

# Software Studio

## 軟體設計與實驗

# Firebase Hosting

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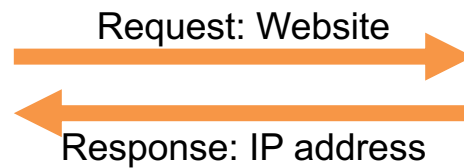
**CS2410**



# Basic Web Workflow



Client



DNS Server



Main Server



# What is Firestore?

- Firestore is an application cloud development platform built by Google.
- Help developers **quickly set up** backend services in the cloud which effectively shorten the application development time.



# Firestore



# Step by step

1. Create a new Firebase Project
2. Create a new Web App on Firebase Console
3. Install the Firebase CLI
4. Host Your Webpage



# 1. Create a new Firebase Project

- Go to [Firebase Console](#) (need a Google account) and add a project

× 建立專案(步驟 3 之 1)

請先輸入您的 專案名稱<sup>®</sup>

專案名稱

Software Studio

software-studio-a2c21

☒ 我接受 [Firebase 條款](#)

繼續

This id will be used in database URL and webpage domain.  
Please record it!




## 2. Create a new Web App on Firebase Console



# Initialization Configuration

## 1 註冊應用程式

應用程式暱稱 

Hosting

Pick a name for your application



一併為這個應用程式設定 **Firebase 託管**。 [瞭解詳情](#)

你也可以日後再設定託管功能，無論何時開始使用託管功能，你都無須付費。



hosting-2-bd9a4 (尚未部署任何項目)

註冊應用程式

## 2 新增 Firebase SDK



# Initialization Configuration

## 2 新增 Firebase SDK

☒ 使用 npm  ☐ 使用 <script> 標記 

如果你已使用 [npm](#) 和 [webpack](#) 或 [Rollup](#) 等模組整合工具，則可執行下列指令來安裝最新版 SDK：

```
$ npm install firebase
```



請初始化 Firebase，接著即可開始將 SDK 套用至要使用的產品。

```
// Import the functions you need from the SDKs you need
import { initializeApp } from "firebase/app";
// TODO: Add SDKs for Firebase products that you want to use
// https://firebase.google.com/docs/web/setup#available-libraries

// Your web app's Firebase configuration
const firebaseConfig = {
```

**注意事項：**這個選項會使用[模組 JavaScript SDK](#)，因此 SDK 的大小得以縮減。

如要進一步瞭解適用於網頁應用程式的 Firebase，請查看下列資源：[開始使用](#)、[Web SDK API 參考資料](#)、[使用範例](#)

前往控制台

Skip this step

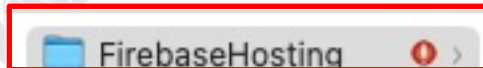




# 3. Prepare Project Folders

- In your project directory, create a “public” folder, and put all your source code and source files in it.

