Experiment No: 6

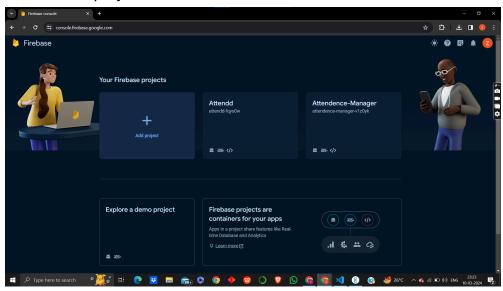
Name:- Vishal Gori Batch: A

Roll No.: 18 Division:- D15B

AIM:- To Set Up Firebase with Flutter for iOS and Android Apps

SetUp Steps:-

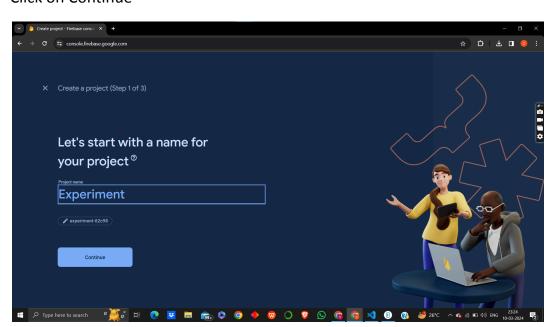
Goto firebase website https://console.firebase.google.com/ Click on Add project

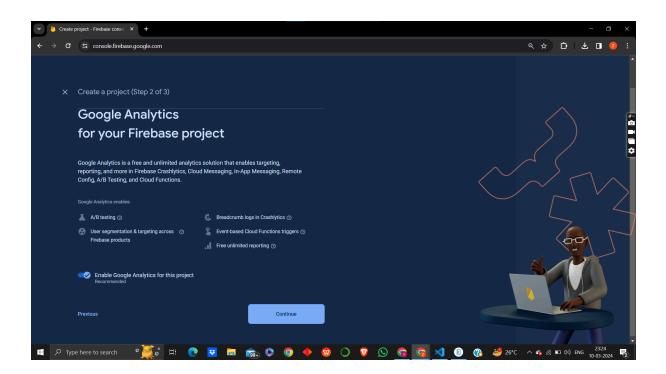


Give a name to the project

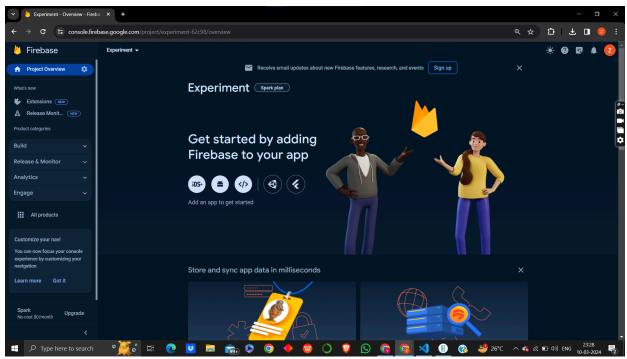
- My project name is **Experiment**

Click on Continue





- Once the project is ready we get navigated to this page



Now Goto your flutter project on VS Code or Android Studio

Step 1: Install the required command line tools

Now we goto our Flutter project where we have written some basic code We will setup firebase for our app using CLI

1. To install CLI

To use npm (the Node Package Manager) to install the Firebase CLI, follow these steps:

- 1. Install <u>Node.js</u> using <u>nvm-windows</u> (the Node Version Manager). Installing Node.js automatically installs the npm command tools.
 - **Note:** The Firebase CLI requires **Node.js v18.0.0 or later**. Some Firebase features might require specific versions of Node.js, so check each Firebase product's getting started page for any specific Node.js requirements.
- 2. Install the Firebase CLI via npm by running the following command:
- 3. npm install -q firebase-tools
- This command enables the globally available firebase command.
 Note: If the npm install -g firebase-tools command fails, you might need to <u>change npm permissions</u>.
- 5. Continue to log in and test the CLI.
- 2. Log into Firebase using your Google account by running the following command: First check weather firebase is logged in using the command

firebase login

It will show the logged in firebase account

```
//home': (context) => HomePage(),

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PS C:\Vishal\Flutter\exp> firebase login
Already logged in as zeusthunder0505@gmail.com

PS C:\Vishal\Flutter\exp>
```

3. Install the FlutterFire CLI by running the following command from any directory: *dart pub global activate flutterfire_cli*

```
PS C:\Vishal\Flutter\exp> firebase login
Already logged in as zeusthunder0505@gmail.com

PS C:\Vishal\Flutter\exp> dart pub global activate flutterfire_cli
Package flutterfire_cli is currently active at version 0.2.7.
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.
Activated flutterfire_cli 0.2.7.

PS C:\Vishal\Flutter\exp>
```

Step 2: Configure your apps to use Firebase

Use the FlutterFire CLI to configure your Flutter apps to connect to Firebase.

