCEPT foo.
import 'package:lib2/lib2.dart' hide foo;
```

- **deferred**

```
import 'package:deferred/hello.dart' deferred as hello;
```

- **loadLibrary**

```
greet() async {
  await hello.loadLibrary();
  hello.printGreeting();
}
```

await◦ await◦

<https://riptutorial.com/zh-CN/dart/topic/3332/>

7:

Examples

+

```
'Dart ' + 'is ' + 'fun!'; // 'Dart is fun!'
```

```
'Dart ' 'is ' 'fun!'; // 'Dart is fun!'
```

`{} Dart`

```
var text = 'dartlang';
'$text has ${text.length} letters'; // 'dartlang has 8 letters'
```

`.. Dart`

```
'Single quotes';
"Double quotes";
'Double quotes in "single" quotes';
"Single quotes in 'double' quotes";

'''A
multiline
string''';

"""
Another
multiline
string"";
```

`String StringBuffer` `toString()` `StringBuffer String`

```
var sb = new StringBuffer();

sb.write("Use a StringBuffer");
sb.writeAll(["for ", "efficient ", "string ", "creation "]);
sb.write("if you are ")
sb.write("building lots of strings");

// or you can use method cascades:

sb
..write("Use a StringBuffer")
..writeAll(["for ", "efficient ", "string ", "creation "])
..write("if you are ")
..write("building lots of strings");

var fullString = sb.toString();

print(fullString);
```

```
// Use a StringBuffer for efficient string creation if you are building lots of strings  
sb.clear(); // all gone!
```

<https://riptutorial.com/zh-CN/dart/topic/5003/>

8:

- var regExp = RegExp'^。 *'\$'multiLinetruecaseSensitivefalse;

String source	String
{bool multiline}	。 ^\$
{bool caseSensitive}	

DartJavaScript。 JavaScript<http://ecma-international.org/ecma-262/5.1/#sec-15.10>。

JavaScriptdart。

Examples

```
var regExp = new RegExp(r"(\w+)");
var str = "Parse my string";
Iterable<Match> matches = regExp.allMatches(str);
```

“” r 。

<https://riptutorial.com/zh-CN/dart/topic/3624/>

Examples

```
Future<Results> costlyQuery() {
    var completer = new Completer();

    database.query("SELECT * FROM giant_table", (results) {
        // when complete
        completer.complete(results);
    }, (error) {
        completer.completeException(error);
    });

    // this returns essentially immediately,
    // before query is finished
    return completer.future;
}
```

```
import 'dart:async';

Future main() async {
    var value = await _waitForValue();
    print("Here is the value: $value");
    //since _waitForValue() returns immediately if you un it without await you won't get the
    result
    var errorValue = "not finished yet";
    _waitForValue();
    print("Here is the error value: $value");// not finished yet
}

Future<int> _waitForValue() => new Future<int>() {
    var n = 100000000;

    // Do some long process
    for (var i = 1; i <= n; i++) {
        // Print out progress:
        if ([n / 2, n / 4, n / 10, n / 20].contains(i)) {
            print("Not done yet...");
        }

        // Return value when done.
        if (i == n) {
            print("Done.");
            return i;
        }
    }
};
```

Dartpad <https://dartpad.dartlang.org/11d189b51e0f2680793ab3e16e53613c>

DartFuture Stream。FuturesAPI。DartCompleter。CompleterFuture。

FutureAPI API。FuturesFuture。

```
// A good use of a Completer.

Future doStuff() {
  Completer completer = new Completer();
  runDatabaseQuery(sql, (results) {
    completer.complete(results);
  });
  return completer.future;
}
```

APIFutureCompleter◦

<https://riptutorial.com/zh-CN/dart/topic/2520/>

10:

Examples

Dart

```
if (year >= 2001) {  
    print('21st century');  
} else if (year >= 1901) {  
    print('20th century');  
} else {  
    print('We Must Go Back!');  
}
```

if

```
var foo = true;  
print(foo ? 'Foo' : 'Bar'); // Displays "Foo".
```

Loop

Dartwhile

