

JavaScript 物聯網實作

Node.js 與網路爬蟲

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JavaScript

JavaScript

<https://zh.wikipedia.org/wiki/JavaScript>

- JavaScript (縮寫為 JS) 是一種進階、直譯的程式語言
- 官方名稱是 ECMAScript
- 語法來自 Java
- 函式來自 Scheme
- 原型繼承來自 Self
- 正則表示式來自 Perl

```
String.prototype.trim =  
function ()  
{  
  return this  
    .replace (/^\s+/, "")  
    .replace (/s+$/, "");  
}
```

.js

JavaScript \neq Java

JavaScript & Blockly

Google Blockly

<https://developers.google.com/blockly/>

Blockly

搜尋結果

中文 - 繁體

Sign in

A JavaScript library for building visual programming editors.

[首頁](#) [指南](#) [參考資料](#) [範例](#) [支援服務](#) [Publications](#)

Try Blockly

Logic

Loops

Math

Text

Lists

Color

Variables

Functions

set Count to 1

repeat while Count ≤ 3

do

print "Hello World!"

set Count to Count + 1

Language: JavaScript

var Count;

Count = 1;

while (Count <= 3) {

window.alert('Hello World!');

Count = Count + 1;

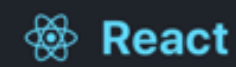
}

The Blockly library adds an editor to your app that represents coding concepts as interlocking blocks. It outputs syntactically correct code in the programming language of your choice. Custom blocks may be created to connect to your own application.

JavaScript UI

React

https://reactjs.org

[Docs](#)[Tutorial](#)[Blog](#)[Community](#)[Search](#)[v16.13.1](#)[Languages](#)[GitHub](#)

React

A JavaScript library for building user interfaces

[Get Started](#)[Take the Tutorial >](#)

Declarative

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.

Declarative views make your code more predictable and easier to debug.

Component-Based

Build encapsulated components that manage their own state, then compose them to make complex UIs.

Since component logic is written in JavaScript instead of templates, you can easily pass rich data through your app and keep state out of the DOM.

Learn Once, Write Anywhere

We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.

React can also render on the server using Node and power mobile apps using [React Native](#).

Vue.js

https://vuejs.org

Vue.js

Learn ▾

Ecosystem ▾

Team

Resources ▾

Support Vue ▾

Translations ▾



The Progressive JavaScript Framework



WHY VUE.JS?

GET STARTED



GITHUB

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Build app-to-app workflows and connect APIs

Approachable

Already know HTML, CSS and JavaScript? Read the guide and start building things in no time!

Versatile

An incrementally adoptable ecosystem that scales between a library and a full-featured framework.

Performant

20KB min+gzip Runtime
Blazing Fast Virtual DOM
Minimal Optimization Efforts

Patreon Sponsors



React Native

<https://reactnative.dev>



React Native 0.62

[Docs](#)

[API](#)

