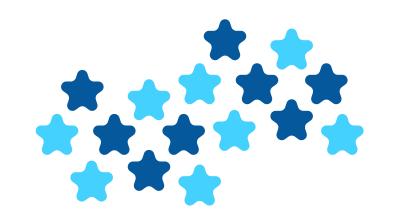


# Introduction to Firebase

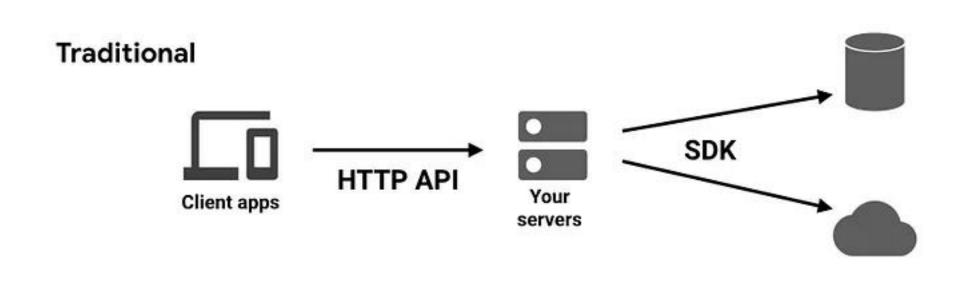








Firebase is a toolset to "build, improve, and grow your app", and the tools it gives you cover a large portion of the services that developers would normally have to build themselves, but don't really want to build, because they'd rather be focusing on the app experience itself. This includes things like *analytics, authentication, databases, configuration, file storage, push messaging,* and the list goes on. The services are hosted in the cloud, and scale with little to no effort on the part of the developer.







### Firebase Services





- Authentication user login and identity
- **Realtime Database** realtime, cloud hosted, NoSQL database
- Cloud Firestore realtime, cloud hosted, NoSQL database
- Cloud Storage massively scalable file storage
- Cloud Functions "serverless", event driven backend
- Firebase Hosting global web hosting
- ML Kit —SDK for common ML tasks