```
while(peopleAreClapping()) {  
    playSongs();  
}
```

```
do {  
    processRequest();  
} while(stillRunning());
```

break

```
while (true) {  
    if (shutDownRequested()) break;  
    processIncomingRequests();  
}
```

continue

```
for (var i = 0; i < bigNumber; i++) {  
    if (i.isEven){  
        continue;  
    }  
    doSomething();  
}
```

for

```
for (int month = 1; month <= 12; month++) {  
    print(month);  
}
```

```
for (var object in flybyObjects) {  
    print(object);  
}
```

Iterable for-in◦ forEachIterablefor-in

```
flybyObjects.forEach((object) => print(object));
```

```
flybyObjects.forEach(print);
```

Dartswitch caselong if-else

```
var command = 'OPEN';  
  
switch (command) {  
  case 'CLOSED':  
    executeClosed();  
    break;  
  case 'OPEN':  
    executeOpen();  
    break;  
  case 'APPROVED':  
    executeApproved();  
    break;  
  case 'UNSURE':  
    // missing break statement means this case will fall through  
    // to the next statement, in this case the default case  
  default:  
    executeUnknown();  
}
```

◦ ==◦

Dart◦◦◦ breakcontinuethrowreturn◦

```
var command = 'OPEN';  
switch (command) {  
  case 'OPEN':  
    executeOpen();  
    // ERROR: Missing break causes an exception to be thrown!!  
  
  case 'CLOSED': // Empty case falls through  
  case 'LOCKED':  
    executeClosed();  
    break;  
}
```

case continue

```
var command = 'OPEN';
```

```
switch (command) {  
  case 'OPEN':  
    executeOpen();  
    continue locked;  
locked: case 'LOCKED':  
    executeClosed();  
    break;  
}
```

<https://riptutorial.com/zh-CN/dart/topic/923/>

Examples

DateTime

```
DateTime now = new DateTime.now();
DateTime berlinWallFell = new DateTime(1989, 11, 9);
DateTime moonLanding = DateTime.parse("1969-07-20 20:18:00"); // 8:18pm
```

◦

<https://riptutorial.com/zh-CN/dart/topic/3322/>

12:

Examples

```
enum Fruit {  
    apple, banana  
}  
  
main() {  
    var a = Fruit.apple;  
    switch (a) {  
        case Fruit.apple:  
            print('it is an apple');  
            break;  
    }  
  
    // get all the values of the enums  
    for (List<Fruit> value in Fruit.values) {  
        print(value);  
    }  
  
    // get the second value  
    print(Fruit.values[1]);  
}
```

<https://riptutorial.com/zh-CN/dart/topic/5107/>

13:

Examples

```
class InputField {  
    int maxLength;  
    String name;  
}
```

newnull。

```
var field = new InputField();
```

```
// this will trigger the setter  
field.name = "fieldname";  
  
// this will trigger the getter  
print(field.name);
```

◦

/◦ null◦

```
class Foo {  
    var member1;  
    int member2;  
    String member3 = "Hello world!";  
}
```

static◦

```
class Bar {  
    static var member4;  
    static String member5;  
    static int member6 = 42;  
}
```

getter

```
class Foo {  
    String get bar {  
        var result;  
        // ...  
        return result;  
    }  
}
```

gettersgetter

```
main() {
  var foo = new Foo();
  print(foo.bar); // prints "bar"
}
```

setter

```
class Foo {
  String _bar;

  String get bar => _bar;

  void set bar(String value) {
    _bar = value;
  }
}
```

setter

```
main() {
  var foo = new Foo();
  foo.bar = "this is calling a setter method";
}
```

◦

Person

```
class Person {
  String name;
  String gender;
  int age;

  Person(this.name, this.gender, this.age);
}
```

```
class Person {
  String name;
  String gender;
  int age;

  Person(String name, String gender, int age) {
    this.name = name;
    this.gender = gender;
    this.age = age;
  }
}
```

Person

```
var alice = new Person('Alice', 'female', 21);
```

<https://riptutorial.com/zh-CN/dart/topic/1511/>

14:

- //
- /* */
- /// Dartdoc

◦ ◦

StackOverflow

•

Examples

//◦

