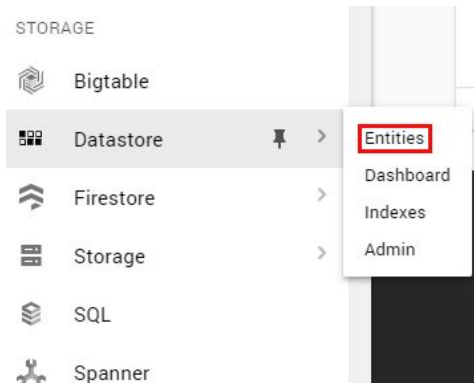


In order to practice exercises with Datastore (GCP NoSQL database), we show below the basic steps to populate table and practice queries on it.

Access to Datastore and enabled Datastore API

In left menu on the Console, Storage section, go to **Datastore > Entities**.




Under the Datastore mode column, click Select Datastore Mode.

1 Select a database service

2 Choose where to store your data

Cloud Firestore is the next generation of Cloud Datastore. You can use Cloud Firestore in either Native mode or Datastore mode, each with distinct system behavior optimized for different types of projects. [Pricing](#) for both modes is based on location, stored data, operations, and network egress with a daily free quota for each. [Learn more about choosing a mode](#)

 The mode you select here will be permanent for this project

	Native mode	Datastore mode
	Enable all of Cloud Firestore's features, with offline support and real-time synchronization. SELECT NATIVE MODE	Leverage Cloud Datastore's system behavior on top of Cloud Firestore's powerful storage layer. SELECT DATASTORE MODE
API	Firestore	Datastore
Scalability	Automatically scales to millions of concurrent clients	Automatically scales to millions of writes per second
App engine support	Not supported in the App Engine standard Python 2.7 and PHP 5.5 runtimes	All runtimes
Max writes per second	10,000	No limit
Real-time updates	✓	✗
Mobile/web client libraries with offline data persistence	✓	✗

[SHOW MORE](#)

Keep in mind, You cannot change the location after it has been saved.

Click Create database.

Click Create Entity.

On the Create an entity page, use [default] for Namespace.

Type restaurants for **Kind**.

Under Properties use the Add property button to add these properties, and click Done after each one. Do not put Value, keep it Empty or default value.

[←](#) Create an entity

Namespace
[default] ?

Kind
restaurants ?

Key identifier
Numeric ID (auto-generated) ▼ ?

✓ SPECIFY PARENT

Properties

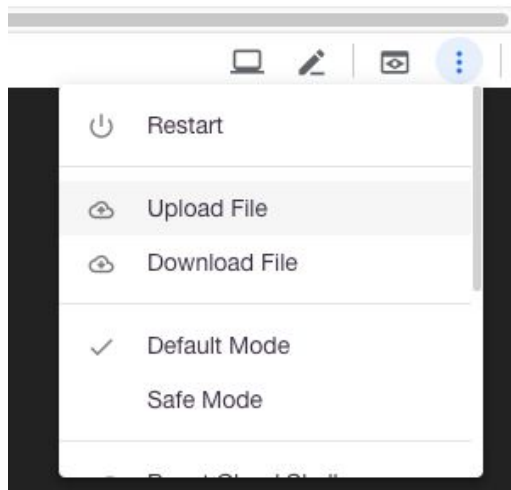
id: Empty Indexed	(Not saved) ▼
name: Empty	(Not saved) ▼
cuisine: Empty	(Not saved) ▼
borough: Empty	(Not saved) ▼
zipcode: Empty	(Not saved) ▼
street: Empty	(Not saved) ▼
building: Empty	(Not saved) ▼
longitude: 0	(Not saved) ▼
latitude: 0 Indexed	(Not saved) ▼
ADD PROPERTY	

CREATE

CANCEL

NOTE: You need to set **Indexed** field in the fields for which you want to use for filter.
If you do not declare it, you cannot update the table.

Open cloud shell and upload two files, **restaurants.json** (in **restaurants.zip**) and **restaurants-to-datastore.py**.



After upload files, execute following command in console.

```
student_00_e21efd4a03aa@cloudshell:~ (qwiklabs-gcp-00-39cb3df9d88f) $ python restaurants-to-datastore.py
```

When the script has finished, you can check the data into the restaurants Entity.

<input type="checkbox"/>	Name/ID ↑	borough	building	cuisine	id	latitude	longitude	name	street
<input type="checkbox"/>	id=4645840605937664	Queens	Astoria Boulevard	American	40395020	40.7634533	-73.8761791	Buccaneer Diner	Astoria Boulevard
<input type="checkbox"/>	id=4661470663016448	Bronx	Arthur Avenue	Italian	40397574	40.8543105	-73.8889027	Dominick'S Bar & Restaurant	Arthur Avenue
<input type="checkbox"/>	id=4667546565345280	Bronx	Grand Concourse	Pizza	40389365	40.8545577	-73.9024234	Vinny'S Famous Pizza	Grand Concourse
<input type="checkbox"/>	id=4670794634362880	Manhattan	Elizabeth Street	American	40398561	40.724614	-73.993143	Tom And Jerry Bar	Elizabeth Street
<input type="checkbox"/>	id=4691066074693632	Bronx	White Plains Road	Bakery	40394761	40.8936238	-73.85694079999999	E & L Bakery & Coffee Shop	White Plains Road
<input type="checkbox"/>	id=4698209544830976	Manhattan	7 Avenue	American	40394762	40.7608268	-73.9837606	Caroline'S On Broadway	7 Avenue
<input type="checkbox"/>	id=4718971685175296	Queens	Northern Boulevard	Hamburgers	40395910	40.7683787	-73.737484	McDonald'S	Northern Boulevard
<input type="checkbox"/>	id=4725190999146496	Manhattan	Broadway	American	40397492	40.79358999999999	-73.97203999999999	Manhattan Diner	Broadway
<input type="checkbox"/>	id=4741803932647424	Manhattan	Lexington Avenue	Cafe/Coffee/Tea	40398588	40.768975	-73.9634559	World Cup Cafe	Lexington Avenue
<input type="checkbox"/>	id=4742831570681856	Manhattan	East 86 Street	Pizza	40395200	40.7782353	-73.9532315	Uno Chicago Grill	East 86 Street
<input type="checkbox"/>	id=4754064386555904	Staten Island	Richmond Avenue	Chinese	40394394	40.5823983	-74.1660553	Master Wok	Richmond Avenue
<input type="checkbox"/>	id=4754793658580992	Manhattan	West 47 Street	Irish	40396246	40.7587108	-73.9838036	Langans Bar & Restaurant	West 47 Street
<input type="checkbox"/>	id=4755714996174848	Bronx	White Plains Road	Hamburgers	40395992	40.8640754	-73.86709549999999	McDonald'S	White Plains Road

Now, go to Query by GQL and run queries.

NOTE: If you try to execute some query when you do not define a field as an Index, you will see the following error:

QUERY BY KIND

QUERY BY GQL

```
1 select * from restaurants
2 where cuisine = 'American'
```

RUN QUERY

CLEAR QUERY

[GQL query help](#)

☐ Name/ID ↑

No entities matched this query.



Make sure there are either simple or composite indexes for the properties you are searching. [Learn more](#)