**Exploring Cloud Firestore in Datastore Mode**

In this hands-on lab, we'll see how to build a Firestore NoSQL database in Cloud Datastore mode for the best of both worlds.

How to Log in to Google Lab Accounts

On the lab page, right-click **Open GCP Console** and select the option to open it in a new private browser window (this option will read differently depending on your browser — e.g., in Chrome, it says "Open Link in Incognito Window"). Then, sign in to Google Cloud Platform using the credentials provided on the lab page.

On the *Welcome to your new account* screen, review the text, and click **Accept**. In the "Welcome L.A.!" pop-up once you're signed in, check to agree to the terms of service, choose your country of residence, and click **Agree and Continue**.

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Now, on to the lab!

Enable APIs.

1. From the main navigation, click **APIs and Libraries** > **Library**.
2. Search for **Datastore**.
3. Select the **Cloud Datastore API** card.
4. 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.

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**.
2. In the *Airline* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **LA Air**.
   * Click **Done**.
3. In the *Flight Number* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **102**.
   * Click **Done**.
4. In the *OnTime* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **True**
   * Click **Done**.
5. Click **Create**.

Entity #3

1. Click **Create Entity**.
2. In the *Airline* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **LA Air**.
   * Click **Done**.
3. In the *Flight Number* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **103**.
   * Click **Done**.
4. In the *OnTime* property, click the dropdown arrow to expand it, and enter the following value:
   * *Value*: **False**
   * Click **Done**.
5. Click **Add Property** and use the following values:
   * *Name*: **Note**
   * *Type*: **String**
   * *Value*: **Re-routed due to weather**, un-check the **Index this property** box
   * Click **Done**.
6. Click **Create**.

Query the data.

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

SELECT \* FROM Flights

1. Click **Run Query**.
2. In the *Query* field, enter the following:

SELECT \* FROM Flights WHERE OnTime = false

1. Click **Run Query**.
2. Review results.

Conclusion

Congratulations on completing this hands-on lab!