

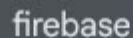
Flutter + Firebase

17.11.2025


-ghifari

Setting/Daftar Firebase

Jaga-jaga aja



Firestore

<https://firebase.google.com> 

Prototype, build & run modern, AI-powered experiences users love with **Firebase**, a platform designed to support you throughout your app development lifecycle.

Firestore Console



Not your computer? Use Guest mode to sign in privately. [Learn more](#)

Pricing



No-cost Products · Network egress. No-cost up to 10 GiB/month ...

Firestore Realtime Database



The Firebase Realtime Database lets you build rich, collaborative ...

Firestore console (google.com)



Sign in. Use your Google Account, Email or phone. Forgot email ...

Firestore Authentication



To sign a user into your app, you first get authentication ...



Introducing Firebase Studio

Prototype, build, and deploy full-stack, AI apps with our agentic development environment. Now with AI-optimized templates, seamless integration with Firebase services, and ability to fork workspaces, all designed to make AI-assisted development more powerful.

Get Started

Make your app 🚀🌐 the
best it can be with
Firebase and generative



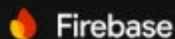
Welcome to Firebase Studio, a complete web-based development workspace from Google, designed to make it faster and easier to build, ship, and manage full-stack, multiplatform apps from the comfort of your browser.

☒ I accept the terms and conditions for Firebase Services listed on the [Terms of Service](#) page and the [Android SDK Terms and Conditions](#)

☐ I want to receive email updates about Firebase Studio news and features.

☐ I'm interested in participating in research studies to improve Firebase Studio

Confirm



Hello, Muhammad

Welcome to Firebase!

Get started



Get started by setting up a Firestore project

Integrate Firebase products to super-charge your
app

Try out a sample app



Build an AI-powered Flutter app

Deploy a sample app that showcases how the Gemini Live API, multimodal prompts, and image creation with Nano Banana all work in Flutter



Try an agentic barista app

Deploy a sample app that uses Firestore, Authentication, and function calling in Firebase AI Logic. Explore the code in Firebase Studio



Explore our view-only demo project

[View](#)

Language — English (United States) ▼

[Support](#) — [Terms](#) — [Privacy Policy](#)



Set Up Firebase

1. Download Node.js


Google

nodejs

×

[All](#) [Images](#) [News](#) [Videos](#) [Shopping](#) [Short videos](#) [More ▾](#) [Tools ▾](#)

Node.js

<https://nodejs.org> › ... 

Node.js

Node.js® is a free, open-source, cross-platform JavaScript runtime environment that lets developers create servers, web apps, command line tools and scripts.

Download

Download and install nvm: `curl -o- https://raw.githubusercontent.com` ...



Releases

Node.js Releases ... Major Node.js versions enter Current release ...



Introduction to Node.js

A Node.js app runs in a single process, without creating a new ...



About

As an asynchronous event-driven JavaScript runtime, Node.js is ...



Node.js v24.11.1 (LTS)

Node.js® is a free, open-source, cross-platform JavaScript ...



Run JavaScript Everywhere

Node.js® is a free, open-source, cross-platform JavaScript runtime environment that lets developers create servers, web apps, command line tools and scripts.

Get Node.js®

Get security support
for EOL Node.js versions



Node.js is proudly supported by
the partners above [and more](#).

Create an HTTP Server Write Tests Read and Hash a File

```
1 // server.mjs
2 import { createServer } from 'node:http';
3
4 const server = createServer((req, res) => {
5   res.writeHead(200, { 'Content-Type': 'text/plain' });
6   res.end('Hello World!\n');
7 });
8
9 // starts a simple http server locally on port 3000
10 server.listen(3000, '127.0.0.1', () => {
11   console.log('Listening on 127.0.0.1:3000');
12 });
13
14 // run with `node server.mjs`
```

JavaScript



Copy to clipboard

Learn more what Node.js is able to offer with our [Learning materials](#).

Download Node.js®

Get Node.js®

v24.11.1 (LTS) ▾

for

Windows ▾

using

Docker ▾


with

npm ▾

Info Want new features sooner? Get the [latest Node.js version](#) instead and try the latest improvements!

```
1 # Docker has specific installation instructions for each operating system.
2 # Please refer to the official documentation at https://docker.com/get-started/
3
4 # Pull the Node.js Docker image:
5 docker pull node:24-alpine
6
7 # Create a Node.js container and start a Shell session:
8 docker run --entrypoint sh node:24-alpine
9
10 # Verify the Node.js version:
11 node -v # Should print "v24.11.1".
12
13 # Verify npm version:
14 npm -v # Should print "11.6.2".
```

PowerShell

 Copy to clipboard

Docker is a containerization platform. If you encounter any issues please visit [Docker's website](#) ↗


Or get a prebuilt Node.js® for

Windows ▾

running a

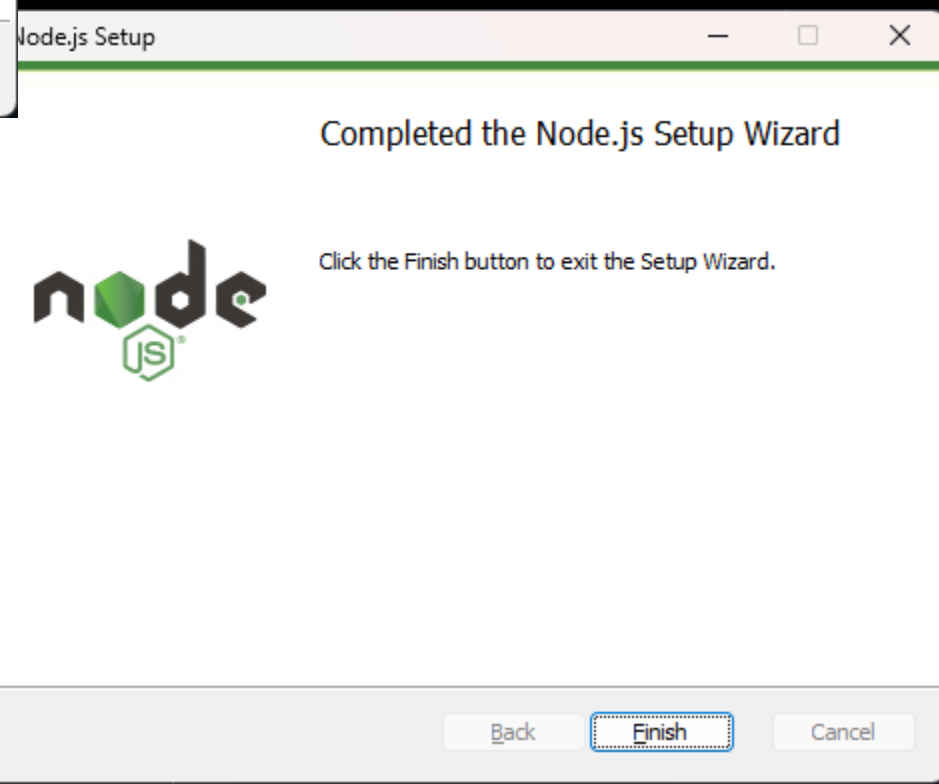
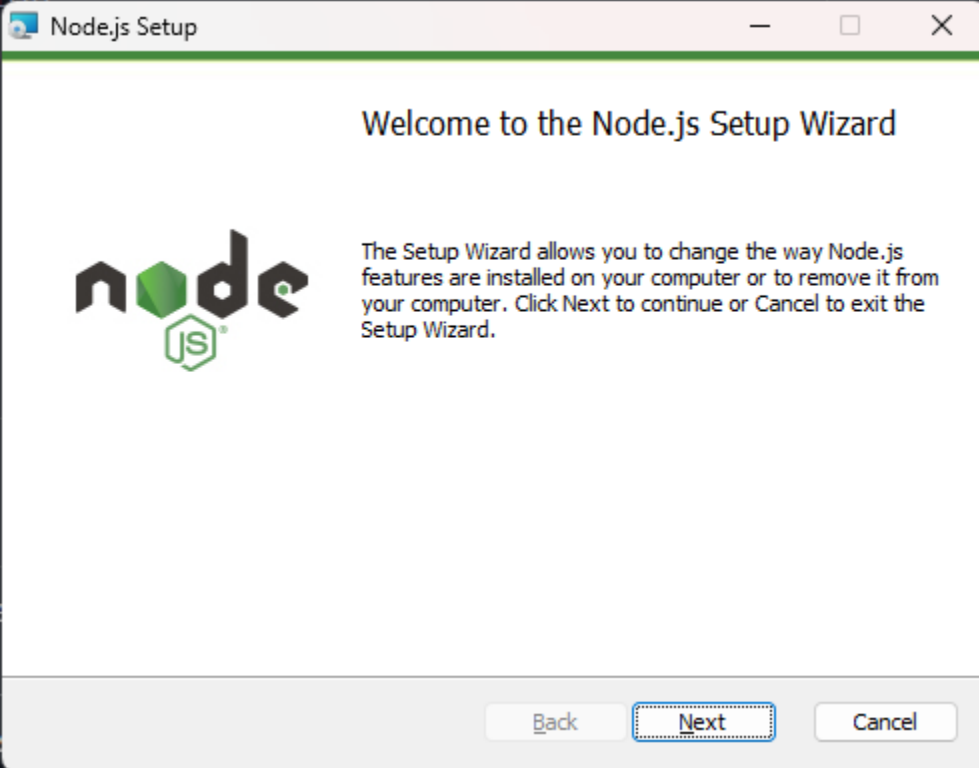
x64 ▾

architecture.

 [Windows Installer \(.msi\)](#) [Standalone Binary \(.zip\)](#)

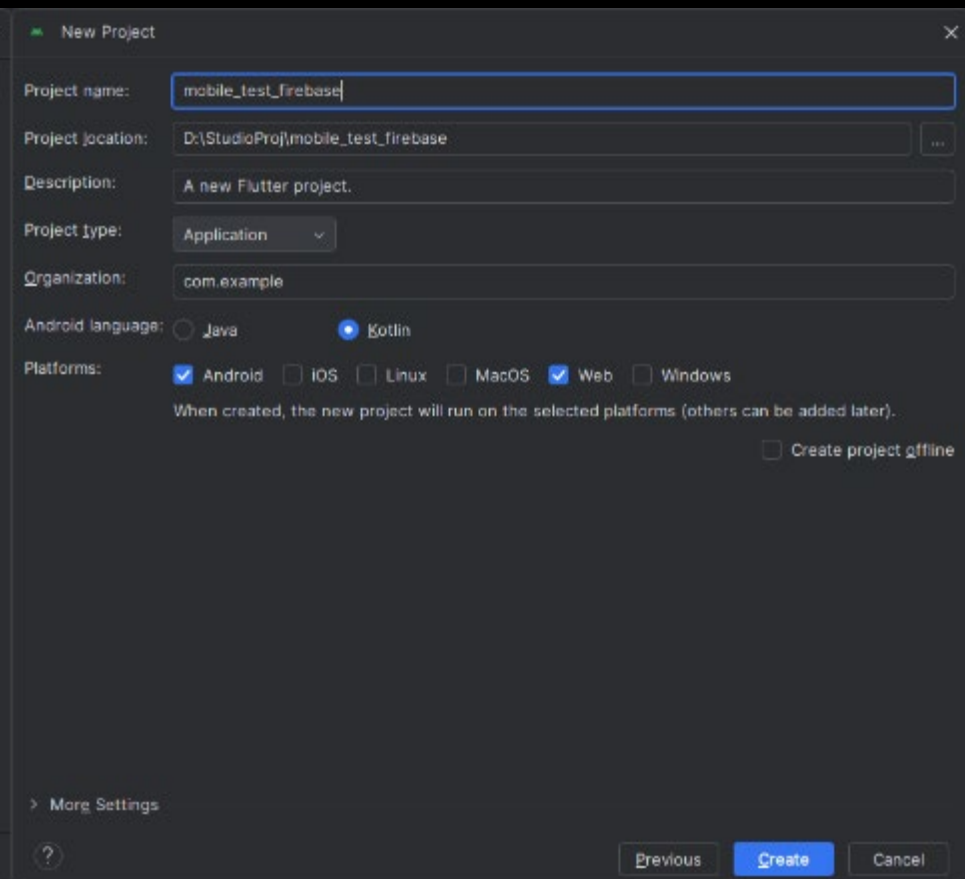
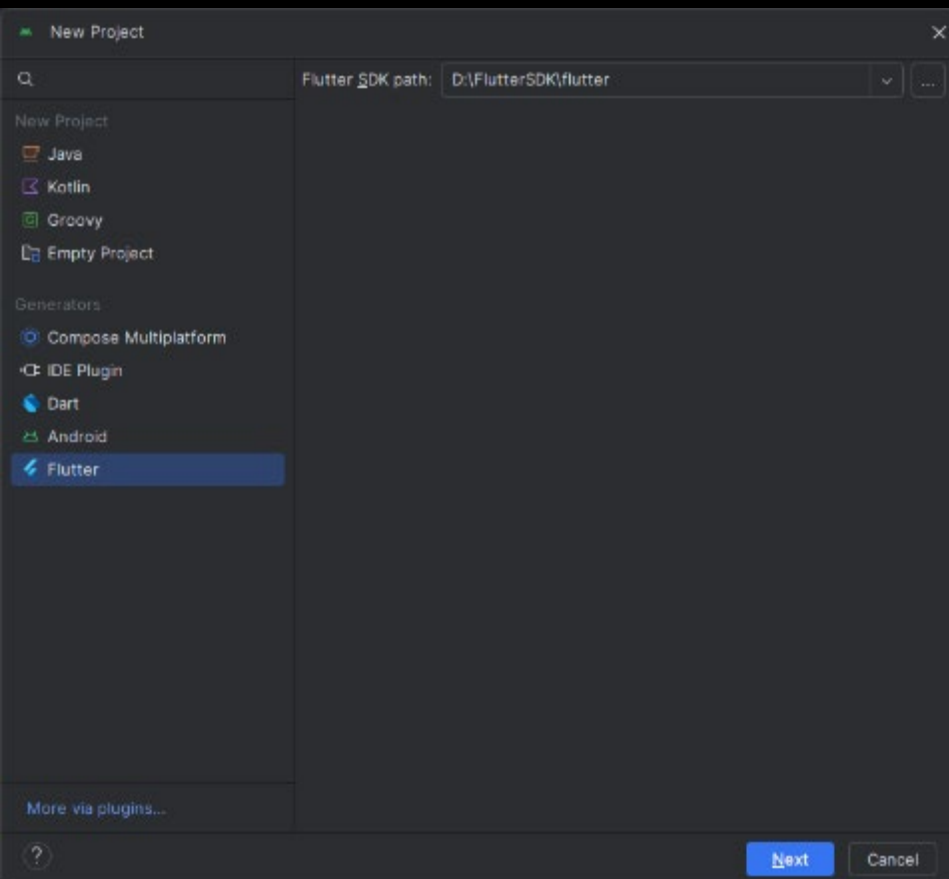
Read the [changelog](#) ↗ or [blog post](#) for this version.

