Laporan Project Mata Kuliah Mobile Computing

Disusun Oleh :

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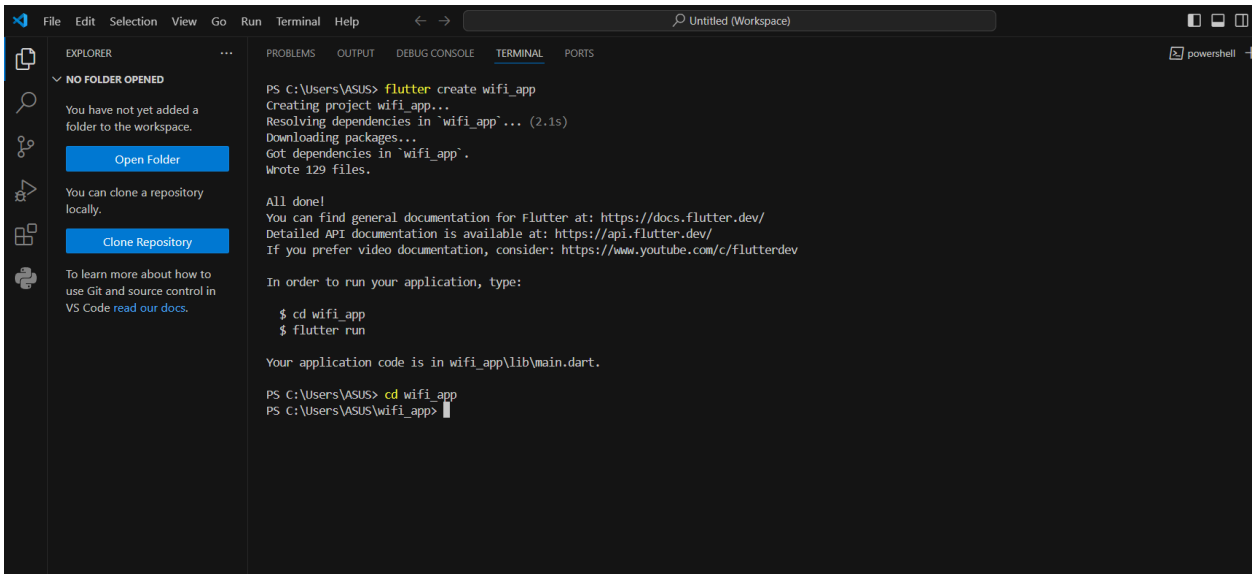
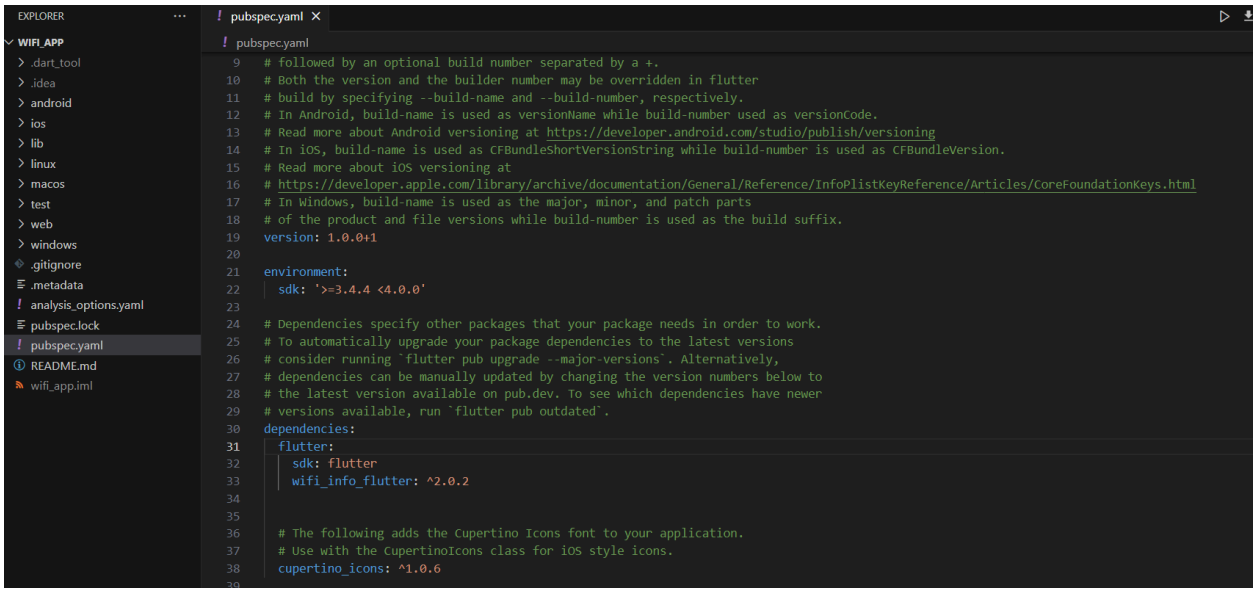
TI-4A
TEKNIK INFORMATIKA
TEKNIK INFORMATIKA DAN KOMPUTER
POLITEKNIK NEGERI JAKARTA
2024

Flutter WIFI

1. **Bagian wifi:**



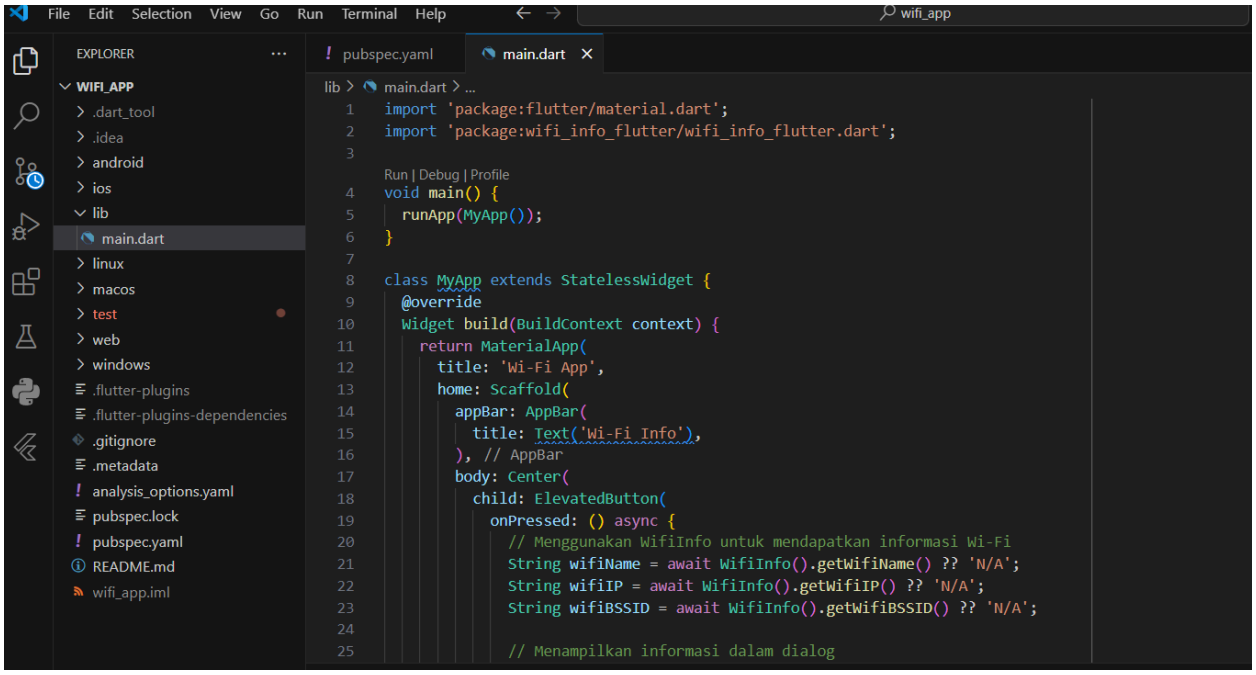
Setelah berhasil buka file - new file - ke folder C - users - user dan cari wifi_app dan klik open folder.

