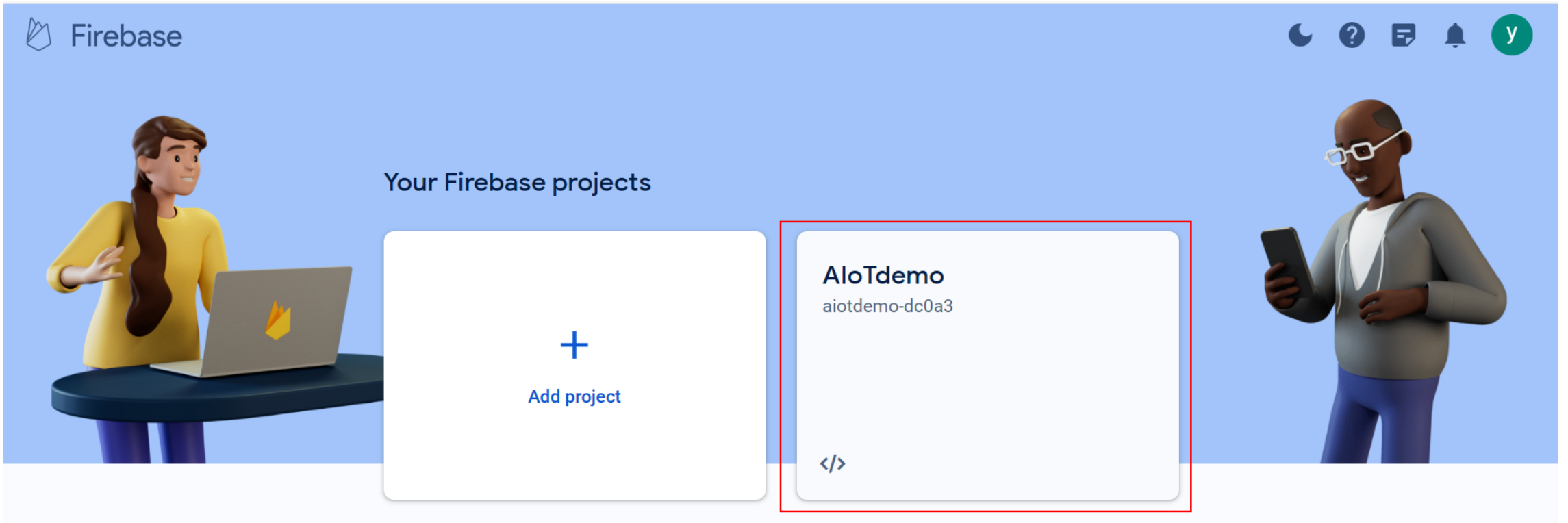


物聯網實作

(十三)