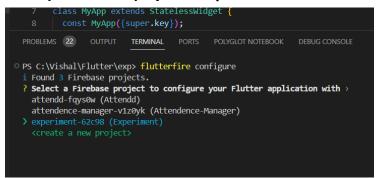
From your Flutter project directory, run the following command to start the app configuration workflow:

Use command

flutterfire configure

To configure your flutter app with firebase project

Select your created project and press enter



Select for which platforms do you want to setup your project

- android
- los
- macos
- web

Use space key to select and deselect and press enter

```
PROBLEMS 22 OUTPUT TERMINAL PORTS POLYGLOT NOTEBOOK DEBUG CONSOLE

O PS C:\Vishal\Flutter\exp> flutterfire configure
i Found 3 Firebase projects.

\sigma select a Firebase project to configure your Flutter application with \cdot experiment-62c98 (Experiment)
? Which platforms should your configuration support (use arrow keys & space to select)? >

\sigma android

\sigma ios
macos
web
```

Now your project is ready and configured with firebase

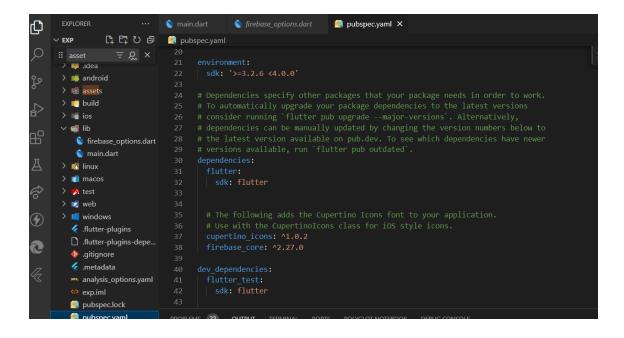
Step 3: Initialize Firebase in your app

1. From your Flutter project directory, run the following command to install the core plugin:

flutter pub add firebase_core

Goto pubspec.yaml

Check Firebase core Added into the dependencies



2. From your Flutter project directory, run the following command to ensure that your Flutter app's Firebase configuration is up-to-date:

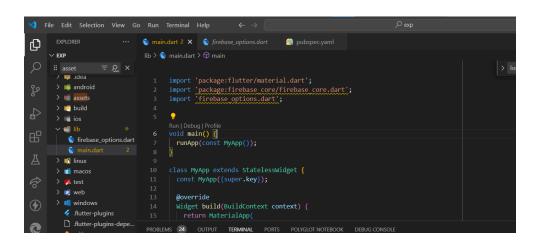
flutterfire configure

3. In your lib/main.dart file, import the Firebase core plugin and the configuration file you generated earlier:

Code:

import 'package:firebase_core/firebase_core.dart';

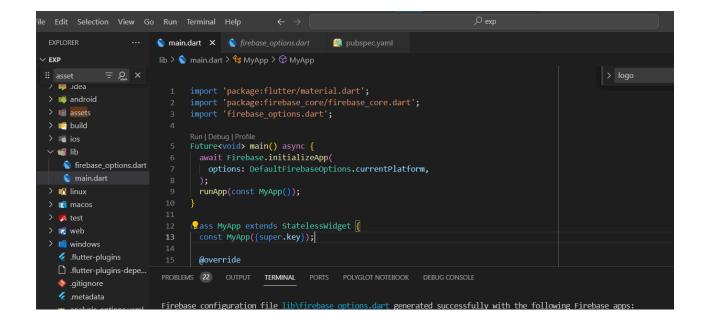
import 'firebase_options.dart';



4. Also in your lib/main.dart file, initialize Firebase using the DefaultFirebaseOptions object exported by the configuration file:

Code:

```
await Firebase.initializeApp(
  options: DefaultFirebaseOptions.currentPlatform,
);
```



5. Rebuild your Flutter application:

flutter run

Step 4: Add Firebase plugins

You access Firebase in your Flutter app through the various <u>Firebase Flutter plugins</u>, one for each Firebase product (for example: Cloud Firestore, Authentication, Analytics, etc.).

Since Flutter is a multi-platform framework, each Firebase plugin is applicable for Apple, Android, and web platforms. So, if you add any Firebase plugin to your Flutter app, it will be used by the Apple, Android, and web versions of your app.

Here's how to add a Firebase Flutter plugin:

1. From your Flutter project directory, run the following command:

flutter pub add PLUGIN_NAME

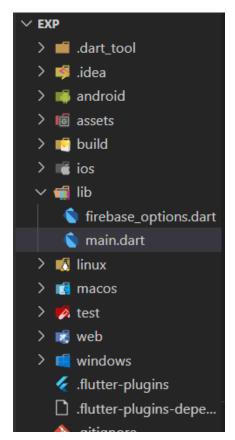
2. From your Flutter project directory, run the following command:

flutterfire configure

- 3. Running this command ensures that your Flutter app's Firebase configuration is up-to-date and, for Crashlytics and Performance Monitoring on Android, adds the required Gradle plugins to your app.
- 4. Once complete, rebuild your Flutter project:

flutter run

You're all set! Your Flutter apps are registered and configured to use Firebase.



After the setup a **firebse_options.dart** file is create

This file has all the necessary configuration keys for various platforms In our case for android and ios

Conclusion:- By following all the above steps we configured our flutter app with the firebase to use all its functionalities, the method we used was firebase CLI which made it easy to set up by just using some commands.