JavaScript 物聯網實作

Node.js 與網路爬蟲

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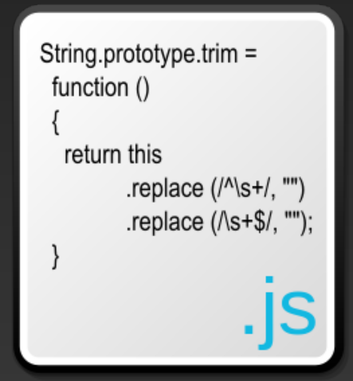
JavaScript

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



JavaScript ≠ Java

JavaScript & Blockly

Google Blockly

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

Blockly

搜尋結果

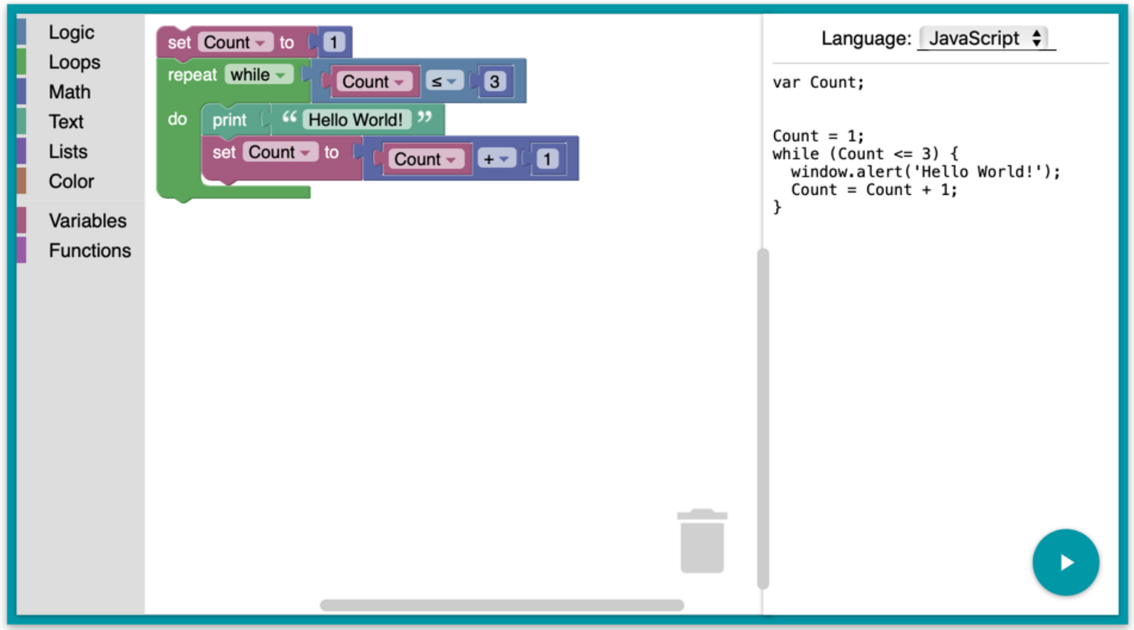