Open a Project





Project shortcuts

 Realtime Database

Product categories

Build



 Authentication


 App Check

 Firestore Database

 Realtime Database

 Extensions

 Storage

 **Hosting**

 Functions

Spark
No-cost \$0/month

Upgrade



General

Cloud Messaging

Integrations

Service accounts

Data privacy

Users and permissions

Your project

Project name AloTdemo 

Project ID ⓘ aiotdemo-dc0a3

Project number ⓘ 488429772252

Default GCP resource location ⓘ Not yet selected 

Web API Key No Web API Key for this project

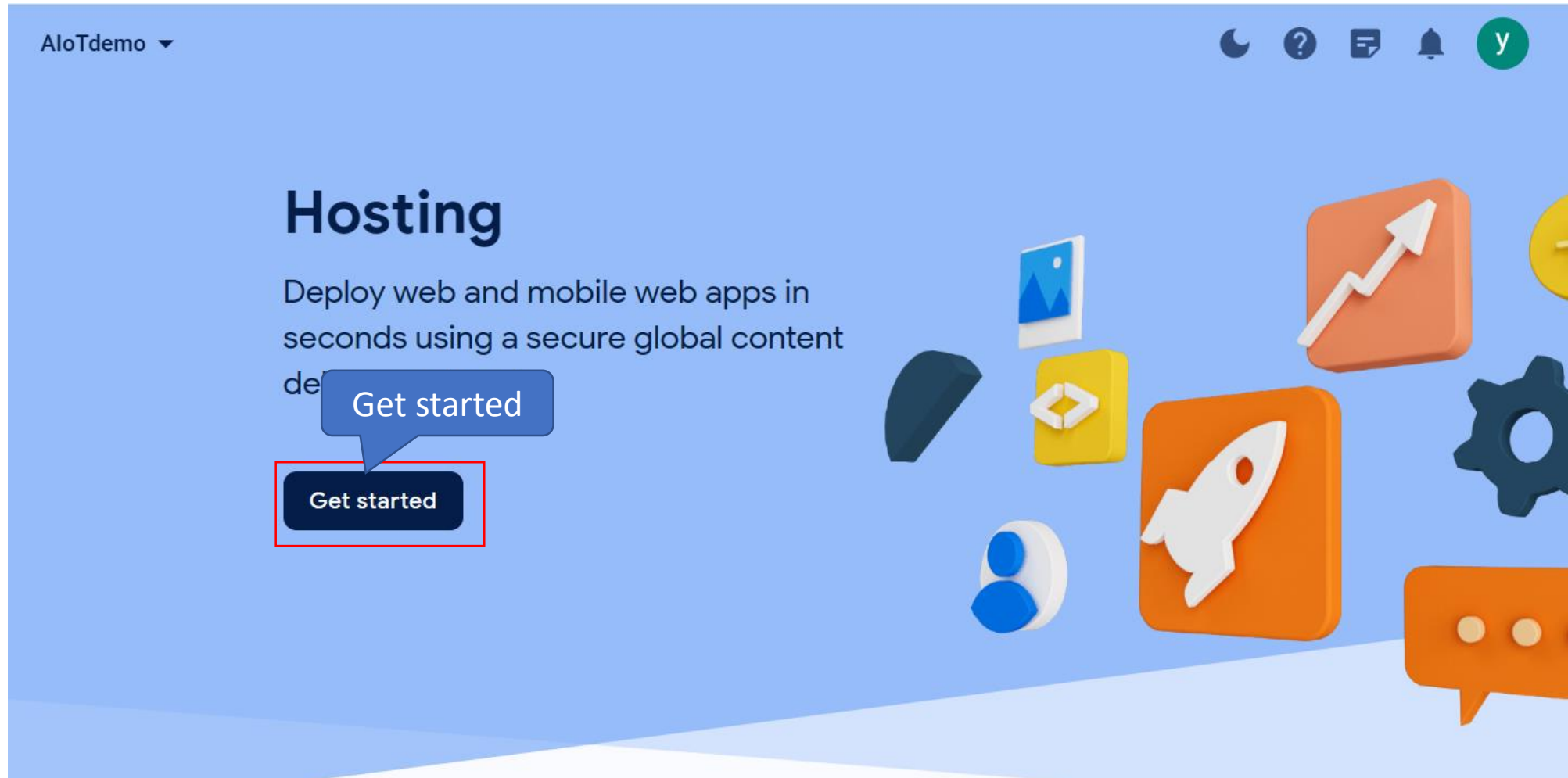
Environment

This setting customizes your project for different stages of the app lifecycle

Environment type Unspecified 

Public settings

Hosting



Set up Firebase Hosting

× Set up Firebase Hosting

1 Install Firebase CLI

To host your site with Firebase Hosting, you need the Firebase CLI (a command line tool).

Run the following [npm](#) command to install the CLI or update to the latest CLI version.

```
$ npm install -g firebase-tools
```



1.Copy

Doesn't work? Take a look at the [Firebase CLI reference](#) or change your [npm permissions](#)

3



Also show me the steps to add the Firebase JavaScript SDK to my web app

The SDK includes Cloud Firestore, Authentication, Performance Monitoring and more. It can be added now or later.

4

Next

2.Paste

npm install -g firebase-tools

Set up Firebase Hosting

× Set up Firebase Hosting

✓ Install Firebase CLI

2 Initialize your project

Open a terminal window and navigate to or create a root directory for your web app

Sign in to Google

```
$ firebase login
```



1.Copy

Initiate your project

Run this command from your app's root directory:

```
$ firebase init
```



3.Copy

5

Next

2.Paste

firebase login

4.Paste

firebase init

Set up Firebase Hosting

✓ Install Firebase CLI

✓ Initialize your project

3 Register your app

If you plan to use Firebase products like Cloud Firestore, Authentication, or Performance Monitoring, register your web app by giving it a nickname:

Link to a web app

App nickname ?

AloTdemolyp

Web App

Link and continue

4 Add Firebase SDK

☐ Use npm ☒ Use a <script> tag

If you don't use build tools, use this option to add and use the Firebase JS SDK. Use this option to get started, but it's not recommended for production apps. [Learn more](#).

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:

```
<script type="module">
  // Import the functions you need from the SDKs you need
  import { initializeApp } from "https://www.gstatic.com/firebasejs/10.7.1/firebase-app.js";
  import { getAnalytics } from "https://www.gstatic.com/firebasejs/10.7.1/firebase-analytics.js";
  // 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
  // For Firebase JS SDK v7.20.0 and later, measurementId is optional
  const firebaseConfig = {
    // [Redacted]
    measurementId: "G-LEH4X0H00Q",
  };

  // Initialize Firebase
  const app = initializeApp(firebaseConfig);
  const analytics = getAnalytics(app);
</script>
```

Are you using npm and a bundler like webpack or Rollup? Check out the [modular SDK](#).

2.Paste

```
<script type="module">
```

```
  // Import the functions you need from the SDKs you need
  import { initializeApp } from
  "https://www.gstatic.com/firebasejs/10.7.1/firebase-app.js";
  import { getAnalytics } from
  "https://www.gstatic.com/firebasejs/10.7.1/firebase-analytics.js";
  // 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
  // For Firebase JS SDK v7.20.0 and later, measurementId is optional
  const firebaseConfig = {
```

1.Copy

```
};
```

```
  // Initialize Firebase
  const app = initializeApp(firebaseConfig);
  const analytics = getAnalytics(app);
</script>
```

Next

3

× Set up Firebase Hosting

- ✓ Install Firebase CLI
- ✓ Initialize your project
- ✓ Register your app
- ✓ Add Firebase SDK
- 5 Deploy to Firebase Hosting

When you're ready, deploy your web app


Put your static files (e.g., HTML, CSS, JS) in your app's deploy directory (the default is "public").