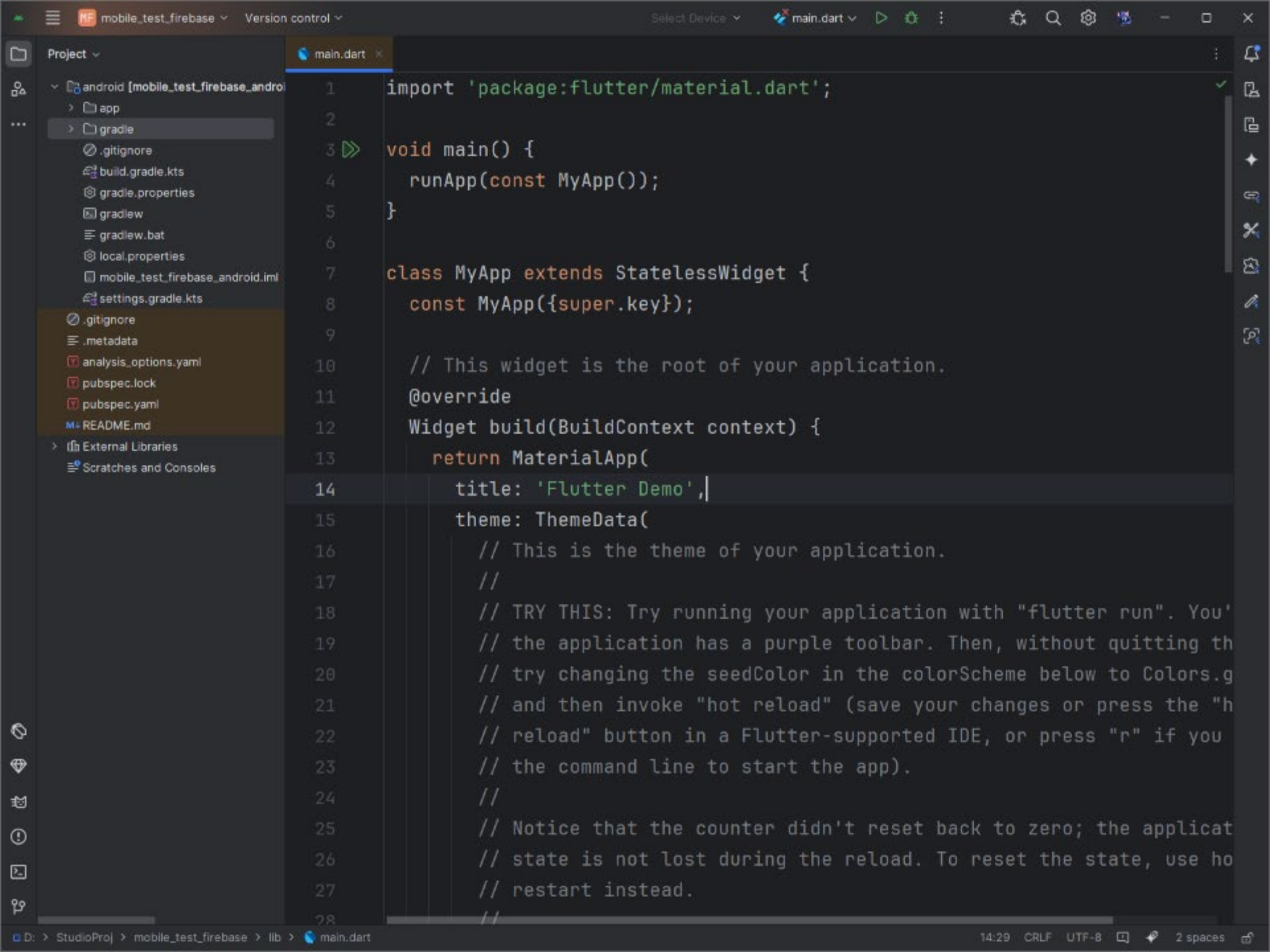
Learn more about [Node.js releases](#), including the release schedule and LTS status.



Set Up Firebase

2. Buat Flutter Baru





```
import 'package:flutter/material.dart';

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});

  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        // This is the theme of your application.
        // TRY THIS: Try running your application with "flutter run". You
        // the application has a purple toolbar. Then, without quitting th
        // try changing the seedColor in the colorScheme below to Colors.g
        // and then invoke "hot reload" (save your changes or press the "h
        // reload" button in a Flutter-supported IDE, or press "r" if you
        // the command line to start the app).
        // Notice that the counter didn't reset back to zero; the applicat
        // state is not lost during the reload. To reset the state, use ho
        // restart instead.
      ),
    );
  }
}
```



mobile_test_firebase

Version control



Project

1

Project

Packages

Project Files

2

Production

Tests

Project Source Files

Project Non-Source Files

Open Files

Scratches and Consoles

Android

settings.gradle.kts

.gitignore

.metadata



main.dart

firebase_android

1

import

2

3



void main

4

runApp

5

}

6

7

class My

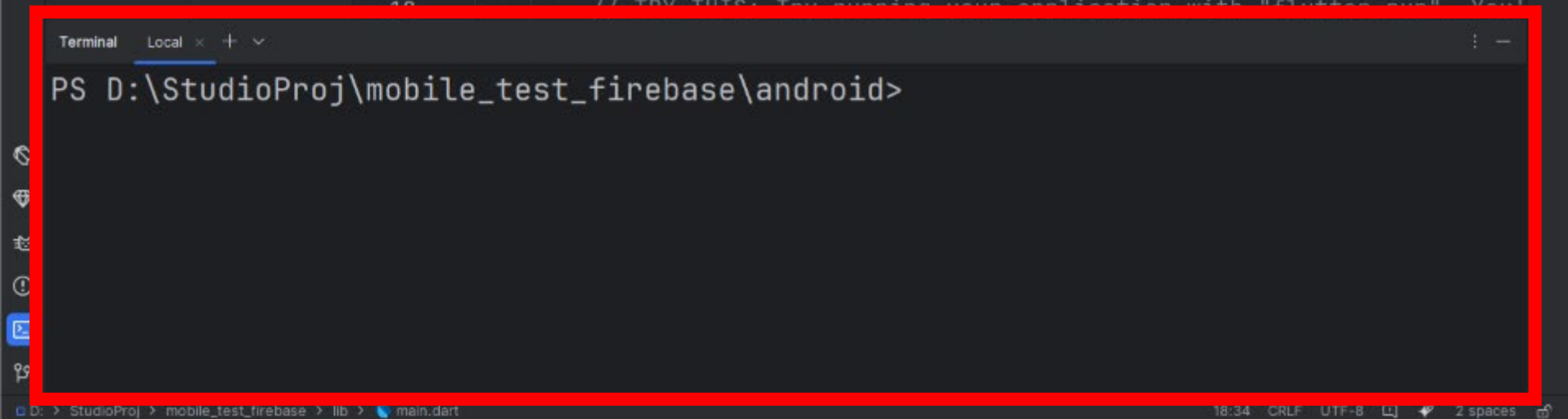
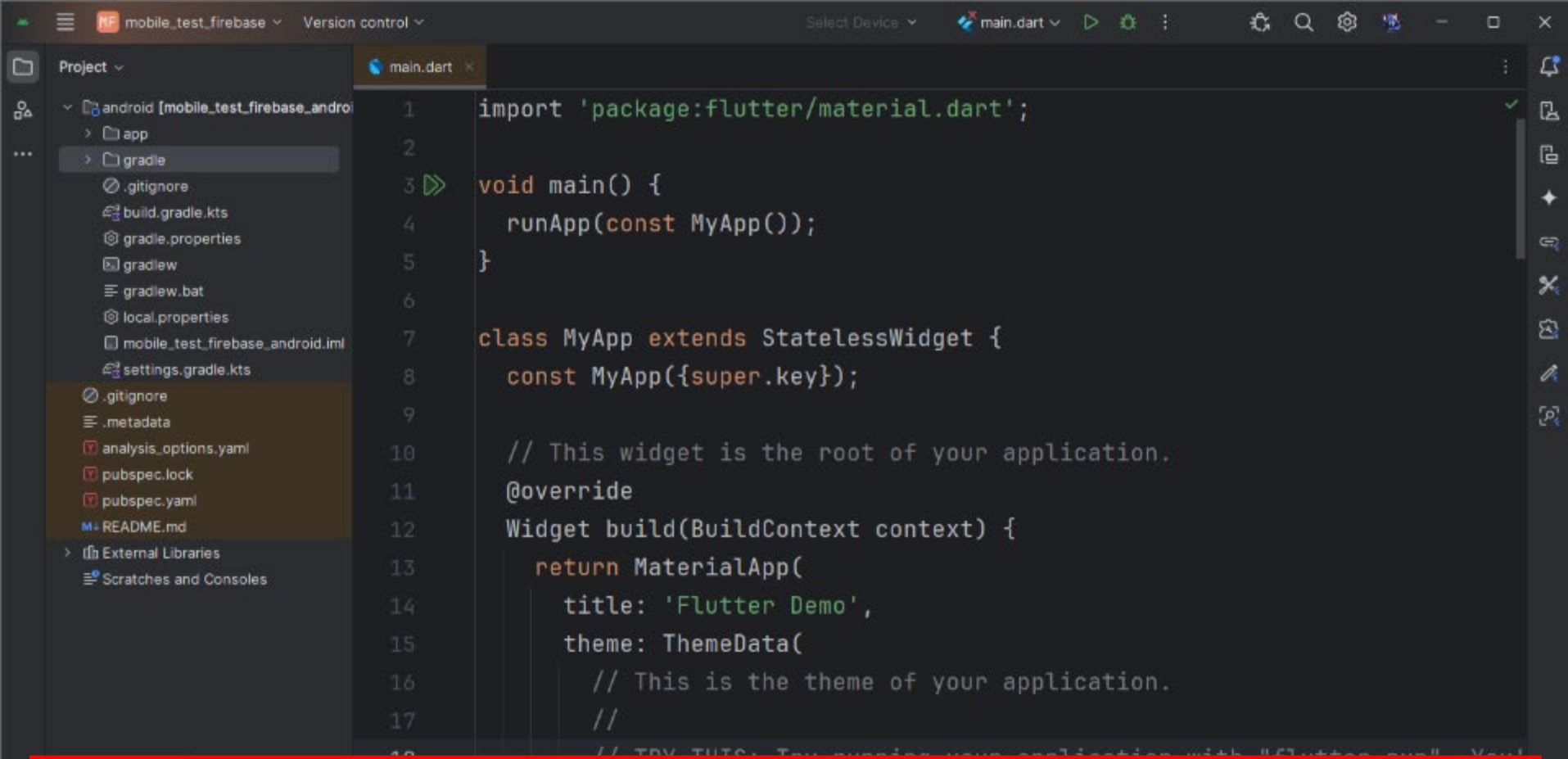
8

const

9

ALT+F12

Buat buka CMD/Console



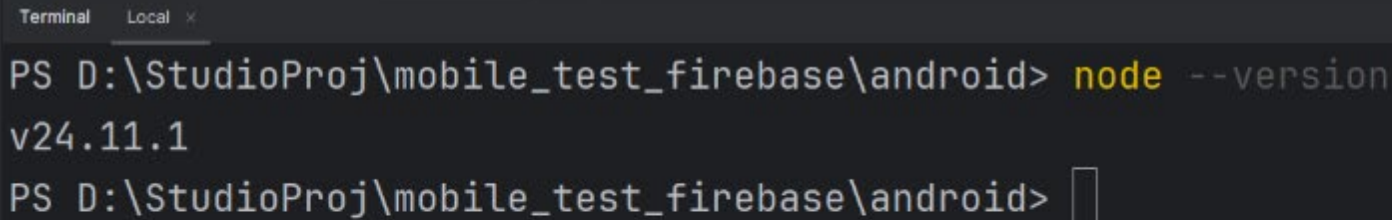
Set Up Firebase

3. Cek Instalasi Node.js

node --version

Cek instalasi Node.js

Kalo ada “v--.--.-” berarti berhasil



```
Terminal Local x
PS D:\StudioProj\mobile_test_firebase\android> node --version
v24.11.1
PS D:\StudioProj\mobile_test_firebase\android> 
```