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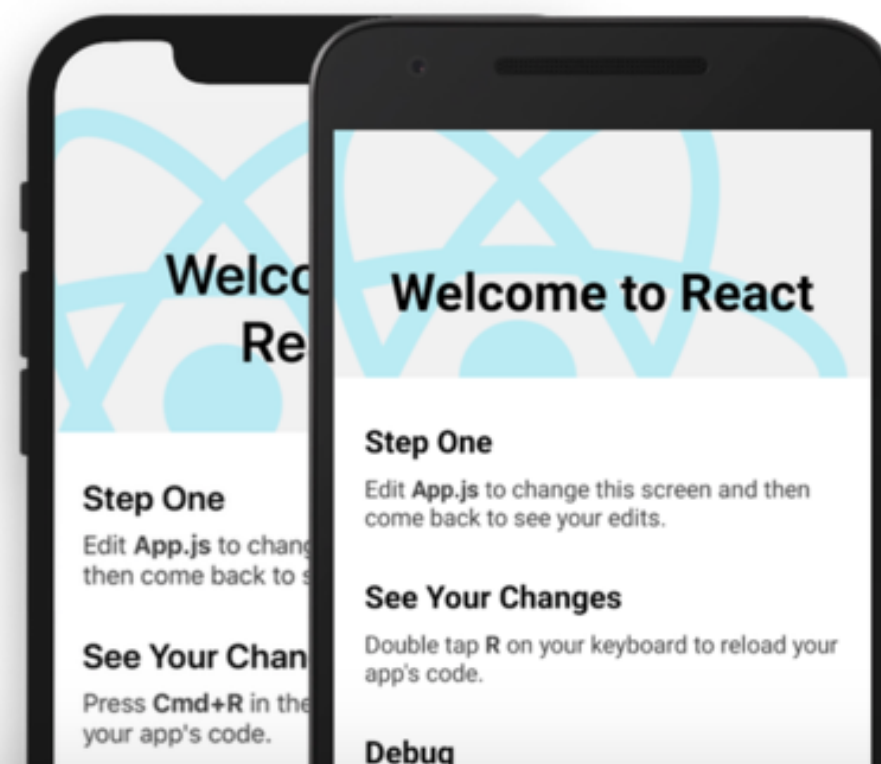
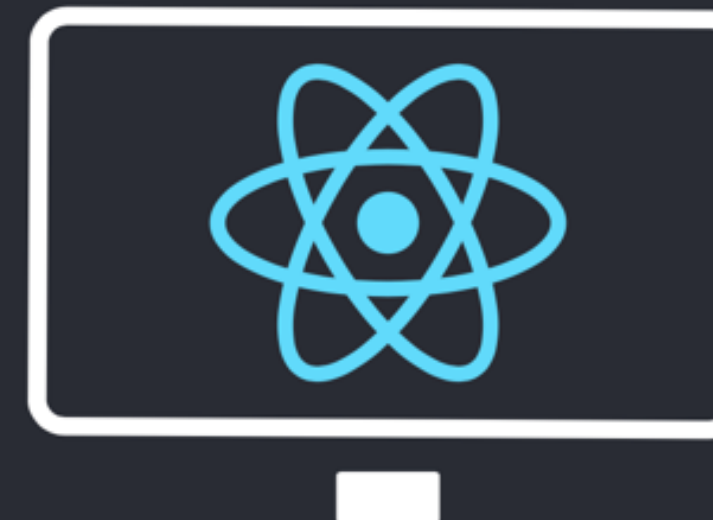
[★ Star](#)

React Native

Learn once, write anywhere.

[Get started](#)

[Learn basics >](#)