Then, run this command from your app's root directory:

```
$ firebase deploy
```



1.Copy

After deploying, view your app at aiotdemo-dc0a3.web.app 

Need help? Check out the [Hosting docs](#) 

Continue to console

3

2.Paste

firebase deploy

Open the Web App

Previous releases

Waiting for your first release

[Instructions](#)

Domains

[aiotdemo-dc0a3.web.app](#) 

Default

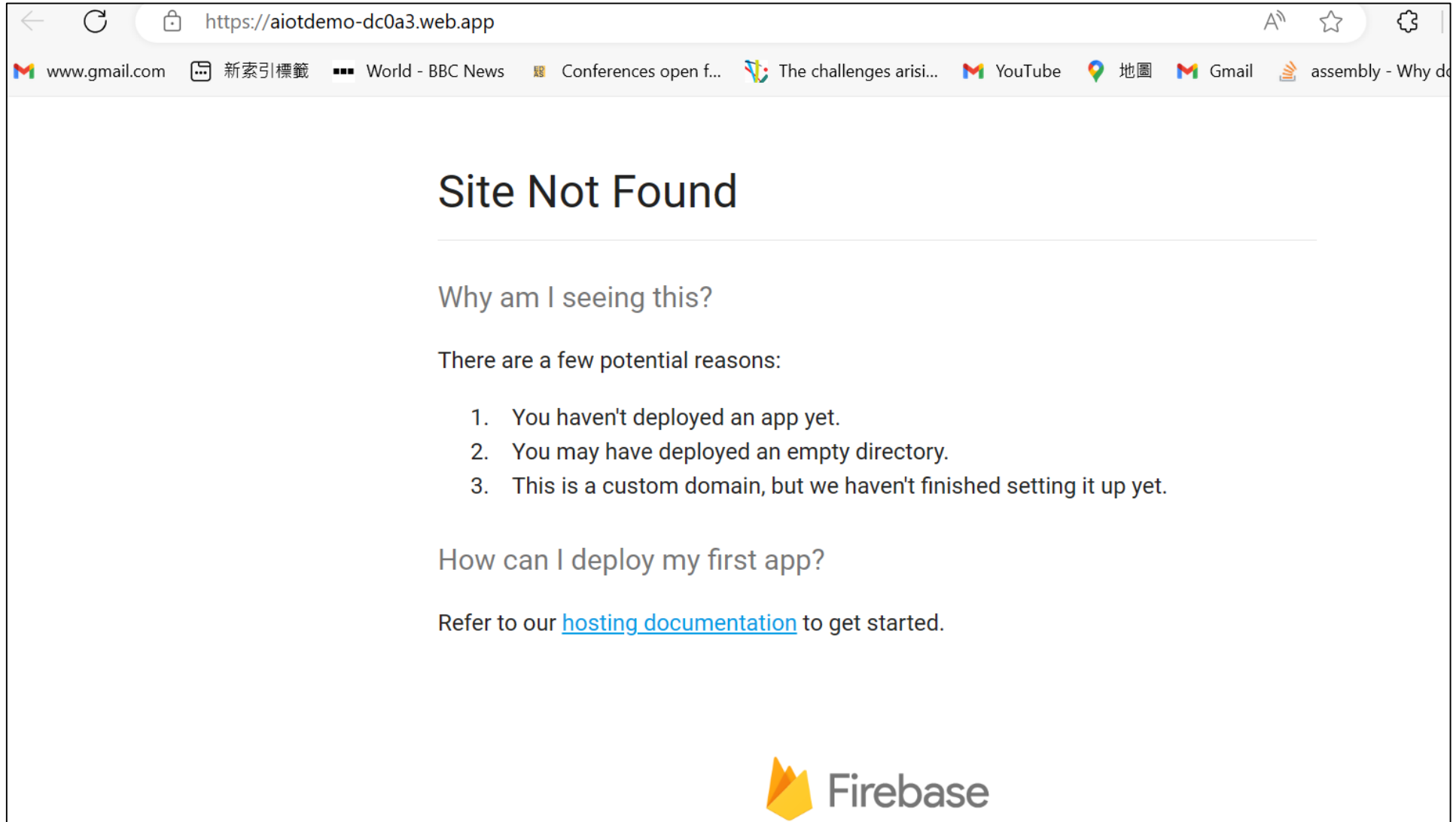
[aiotdemo-dc0a3.firebaseio.com](#) 

Default

[Add custom domain](#)