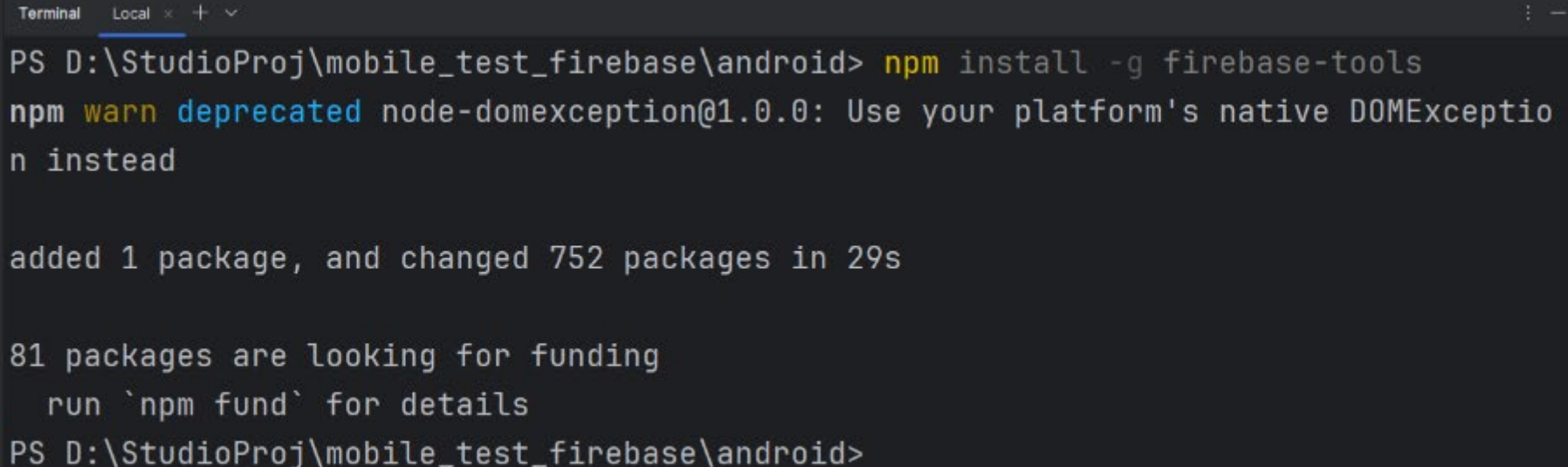
Set Up Firebase

4. SEKALI SAJA, Instalasi Firebase secara Global

npm install -g firebase-tools

Install Firebase lewat NPM secara global

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase\android> npm install -g firebase-tools
npm warn deprecated node-domexception@1.0.0: Use your platform's native DOMException instead

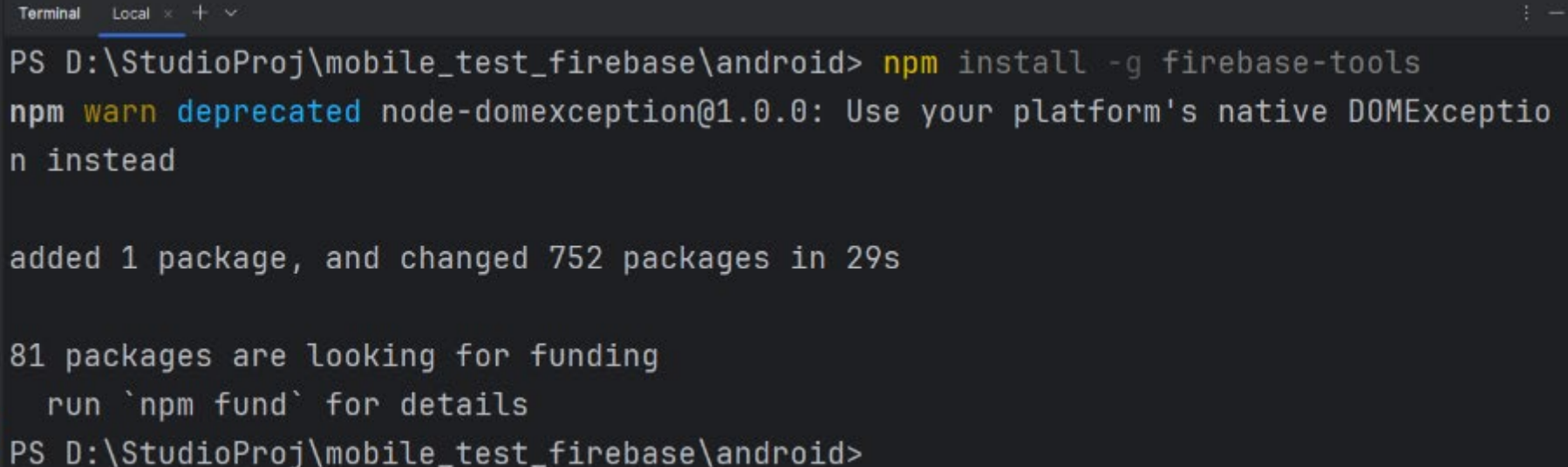
added 1 package, and changed 752 packages in 29s

81 packages are looking for funding
  run `npm fund` for details
PS D:\StudioProj\mobile_test_firebase\android>
```

dart pub global activate flutterfire_cli

Install Flutter Fire CLI secara global

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



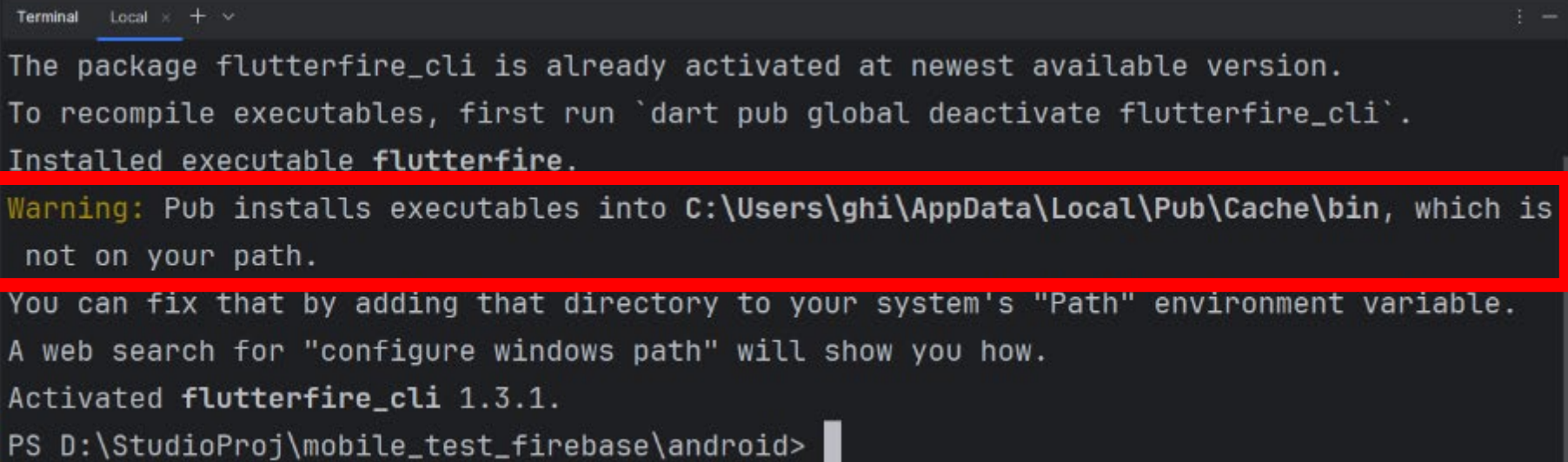
```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase\android> npm install -g firebase-tools
npm warn deprecated node-domexception@1.0.0: Use your platform's native DOMException instead

added 1 package, and changed 752 packages in 29s

81 packages are looking for funding
  run `npm fund` for details
PS D:\StudioProj\mobile_test_firebase\android>
```

Kalau ada “WARNING” ini, jangan dibiarkan.

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)



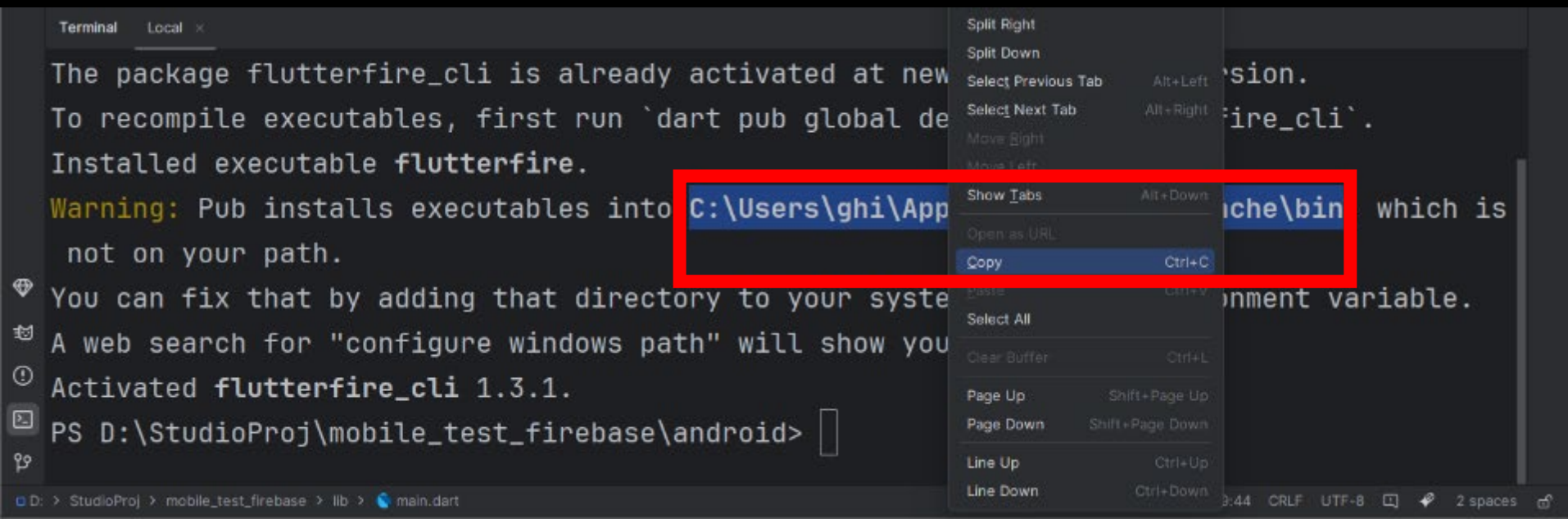
The screenshot shows a terminal window with the following text:

```
Terminal Local x + -  
The package flutterfire_cli is already activated at newest available version.  
To recompile executables, first run `dart pub global deactivate flutterfire_cli`.  
Installed executable flutterfire.  
Warning: Pub installs executables into C:\Users\ghi\AppData\Local\Pub\Cache\bin, which is  
not on your path.  
You can fix that by adding that directory to your system's "Path" environment variable.  
A web search for "configure windows path" will show you how.  
Activated flutterfire_cli 1.3.1.  
PS D:\StudioProj\mobile_test_firebase\android>
```

The warning message is highlighted with a red rectangular box.

1. Select PATH-nya
2. Klik kanan
3. Copy

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)



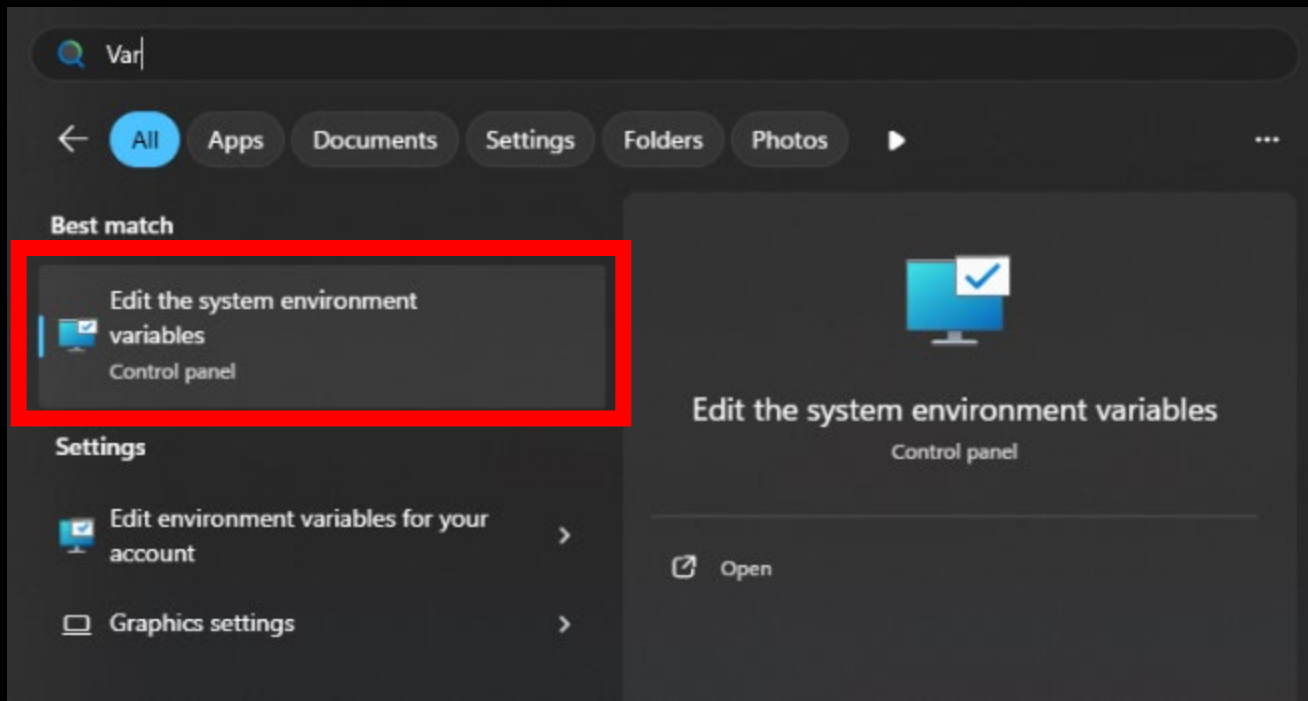
The screenshot shows a terminal window with the following text:

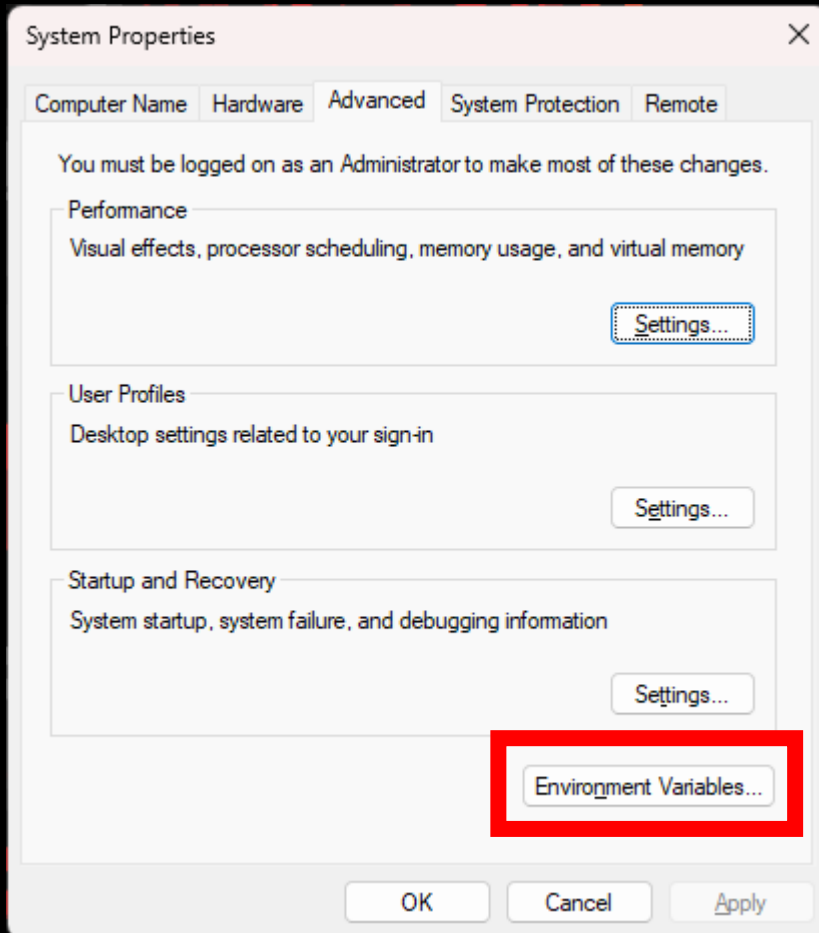
```
The package flutterfire_cli is already activated at new  
To recompile executables, first run `dart pub global de  
Installed executable flutterfire.  
Warning: Pub installs executables into C:\Users\ghi\AppData\Local\flutterfire_cli\bin which is  
not on your path.  
You can fix that by adding that directory to your system  
A web search for "configure windows path" will show you  
Activated flutterfire_cli 1.3.1.  
PS D:\StudioProj\mobile_test_firebase\android>
```

A right-click context menu is open over the highlighted path, with the 'Copy' option selected. The menu includes options like 'Split Right', 'Split Down', 'Select Previous Tab', 'Select Next Tab', 'Move Right', 'Move Left', 'Show Tabs', 'Open as URL', 'Copy', 'Paste', 'Select All', 'Clear Buffer', 'Page Up', 'Page Down', 'Line Up', and 'Line Down'.

4. Buka Windows
5. Cari “Variable”
6. Buka aplikasi ini

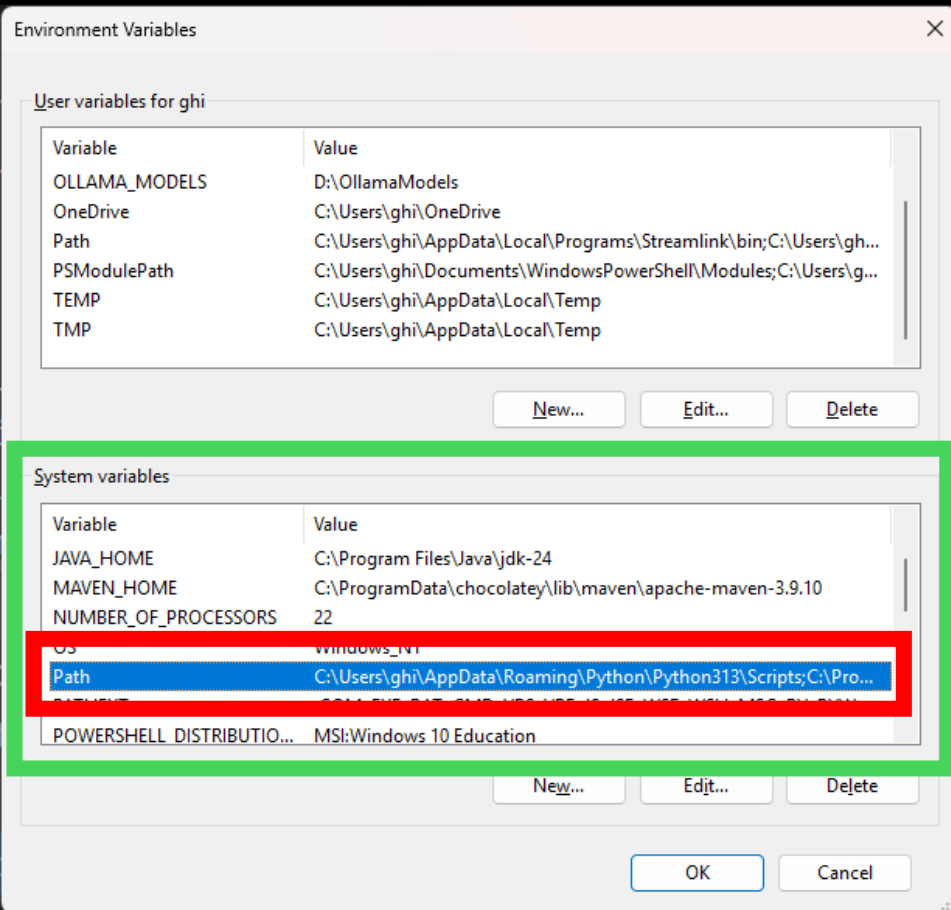
(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)





7. Pencet “Environment Variables”

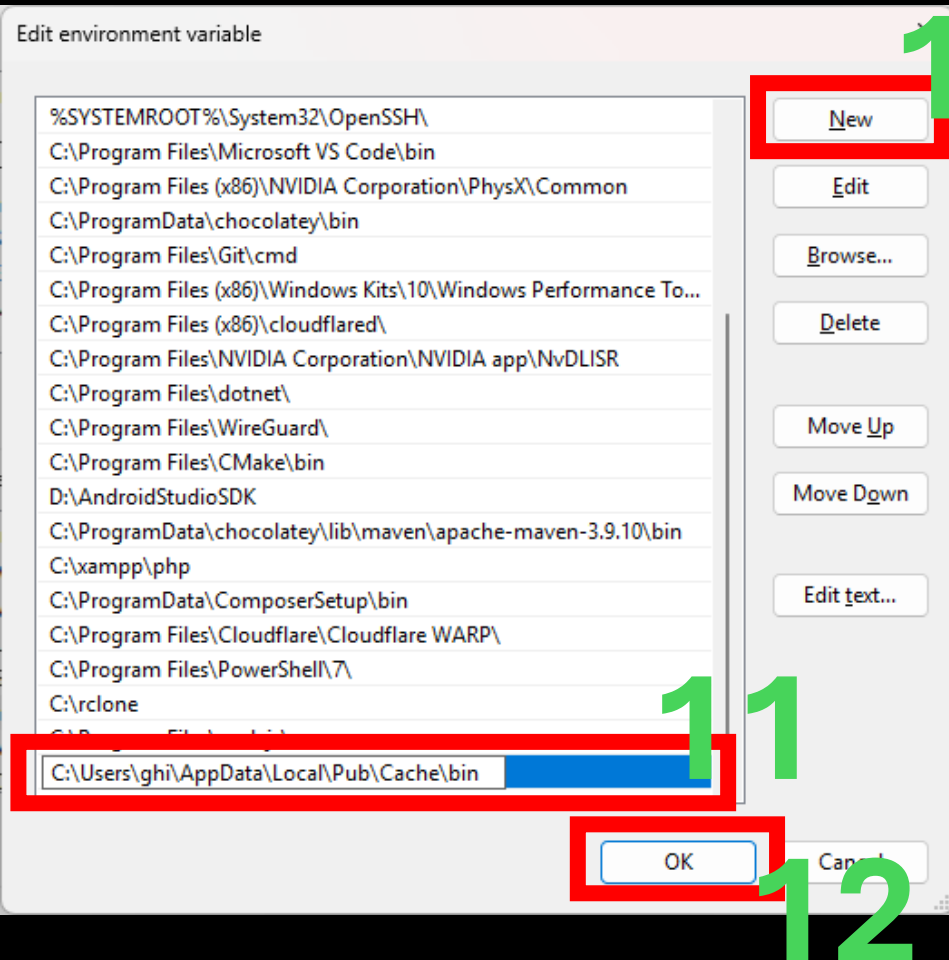
(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)



8. Bagian “System Variable” scroll kebawah

9. Double-click PATH

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)

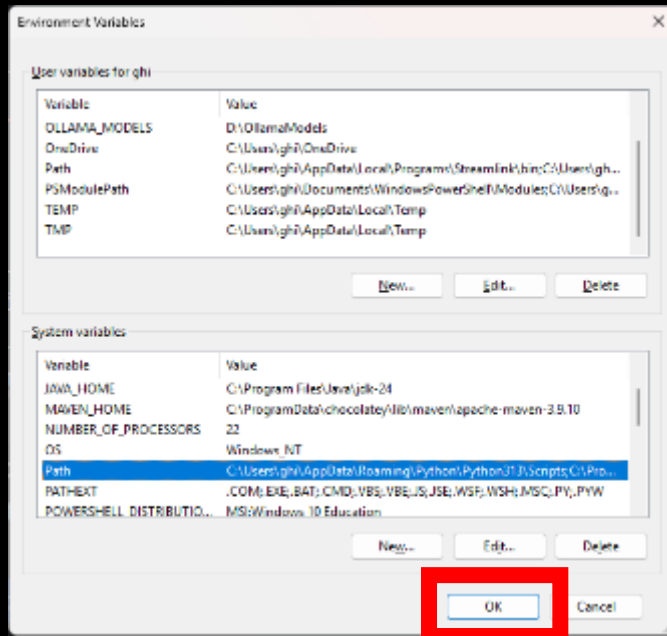


10. Pencet New

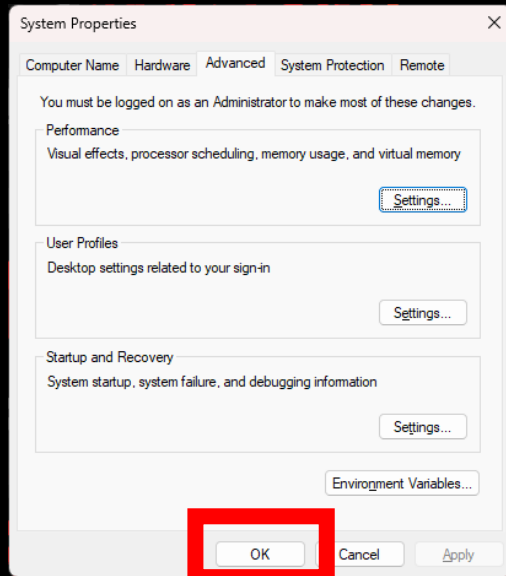
11. Paste (CTRL+V)

12. Pencet OK

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)



13. Pencet OK lagi
buat Close



14. OK lagi

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)

15. PENTING, close dulu
Android Studio nya biar
CMD/Terminal nya Restart

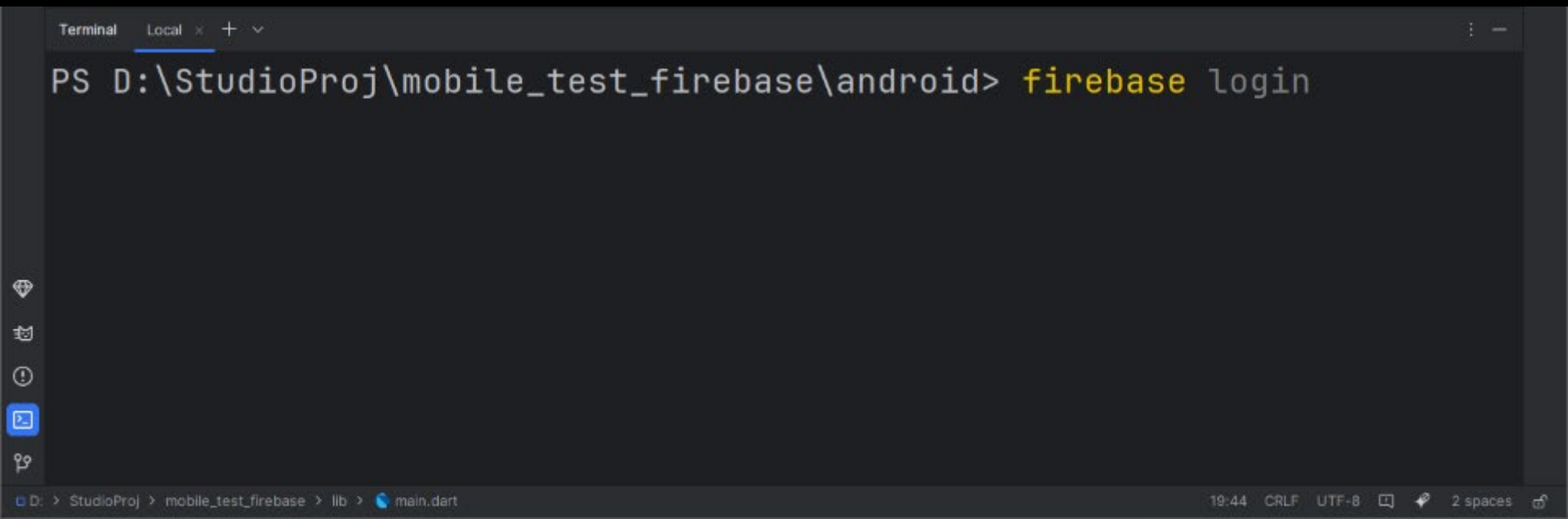
16. Buka lagi Android Studio nya

(Sekali saja, ntar kalo buat project baru, ngga usah lakukan hal ini lagi!)

firebase login

Login ke Firebase

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



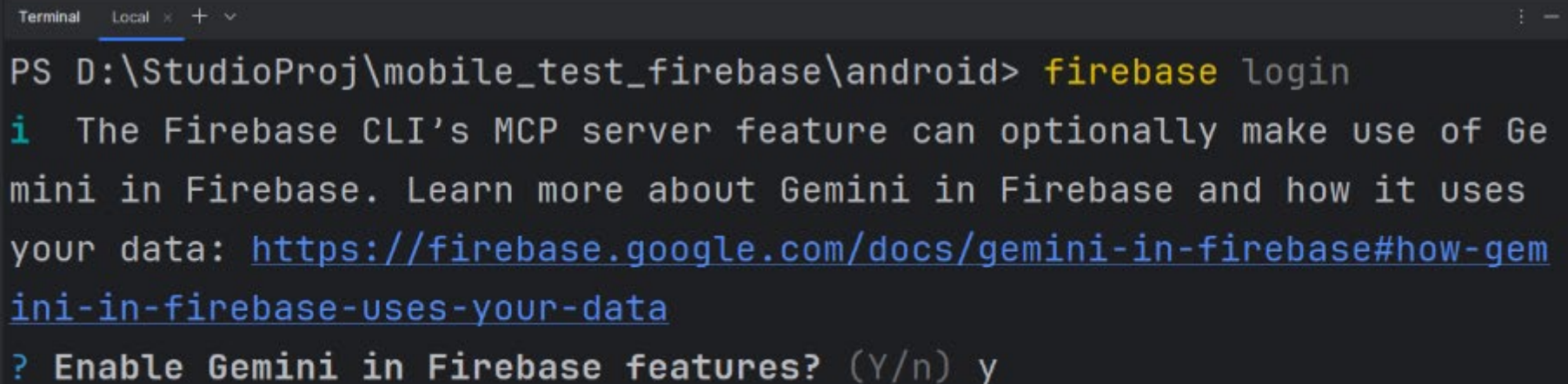
The screenshot shows a terminal window with a dark background. The title bar of the terminal says 'Terminal' and 'Local'. The command prompt is 'PS D:\StudioProj\mobile_test_firebase\android>'. The command 'firebase login' is being typed, with 'firebase' in yellow and 'login' in white. The IDE's sidebar on the left shows icons for Explorer, Search, Run and Debug, and Extensions. The bottom status bar shows the file path 'D:\StudioProj\mobile_test_firebase\lib\main.dart', the time '19:44', and other settings like 'CRLF', 'UTF-8', and '2 spaces'.