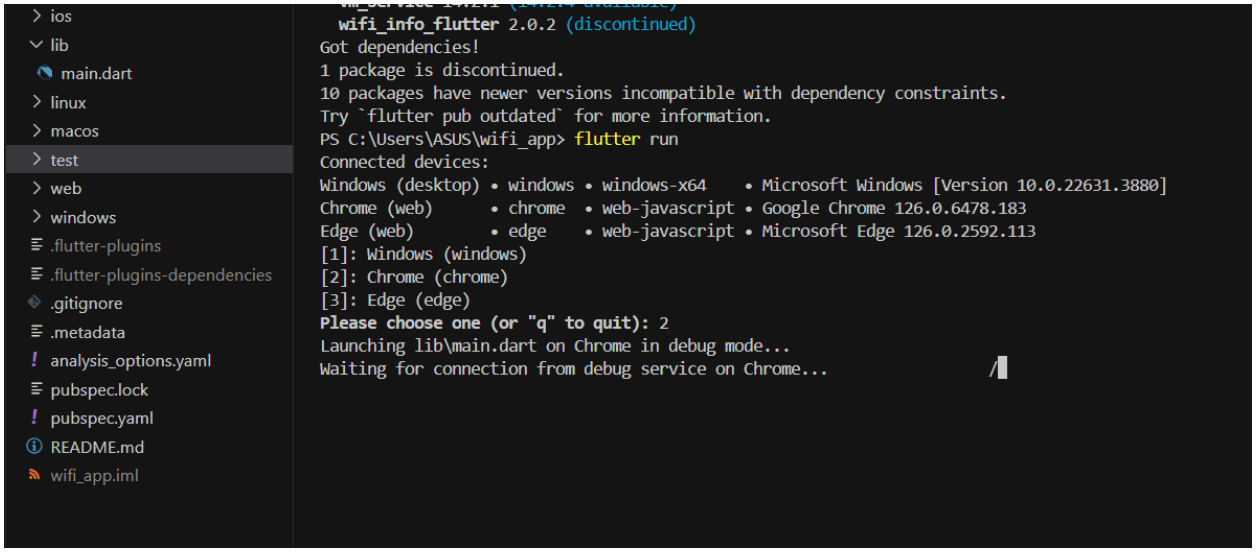


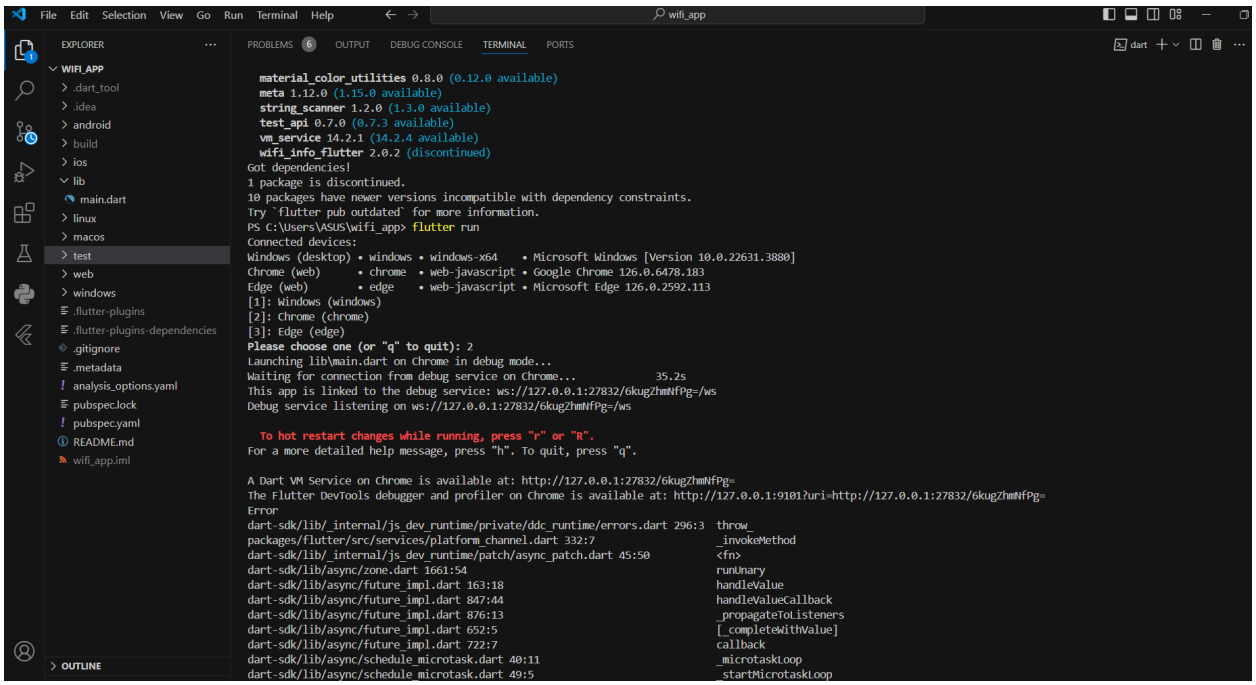
Setelah terbuka pilih file pubspec.yaml dan masukkan “wifi_info_flutter: ^2.0.2 dan ctrl + s untuk menyimpan.

```
PS C:\Users\ASUS\wifi_app> flutter pub get
Resolving dependencies...
Downloading packages...
  collection 1.18.0 (1.19.0 available)
  flutter_lints 3.0.2 (4.0.0 available)
  leak_tracker 10.0.4 (10.0.5 available)
  leak_tracker_flutter_testing 3.0.3 (3.0.5 available)
  lints 3.0.0 (4.0.0 available)
  material_color_utilities 0.8.0 (0.12.0 available)
  meta 1.12.0 (1.15.0 available)
  string_scanner 1.2.0 (1.3.0 available)
  test_api 0.7.0 (0.7.3 available)
  vm_service 14.2.1 (14.2.4 available)
  wifi_info_flutter 2.0.2 (discontinued)
Got dependencies!
1 package is discontinued.
10 packages have newer versions incompatible with dependency constraints.
Try `flutter pub outdated` for more information.
PS C:\Users\ASUS\wifi_app>
```