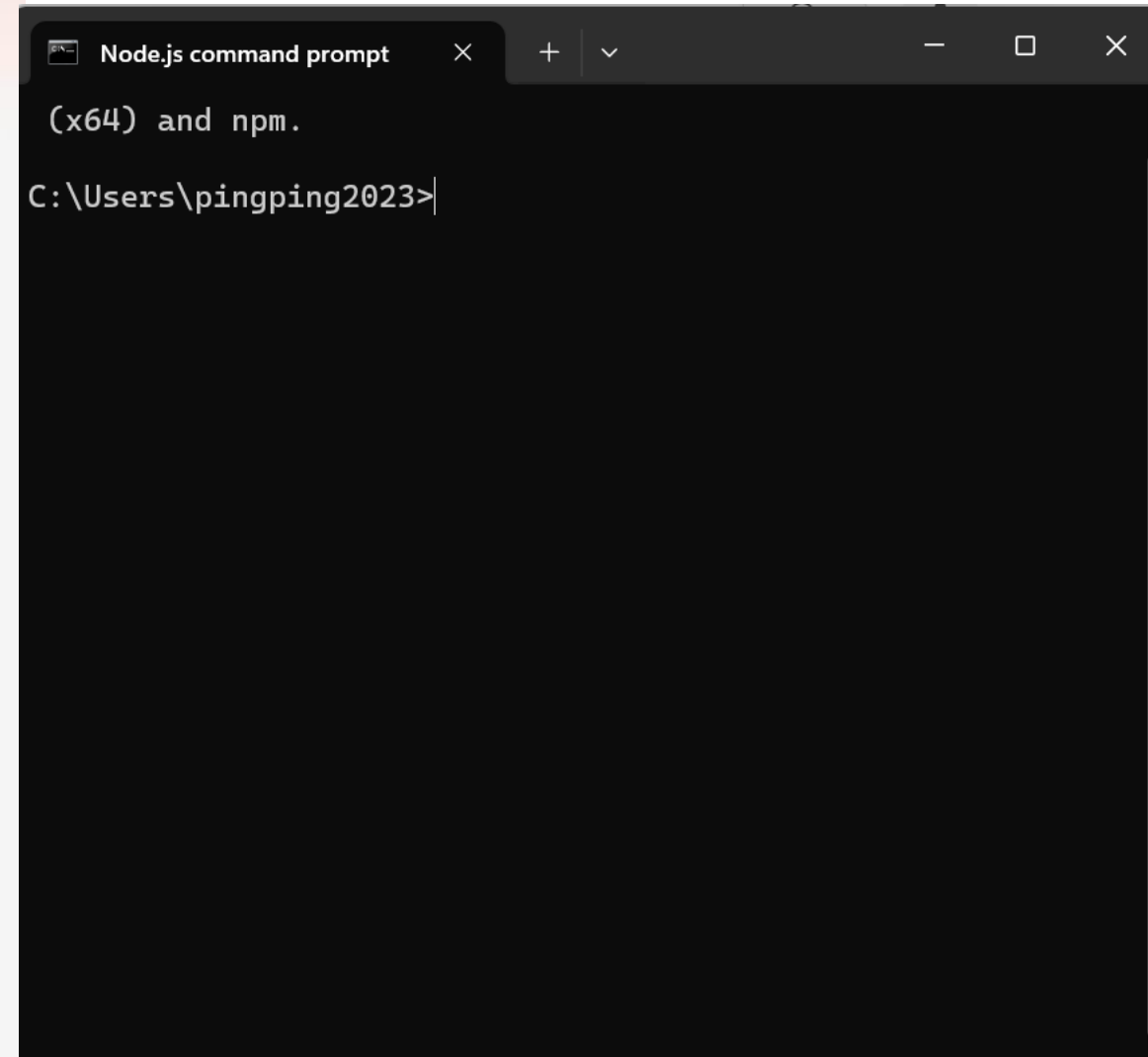
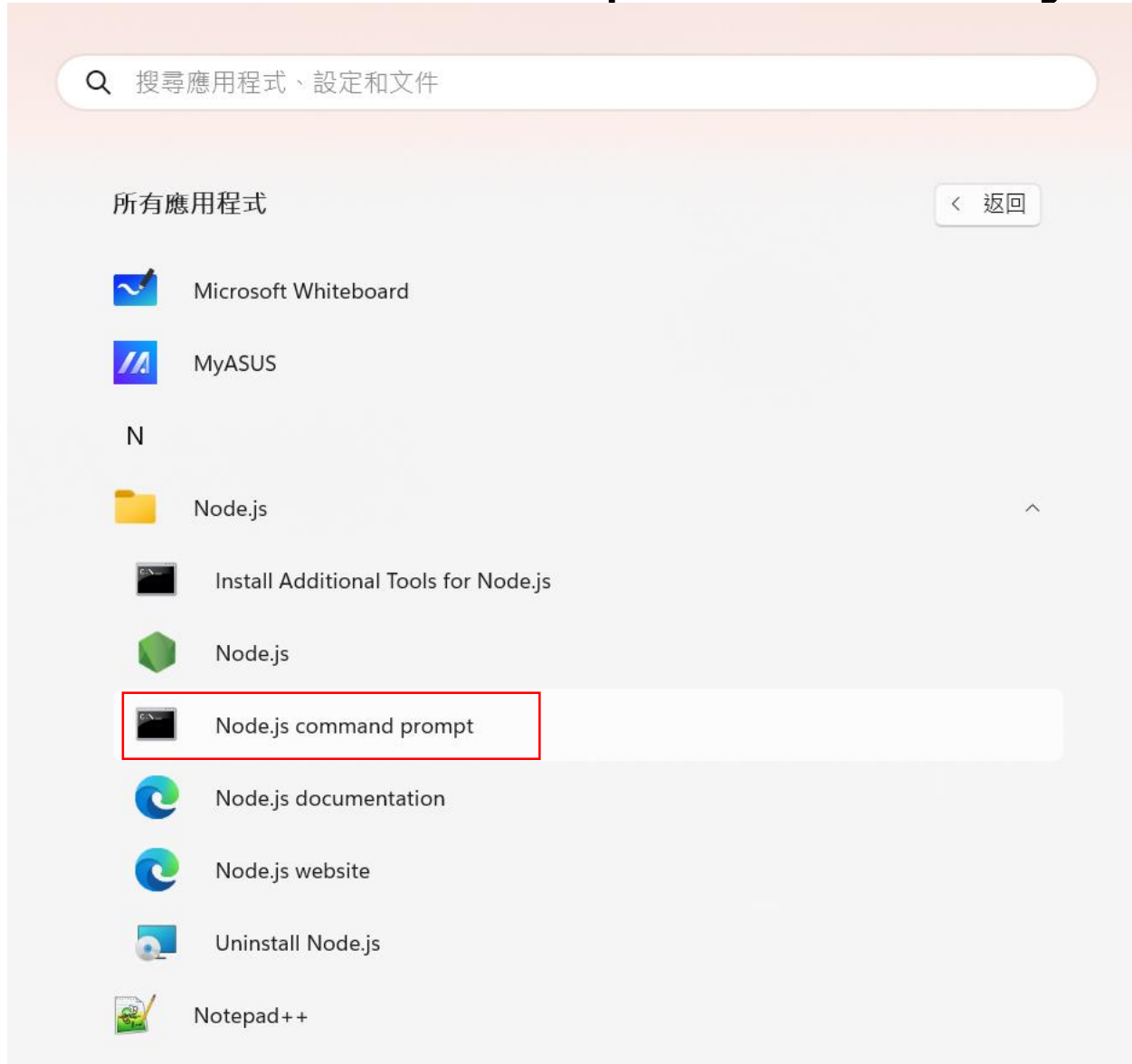
[View all 2 domains →](#)