```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase\android> firebase login
```

Ada pertanyaan? Jawab aja (Y/N)

Login ke Firebase

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



The screenshot shows a terminal window with the following content:

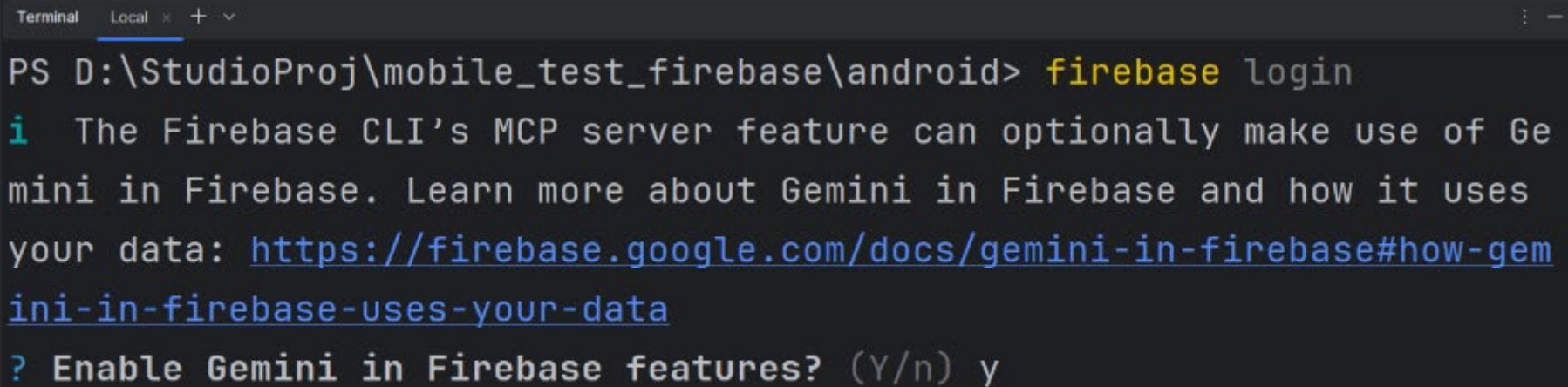
```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase\android> firebase login
i The Firebase CLI's MCP server feature can optionally make use of Gemini in Firebase. Learn more about Gemini in Firebase and how it uses your data: https://firebase.google.com/docs/gemini-in-firebase#how-gemini-in-firebase-uses-your-data
? Enable Gemini in Firebase features? (Y/n) y
```

The terminal window has a dark theme. The prompt is 'PS D:\StudioProj\mobile_test_firebase\android>'. The command 'firebase login' is entered. The output shows an information message about the Gemini MCP server feature, followed by a confirmation prompt '? Enable Gemini in Firebase features? (Y/n)' which is answered with 'y'.

**Biasanya langsung buka Browser,
login aja ke Akun yang tadi.**
(Kalo ngga, copy URL nya, buka di Browsermu)

Login ke Firebase

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



The screenshot shows a terminal window with the following text:

```
Terminal Local x + -
PS D:\StudioProj\mobile_test_firebase\android> firebase login
i The Firebase CLI's MCP server feature can optionally make use of Ge
mini in Firebase. Learn more about Gemini in Firebase and how it uses
your data: https://firebase.google.com/docs/gemini-in-firebase#how-gemini-in-firebase-uses-your-data
? Enable Gemini in Firebase features? (Y/n) y
```

On the left side of the terminal, there is a vertical toolbar with icons for search, run and debug, and other IDE functions. The bottom status bar shows the file path 'D:\StudioProj > mobile_test_firebase > lib > main.dart', the time '19:44', and encoding 'CRLF UTF-8'.

Login dengan Google



Pilih akun

untuk melanjutkan ke [Firebase CLI](#)



[Gunakan akun lain](#)

Sebelum menggunakan aplikasi ini, Anda dapat meninjau [kebijakan privasi](#) dan [persyaratan layanan](#) [Firebase CLI](#).



Woohoo!

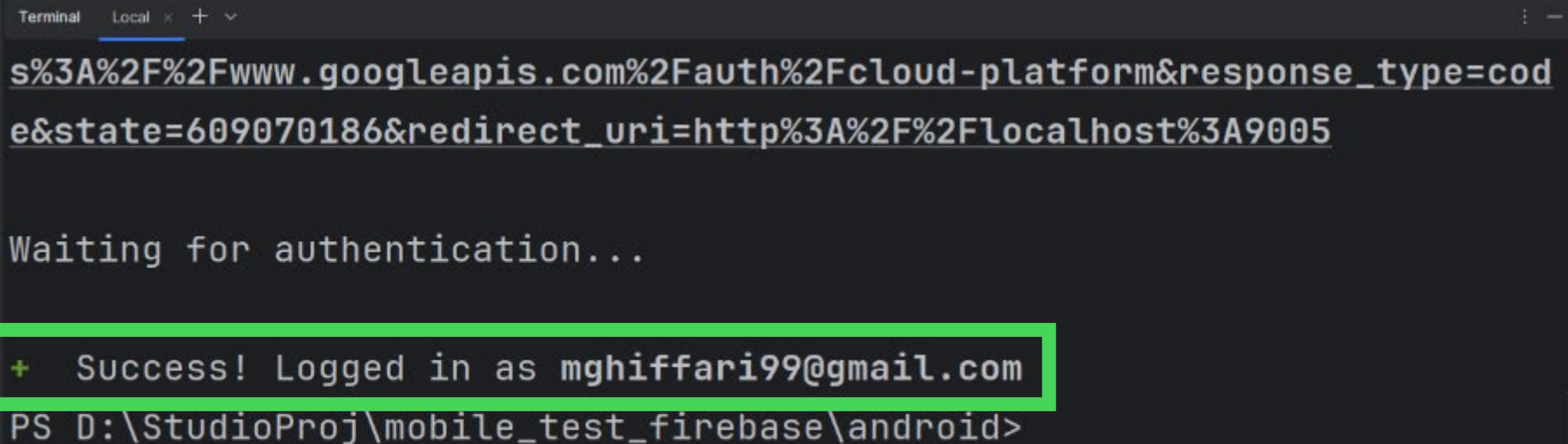
Firebase CLI Login Successful

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

Kalau ada ini, udah login

Login ke Firebase

(Sekali saja, ntar kalo buat project baru, ngga usah run ini!)



The screenshot shows a terminal window with a dark background. At the top, there's a tab labeled 'Terminal' and a sub-tab 'Local'. The main content of the terminal is a long URL: `s%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform&response_type=code&state=609070186&redirect_uri=http%3A%2F%2Flocalhost%3A9005`. Below the URL, it says 'Waiting for authentication...'. Then, a green box highlights a message: `+ Success! Logged in as mghiffari99@gmail.com`. At the bottom, the prompt `PS D:\StudioProj\mobile_test_firebase\android>` is visible.

```
Terminal Local x + v
s%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform&response_type=code&state=609070186&redirect_uri=http%3A%2F%2Flocalhost%3A9005

Waiting for authentication...