中文 – 繁體

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

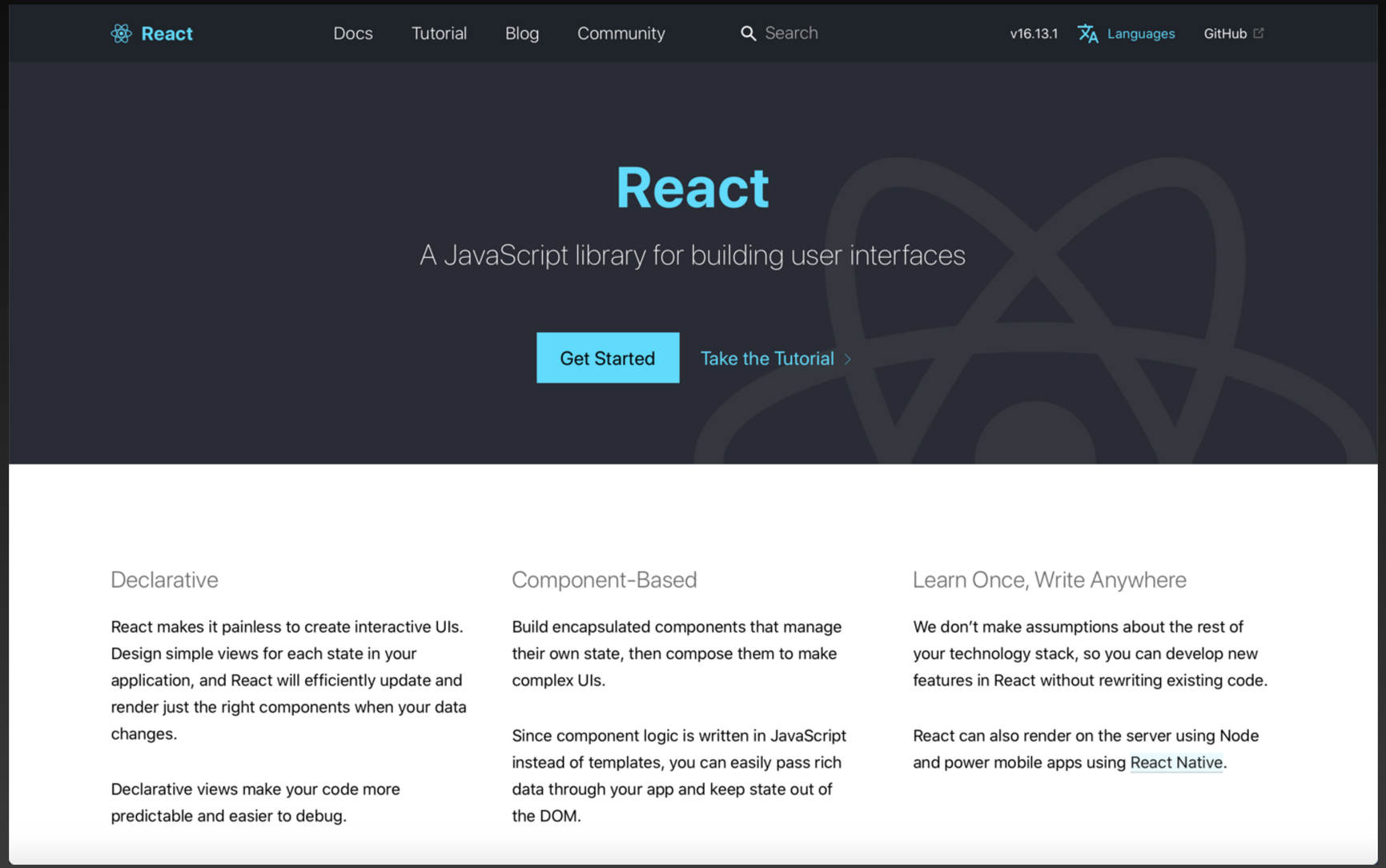


The Blockly library adds an editor to your app that represents coding concepts as interlocking blocks. It outputs syntactically correct code in the programming language of your choice. Custom blocks may be created to connect to your own application