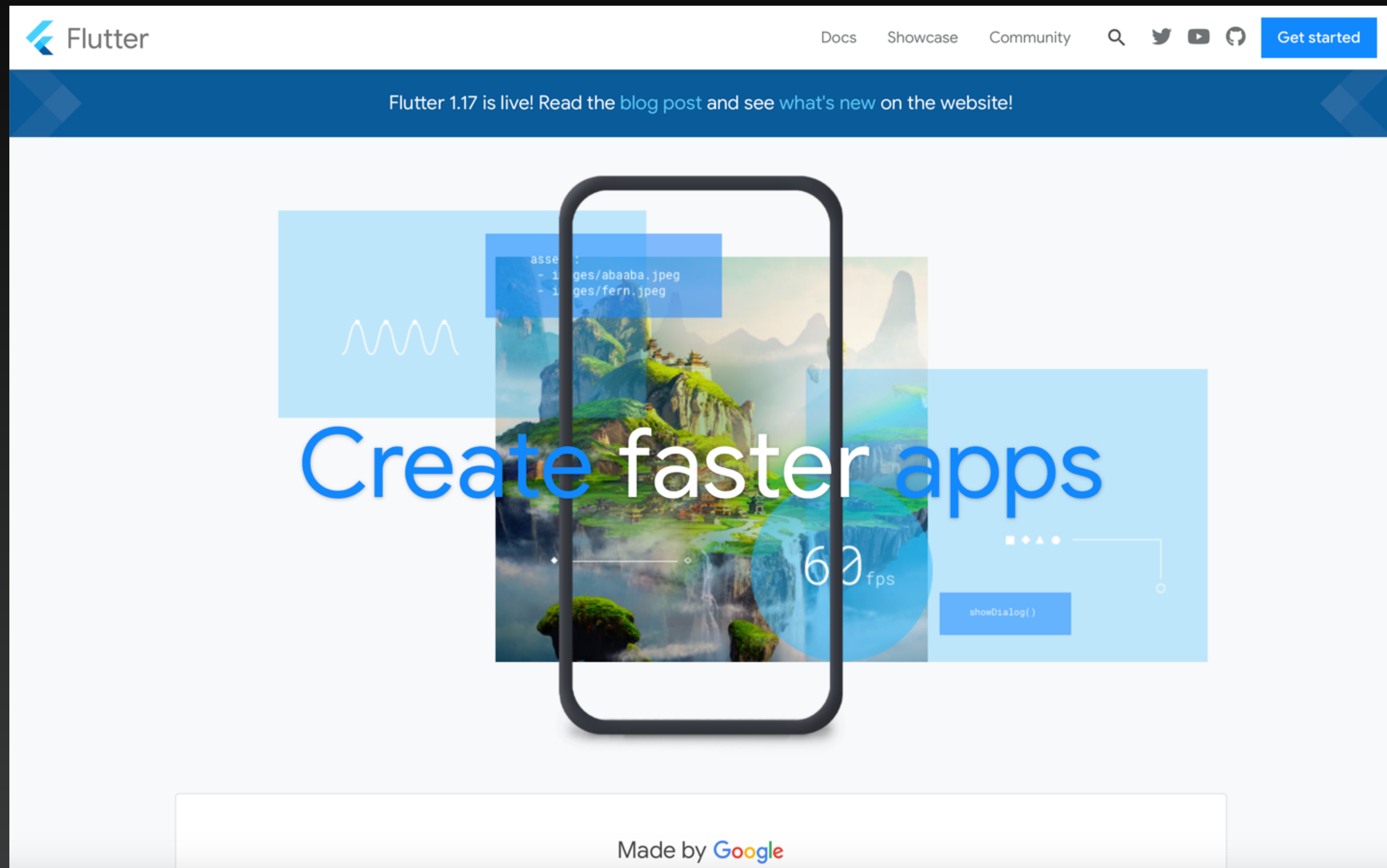
Create native apps for Android and iOS using React

React Native combines the best parts of native development with React, a best-in-class JavaScript library for building user interfaces.

Use a little—or a lot. You can use React Native today in your existing Android and iOS projects or you can create a whole new app from scratch.

Flutter

<https://flutter.dev>



Electron

<https://www.electronjs.org>

 ELECTRON

贊助者 應用程式 文件 部落格 社群 治理 版本發佈 搜尋

中文



Build cross-platform desktop apps with JavaScript, HTML, and CSS

版本發佈

```
$ npm i -D electron@latest
# Electron 8.2.5
# Node 12.13.0
# Chromium 80.0.3987.165
```

```
$ npm i -D electron@beta
# Electron 9.0.0-beta.22
# Node 12.14.1
# Chromium 83.0.4103.34
```

```
$ npm i -D electron-nightly
# Electron 10.0.0-nightly.20200507
# Node 12.16.3
# Chromium 84.0.4129.0
```

Node.js


Node.js

<https://zh.wikipedia.org/wiki/Node.js>

- Node.js 是能夠在伺服器端運行、跨平台 JavaScript 執行環境
- Node.js 採用 Google 開發的 V8 執行程式碼，使用事件驅動、非阻塞和非同步輸入輸出模型等技術來提高效能，可最佳化應用程式的傳輸量和規模
- 在 Node.js 出現之前，JavaScript 通常作為用戶端程式設計語言使用，在用戶的瀏覽器上執行
- Node.js 的出現使 JavaScript 也能用於伺服器端編程

Introduction to Node.js

<https://nodejs.dev/introduction-to-nodejs>

 [Download](#) [API Docs](#) [GitHub](#)

Introduction to Node.js

Quick Start

- Introduction to Node.js
- A brief history of Node.js
- How to install Node.js
- How much JavaScript do you need to know to use Node.js?
- Differences between Node.js and the Browser

Getting Started

- The V8 JavaScript Engine
- Run Node.js scripts from the command line

► TABLE OF CONTENTS

Node.js is an open-source and cross-platform JavaScript runtime environment. It is a popular tool for almost any kind of project!