+ Success! Logged in as mghiffari99@gmail.com

PS D:\StudioProj\mobile_test_firebase\android>
```

Set Up Firebase

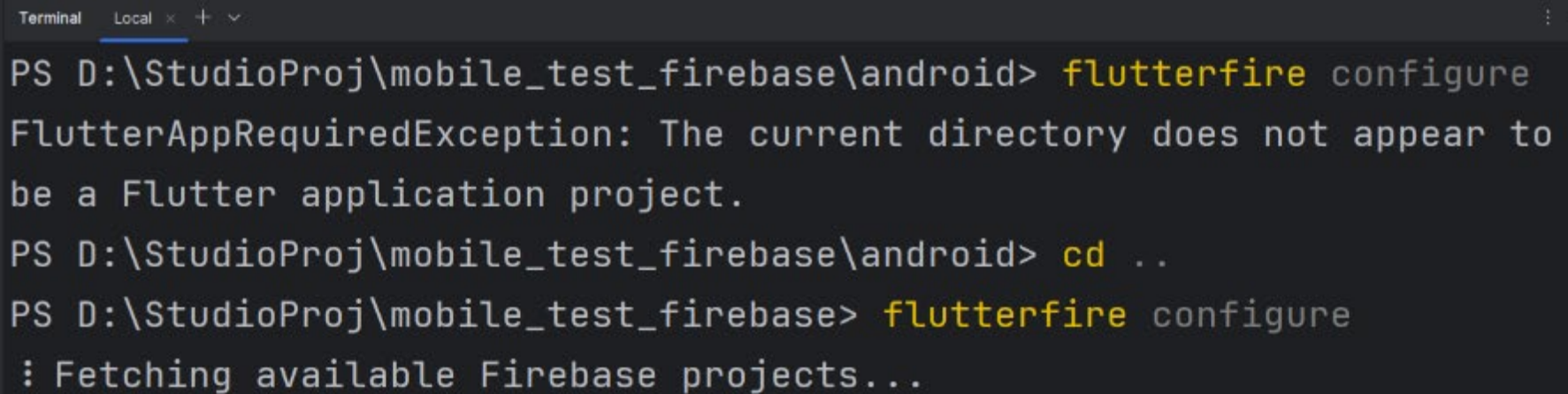
5. LAKUKAN SETIAP PROJECT BARU,
Konfigurasi Firebase ke Project

cd ..

flutterfire configure

Konfigurasi, Firebase ke Flutter.

Kalo error, “FlutterAppRequiredException”, pindah ke Project ROOT
(Mulai dari step ini, dilakukan kalau buat project baru)

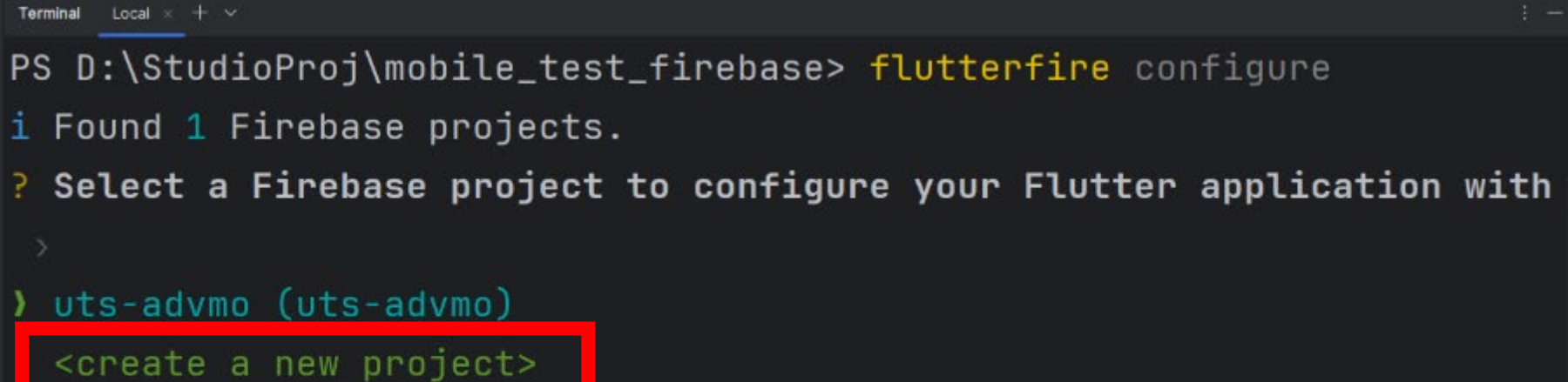


```
Terminal Local x + -
PS D:\StudioProj\mobile_test_firebase\android> flutterfire configure
FlutterAppRequiredException: The current directory does not appear to
be a Flutter application project.
PS D:\StudioProj\mobile_test_firebase\android> cd ..
PS D:\StudioProj\mobile_test_firebase> flutterfire configure
: Fetching available Firebase projects...
```

Pilih “Create a new Project”, terus ENTER

Konfigurasi, Firebase ke Flutter.

CONTROL PAKE ARROWS (ATAS-BAWAH), PILIH = SPASI

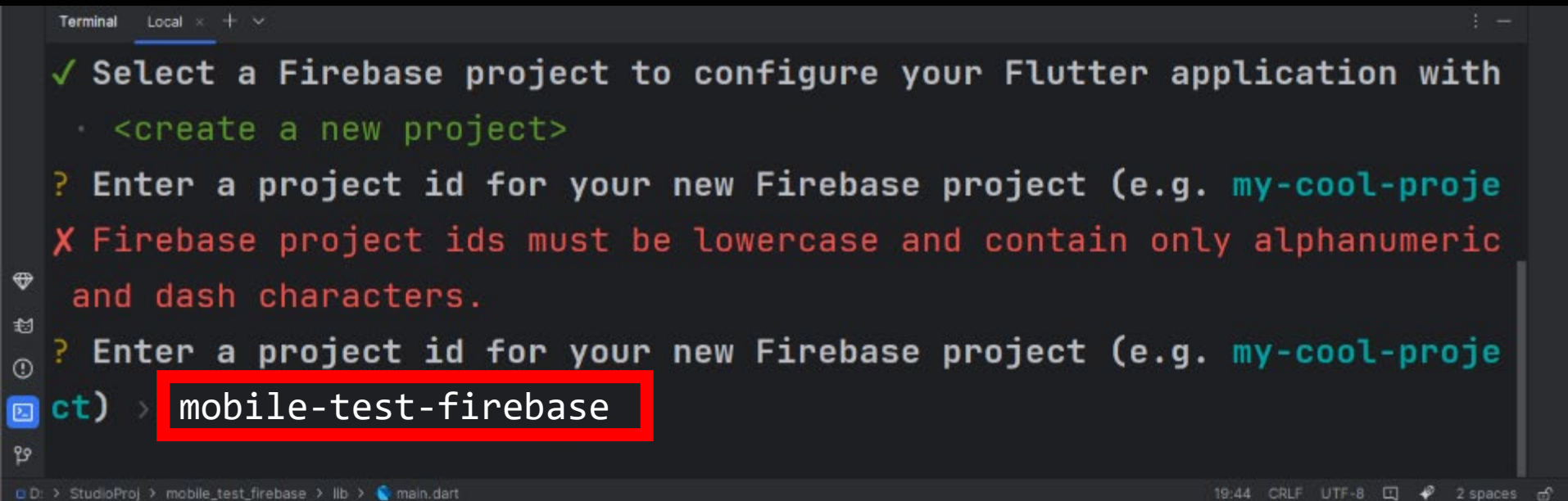


```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase> flutterfire configure
i Found 1 Firebase projects.
? Select a Firebase project to configure your Flutter application with
>
> uts-advmo (uts-advmo)
  <create a new project>
```

Nama Project terserah

Konfigurasi, Firebase ke Flutter.

CONTROL PAKE ARROWS (ATAS-BAWAH), PILIH = SPASI



The screenshot shows a terminal window with the following text:

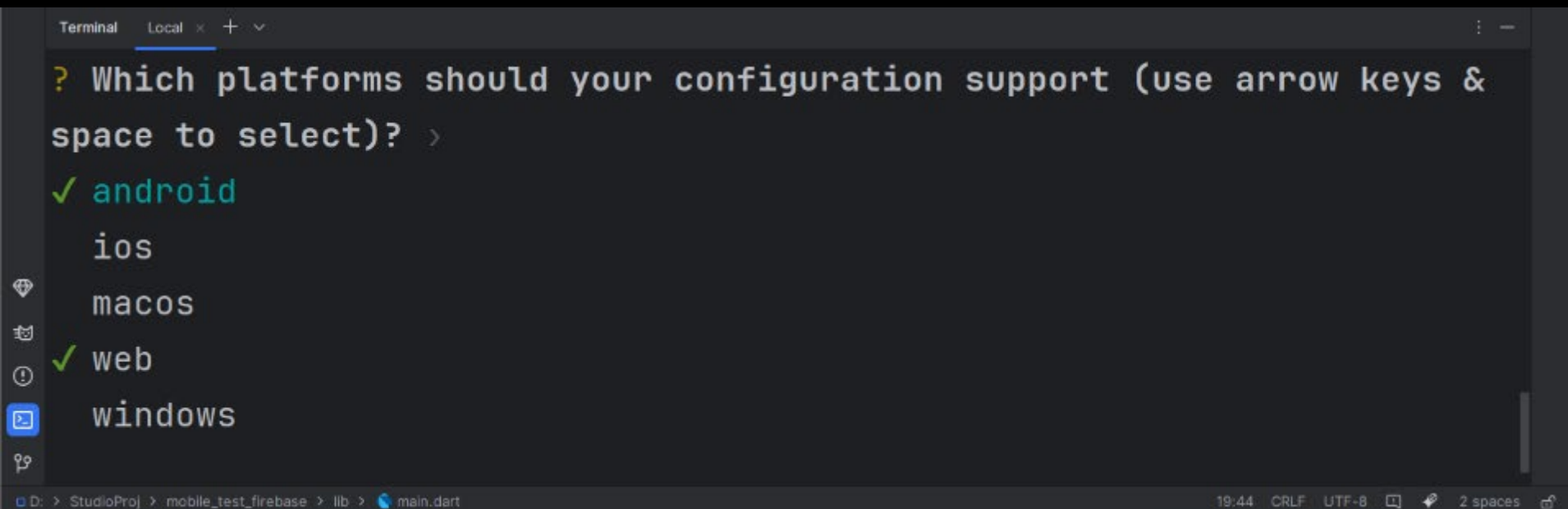
```
Terminal Local x + v
✓ Select a Firebase project to configure your Flutter application with
  • <create a new project>
? Enter a project id for your new Firebase project (e.g. my-cool-proje
X Firebase project ids must be lowercase and contain only alphanumeric
  and dash characters.
? Enter a project id for your new Firebase project (e.g. my-cool-proje
ct) > mobile-test-firebase
```

The text "mobile-test-firebase" is highlighted with a red rectangle. The terminal window has a dark background with light-colored text. The status bar at the bottom shows the file path "D:\> StudioProj > mobile_test_firebase > lib > main.dart" and the time "19:44".

Untuk sekarang, pilih “Android” dan “Web” aja, terus ENTER

Konfigurasi, Firebase ke Flutter.

CONTROL PAKE ARROWS (ATAS-BAWAH), PILIH = SPASI

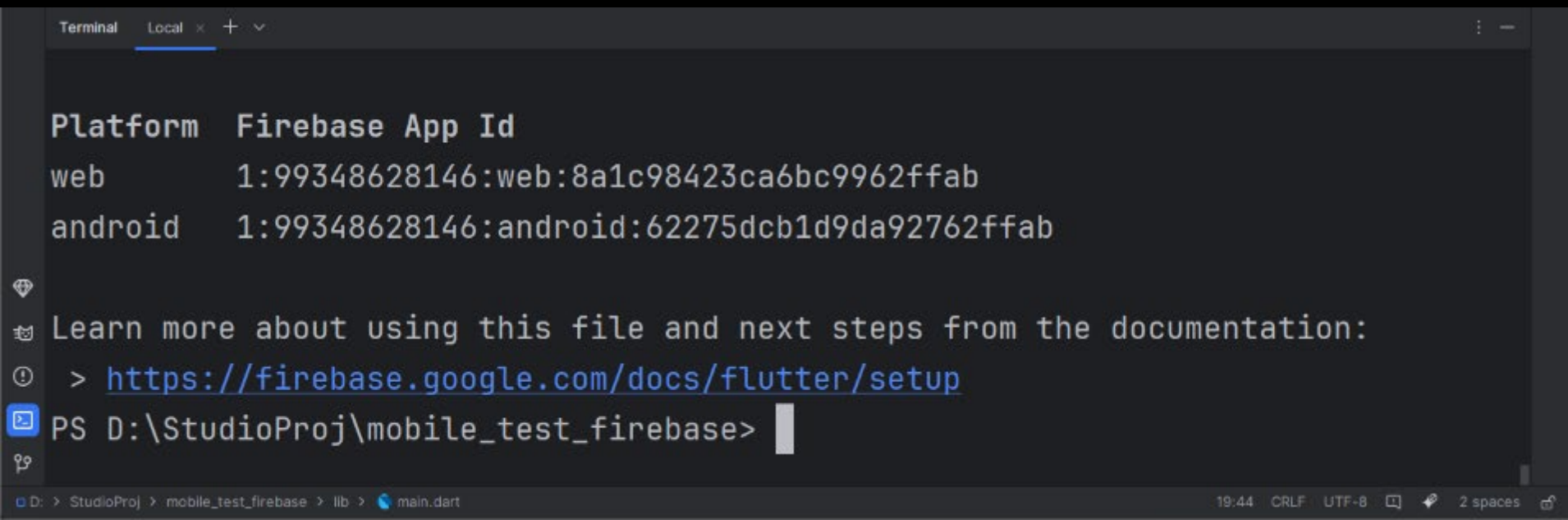


The screenshot shows a terminal window with a dark background. The prompt is: `? Which platforms should your configuration support (use arrow keys & space to select)? >`. Below the prompt, there is a list of platforms: `android`, `ios`, `macos`, `web`, and `windows`. The `android` and `web` options are preceded by a green checkmark, indicating they are selected. The `main.dart` file is open in the background, and the status bar at the bottom shows the time as 19:44, the encoding as CRLF, and the file encoding as UTF-8.