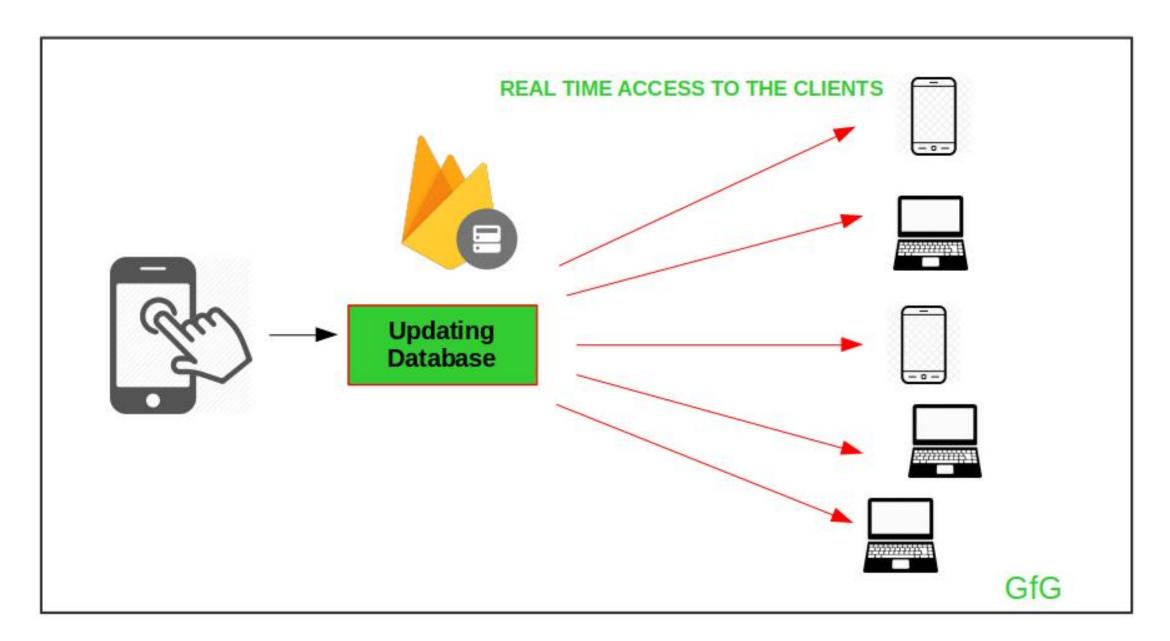






This is different than traditional app development, which typically involves writing both frontend and backend software. The frontend code just invokes API endpoints exposed by the backend, and the backend code actually does the work. However, with Firebase products, the traditional backend is bypassed, putting the work into the client. Administrative access to each of these products is provided by the <u>Firebase console</u>.

The way Firebase products work, some people might call Firebase a "platform as a service" or a "backend as a service".