Web App



- `npm install -g firebase-tools`
- `firebase login`
- `firebase init`
- `firebase deploy`

Open Node.js command



npm install -g firebase-tools

```
Node.js command prompt
(x64) and npm.
C:\Users\pingping2023>npm install -g firebase-tools
```

```
Node.js command prompt
(x64) and npm.
C:\Users\pingping2023>npm install -g firebase-tools
[redacted] \ idealTree:npm: sill idealTree build
added 639 packages in 18s
65 packages are looking for funding
  run `npm fund` for details
npm notice
npm notice New major version of npm available! 9.8.1 -> 10.2.5
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.2.5
npm notice Run npm install -g npm@10.2.5 to update!
npm notice
C:\Users\pingping2023>
```

npm install -g npm@10.2.5

```
Node.js command prompt
(x64) and npm.

C:\Users\pingping2023>npm install -g firebase-tools
[ ] \ idealTree:npm: sill idealTree buil

added 639 packages in 18s

65 packages are looking for funding
  run `npm fund` for details
npm notice
npm notice New major version of npm available! 9.8.1 -> 10
.2.5
npm notice Changelog: https://github.com/npm/cli/releases/
tag/v10.2.5
npm notice Run npm install -g npm@10.2.5 to update!
npm notice

C:\Users\pingping2023>npm install -g npm@10.2.5
```

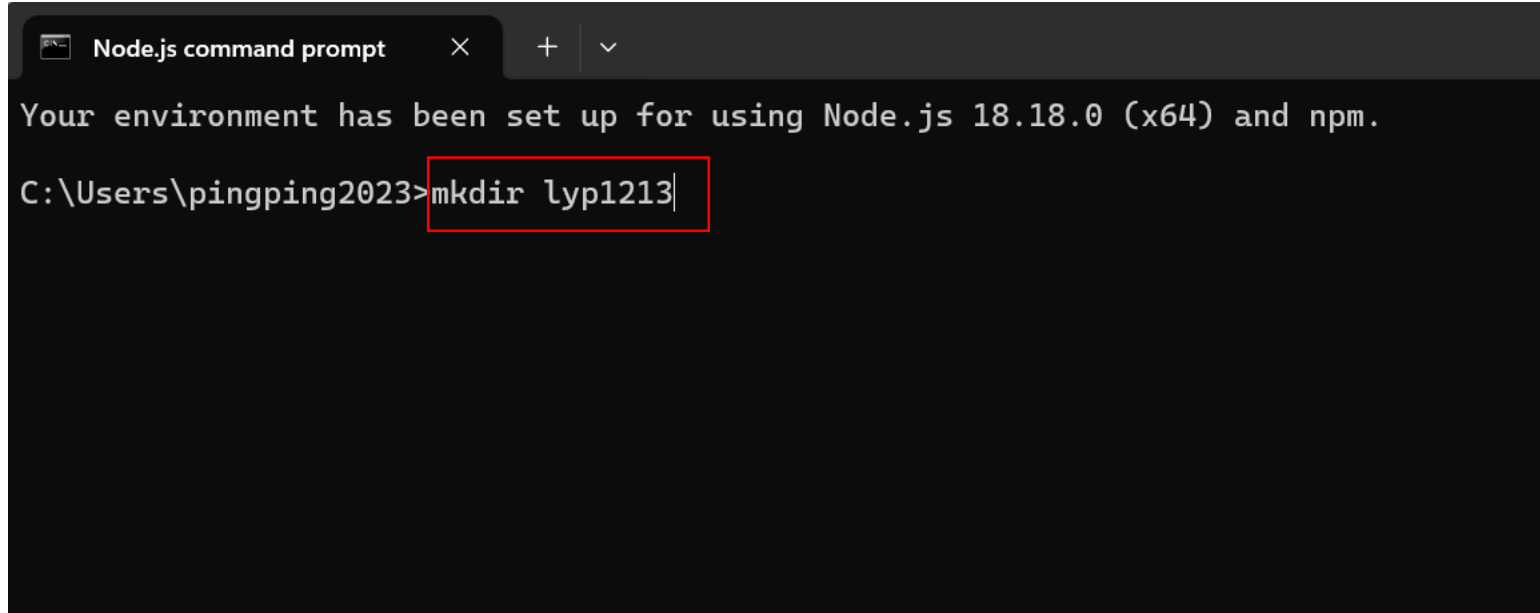
```
C:\Users\pingping2023>npm install -g npm@10.2.5

added 1 package in 2s

28 packages are looking for funding
  run `npm fund` for details

C:\Users\pingping2023>
```

mkdir lyp1213

A screenshot of a Node.js command prompt window. The window has a title bar with a small icon, the text "Node.js command prompt", and standard window controls (close, maximize, and a dropdown arrow). The main area of the window is black with white text. It displays the message "Your environment has been set up for using Node.js 18.18.0 (x64) and npm." followed by the command prompt "C:\Users\pingping2023>". The command "mkdir lyp1213" is being typed and is highlighted with a red rectangular box.

```
Node.js command prompt × + ▾  
Your environment has been set up for using Node.js 18.18.0 (x64) and npm.  
C:\Users\pingping2023>mkdir lyp1213|
```


cd lyp1213

```
Node.js command prompt
Your environment has been set up for using Node.js 18.18.0 (x64) and npm.
C:\Users\pingping2023>mkdir lyp1213
C:\Users\pingping2023>cd lyp1213|
```

```
Node.js command prompt
Your environment has been set up for using Node.js 18.18.0 (x64) and npm.
C:\Users\pingping2023>mkdir lyp1213
C:\Users\pingping2023>cd lyp1213
C:\Users\pingping2023\lyp1213>
```


firebase login

```
C:\Users\pingping2023\lyp1213>firebase login
i  Firebase optionally collects CLI and Emulator Suite usage and error reporting information to help
   improve our products. Data is collected in accordance with Google's privacy policy (https://policies.google.com/privacy) and is not used to identify you.

?  Allow Firebase to collect CLI and Emulator Suite usage and error reporting information? (Y/n) |
```

```
?  Allow Firebase to collect CLI and Emulator Suite usage and error reporting information? (Y/n) Y|
```