Lalu kembali ke terminal dan seperti gambar “flutter pub get”

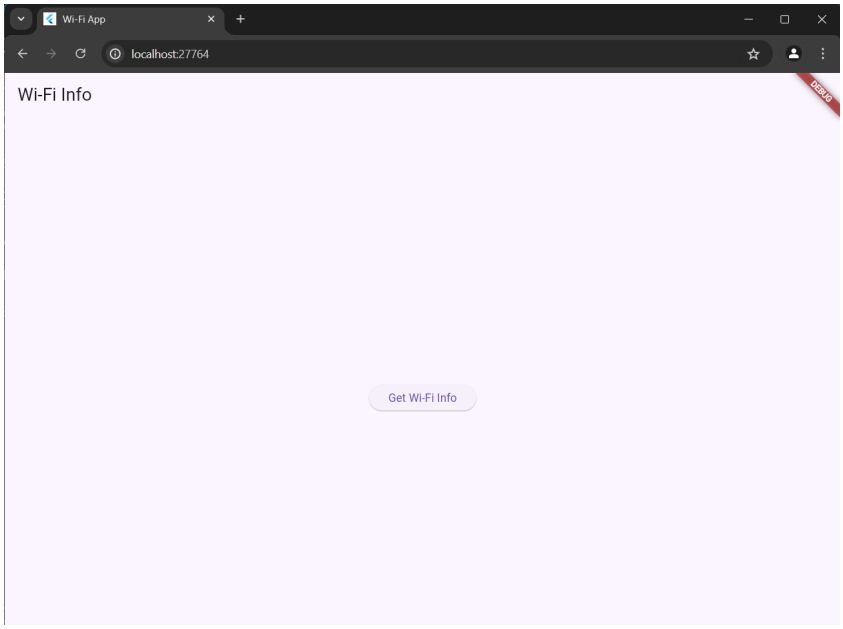






Lalu setelah itu ketik lagi “terminal run” dan enter lagi.

Hasil output:

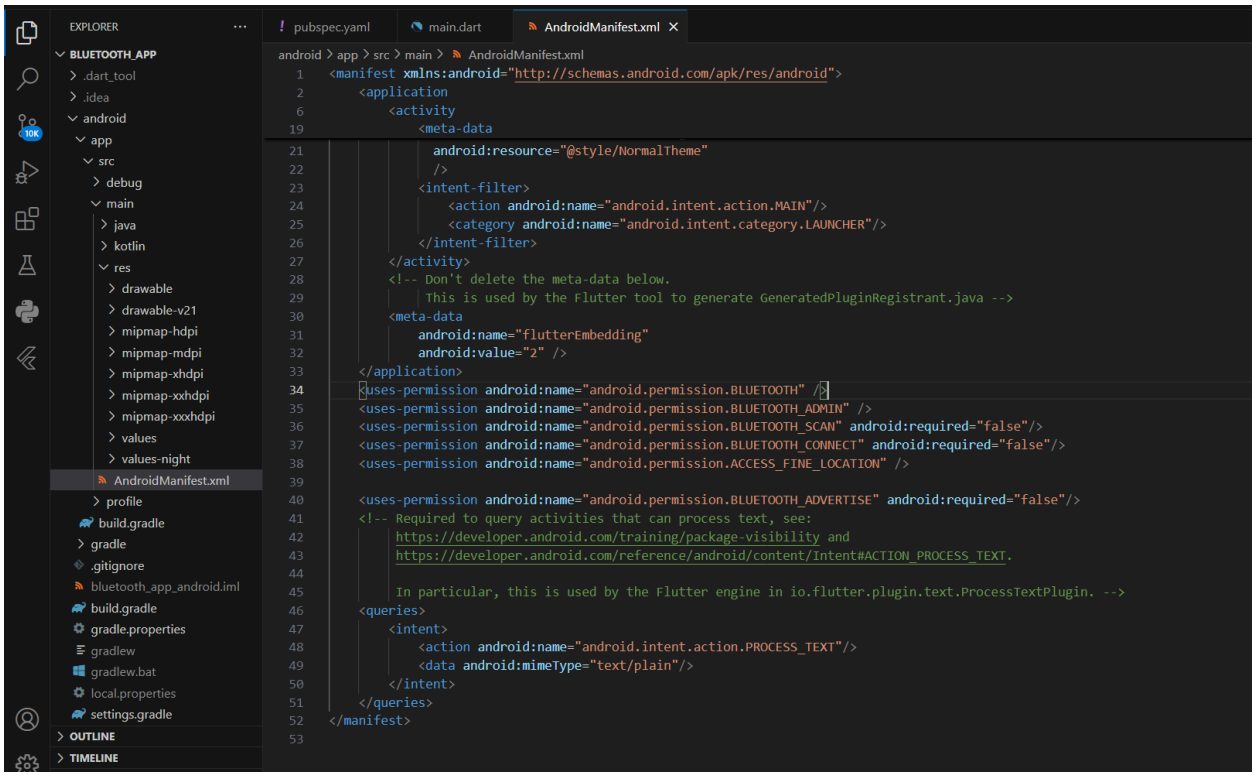


2. Bagian Bluetooth :

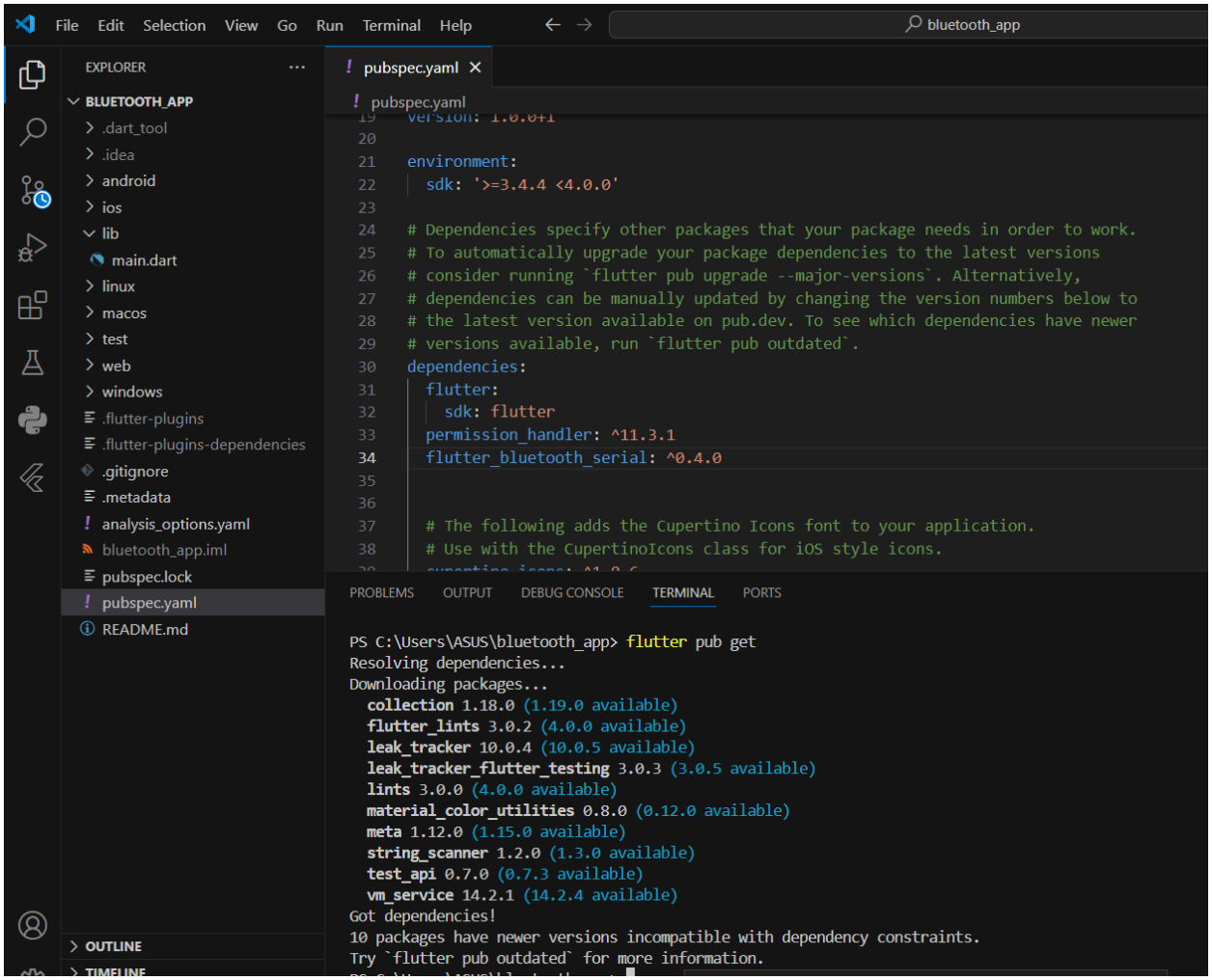
```
PS C:\Users\ASUS> flutter create bluetooth_app
Creating project bluetooth_app...
Resolving dependencies in `bluetooth_app`... (1.9s)
Downloading packages...
Got dependencies in `bluetooth_app`.
Wrote 129 files.

All done!
You can find general documentation for Flutter at: https://docs.flutter.dev/
Detailed API documentation is available at: https://api.flutter.dev/
If you prefer video documentation, consider: https://www.youtube.com/c/flutterdev

In order to run your application, type:

  $ cd bluetooth_app
  $ flutter run

Your application code is in bluetooth_app\lib\main.dart.

PS C:\Users\ASUS> cd bluetooth_app
PS C:\Users\ASUS\bluetooth_app>
```

Untuk bagian bluetooth langkah menginstalnya juga sama seperti wifi. File - new windows - terminal - new terminal - lalu ketik “flutter create bluetooth_app” dan enter.

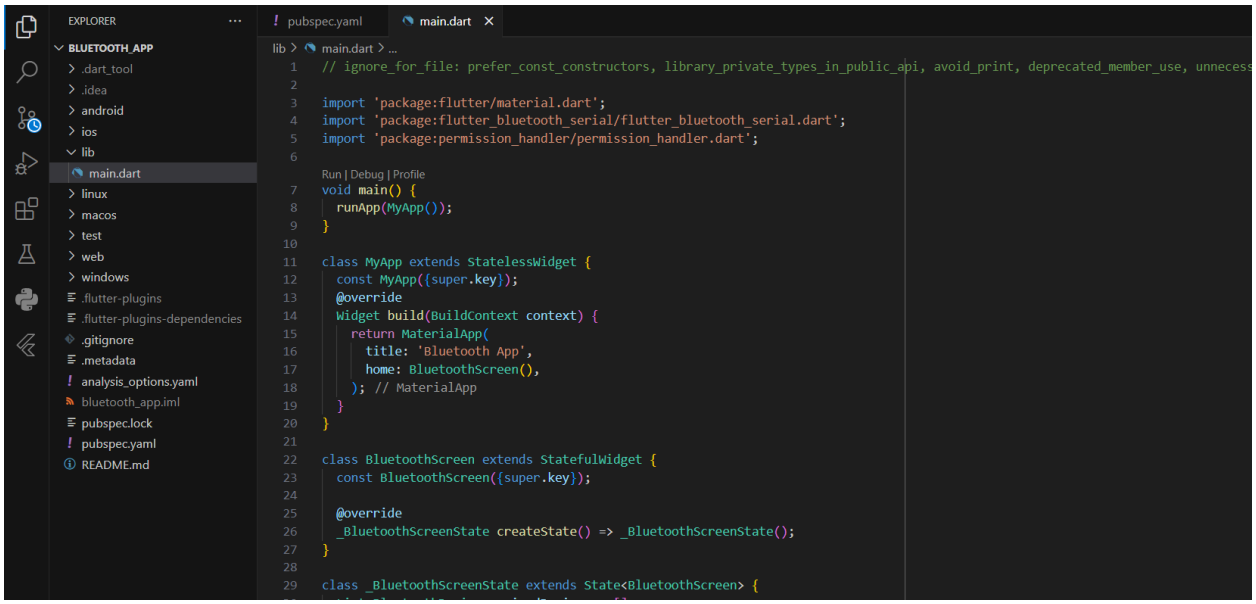
Selanjutnya ketik “cd bluetooth_app” dan enter. Jika sudah buka file C-USERS-USER- dan cari bluetooth_app”



Pada file pubspec.yaml tambahkan code yang ada di line 33-34 dan sejajarkan dengan dependencies.