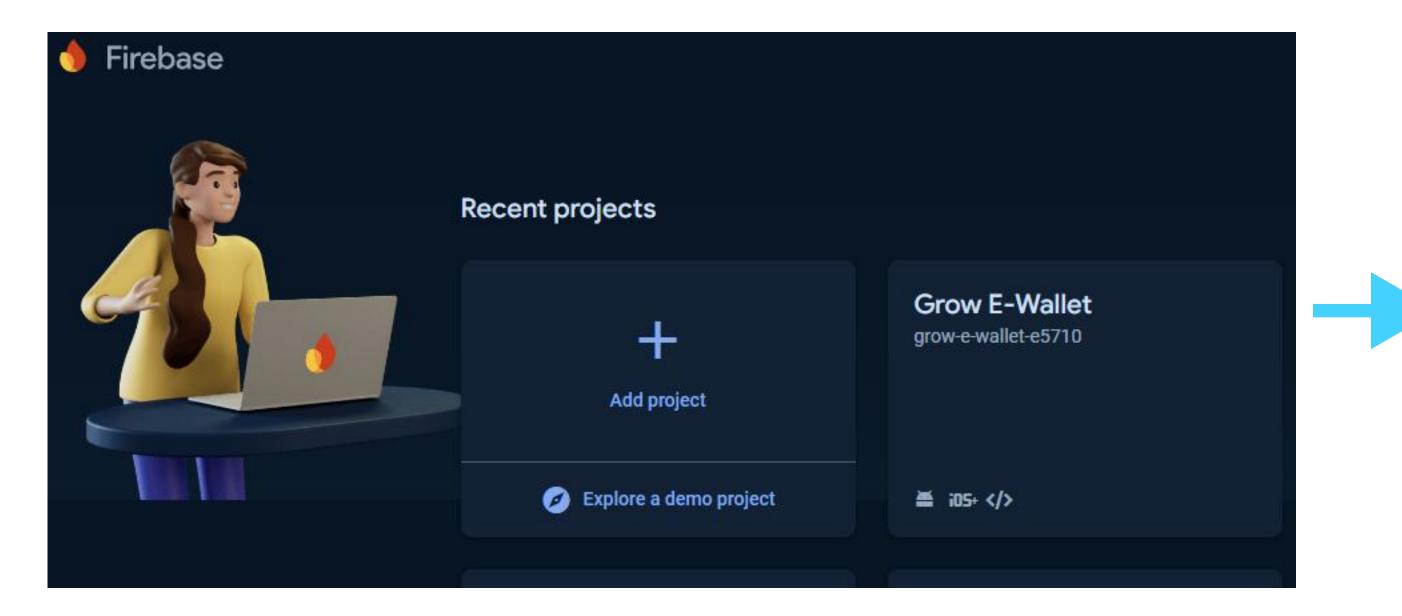


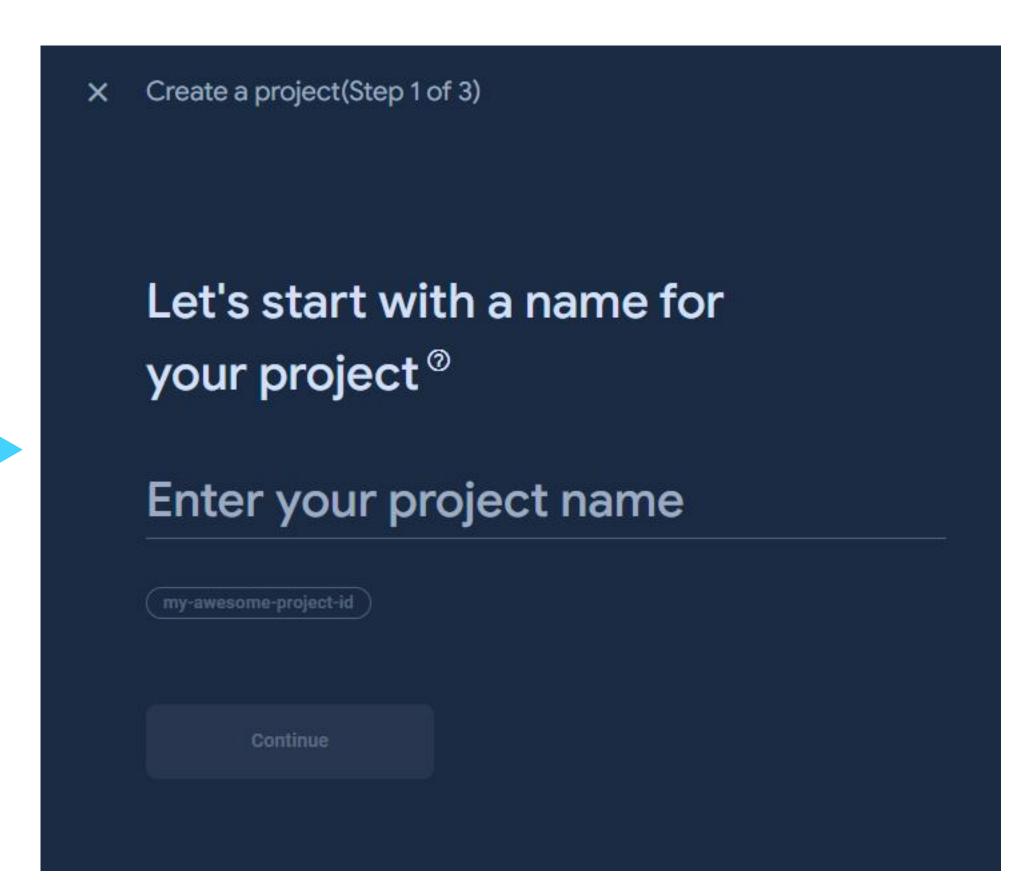
#### Set-Up Firebase





1. Go to https://console.firebase.google.com/u/0/





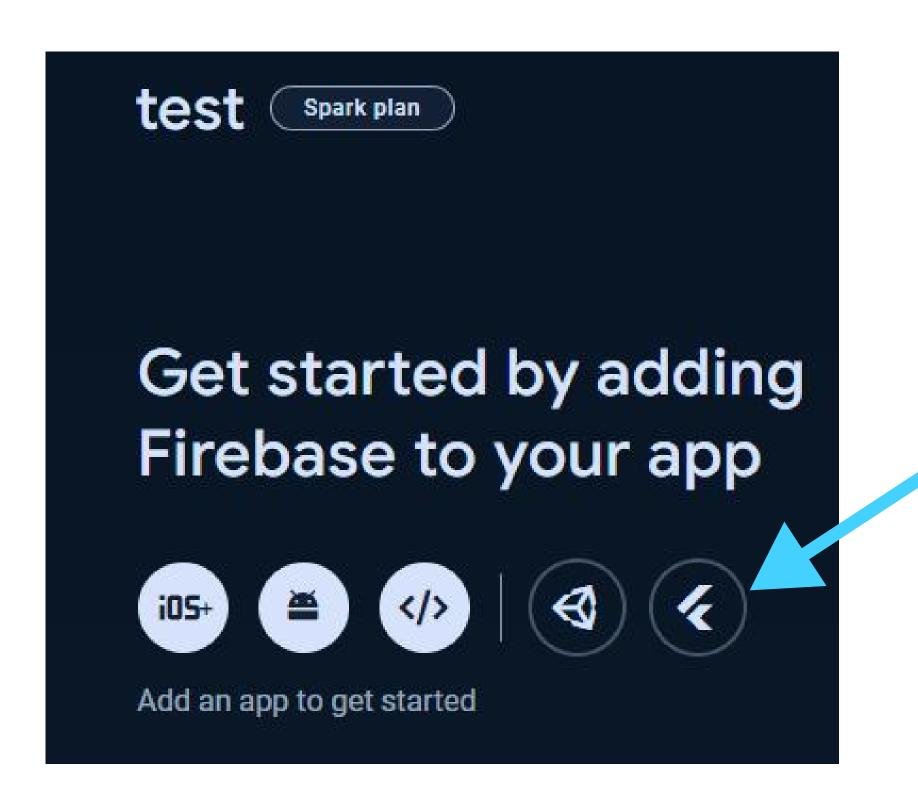


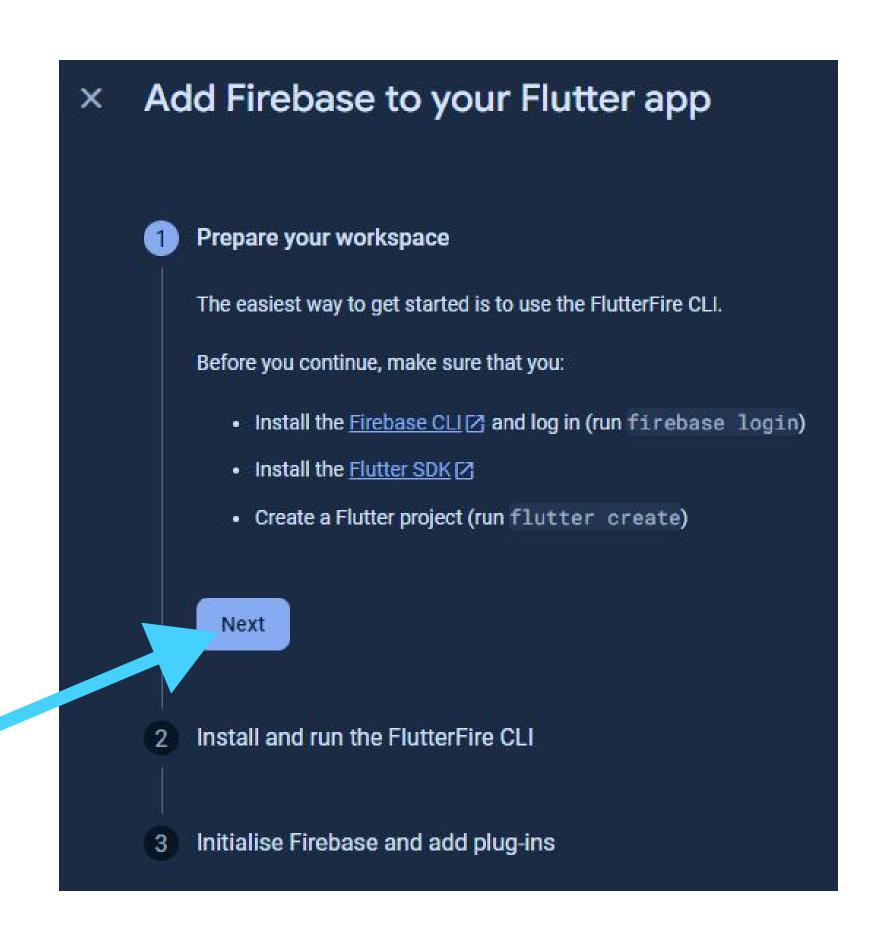


#### Set-Up Firebase













## Initialize The Firebase on Your Projects





On your main.dart change the void main() to:

```
Future<void> main() async {
    WidgetsFlutterBinding.ensureInitialized();
    await Firebase.initializeApp(options: DefaultFirebaseOptions.currentPlatform);
    runApp(const MyApp());
}
```

