

## Introduction to Firebase

Firebase is Google's mobile and web application development platform that provides a suite of backend services—authentication, real-time database, storage, analytics, hosting, and more—so you can focus on building great user experiences rather than managing servers. Its key benefits include:

- Fully managed services (no servers to maintain)
- Scalable infrastructure that grows with your app
- Rich feature set (Auth, Firestore, Realtime Database, Cloud Functions, Hosting, etc.)
- Easy integration with web frameworks via JavaScript/TypeScript SDKs

## Important Firebase Terms

Term	Meaning
Firebase Project	A container for your app and its services
Web App	A Firebase-connected frontend interface
Firebase Config	A JavaScript object with credentials to connect your app to Firebase
SDK	Software Development Kit – a set of tools used to work with Firebase
Authentication	Firebase service for login/signup using Google, Email, etc.
Authorized Domains	Safe URLs (A URL (Uniform Resource Locator) is the web address that identifies the location of a specific resource on the internet, such as a webpage, image, or document.) from which Firebase accepts login requests
Firestore / Realtime DB	Firebase's cloud databases
Hosting	A service to publish your web app

#### **Prerequisites**

Before you begin:

- A Google account (to access Firebase Console).
- Node.js and npm installed (if using the npm SDK).
- A basic web app scaffold (HTML/CSS/JS) or framework setup (e.g. React, Vue).

### Creating Your Firebase Project

- 1. Sign in to Firebase Console at <a href="https://console.firebase.google.com">https://console.firebase.google.com</a>.
- 2. Click "Add project", Project name: BIG-POCKET, and follow the prompts.
- 3. Observe your newly created project's Dashboard, with default Spark (free) plan active.

#### Register Your Web App

- 1. Inside your project, click on the "</>" (Web icon) to add a Web App
- 2. Name it: BIG-POCKET-APP
- 3. Click "Register App"
- 4. It shows you a **Firebase Config object** like this:



authDomain: "big-pocket-80563.firebaseapp.com",

storageBucket: "big-pocket-80563.firebasestorage.app",

appId: "1:1058217657377:web:025a3d2c2a49943b414f60",

projectId: "big-pocket-80563",

measurementId: "G-BLQ8SMVQN2"

messagingSenderId: "1058217657377",

### Add Firebase to Your JavaScript App

- Add Firebase scripts in HTML
- Inside a JS file add Firebase Config Object
- Initialize Firebase
- Now Firebase is connected.

# Set Up Authentication

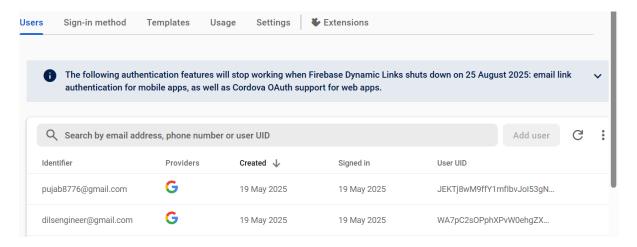
- 1. Go to Authentication  $\rightarrow$  Sign-in method
- 2. Enable Google and any other providers (e.g., Email/Password)
- 3. Go to Authentication  $\rightarrow$  Settings  $\rightarrow$  Authorized Domains Add:
  - localhost
  - 0 127.0.0.1
  - o comeonsom.github.io
  - big-pocket-80563.firebaseapp.com
  - o big-pocket-80563.web.app

This ensures Firebase accepts login requests from your app.

#### Check Users

You'll see all users in **Authentication**  $\rightarrow$  **Users**:

- Email addresses
- Sign-in methods
- Sign-up dates



Now you are good to go!