

# **Application Systems Development for Business Analytics**

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**Creating Firebase Account and Firestore Database**

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← → ↻ 🔒 [firebase.google.com](https://firebase.google.com)

Login with your gmail account.



Firebase

Products ▾

Use Cases

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[Go to console](#)



# Firebase helps you build and run successful apps

Backed by Google and loved by app development  
teams - from startups to global enterprises

[Get started](#)

[Try demo](#)

[Watch video](#)





# Welcome to Firebase!

Tools from Google for building app infrastructure, improving app quality and growing your business

Create a project

 [View docs](#)




✕ Create a project(Step 1 of 3)

Let's start with a name for  
your project<sup>?</sup>

Project name

democpp

 democppfiredev

☒ I accept the [Firebase terms](#)

Continue

## Google Analytics for your Firebase project

Google Analytics is a free and unlimited analytics solution that enables targeting, reporting and more in Firebase Crashlytics, Cloud Messaging, In-App Messaging, Remote Config, A/B Testing, Predictions and Cloud Functions.

Google Analytics enables:

- × A/B testing ?
- × User segmentation and targeting across Firebase products ?
- × Predicting user behaviour ?
- × Crash-free users ?
- × Event-based Cloud Functions triggers ?
- × Free unlimited reporting ?

☐ Enable Google Analytics for this project  
Recommended

[Previous](#)

Not  
mandatory

Create project



democpp

✓ Your new project is ready

Continue



Firebase



Project Overview



## Build

Authentication, Firestore Database, ...

## Release and monitor

Crashlytics, Performance, Test Lab ...

## Analytics

Dashboard, Realtime, Events, Conve...

## Engage

Predictions, A/B Testing, Cloud Mes...

democpp ▾

Go to docs



S



Receive email updates about new Firebase features, research and events

Sign up



democpp

Spark plan



# Get started by adding Firebase to your app

iOS






Add an app to get started



**Build** [Authentication](#) [Firestore Database](#) [Realtime Database](#) [Storage](#) [Hosting](#) [Functions](#) [Machine Learning](#)**Release and monitor**[Crashlytics, Performance, Test Lab ...](#)**Analytics**[Dashboard, Realtime, Events, Conve...](#)**Engage**[Predictions, A/B Testing, Cloud Mes...](#)

# Firestore

**Build** [Authentication](#) [Firestore Database](#) [Realtime Database](#) [Storage](#) [Hosting](#) [Functions](#) [Machine Learning](#)

## Cloud Firestore

Real-time updates, powerful queries and automatic scaling

[Create database](#)

## Create database



- 1 Secure rules for Cloud Firestore
- 2 Set Cloud Firestore location

After you've defined your data structure, you will need to write rules to secure your data.

[Learn more](#)

### ☐ Start in **production mode**

Your data is private by default. Client read/write access will only be granted as specified by your security rules.

### ☒ Start in **test mode**

Your data is open by default to enable quick setup. However, you must update your security rules within 30 days to enable long-term client read/write access.

```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {
    match /{document=**} {
      allow read, write: if
        request.time < timestamp.date(2021, 8, 20);
    }
  }
}
```



The default security rules for test mode allow anyone with your database reference to view, edit and delete all data in your database for the next 30 days

Enabling Cloud Firestore will prevent you from using Cloud Datastore with this project, notably from the associated App Engine app

Cancel

Next



## Create database



Secure rules for Cloud Firestore

2

Set Cloud Firestore location

Your location setting is where your Cloud Firestore data will be stored.



After you've set this location, you cannot change it later. Also, this location setting will be the location for your default Cloud Storage bucket.

[Learn more](#)

Cloud Firestore location

asia-south1










Enabling Cloud Firestore will prevent you from using Cloud Datastore with this project, notably from the associated App Engine app

Cancel

Enable

**Build**

-  Authentication
-  **Firestore Database**
-  Realtime Database
-  Storage
-  Hosting
-  Functions
-  Machine Learning

**Release and monitor**

Crashlytics, Performance, Test Lab ...

**Analytics**

Dashboard, Realtime, Events, Conve...

**Engage**


Predictions, A/B Testing, Cloud Mes...

# Cloud Firestore

[Data](#)
[Rules](#)
[Indexes](#)
[Usage](#)


Prototype and test end-to-end with the Local Emulator Suite, now with Firebase Authentication

[Get started](#)


 democppfiredev





[+ Start collection](#)


Your database is ready to go. Just add data.

**Project settings**

Users and permissions

Usage and billing

**Build** **Authentication** **Firestore Database** **Realtime Database** **Storage** **Hosting** **Functions** **Machine Learning**

democpp ▾

**store**

democppfiredev

**Start collection**



Firebase



Project Overview



## Build



Authentication



Firestore Database



Realtime Database



Storage



Hosting



Functions



Machine Learning

## Release and monitor

Crashlytics, Performance, Test Lab ...

## Analytics

Dashboard, Realtime, Events, Conve...