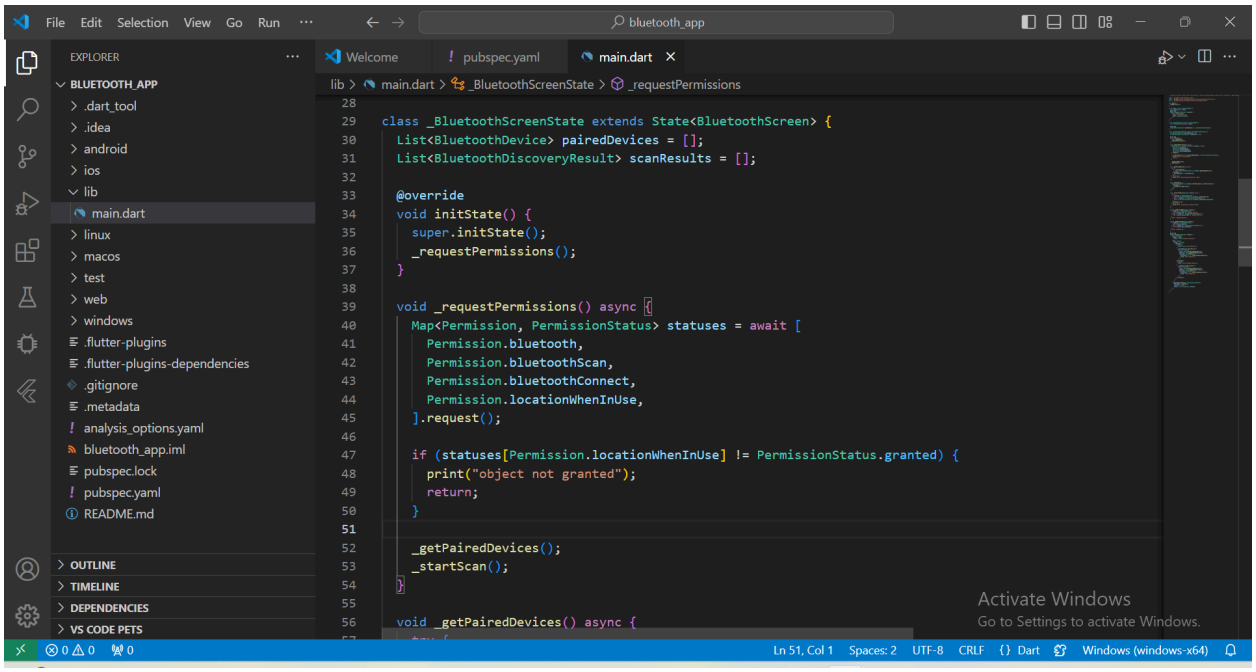


Klik tanda tiga lagi - terminal - new terminal lalu ketik “flutter pub get” dan enter.

