Business Intelligence Analyst Remote Assessment

2023

Analysis and Presentation (~6 hours)

The dataset

The **orders.csv** is a dummy dataset with basic information regarding efood orders of smaller cities during August and September 2023.

fullname	type	description
order_id	INTEGER	unique identifier for each order
user_id	INTEGER	unique identifier for user
user_class_name	STRING	based on RFM shows the importance of the user for efood. Calculated on a monthly level
order_timestamp	TIMESTAMP	local timestamp of the order
city	STRING	city-location
vertical	STRING	(Restaurant|Local Stores) group of main cuisines
cuisine	STRING	the main cuisine ordered
device	STRING	device used by user
paid_cash	BOOLEAN	TRUE when user paid cash FALSE for online payments
order_contains_offer	BOOLEAN	TRUE when order contains items in offer
coupon_discount_amount	FLOAT	actual discount in euros when coupon applied
amount	FLOAT	actual amount that user paid in euros
delivery_cost	FLOAT	actual amount that user paid for delivery service in euros

The task

- ➔ Using the toolset & data stack that aligns best with your preferences and expertise, perform an exploratory **analysis on the customer data** (you may use existing classes as well) and prepare a **presentation** to share your findings/insights with the **Chief Marketing Officer & other C-level executives**.
- ➔ Which users would you recommend to target in an upcoming coupon campaign dedicated to Breakfast cuisine? Include your recommendation in your presentation.

Submitting a solution

Please, create a **public Github repo**, that will contain all the **code** (i.e. Python, R, SQL) and instructions to run it, or **files** used (i.e. excel, visualization dashboards) and your presentation (i.e. powerpoint, pdf).

Reply via email sharing your repo link and comments. Good luck!

Contact

You can send an email to d.kouvari@e-food.gr, gmouratos@e-food.gr with any questions you have. It goes without saying that this assessment is handed over as a real case so you are expected to work as you would in your normal work life (eg search the Nets, reference books etc); as always keep in mind to **cite** anything that is considered a “loan”.

Useful Material - Set up BigQuery

We, as Business Intelligence Analysts in efood, are mainly using the Standard SQL of BigQuery.

The usage of BigQuery for the completion of your assessment is entirely **optional**, but we believe that

- it can be valuable for your analysis,
- could help you familiarize with the tools and methodologies that we use and so
- it would be an excellent preparation for the **Live Assessment** that follows the successful completion of the Remote Assessment.

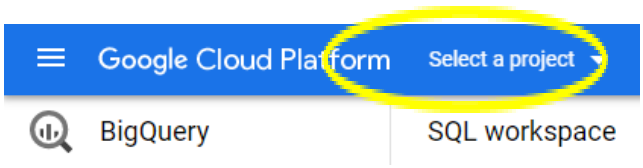
Requirements

- Please note that you need a gmail (or **google-based**) **account** to connect to BigQuery, so you have to create if not use an existing one.
- **Download** the **orders.csv** file.
- Once you have logged in to your google-based account, you can access the BigQuery platform following the Link to BQ.

Set up Instructions

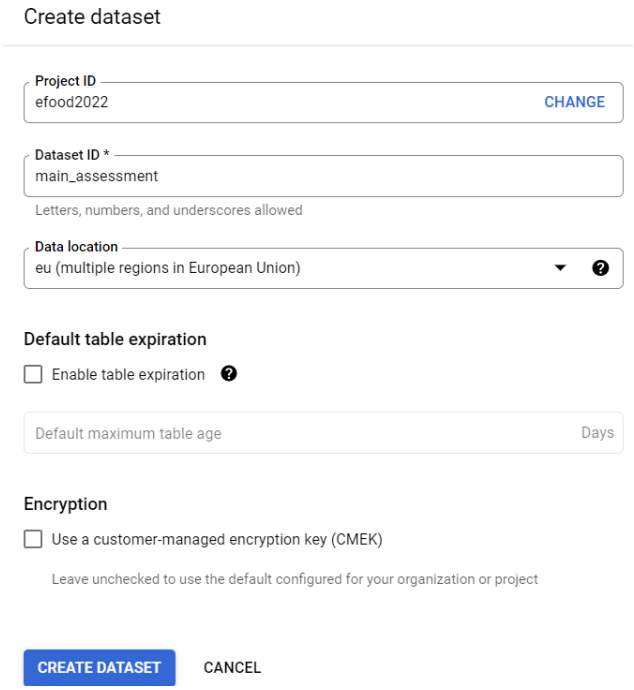
1. Create a **project**

   Click on "Select a project" and "Create New". I 've used the name: **efood2022**.



2. Add a **dataset**

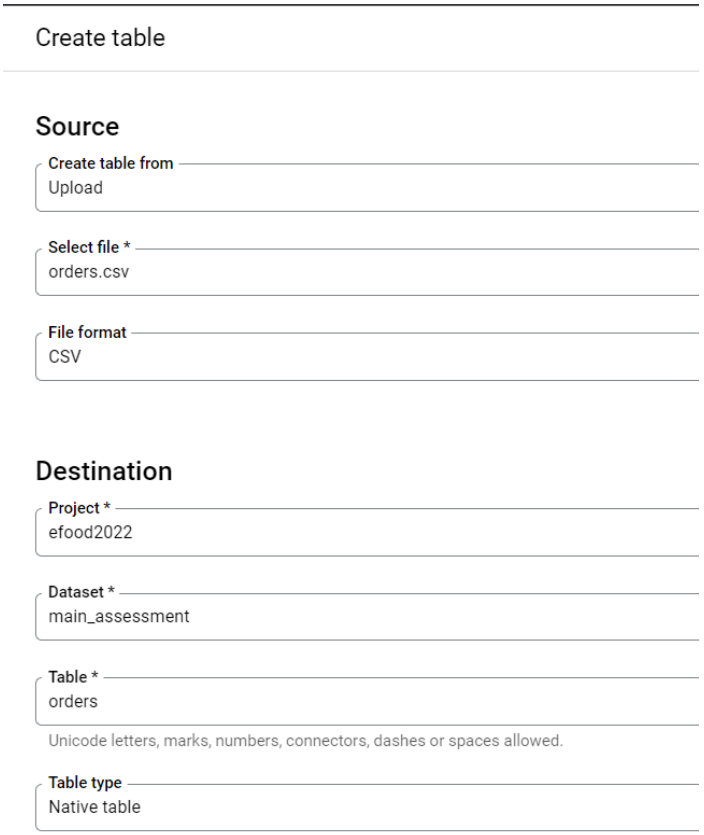
   Click on the 3 bullets next to efood2022 name and select create dataset. Window like screenshot appears where you set the dataset name and location in Europe (eu) and press on the blue button. I've named it **main_assessment.**