```
Terminal Local x + -
? Which platforms should your configuration support (use arrow keys &
space to select)? >
✓ android
  ios
  macos
✓ web
  windows
D: > StudioProj > mobile_test_firebase > lib > main.dart
19:44 CRLF UTF-8 2 spaces
```

Firestore sudah terkonfigurasi di Project Flutter kamu

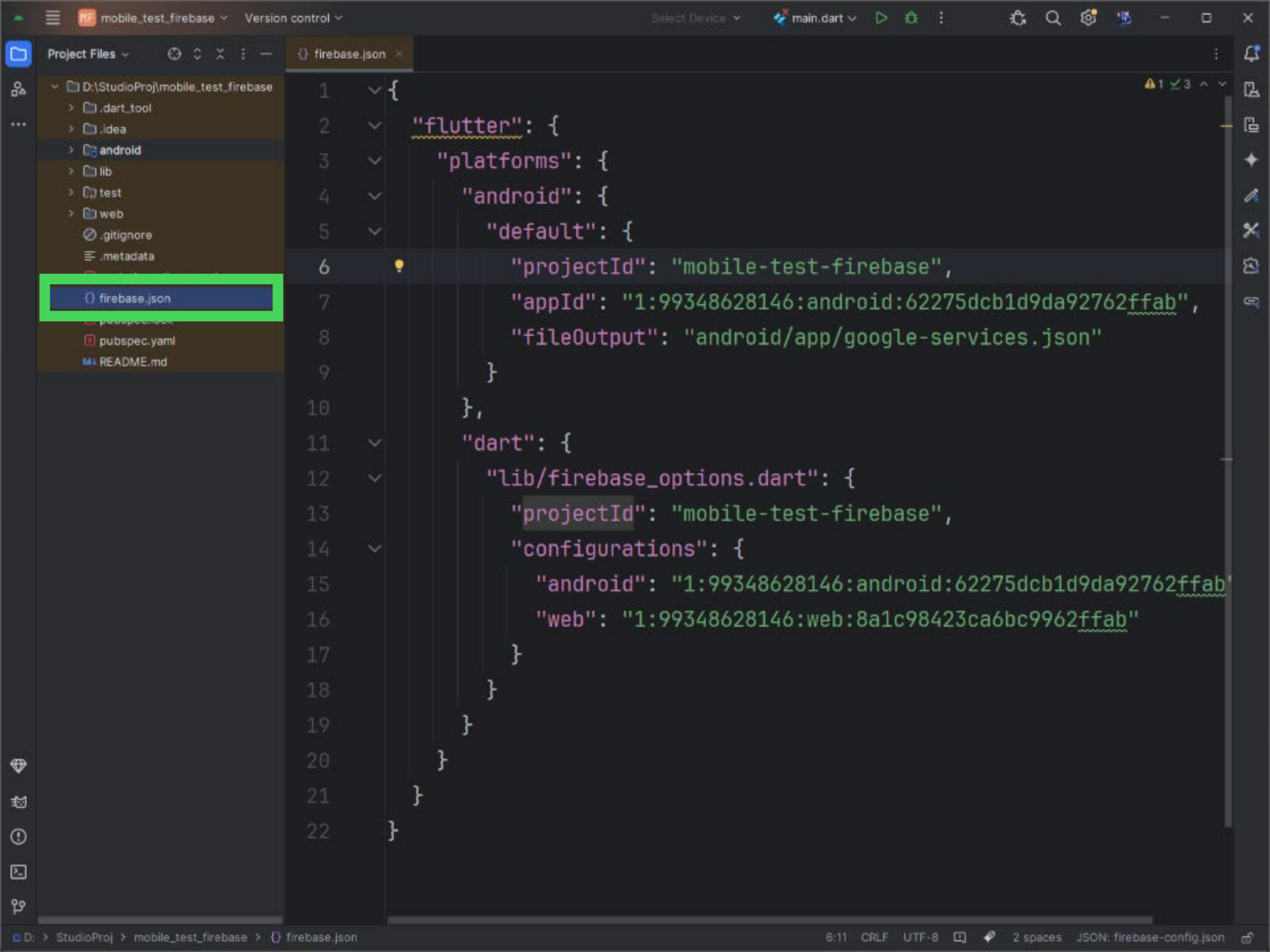
Konfigurasi, Firestore ke Flutter.



```
Terminal Local x + -  
  
Platform  Firestore App Id  
web       1:99348628146:web:8a1c98423ca6bc9962ffab  
android   1:99348628146:android:62275dcb1d9da92762ffab  
  
Learn more about using this file and next steps from the documentation:  
> https://firebase.google.com/docs/flutter/setup  
PS D:\StudioProj\mobile_test_firestore>
```

D:\StudioProj\mobile_test_firestore\lib> main.dart

19:44 CRLF UTF-8 2 spaces





Hello, Muhammad

Welcome back to Firebase!

Get started



Create a new Firebase project

Integrate Firebase products to supercharge your app



Start coding an app

Create a new app from one of the Firebase Studio templates

Try out a sample app



Build an AI-powered Flutter app

Deploy a sample app that showcases how the Gemini Live API, multimodal prompts and image creation with Nano Banana all work in Flutter

🔍 Search all projects and workspaces

Projects and workspaces ▼



uts-advmo

uts-advmo



mobile-test-firebase

mobile-test-firebase



1-2 of 2



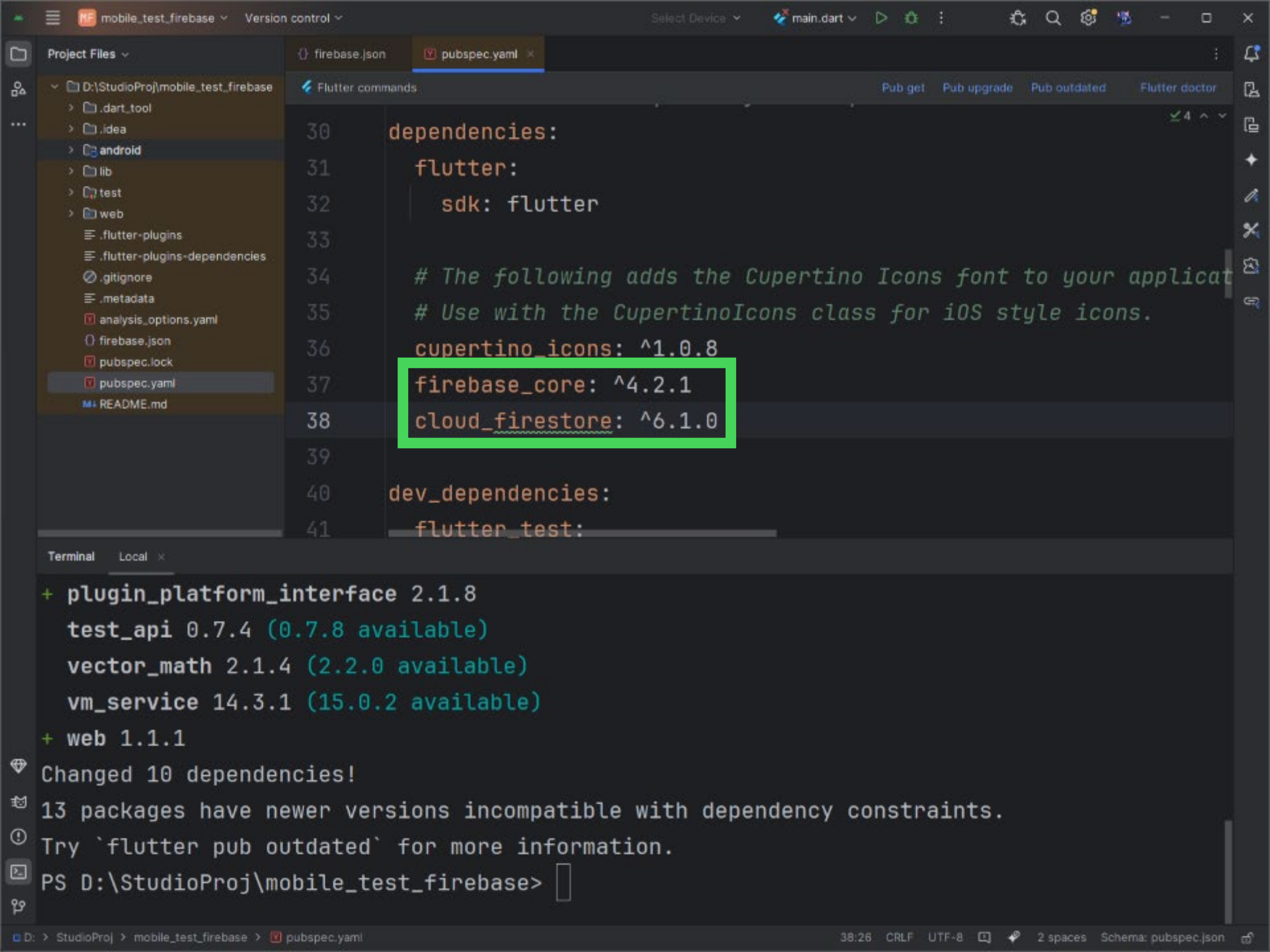
Install Dependensi

LAKUKAN SETIAP PROJECT BARU

flutter pub add firebase_core cloud_firestore

Tambahkan dependensi, bisa di pubspec.yaml,
juga bisa otomatis disini (termasuk versi terbaru, biar ngga cari-cari)

```
Terminal Local x + v
PS D:\StudioProj\mobile_test_firebase> flutter pub add firebase_core cloud_firestore
Resolving dependencies...
Downloading packages...
+ _flutterfire_internals 1.3.64
  async 2.12.0 (2.13.0 available)
  characters 1.4.0 (1.4.1 available)
+ cloud_firestore 6.1.0
+ cloud_firestore_platform_interface 7.0.4
+ cloud_firestore_web 5.1.0
```

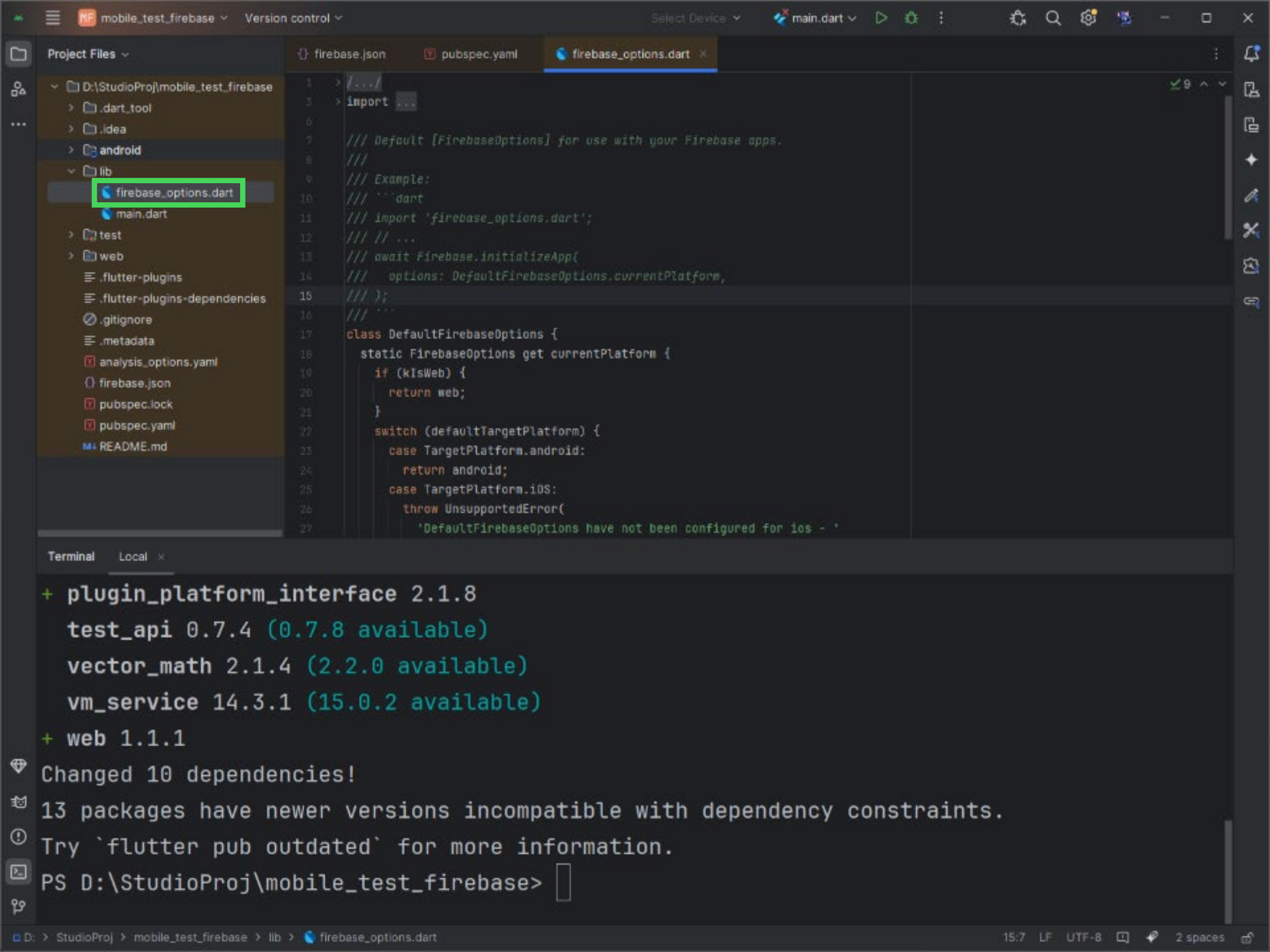