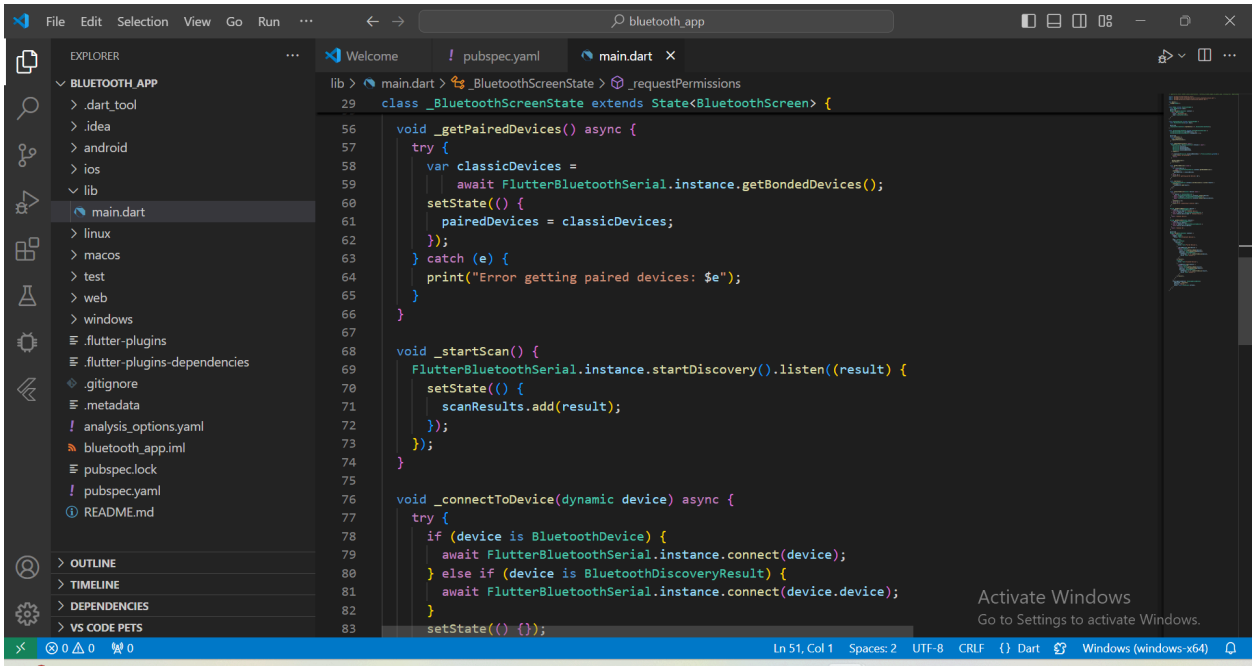


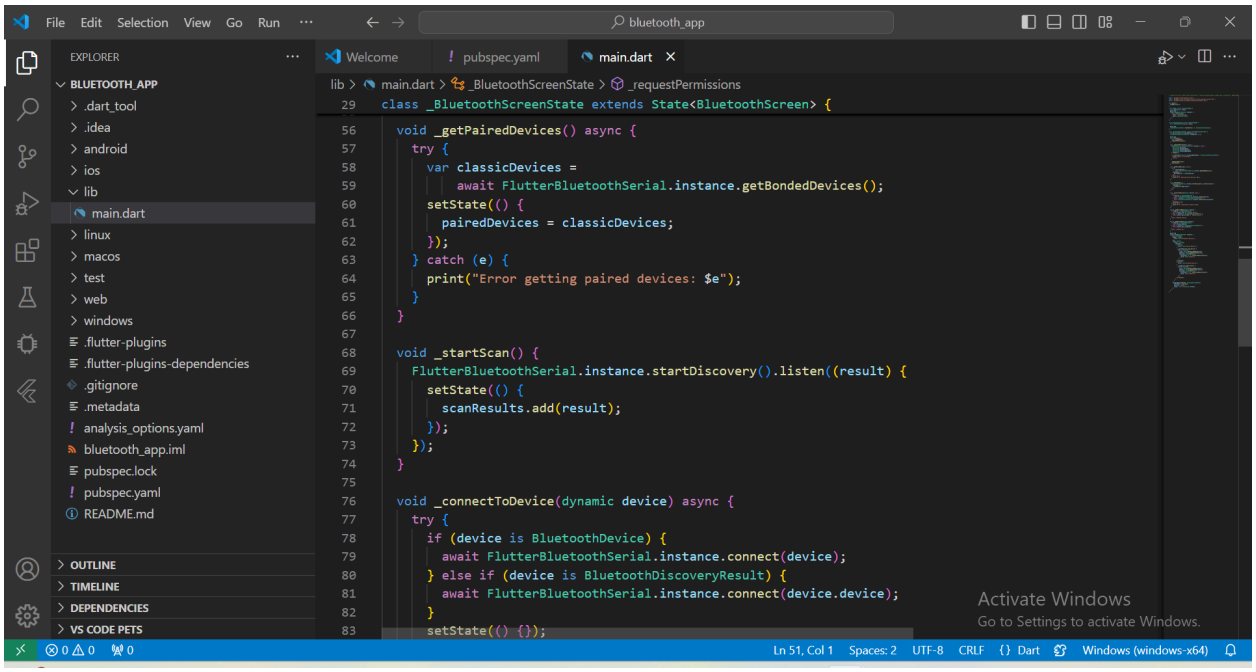
```
// ignore_for_file: prefer_const_constructors, library_private_types_in_public_api, avoid_print, deprecated_member_use, unnecess

import 'package:flutter/material.dart';
import 'package:flutter_bluetooth_serial/flutter_bluetooth_serial.dart';
import 'package:permission_handler/permission_handler.dart';

Run | Debug | Profile
void main() {
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Bluetooth App',
      home: BluetoothScreen(),
    ); // MaterialApp
  }
}

class BluetoothScreen extends StatefulWidget {
  const BluetoothScreen({super.key});

  @override
  _BluetoothScreenState createState() => _BluetoothScreenState();
}

class _BluetoothScreenState extends State<BluetoothScreen> {
```

Pada folder lib - main.dart lalu masukkan code yang tertera digambar. Lalu ctrl + S



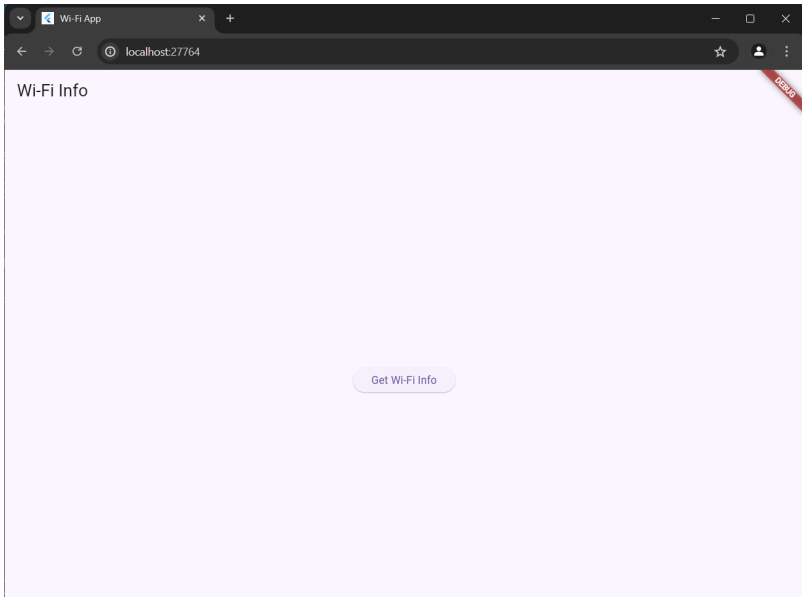
```
class _BluetoothScreenState extends State<BluetoothScreen> {
  List<BluetoothDevice> pairedDevices = [];
  List<BluetoothDiscoveryResult> scanResults = [];

  @override
  void initState() {
    super.initState();
    _requestPermissions();
  }

  void _requestPermissions() async {
    Map<Permission, PermissionStatus> statuses = await [
      Permission.bluetooth,
      Permission.bluetoothScan,
      Permission.bluetoothConnect,
      Permission.locationWhenInUse,
    ].request();

    if (statuses[Permission.locationWhenInUse] != PermissionStatus.granted) {
      print("object not granted");
      return;
    }

    _getPairedDevices();
    _startScan();
  }

  void _getPairedDevices() async {
```





