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Training



Playground



Quick Training



Hands-On Labs



Learning Paths



Community



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Exploring Cloud Firestore in Datastore Mode

🕒 116 Min. Remaining

📖 Beginner

Cancel Lab

Complete Lab

How was this lab?



Credentials

[How do I connect? ?](#)

Google Labs Account

Username

cloud_user_p_7134a3@linuxacademygclabs.com



Password

lwOS8sQP

[Open Google Console](#)

Tools

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Video

Guide

Define entities.

Entity #1

1. On the **Entities** page, make sure you're in the **Query by Kind** tab.
2. In the **Kind** field, enter **Flights**.
3. Click **Create Entity**.
4. For **Key identifier**, choose **Numeric ID (auto-generated)**.
5. Add the following properties:

- Airline
 - **Name:** Airline
 - **Type:** String
 - **Value:** LA Air, check the **Index this property** box
 - Click **Done**.
 - Click **Add property**.
- Flight Number
 - **Name:** Flight Number
 - **Type:** Integer
 - **Value:** 101, un-check the **Index this property** box
 - Click **Done**.
 - Click **Add property**.
- Arrival
 - **Name:** Arrival
 - **Type:** Data and time
 - **Value:** Current time, check the **Index this property** box
 - Click **Done**.
 - Click **Add property**.
- OnTime
 - **Name:** OnTime
 - **Type:** Boolean
 - **Value:** True, check the **Index this property** box
 - Click **Done**.

6. Click **Create**.

Entity #2

1. Click **Create Entity**.

Additional Information and Resources

You've been charged with setting up a non-relational database for LA International to track flights, arrival times, and on-time status. You decide to use Cloud Firestore in Datastore mode because of its flexible NoSQL structure. After establishing the initial data, you need to run several queries in GQL to ensure all the necessary properties are searchable.

You'll need to accomplish the following steps to complete your task:

1. Enable API.
2. Create database.
3. Create entities.
4. Query the data.

Learning Objectives



Enable APIs.

1. From the main navigation, click **APIs and Libraries** > **Library**.
2. Search for **Datastore**.
3. Click **Enable**.



Create the database.

1. From the main navigation, click **Datastore**.
2. Choose **Datastore Mode**.
3. Select your closest location.

4. Click **Create database**.



Define entities.



1. For **Kind**, enter **Flights**.
2. Click **Create Entity**.
3. Click **Add property** for each of the following entries, of the specified type:
 - **Airline**: String
 - **Flight Number**: Integer
 - **Arrival**: Data and Time
 - **OnTime**: Boolean
4. Click **Save**.
5. Repeat steps 3 and 4 twice more with different values.
6. For the final entry, add another property:
 - **Note**: Text
7. Click **Save**.



Query the data.



1. Switch to **Query by GQL**.
2. In the **Query** field, enter the following:

```
SELECT * FROM Flights
```

3. Click **Run Query**.
4. In the **Query** field, enter the following:

```
SELECT * FROM Flights WHERE OnTime = false
```

5. Click **Run Query**.
6. Review results.