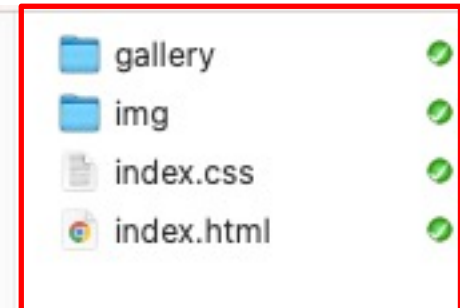
1. Project directory



2. Create “public” folder

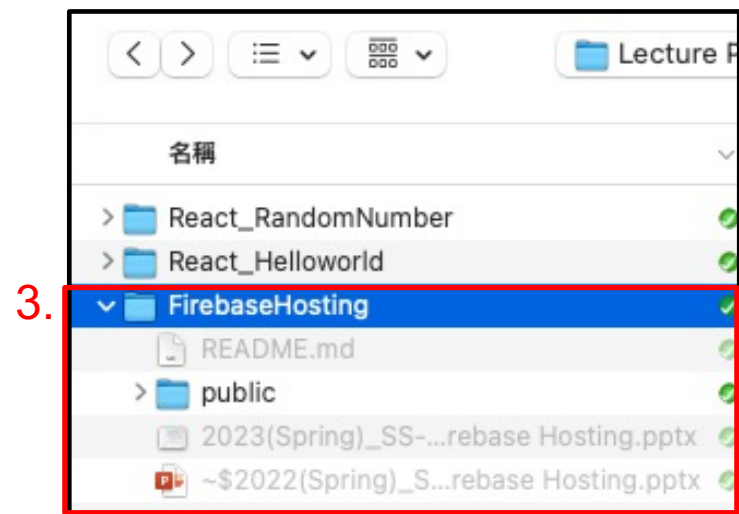
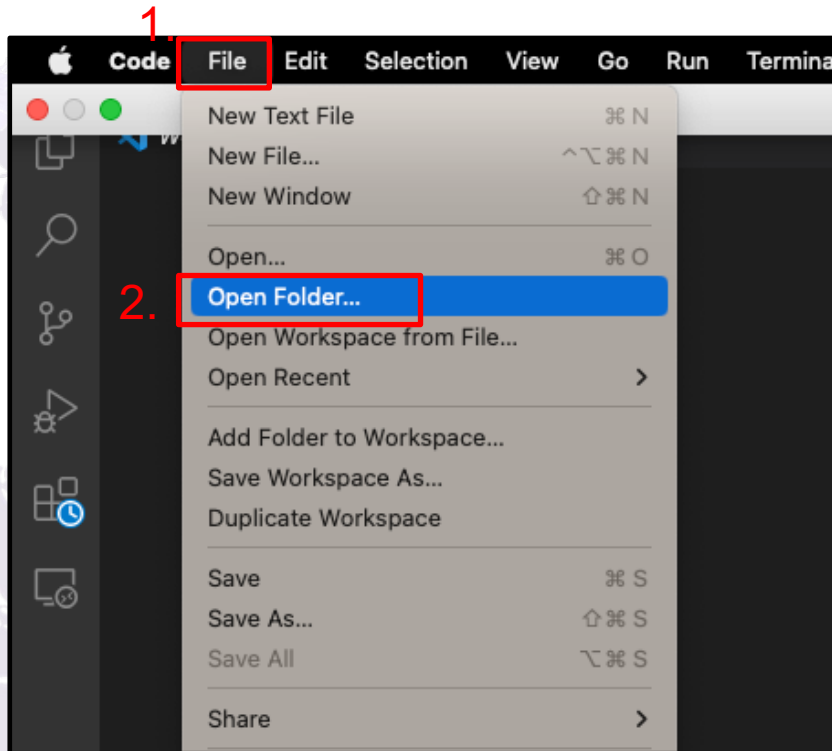


3. Put in sources and codes

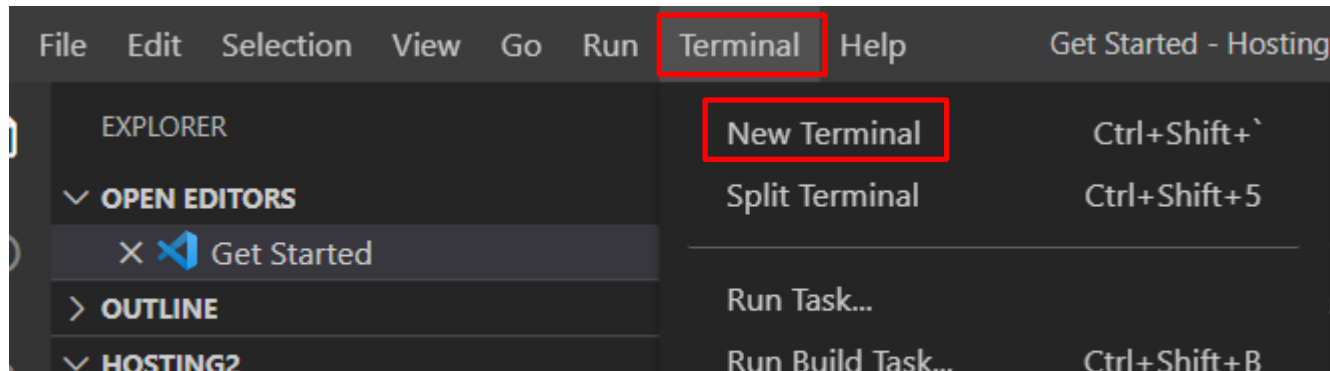


# 4. Install the Firebase CLI

- Download [node.js](https://nodejs.org/en/download/), 12.16.2 LTS
- Start VSCode at your **project directory**, not in the public folder.