Enter

 使用 Google 帳戶登入



選擇帳戶

以繼續使用「**Firebase CLI**」



Yu-Ping Liao

lyp@cycu.org.tw



yupingliao2023廖平平

yupingliao2023@gmail.com



使用其他帳戶

如要繼續進行，Google 會將您的姓名、電子郵件地址、語言偏好設定和個人資料相片提供給「**Firebase CLI**」。使用這個應用程式前，請先詳閱「**Firebase CLI**」的《[隱私權政策](#)》及《[服務條款](#)》。

「**Firebase CLI**」想要存取您的 Google 帳戶



yupingliao2023@gmail.com

這麼做將允許「**Firebase CLI**」進行以下操作：

- 查看、編輯、設定和刪除您的 Google Cloud 資料，以及查看您 Google 帳戶的電子郵件地址。
-  查看及管理您的所有 Firebase 資料和設定。
- 查看您的 Cloud Platform 專案。

確認「**Firebase CLI**」是您信任的應用程式

這麼做可能會將機密資訊提供給這個網站或應用程式。您隨時可以前往 [Google 帳戶](#) 頁面查看或移除存取權。

瞭解 Google 如何協助您[安全地分享資料](#)。

詳情請參閱「**Firebase CLI**」的《[隱私權政策](#)》和《[服務條款](#)》。

取消

允許

Woohoo!

Firebase CLI Login Successful

You are logged in to the Firebase Command-Line interface. You can immediately close this window and continue using the CLI.

```
C:\WINDOWS\system32\cmd. x + v - □ X

C:\Users\pingping2023>cd lyp1213

C:\Users\pingping2023\lyp1213>npm install -g firebase-tools

changed 639 packages in 42s

65 packages are looking for funding
  run `npm fund` for details

C:\Users\pingping2023\lyp1213>firebase login
i  Firebase optionally collects CLI and Emulator Suite usage and error reporting information to help
  improve our products. Data is collected in accordance with Google's privacy policy (https://policie
s.google.com/privacy) and is not used to identify you.

? Allow Firebase to collect CLI and Emulator Suite usage and error reporting information? Yes
i  To change your data collection preference at any time, run `firebase logout` and log in again.

Visit this URL on this device to log in:
https://accounts.google.com/o/oauth2/auth?client_id=563584335869-fgrhgm47bqnekij5i8b5pr03ho849e6.ap
ps.googleusercontent.com&scope=email%20openid%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloudplatf
ormprojects.readonly%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Ffirebase%20https%3A%2F%2Fwww.google
apis.com%2Fauth%2Fcloud-platform&response_type=code&state=147014982&redirect_uri=http%3A%2F%2Flocalh
ost%3A9005

Waiting for authentication...

+  Success! Logged in as yupingliao2023@gmail.com

C:\Users\pingping2023\lyp1213>
```

firebase init

```
C:\Users\pingping2023\lyp1213>firebase init

#####  #####  #####  #####  #####  #####  #####  #####
##      ##  ##      ##  ##      ##      ##  ##      ##
#####  ##  #####  #####  #####  #####  #####  #####
##      ##  ##      ##  ##      ##      ##  ##      ##
##      #####  ##      ##  #####  #####  ##      ##  #####

You're about to initialize a Firebase project in this directory:

C:\Users\pingping2023\lyp1213

? Are you ready to proceed? (Y/n) |
```

```
? Are you ready to proceed? (Y/n) Y|
```

Enter

```
C:\Users\pingping2023\lyp1213
```

```
? 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)
```

```
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
```

```
( ) Emulators: Set up local emulators for Firebase products
```

```
(Move up and down to reveal more choices)
```

1.上下鍵

```
C:\Users\pingping2023\lyp1213
```

```
? 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)
```

```
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
```

```
( ) Emulators: Set up local emulators for Firebase products
```

```
(Move up and down to reveal more choices)
```

2.Space

3.Enter

```
C:\Users\pingping2023\lyp1213
```

```
? 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. Hosting: Configure files for Firebase Hosting and (optionally)  
set up GitHub Action deploys
```

```
=== Project Setup
```

```
First, let's associate this project directory with a Firebase project.  
You can create multiple project aliases by running firebase use --add,  
but for now we'll just set up a default project.
```

```
? Please select an option: (Use arrow keys)
```

```
> Use an existing project
```

```
Create a new project
```

```
Add Firebase to an existing Google Cloud Platform project
```

```
Don't set up a default project
```

Enter

```
C:\Users\pingping2023\lyp1213
```

```
? 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. Hosting: Configure files for Firebase Hosting and (optionally)  
set up GitHub Action deploys
```

```
=== Project Setup
```

```
First, let's associate this project directory with a Firebase project.  
You can create multiple project aliases by running firebase use --add,  
but for now we'll just set up a default project.
```

```
? Please select an option: Use an existing project
```

```
? Select a default Firebase project
```

```
> aiotdemo-dc0a3 (AIoTdemo)
```

Enter

```
y: (Use arrow keys)
```

```
C:\Users\pingping2023\lyp1213
```

```
? 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. Hosting: Configure files for Firebase Hosting and (optionally)  
set up GitHub Action deploys
```

=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running `firebase use --add`,
but for now we'll just set up a default project.

```
? Please select an option: Use an existing project
```

```
? Select a default Firebase project for this directory: aiotdemo-dc0a3 (AIoTdemo)
```

```
i Using project aiotdemo-dc0a3 (AIoTdemo)
```

=== 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) |
```

Enter


```
C:\Users\pingping2023\lyp1213
```

```
? 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. Hosting: Configure files for Firebase Hosting and (optionally)  
set up GitHub Action deploys
```

=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running `firebase use --add`,
but for now we'll just set up a default project.

