This quickstart shows you how to set up Cloud Firestore, add data, and read data by using the Android, iOS, or Web client library.

This quickstart uses the Firebase console instead of the Google Cloud Console.

- If you haven't already, create a Firebase project: In the <u>Firebase console</u> (//console.firebase.google.com), click **Add project**, then follow the on-screen instructions to create a Firebase project or to add Firebase services to an existing GCP project.
- 2. From the Firebase console's navigation pane, select **Database**, then click **Create database** for Cloud Firestore.
- 3. Select Test mode for your Cloud Firestore Security Rules:

Test mode

Good for getting started with the mobile and web client libraries, but allows anyone to read and overwrite your data. After testing, **make sure to review the** <u>Secure your data</u> (#secure_your_data) section.

- 4. Select a location (/firestore/docs/locations#types) for your database.
 - This location setting is your project's <u>default Google Cloud Platform (GCP) resource</u> <u>location</u> (/firestore/docs/locations#default-cloud-location). Note that this location will be used for GCP services in your project that require a location setting, specifically, your default <u>Cloud Storage</u> (/storage/docs) bucket and your <u>App Engine</u> (https://cloud.google.com/appengine/docs/) app (which is required if you use Cloud Scheduler).
 - If you aren't able to select a location, then your project already has a default GCP resource location. It was set either during project creation or when setting up another service that requires a location setting.

Warning: After you set your project's default GCP resource location, you cannot change it.

5. Click Done.

Firestore and App Engine: You can't use both Cloud Firestore and Datastore in the same project, which might affect App Engine. Try using Cloud Firestore with a different project if you need to use Datastore.

When you enable Cloud Firestore, it also enables the API in the <u>Cloud API Manager</u> (https://console.cloud.google.com/projectselector/apis/api/firestore.googleapis.com/overview).

Add the required dependencies and client libraries to your app.

Initialize an instance of Cloud Firestore:

Cloud Firestore stores data in Documents, which are stored in Collections. Cloud Firestore creates collections and documents implicitly the first time you add data to the document. You do not need to explicitly create collections or documents.

Create a new collection and a document using the following example code.

Now add another document to the users collection. Notice that this document includes a key-value pair (middle name) that does not appear in the first document. Documents in a collection can contain different sets of information.

To quickly verify that you've added data to Cloud Firestore, use the data viewer in the <u>Firebase</u> <u>console</u> (https://console.firebase.google.com/project/_/database/firestore/data).

You can also use the get method to retrieve the entire collection.

Use <u>Firebase Authentication</u> (//firebase.google.com/docs/auth/) and <u>Cloud Firestore Security Rules</u> (/firestore/docs/security/get-started) to secure your data in Cloud Firestore.

Here are some basic rule sets you can use to get started. You can modify your security rules in the **Rules tab** (https://console.firebase.google.com/project/_/database/firestore/rules) of the Firebase console.

For detailed guidance on getting started with the Cloud Firestore mobile and web client libraries, watch one of the following video tutorials:

You can find more videos in the Firebase YouTube channel (https://www.youtube.com/firebase).

Deepen your knowledge with the following topics:

- Codelabs Learn to use Cloud Firestore in a real app by following the codelab for <u>Android</u> (https://codelabs.developers.google.com/codelabs/firestore-android), <u>iOS</u> (https://codelabs.developers.google.com/codelabs/firestore-ios), or <u>Web</u> (https://codelabs.developers.google.com/codelabs/firestore-web).
- **Data model** (/firestore/docs/data-model) Learn more about how data is structured in Cloud Firestore, including hierarchical data and subcollections.
- <u>Add data</u> (/firestore/docs/manage-data/add-data) Learn more about creating and updating data in Cloud Firestore.
- <u>Get data</u> (/firestore/docs/query-data/get-data) Learn more about how to retrieve data.
- <u>Perform simple and compound queries</u> (/firestore/docs/query-data/queries) Learn how to run simple and compound queries.

 Order and limit queries (/firestore/docs/query-data/order-limit-data) — Learn how to order and limit the data returned by your queries.