# Install the Firebase CLI



- Run the command at your **project directory** and complete all settings
  1. `npm install -g firebase-tools`
  2. `firebase login`
  3. `firebase init`

```
(base) licaorong@licaorongdeMacBook-Pro FirebaseHosting % npm install -g firebase-tools
```



# Firebase Initialization

- Press **<space>** to select Firebase features.
- Select **“Hosting”**

```
? Are you ready to proceed? Yes
? Which Firebase features do you want to set up for this directory? Press Space to select features, then Enter to confirm your choices. (Press <space> to select, <a> to toggle all, <i> to invert selection, and <enter> to proceed)
nally) provision default instance
  ( ) Firestore: Configure security rules and indexes files for Firestore
  ( ) Functions: Configure a Cloud Functions directory and its files
>(*) Hosting: Configure files for Firebase Hosting and (optionally) set up GitHub Action deploys
  ( ) Hosting: Set up GitHub Action deploys
  ( ) Storage: Configure a security rules file for Cloud Storage
(Move up and down to reveal more choices)
```



# Firebase Initialization

- Choose “Use an existing project” and select your Firebase project.

```
? Please select an option:  
> Use an existing project  
Create a new project  
Add Firebase to an existing Google Cloud Platform project  
Don't set up a default project
```



# Firebase Initialization

- Use “y” or “n” to select the configuration and press “Enter” to continue.

## === Hosting Setup

Your **public** directory is the folder (relative to your project directory) that will contain Hosting assets to be uploaded with **firebase deploy**. If you have a build process for your assets, use your build's output directory.

```
? What do you want to use as your public directory? public
? Configure as a single-page app (rewrite all urls to /index.html)? No
? Set up automatic builds and deploys with GitHub? No
✓ Wrote public/404.html
? File public/index.html already exists. Overwrite? (y/N) n
```



# 5. Host Your Webpage

- Run the command at your project directory
  - `firebase deploy`
- Your app will be deployed to the domain [<YOUR-FIREBASE-APP>.firebaseapp.com](https://<YOUR-FIREBASE-APP>.firebaseapp.com) and [<YOUR-FIREBASE-APP>.web.app](https://<YOUR-FIREBASE-APP>.web.app)

```
(base) licaorong@licaorongdeMacBook-Pro FirebaseHosting % firebase deploy

== Deploying to 'test-2c010'...

i  deploying hosting
i  hosting[test-2c010]: beginning deploy...
i  hosting[test-2c010]: found 17 files in public
✓  hosting[test-2c010]: file upload complete
i  hosting[test-2c010]: finalizing version...
✓  hosting[test-2c010]: version finalized
i  hosting[test-2c010]: releasing new version...
✓  hosting[test-2c010]: release complete

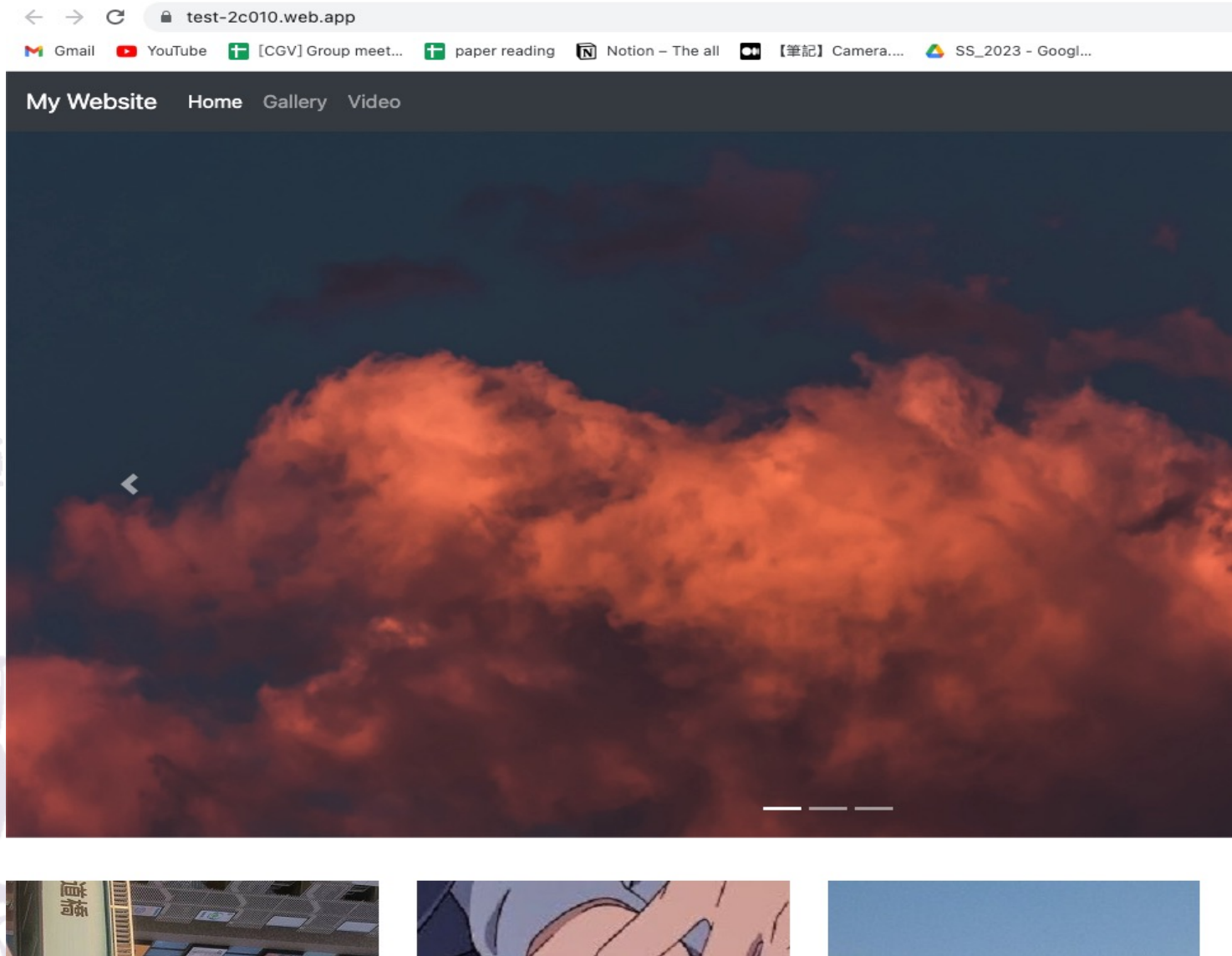
✓  Deploy complete!

Project Console: https://console.firebase.google.com/project/test-2c010/overview
Hosting URL: https://test-2c010.web.app
```