```
? Please select an option: Use an existing project
```

```
? Select a default Firebase project for this directory: aiotdemo-dc0a3 (AIoTdemo)
```

```
i Using project aiotdemo-dc0a3 (AIoTdemo)
```

=== 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)? (y/N) |
```

```
? Configure as a single-page app (rewrite all urls to /index.html)? (y/N) N
```

Enter

```
C:\Users\pingping2023\lyp1213
```

```
? 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. Hosting: Configure files for Firebase Hosting and (optionally)  
set up GitHub Action deploys
```

=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running `firebase use --add`,
but for now we'll just set up a default project.

```
? Please select an option: Use an existing project
```

```
? Select a default Firebase project for this directory: aiotdemo-dc0a3 (AIoTdemo)
```

```
i Using project aiotdemo-dc0a3 (AIoTdemo)
```

=== 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? (y/N) N
```

Enter

```
C:\WINDOWS\system32\cmd. x + v - □ ×

=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running firebase use --add,
but for now we'll just set up a default project.

? Please select an option: Use an existing project
? Select a default Firebase project for this directory: aiotdemo-dc0a3 (AIoTdemo)
i Using project aiotdemo-dc0a3 (AIoTdemo)

=== 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
+ Wrote public/index.html

i Writing configuration info to firebase.json...
i Writing project information to .firebaserc...
i Writing gitignore file to .gitignore...

+ Firebase initialization complete!

C:\Users\pingping2023\lyp1213>
```

Double click

✓ lyp1213

Double click

public

.firebase

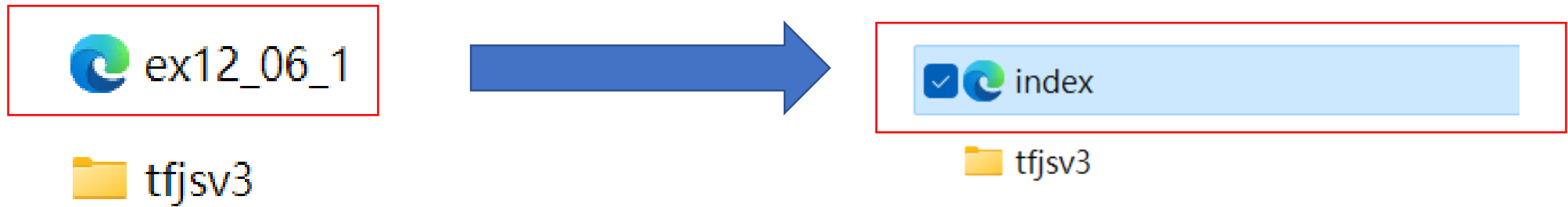
.gitignore

firebase

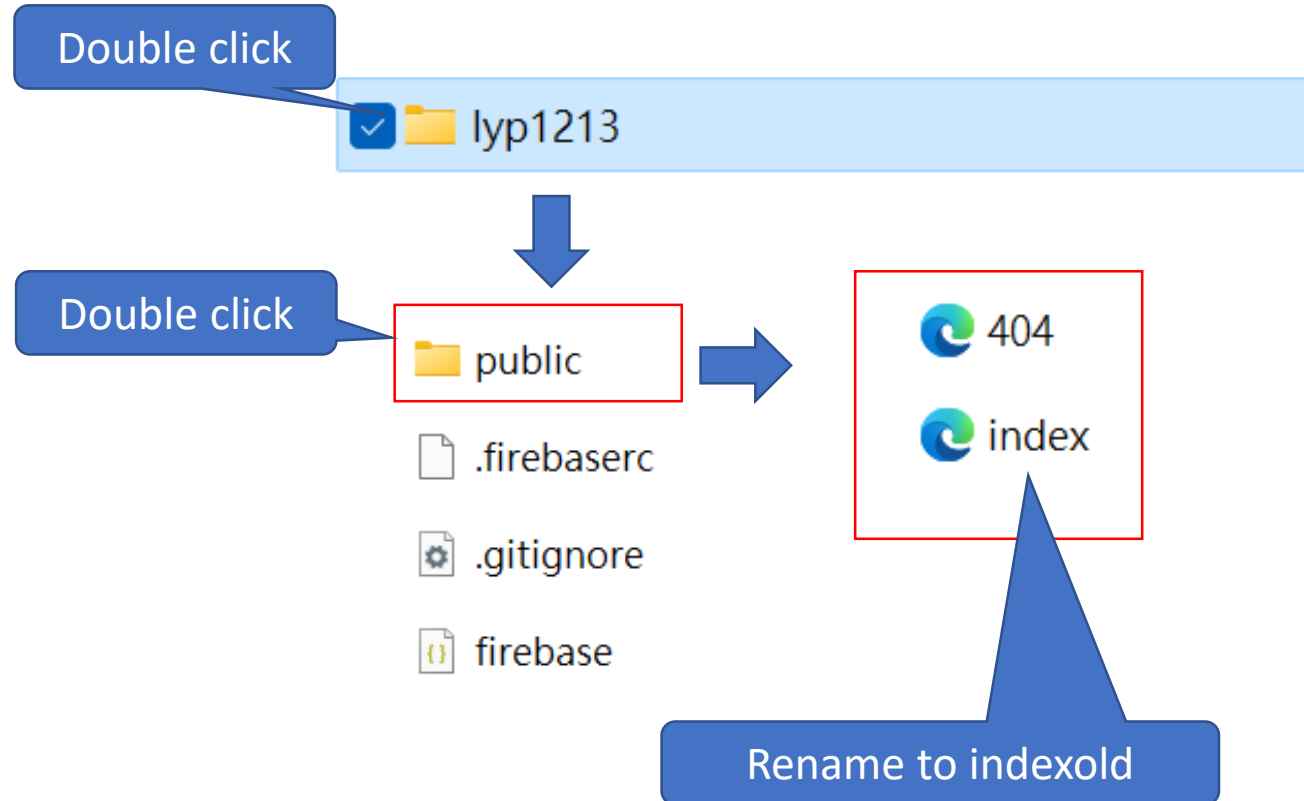
404

index

Rename



Rename



Copy and Paste

Copy

上

✓ index

✓ tfjsv3

☐ 名稱

tfjsv3

404

index

indexold

Paste

firebase deploy