Node.js runs the V8 JavaScript engine, the core of Google Chrome, outside of the browser. This allows Node.js to be very performant.

A Node.js app is run in a single process, without creating a new thread for every request. Node.js provides a set of asynchronous I/O primitives in its standard library that prevent JavaScript code from blocking and generally, libraries in Node.js are written using non-blocking paradigms, making blocking behavior the exception rather than the norm.

When Node.js needs to perform an I/O operation, like reading from the network, accessing a database or the filesystem, instead of blocking the thread and waiting CPU cycles waiting, Node.js will resume the

Node.js 爬蟲 (日幣匯率)

安裝 Node.js

<https://nodejs.org/en/>



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Node.js® is a JavaScript runtime built on [Chrome's V8 JavaScript engine](#).

Download for macOS (x64)

12.16.3 LTS

Recommended For Most Users

14.2.0 Current

Latest Features

[Other Downloads](#) | [Changelog](#) | [API Docs](#) [Other Downloads](#) | [Changelog](#) | [API Docs](#)

Or have a look at the [Long Term Support \(LTS\) schedule](#).

Sign up for [Node.js Everywhere](#), the official Node.js Monthly Newsletter.



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[Node.js Project Licensing Information](#).



Thank you drifkin for being a Node.js contributor **4 contributions**

安裝 Node.js 套件

透過 npm 安裝以下套件

- request：抓取整個網頁的程式碼
- cheerio：後端的 jQuery

抓取日幣匯率

<https://tutorials.webduino.io/zh-tw/docs/socket/useful/exchange-nodejs.html>

- 建立一個 index.js 的檔案

```
1  var request = require("request");
2  var cheerio = require("cheerio");
3
4  ▼ var jp = function() {
5  ▼   request({
6     url: "http://rate.bot.com.tw/Pages/Static/UIP003.zh-TW.htm",
7     method: "GET"
8   }, function(error, response, body) {
9   ▼   if (error || !body) {
10      return;
11  ▼   }else{
12
13      // 爬完網頁後要做的事情
14      console.log(body);
15  └   }
16  └   });
17  └   };
```

```
1 var request = require("request");
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6     url: "http://rate.bot.com.tw/Pages/Static/UIP003.zh-TW.htm",
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8   }, function(error, response, body) {
9 ▼     if (error || !body) {
10       return;
11 ▼     }else{
12
13       // 爬完網頁後要做的事情
14       var $ = cheerio.load(body);
15       var target = $(".rate-content-sight.text-right.print_hide");
16       console.log(target);
17     }
18   });
19 };
20
```



```
1 var request = require("request");
2 var cheerio = require("cheerio");
3
4 ▼ var jp = function() {
5 ▼   request({
6     url: "http://rate.bot.com.tw/Pages/Static/UIP003.zh-TW.htm",
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13       // 爬完網頁後要做的事情
14       var $ = cheerio.load(body);
15       var target = $(".rate-content-sight.text-right.print_hide");
16       console.log(target[15].children);
17     }
18   });
19 };
```

```
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4 ▼ var jp = function() {
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9 ▼     if (error || !body) {
10       return;
11   }else{
12
13     // 爬完網頁後要做的事情
14     var $ = cheerio.load(body);
15     var target = $(".rate-content-sight.text-right.print_hide");
16     console.log(target[15].children[0].data);
17   }
18   });
19   };
```

講義、範例程式下載：

- <http://ycwang812.at.tw>

Repositories > UCH

- <https://github.com/ycwang812/UCH>

