

Experiment 6	
Name	Pratik Manish Patil
Roll No	40
DOP	
DOS	
Sign	
Grade	

**Aim:** To connect flutter UI with firebase database

**Theory:**

Connecting a Flutter application to a Firebase database allows for seamless real-time data storage and retrieval, making apps dynamic and responsive. Firebase offers two main database services: Cloud Firestore (a flexible, scalable NoSQL cloud database) and Realtime Database (a tree-structured JSON database for real-time syncing).

In Flutter, Firebase integration is achieved using the `firebase_core` and `cloud_firestore` (or `firebase_database`) packages. After initializing Firebase in the app, data can be added, read, updated, and deleted directly through Firebase methods. Flutter widgets can be connected to database streams, ensuring that any changes in the database are instantly reflected in the UI.

This integration enhances app functionality by enabling persistent data storage, user-specific content, and real-time updates, making it essential for building modern mobile applications.

## Output:

firebase-QuestIT ▾





Authentication

[Users](#) | [Sign-in method](#) | [Templates](#) | [Usage](#) | [Settings](#) | [Extensions](#)

The following authentication features will stop working when Firebase Dynamic Links shuts down on 25 August 2025: email link authentication for mobile apps, as well as Cordova OAuth support for web apps.

Search by email address, phone number or user UID

Add user

Identifier	Providers	Created ▾	Signed in	User UID
square710@gmail.com		1 Mar 2025	1 Mar 2025	xsUHGPSO9BbJFRuvN9upbsk...
pratik.patil9113@gmail....		12 Feb 2025	14 Apr 2025	axYdlIFLiefgpzJuv7Q1mhTKsx...
psqe710@gmail.com		9 Feb 2025	9 Feb 2025	WBf0Y8HdcKVf9fR1HaZMW...
psquare710@gmail.com		9 Feb 2025	10 Feb 2025	GaMTRWqFVsdqU4EfMI1UZI...

Rows per page 50 ▾ 1 – 4 of 4 < >

## Conclusion:

This experiment successfully demonstrates how to integrate Firebase services with a Flutter application. By implementing user signup, login, and data submission features, we explored the use of Firebase Authentication for secure user management and Cloud Firestore for real-time database storage. The flow between screens and backend interaction highlights the power and simplicity of using Firebase in Flutter apps, making it an ideal choice for building scalable and responsive mobile applications.