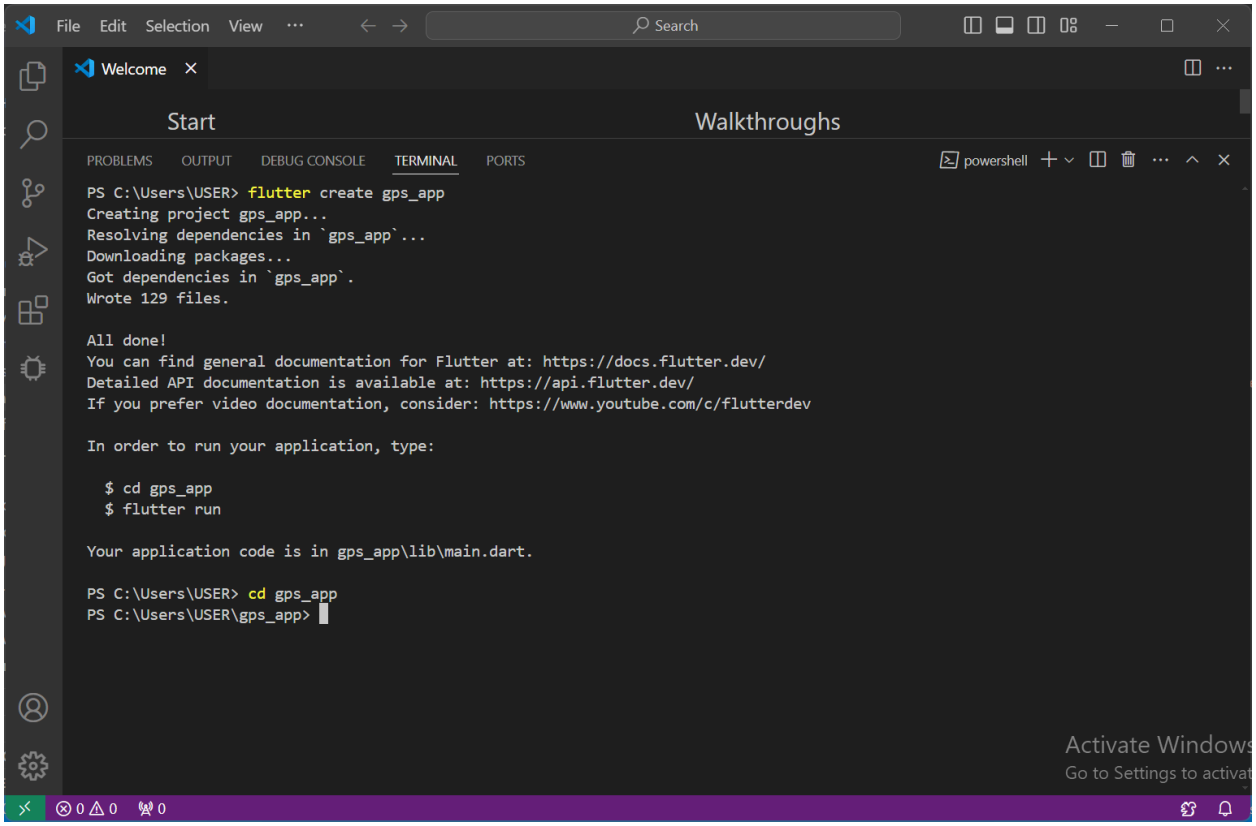
Jika sudah selesai lakukan langkah-langkah seperti wifi_app. Klik tanda tiga diatas - terminal - new terminal - dan ketik “flutter run” lalu enter

Hasil Output:

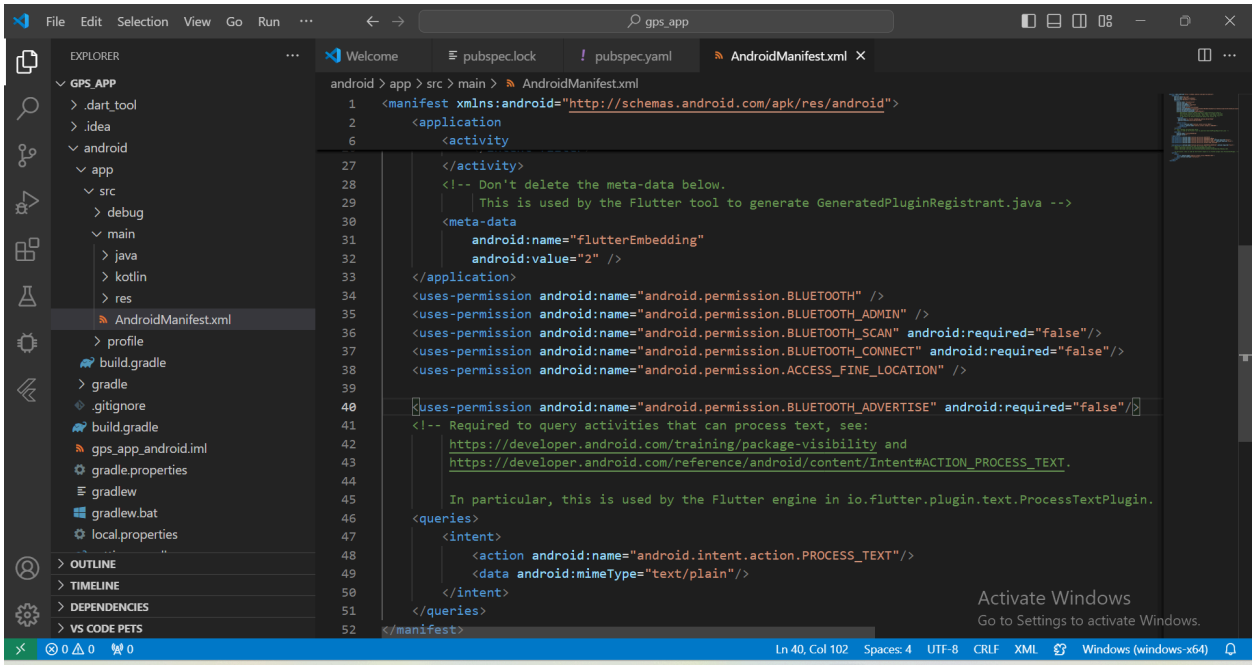


Note: ketika ingin melakukan “Run” harus menyalakan bluetooth yang ada pada laptop. Jika perangkat laptop pernah terhubung pada hp atau perangkat lain selain earphone akan ada tulisannya pada hasil output.

3. Bagian Gps



Pilih tanda titik tiga diatas - terminal - new terminal - ketik “flutter create gps_app” lalu enter. Kemudia dibawahnya Ketik lagi “cd gps_app” lalu enter