```
C:\Users\pingping2023\lyp1213>firebase deploy
```

```
=== Deploying to 'aiotdemo-dc0a3'...
```

```
i  deploying hosting
```

```
i  hosting[aiotdemo-dc0a3]: beginning deploy...
```

```
i  hosting[aiotdemo-dc0a3]: found 5 files in public
```

```
+  hosting[aiotdemo-dc0a3]: file upload complete
```

```
i  hosting[aiotdemo-dc0a3]: finalizing version...
```

```
+  hosting[aiotdemo-dc0a3]: version finalized
```

```
i  hosting[aiotdemo-dc0a3]: releasing new version...
```

```
+  hosting[aiotdemo-dc0a3]: release complete
```

```
+  Deploy complete!
```

```
Project Console: https://console.firebase.google.com/project/aiotdemo-dc0a3/overview
```

```
Hosting URL: https://aiotdemo-dc0a3.web.app
```

```
C:\Users\pingping2023\lyp1213>
```


Open Web App

Manage site

Dashboard

Usage

Previous releases

Waiting for your first release

[Instructions](#)

Domains

[aiotdemo-dc0a3.web.app](#) 

Default

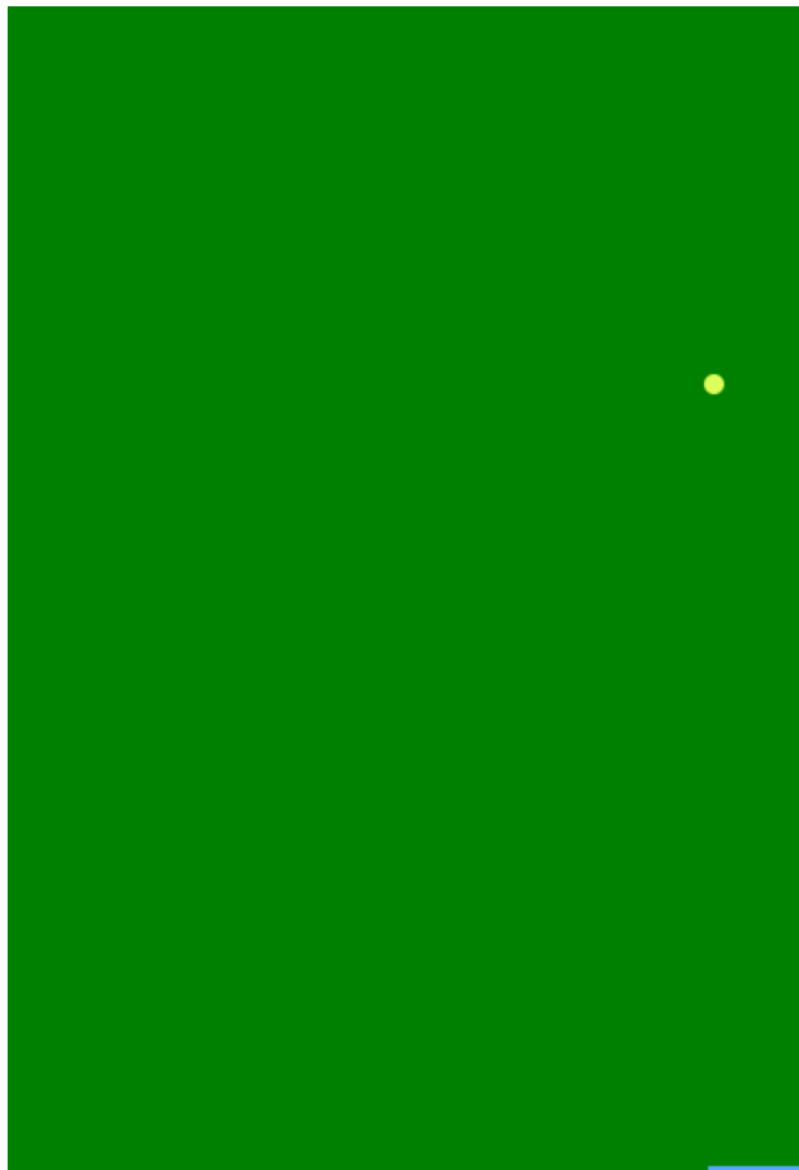
[aiotdemo-dc0a3.firebaseio.com](#) 

Default

[Add custom domain](#)

[View all 2 domains →](#)

AI Playing Ping Pong Game



<https://aiotdemo-dc0a3.web.app/>

Homework 13-1

- Deploy your code to firebase hosting.