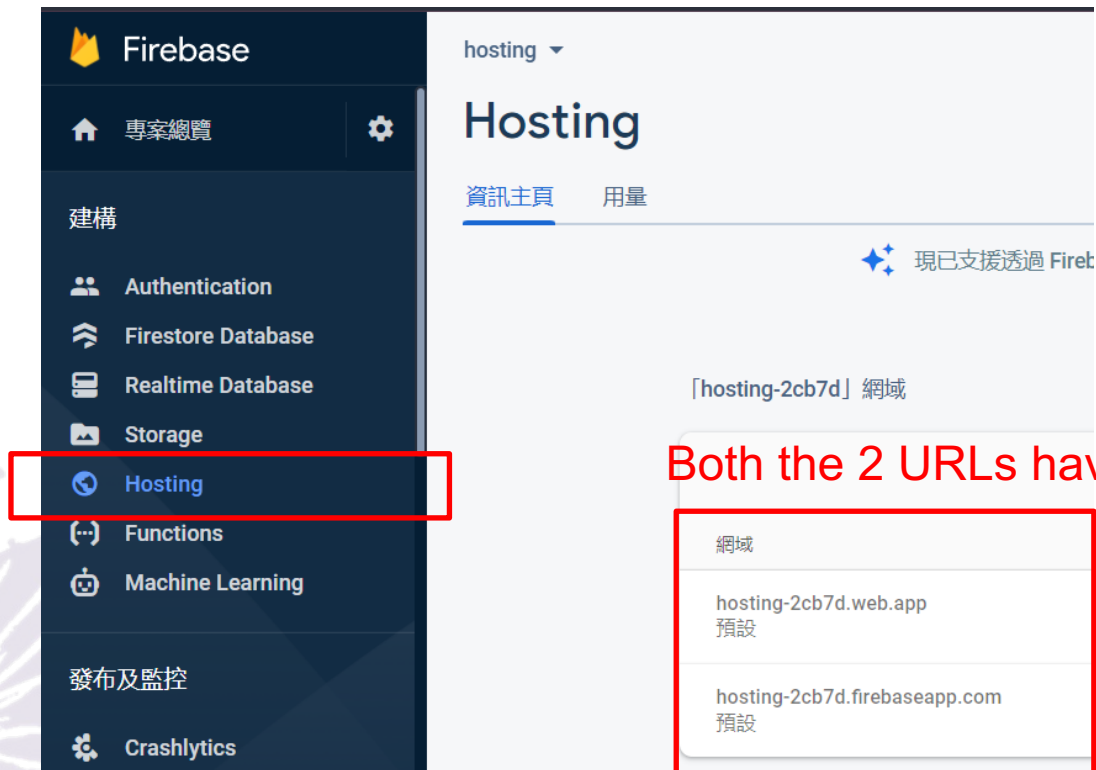
# Done!





# Notice

- If you forget the address, go to firebase console.



Both the 2 URLs have the same content

網域
hosting-2cb7d.web.app 預設
hosting-2cb7d.firebaseio.com 預設



# Update Website

- If you want to update your website, just update the code in the “public” folder, and re-run “firebase deploy” to deploy your project.