```
int i = 0; // Commented out text
```

/**/◦

```
void main() {
  for (int i = 0; i < 5; i++) {
    /* This is commented, and
     * will not affect code */
    print('hello ${i + 1}');
  }
}
```

Dartdoc

docdartdoc◦

```
/// The number of characters in this chunk when unsplit.
int get length => ...
```

dartdocmarkdown◦

```
/// This is a paragraph of regular text.
///
/// This sentence has *two* _emphasized_ words (i.e. italics) and **two**
/// __strong__ ones (bold).
///
/// A blank line creates another separate paragraph. It has some `inline code`
/// delimited using backticks.
///
/// * Unordered lists.
/// * Look like ASCII bullet lists.
/// * You can also use `-` or `+`.
///
```

```
/// Links can be:  
///  
/// * http://www.just-a-bare-url.com  
/// * [with the URL inline] (http://google.com)  
/// * [or separated out] [ref link]  
///  
/// [ref link]: http://google.com  
///  
/// # A Header  
///  
/// ## A subheader
```

<https://riptutorial.com/zh-CN/dart/topic/2436/>

Examples

JSON

```
import 'dart:convert';

void main() {
    var jsonString = """
    {
        "cats": {
            "abysinnian": {
                "origin": "Burma",
                "behavior": "playful"
            }
        }
    """
}

var obj = JSON.decode(jsonString);

print(obj['cats']['abysinnian']['behavior']); // playful
}
```

dartpad <https://dartpad.dartlang.org/7d5958cf10e611b36326f27b062108fe>

<https://riptutorial.com/zh-CN/dart/topic/2778/>

16:

Dart SDKpub。 pub。 HTTPpub.dartlang.org。 IDEWebStormpub。

Pub。

Examples

Webpub build。 pub build build。

pub build。

```
$ cd ~/dart/helloworld
$ pub build
Building helloworld.....
Built 5 files!
```

Dart Web。 localhostHTTPWeb。

Webpubspec.yamldev

```
$ cd ~/dart/helloworld
$ pub serve
Serving helloworld on http://localhost:8080
```

<https://riptutorial.com/zh-CN/dart/topic/3335/>

Examples

◦

List

```
var vegetables = ['broccoli', 'cabbage'];
```

List

```
var fruits = new List();
```

```
var fruits = <String>['apples', 'oranges'];
var fruits = new List<String>();
```

◦

```
var fixedLengthList1 = new List(8);
var fixedLengthList2 = new List.filled(8, "initial text");
var computedValues = new List.generate(8, (n) => "x" * n);
var fromIterable = new List<String>.from(computedValues.getRange(2, 5));
```

Effective Dart◦

```
var ingredients = new Set();
ingredients.addAll(['gold', 'titanium', 'xenon']);
```

◦

```
var searchTerms = new Map();
```

```
var nobleGases = new Map<int, String>();
var nobleGases = <int, String>{};
```

```
var map = {
  "key1": "value1",
  "key2": "value2"
};
```

◦

mapFunction◦ Iterable◦ Iterable◦

Iterable.toSet()Iterable.toList()IterableQueue.fromList.from◦

```
main() {
  var cats = [
    'Abyssinian',
    'Scottish Fold',
    'Domestic Shorthair'
  ];

  print(cats); // [Abyssinian, Scottish Fold, Domestic Shorthair]

  var catsInReverse =
  cats.map((String cat) {
    return new String.fromCharCodes(cat.codeUnits.reversed);
  })
  .toList(); // [nainissybA, dloF hsittocS, riahtrohS citsemoD]

  print(catsInReverse);
}
```

dartpad <https://dartpad.dartlang.org/a18367ff767f172b34ff03c7008a6fa1>

Dart_{where}。

```
var fruits = ['apples', 'oranges', 'bananas'];
fruits.where((f) => f.startsWith('a')).toList(); //apples
```

where AND OR。

<https://riptutorial.com/zh-CN/dart/topic/859/>

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