

EXPERIMENT - 06

AIM : To connect Flutter UI with Firebase database.

THEORY :

Firebase helps developers to manage their mobile app easily. It is a service provided by Google. Firebase has various functionalities available to help developers manage and grow their mobile apps.

Steps to Add firebase to our Flutter app using Firebase CLI

1. Install the Firebase CLI and log in (run `firebase login`)
2. From any directory, run this command:
 - a. `dart pub global activate flutterfire_cli`
3. Then, at the root of your Flutter project directory, run this command:
 - a. `flutterfire configure --project=questitnextjs`
4. This automatically registers your per-platform apps with Firebase and adds a `lib/firebase_options.dart` configuration file to your Flutter project.
5. To initialise Firebase, call `Firebase.initializeApp` from the `firebase_core` package with the configuration from your new `firebase_options.dart` file:

```
import 'package:firebase_core/firebase_core.dart';
```

```
import 'firebase_options.dart';  
await Firebase.initializeApp(  

```

```
  options: DefaultFirebaseOptions.currentPlatform,  
);
```

6. Add the dependencies in the `pubspec.yaml` file

```
Flutterfire_core : ^version  
Flutterfire_auth : ^version  
Flutterfire_store : ^version
```

CODE :

```
void main() async {  
  // Initialize Firebase  
  WidgetsFlutterBinding.ensureInitialized();  
  await Firebase.initializeApp(  
    options: DefaultFirebaseOptions.currentPlatform,  
  );  
  runApp(const MyApp());  
}
```

Adding user :

```
UserCredential userCredential = await  
FirebaseAuth.instance.createUserWithEmailAndPassword(  
  email: email,  
  password: password,  
);
```

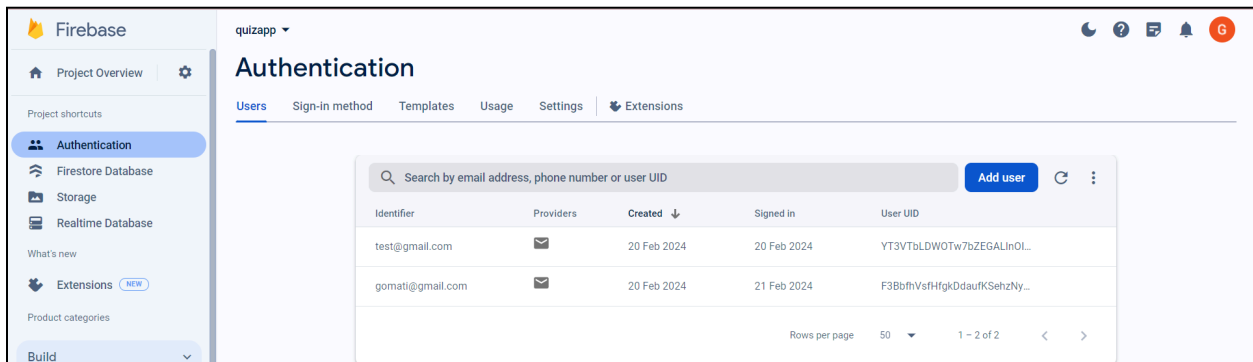
// Add user details to Firestore

```
await FirebaseFirestore.instance.collection('users').doc(userCredential.user!.uid).set({  
  'username': username,  
  'email': email,  
  'password': password,  
});
```

// Navigate to the home page







```
Navigator.push(  
  context,  
  MaterialPageRoute(builder: (context) => UserLandingPage()),  
);
```

OUTPUT :



The screenshot shows the Firebase Authentication console for a project named 'quizapp'. The 'Users' tab is selected, displaying a table of users. The table has columns for Identifier, Providers, Created, Signed in, and User UID. Two users are listed: 'test@gmail.com' and 'gomati@gmail.com', both created on February 20, 2024. The console also includes a search bar, an 'Add user' button, and pagination controls at the bottom.

Identifier	Providers	Created ↓	Signed in	User UID
test@gmail.com	📧	20 Feb 2024	20 Feb 2024	YT3VTbLDW0Tw7bZEGALn0L...
gomati@gmail.com	📧	20 Feb 2024	21 Feb 2024	F3BbfnVsfHfgkDdaufKSehzNy...

 > users > F3BbfhVsfHfgk...		
 (default)	 users  	 F3BbfhVsfHfgkDdaufKSehzNy292
+ Start collection categories questions users >	+ Add document F3BbfhVsfHfgkDdaufKSehzNy292 > YT3VTbLDW0Tw7bZEGAL1n0ICCCJ3	+ Start collection + Add field email: "gomati@gmail.com" password: "Test@1234" username: "gomati"

Conclusion : Thus , we have successfully connected firebase to our flutter app.