```
dependencies:
  flutter:
    sdk: flutter

  # The following adds the Cupertino Icons font to your application
  # Use with the CupertinoIcons class for iOS style icons.
  cupertino_icons: ^1.0.8
  firebase_core: ^4.2.1
  cloud_firestore: ^6.1.0

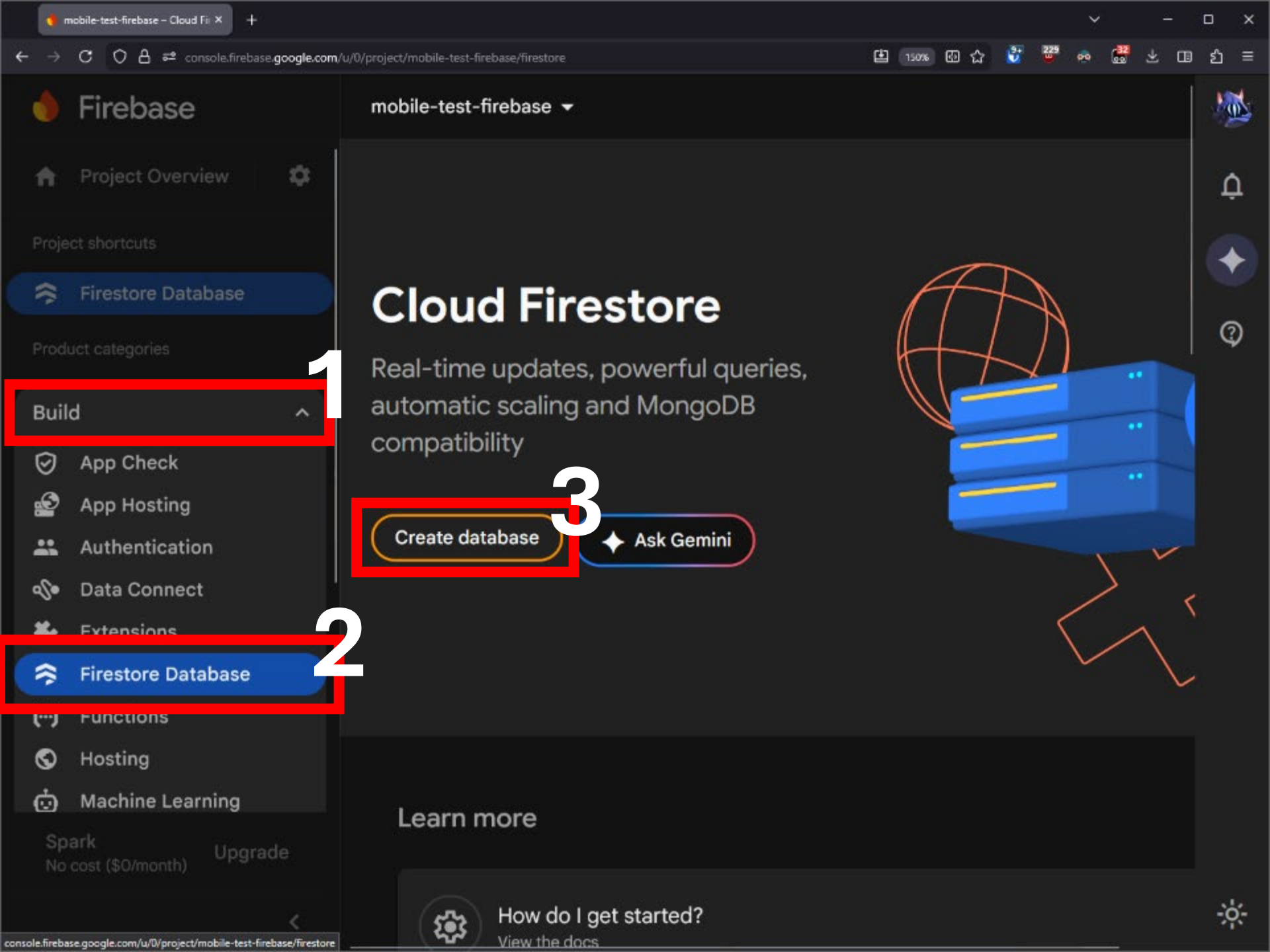
dev_dependencies:
  flutter_test:
```

```
+ plugin_platform_interface 2.1.8
  test_api 0.7.4 (0.7.8 available)
  vector_math 2.1.4 (2.2.0 available)
  vm_service 14.3.1 (15.0.2 available)
+ web 1.1.1
Changed 10 dependencies!
13 packages have newer versions incompatible with dependency constraints.
Try `flutter pub outdated` for more information.
PS D:\StudioProj\mobile_test_firebase>
```



Buat Database Baru

LAKUKAN SETIAP PROJECT BARU



× Create a database

1 Select edition



Standard edition

Simple query engine with automatic indexing. For documents up to 1 MiB.



Enterprise edition

Advanced query engine with MongoDB compatibility. For documents up to 4 MiB. Supports MongoDB drivers and tools only.


Not sure which edition is right for you? [Compare editions](#)

Next

2 Database ID and location

3 Configure

× Create a database

 Select edition

2 Database ID and location

Database ID

(default)

Location

asia-southeast2 (Jakarta)

① Your location setting is where your Cloud Firestore data will be stored

! After you set this location, you cannot change it later.

[Learn more](#)

Next


3 Configure

5

× Create a database

3

Configure

After you define your data structure, you will need to write rules to secure your data. [Learn more](#) 



Start in **Production mode**

Your data is private by default. Client read/write access will only be granted as specified by your security rules.



Start in **test mode**

Your data is open by default to enable quick setup. However, you must update your security rules within 30 days to enable long-term client read/write access.

```
rules_version = '2';


service cloud.firestore {
  match /databases/{database}/documents {
    match /{document=**} {
      allow read, write: if
        request.time < timestamp.date(2025, 12, 16);
    }
  }
}
```





The default security rules for test mode allow anyone with your database reference to view, edit and delete all data in your database for the next 30 days


Cancel

Create

 **Firestore Database**

 Project Overview 

Project shortcuts

 **Firestore Database**

Product categories


Build

Run

Analytics

AI


Related development tools

 [Firebase Studio](#)

Spark

No cost (\$0/month)

Upgrade



mobile-test-firebase ▾

Cloud Firestore >


Database


Add database

◆ Ask Gemini about the core concepts of using Firestore


Data Rules Indexes Disaster recovery Usage Extensions

Panel view Query builder ⋮

 [More in Google Cloud](#) ▾


 (default)

[+ Start collection](#)




Your database is ready to go. Just add data.





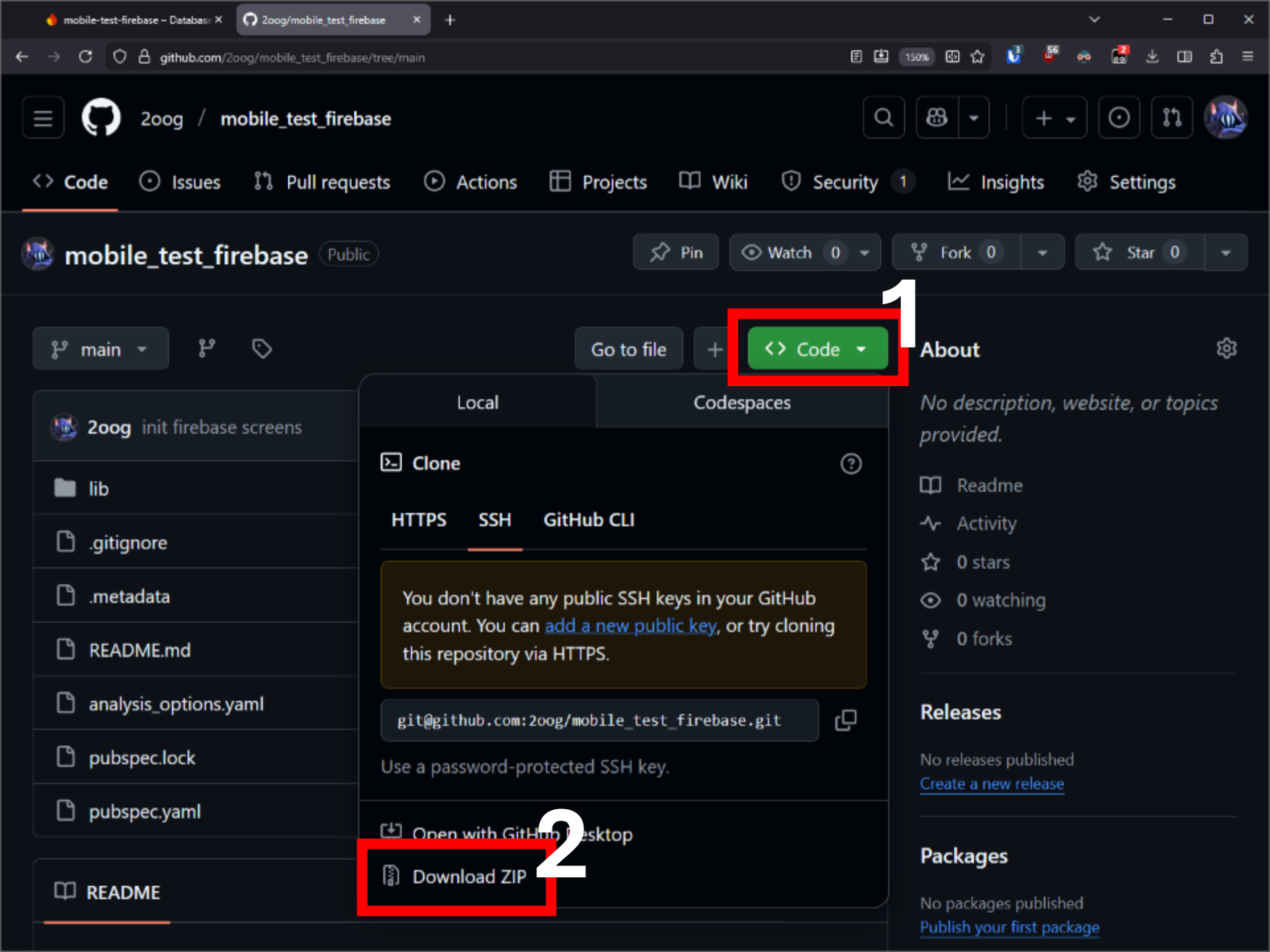


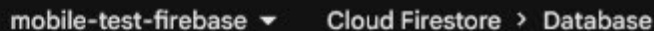




Coba-coba koding

github.com/2oog/mobile_test_firebase





Query builder

Project shortcuts

 Firestore Database

Product categories

Build

Run

Analytics

AI

Related development tools



[Firebase Studio](#)


Spark

No cost (\$0/month)

Upgrade

[🏠](#) > [items](#) > [xdd](#)

 More in Google Cloud

 (default) items

 xdd

+ Start collection

+ Add document

+ Start collection

items

asdf

+ Add field

xdd

```
created_at: 16 November 2025 at
05:28:25 UTC+7
```

```
harga_beli: 15000
```

```
harga_jual: 20000
```

```
kode: "xdd"
```

```
nama: "Hello"
```

satuan: "pcs"

updated_at: 16 November 2025 at
05:28:25 UTC+7

Database location: asia-southeast2