JavaScript UI

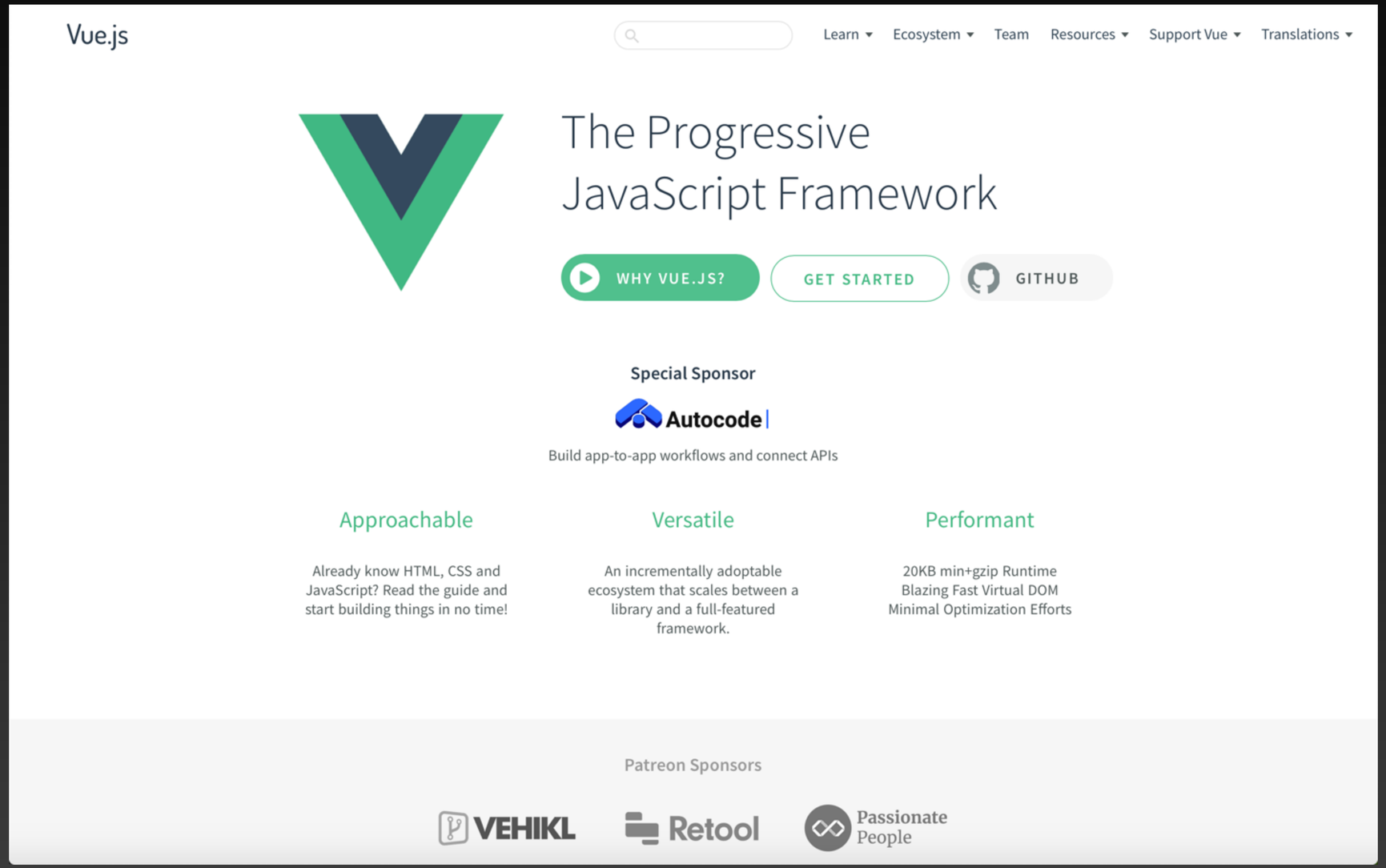
React

https://reactjs.org



Vue.js

https://vuejs.org

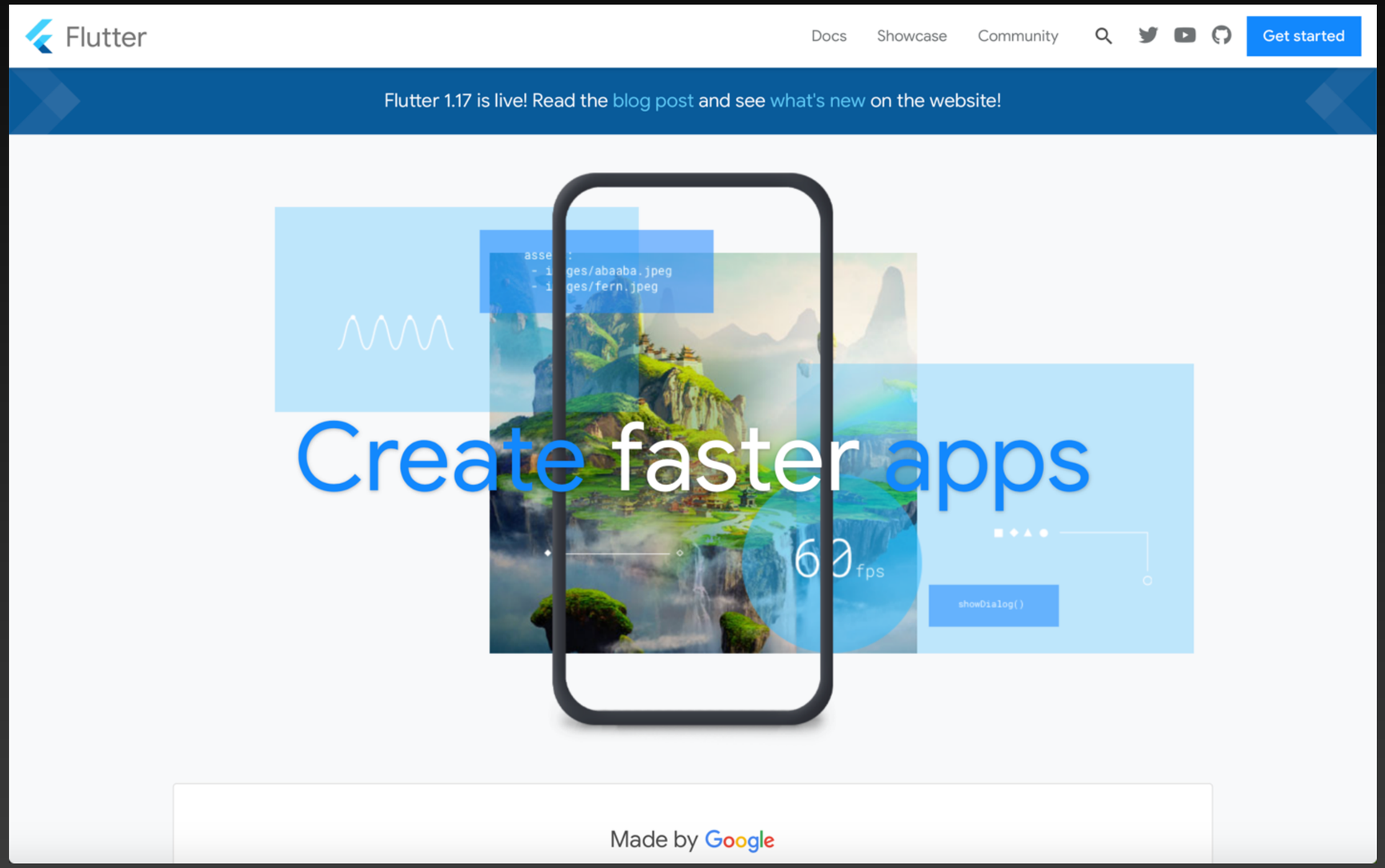


React Native

https://reactnative.dev

Flutter

https://flutter.dev



Electron

https://www.electronjs.org

Node.js

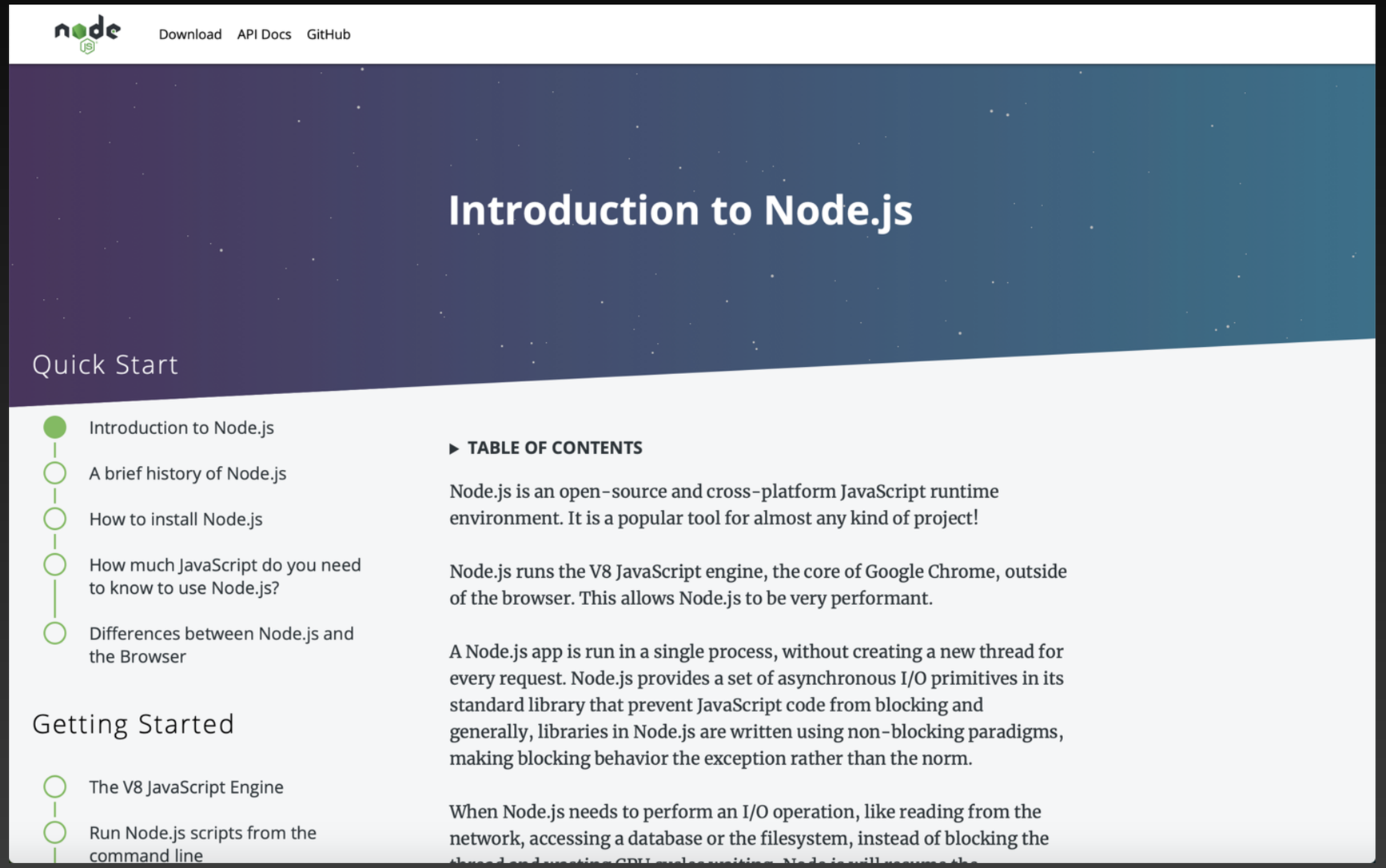
Node.js

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

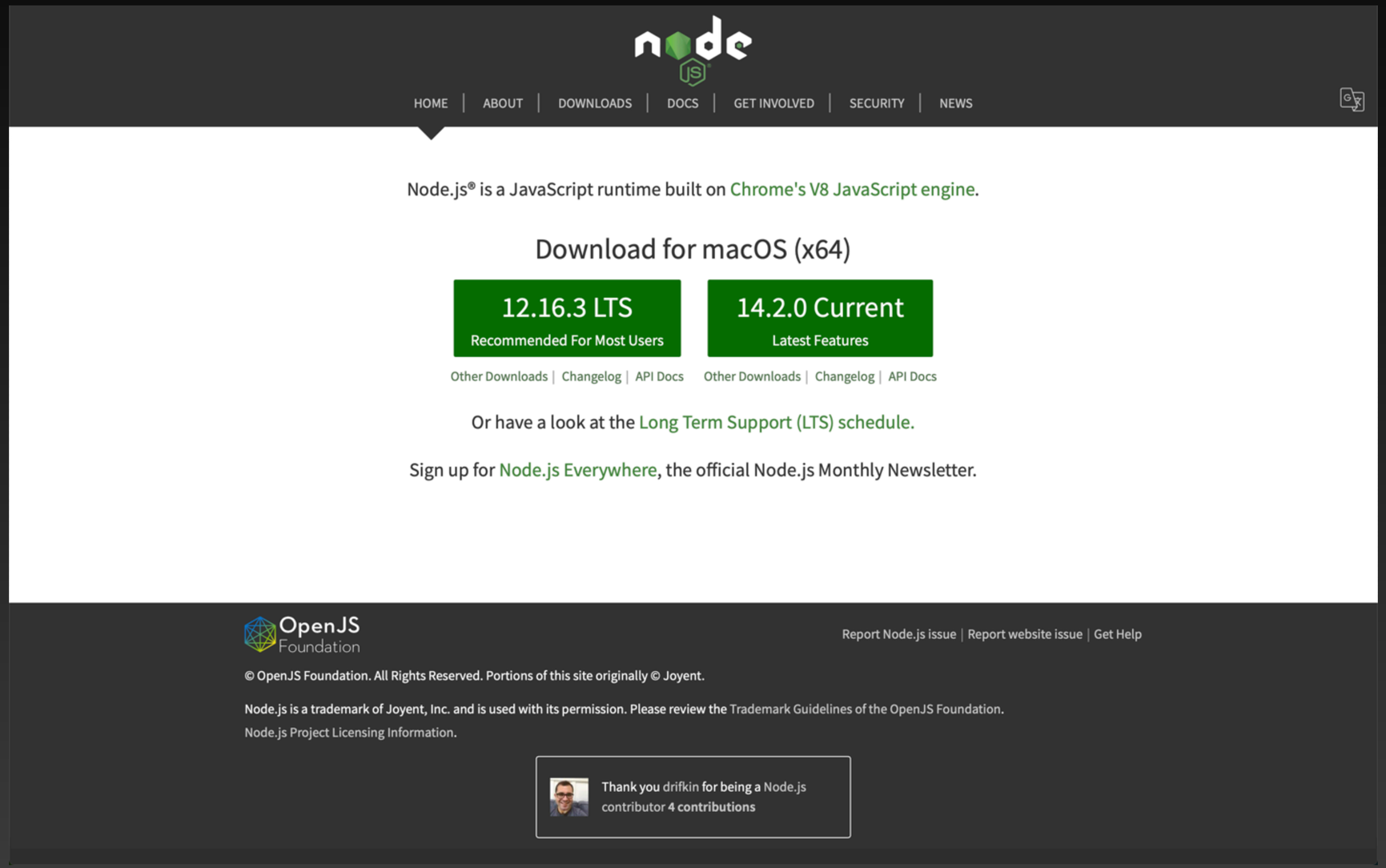
https://nodejs.dev/introduction-to-nodejs



Node-js 爬蟲 (日幣匯率)

安裝 Node.js

https://nodejs.org/en/



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

```
var request = require("request");
var cheerio = require("cheerio");

var jp = function() {
  request({
    url: "http://rate.bot.com.tw/Pages/Static/UIP003.zh-TW.htm",
    method: "GET"
  }, function(error, response, body) {
    if (error || !body) {
      return;
    }else{

    // 爬完網頁後要做的事情
    console.log(body);
    }
  });
};
```

```
var request = require("request");
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    if (error || !body) {
      return;
    }else{

    // 爬完網頁後要做的事情
    var $ = cheerio.load(body);
    var target = $(".rate-content-sight.text-right.print_hide");
    console.log(target);
    }
  });
};

```

```
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     var $ = cheerio.load(body);
15     var target = $(".rate-content-sight.text-right.print_hide");
16     console.log(target[15].children);
17     }
18   });
19 };
```

```
1  var request = require("request");
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3
4  var jp = function() {
5    request({
6      url: "http://rate.bot.com.tw/Pages/Static/UIP003.zh-TW.htm",
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8    }, function(error, response, body) {
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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[0].data);
17     }
18   });
19 };
```

講義、範例程式下載：

- http://ycwang812.at.tw

  Repositories > UCH

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