## Engage

Predictions, A/B Testing, Cloud Mes...



Extensions

democpp ▾

# Project settings

General

Cloud Messaging

Integration

Service accounts

Data privacy

Users and permissions

## Your project

Project name	democpp
Project ID	democppfiredev
Project number	198677821666
Default GCP resource location	asia-south1
Web API key	No web API key for this project

## Public settings

These settings control instances of your project shown to the public

Public-facing name	project-198677821666
Support email	<input type="text" value="Not configured"/>

## Your apps

There are no apps in your project

Select a platform to get started

iOS



## × Add Firebase to your web app

### 1 Register app

App nickname 

democpp

☐ Also set up **Firebase Hosting** for this app. [Learn more](#) 

Hosting can also be set up later. It's free to get started at any time.

Register app

### 2 Add Firebase SDK

✓ Register app

2 Add Firebase SDK

## Version 8

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services

```
<!-- The core Firebase JS SDK is always required and must be listed first -->
<script src="https://www.gstatic.com/firebasejs/8.7.1/firebase-app.js"></script>

<!-- TODO: Add SDKs for Firebase products that you want to use
https://firebase.google.com/docs/web/setup#available-libraries -->

<script>
  // Your web app's Firebase configuration
  var firebaseConfig = {
    apiKey: "AIzaSyB54OL3iU4ZD6e4U1bD6kNTe0tV3U57zFc",
    authDomain: "firebase-8-test.firebaseapp.com",
    projectId: "firebase-8-test",
    storageBucket: "firebase-8-test.appspot.com",
    messagingSenderId: "123456789012",
    appId: "1:123456789012:web:123456789012"
  };
  // Initialize Firebase
  firebase.initializeApp(firebaseConfig);
</script>
```

Learn more about Firebase for web: [Get started](#), [Web SDK API Reference](#), [Samples](#)

Are you using NPM and a bundler like webpack or Rollup? Take a look at the [modular SDK](#), currently in beta

Continue to the console

✓ Register app

2 Add Firebase SDK

## Version 9

☐ Use npm ☒ Use a <script> tag

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:

```
<script type="module">
  // Import the functions you need from the SDKs you need
  import { initializeApp } from "https://www.gstatic.com/firebasejs/9.6.1/firebase-app.js";
  // TODO: Add SDKs for Firebase products that you want to use
  // https://firebase.google.com/docs/web/setup#available-libraries

  // Your web app's Firebase configuration
  const firebaseConfig = {
    apiKey: "AIzaSyB54OL3iU4ZD6e4U1bD6kNTe0tV3U57zFc",
    authDomain: "firebase-9-test.firebaseapp.com",
    projectId: "firebase-9-test",
    storageBucket: "firebase-9-test.appspot.com",
    messagingSenderId: "123456789012",
    appId: "1:123456789012:web:123456789012"
  };
  // Initialize Firebase
  const app = initializeApp(firebaseConfig);
</script>
```

Are you using npm and a bundler like webpack or Rollup? Take a look at the [modular SDK](#).

Learn more about Firebase for web: [Get started](#), [Web SDK API Reference](#), [Samples](#)

Continue to the console

Only copy the credentials. copy CDN  
from class slides

The screenshot shows the Firebase console interface. On the left is a dark sidebar with the Firebase logo and a menu of services: Project Overview, Build (Authentication, Firestore Database, Realtime Database, Storage, Hosting, Functions, Machine Learning), Release and monitor, Analytics, and Engage. The main area is titled 'Project settings' for the 'democpp' project. A red box highlights the 'Project settings' link in the top navigation bar. Below this, a dropdown menu shows 'Users and permissions' and 'Usage and billing'. The 'Your apps' section lists a 'Web app' named 'democpp'. To the right, the 'App nickname' is 'democpp' and the 'App ID' is '1:198677821666:web:e48ead8248ad14197b06bb'. A button 'Link to a Firebase Hosting site' is present. The 'SDK setup and configuration' section has two radio buttons: 'CDN' and 'Config', with 'Config' selected and highlighted by a red box. Below this, a code block shows the Firebase configuration object with a large red rectangle obscuring the values. A red box highlights the copy icon at the bottom right of the code block. At the bottom of the page is a 'Remove this app' button.

firebase

Project settings

Go to docs

Project settings

Users and permissions

Usage and billing

Your apps

Add app

Web apps

democpp Web App

App nickname

democpp

App ID

1:198677821666:web:e48ead8248ad14197b06bb

Link to a Firebase Hosting site

SDK setup and configuration

CDN Config

Firebase configuration object containing keys and identifiers for your app:

```
const firebaseConfig = {
  apiKey: "1:198677821666:web:e48ead8248ad14197b06bb",
  authDomain: "democpp.firebaseio.com",
  projectId: "democpp",
  storageBucket: "democpp.appspot.com",
  messagingSenderId: "198677821666",
  appId: "1:198677821666:web:e48ead8248ad14197b06bb"
};
```

Remove this app

Can also get the  
credentials from  
Project settings