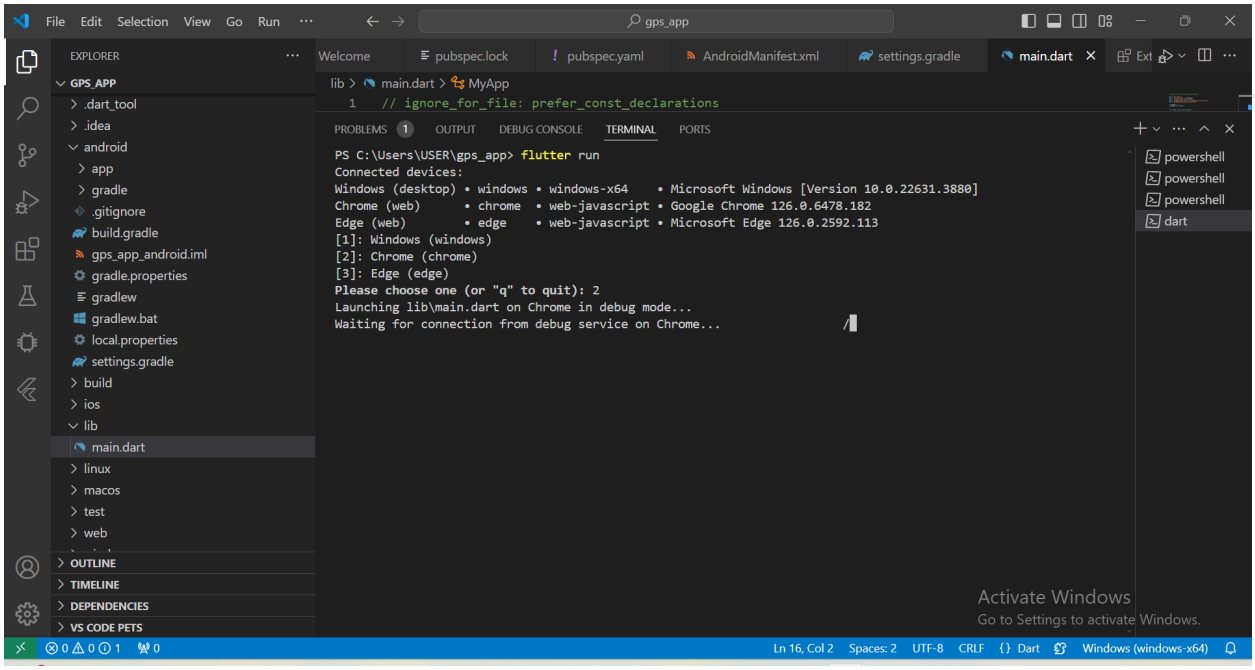


Klik android - app - src - main - androidManifest.xml dibagian bawah application masukkan code berikut ini.

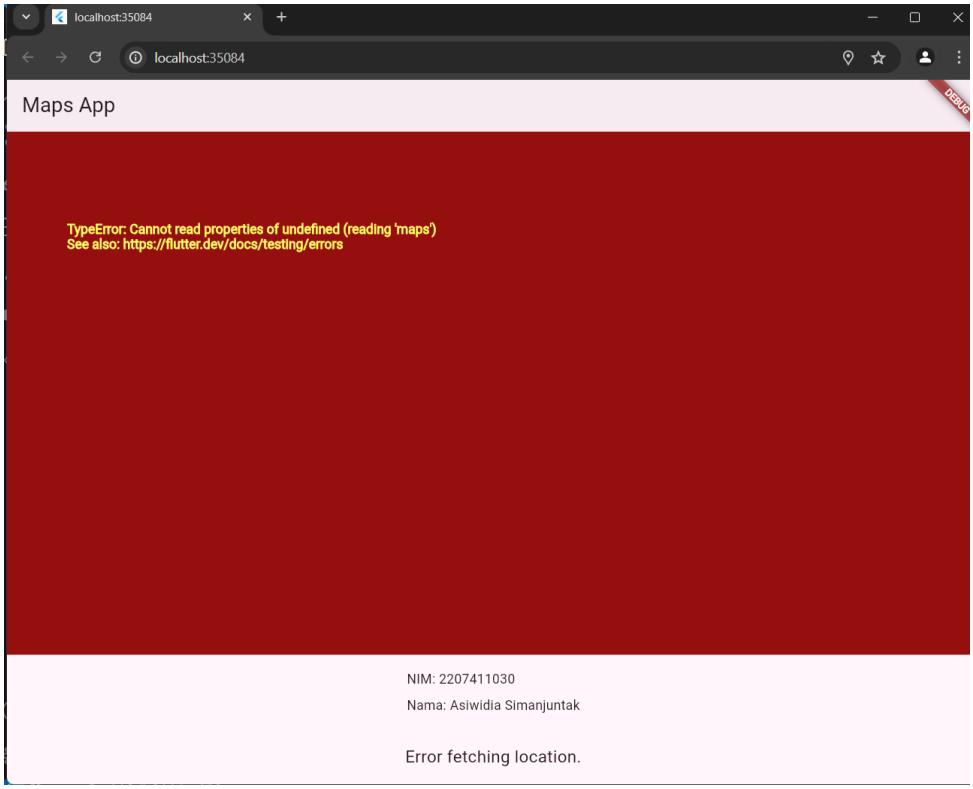
```
 <uses-permission android:name="android.permission.BLUETOOTH" />
   <uses-permission android:name="android.permission.BLUETOOTH_ADMIN"
/>
   <uses-permission android:name="android.permission.BLUETOOTH_SCAN"
android:required="false"/>
   <uses-permission
android:name="android.permission.BLUETOOTH_CONNECT"
android:required="false"/>
   <uses-permission
android:name="android.permission.ACCESS_FINE_LOCATION" />

   <uses-permission
android:name="android.permission.BLUETOOTH_ADVERTISE"
android:required="false"/>
```

Jika sudah ke bagian meta-data dan tambahkan code berikut.

```
      <meta-data
         android:name="com.google.android.geo.API_KEY"
         android:value="AIzaSyBQEuiXMJseti4EmnL1LvlizXQfCTrPeF8"/>

   <uses-permission android:name="android.permission.INTERNET"/>
   <uses-permission
android:name="android.permission.ACCESS_FINE_LOCATION" />
   <uses-permission
android:name="android.permission.ACCESS_COARSE_LOCATION" />
```


File Edit Selection View Go Run
gps_app
EXPLORER
GPS_APP
.dart_tool
.idea
android
app
gradle
.gitignore
build.gradle
gps_app_android.iml
gradle.properties
gradlew
gradlew.bat
local.properties
settings.gradle
build
ios
lib
main.dart
linux
macos
test
web
OUTLINE
TIMELINE
DEPENDENCIES
VS CODE PETS
Welcome
pubspec.lock
pubspec.yaml
AndroidManifest.xml
settings.gradle
main.dart
lib > main.dart > MyApp
1 // ignore_for_file: prefer_const_declarations
PROBLEMS 1
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\USER\gps_app> flutter run
Connected devices:
Windows (desktop) • windows • windows-x64 • Microsoft Windows [Version 10.0.22631.3880]
Chrome (web) • chrome • web-javascript • Google Chrome 126.0.6478.182
Edge (web) • edge • web-javascript • Microsoft Edge 126.0.2592.113
[1]: Windows (windows)
[2]: Chrome (chrome)
[3]: Edge (edge)
Please choose one (or "q" to quit): 2
Launching lib\main.dart on Chrome in debug mode...
Waiting for connection from debug service on Chrome...
powershell
powershell
powershell
dart
Activate Windows
Go to Settings to activate Windows.
Ln 16, Col 2 Spaces: 2 UTF-8 CRLF {} Dart Windows (windows-x64)

Output:


localhost:35084
Maps App
DEBUG
TypeError: Cannot read properties of undefined (reading 'maps')
See also: https://flutter.dev/docs/testing/errors
NIM: 2207411030
Nama: Asiwidia Simanjuntak
Error fetching location.