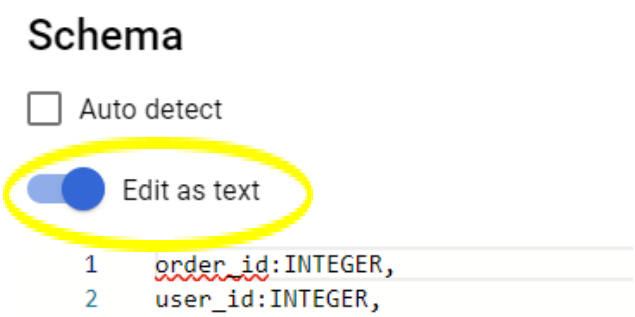
3. Add a **table** named **orders**

   Click on the 3 bullets next to main_assessment and select Create table.

   WIndow appears like in the screenshot where you choose to **upload** the **orders.csv** you downloaded before.

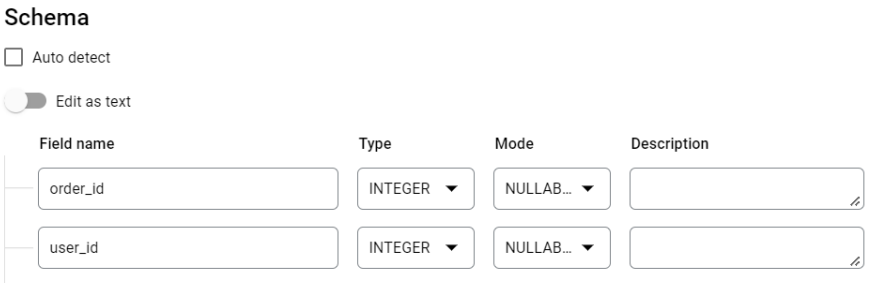


Choose to **edit as text** and paste the schema included in the following gray pane, as shown in the screenshot.



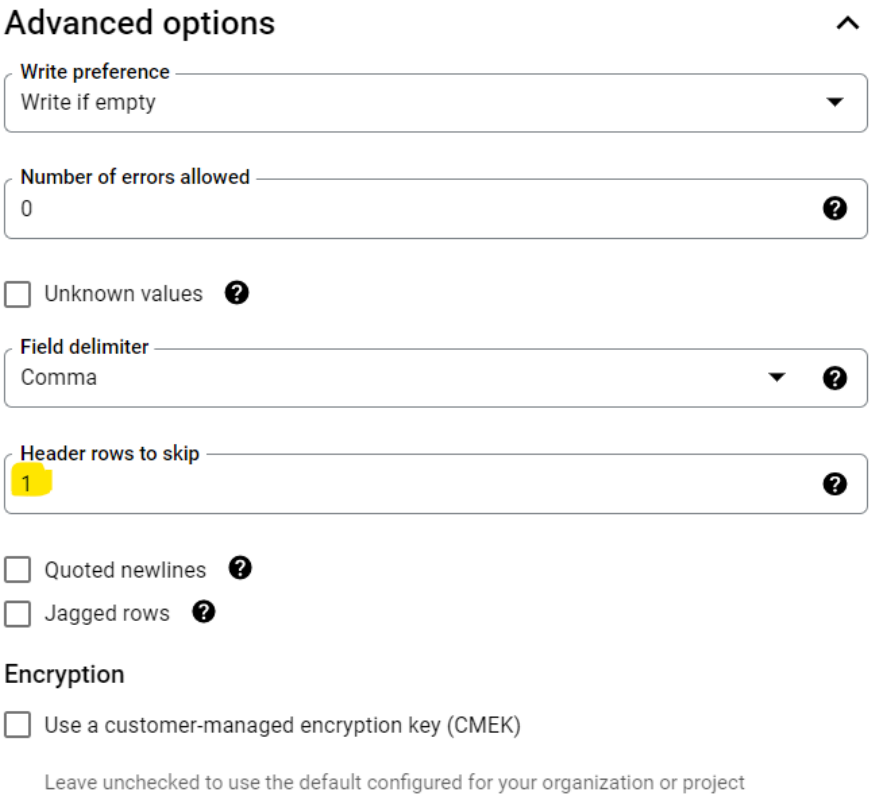

```
order_id:INTEGER,
user_id:INTEGER,
user_class_name:STRING,
order_timestamp:TIMESTAMP,
city:STRING,
vertical:STRING,
cuisine:STRING,
device:STRING,
paid_cash:BOOLEAN,
order_contains_offer:BOOLEAN,
coupon_discount_amount:FLOAT,
amount:FLOAT,
delivery_cost:FLOAT
```

When clicking on Edit as text again you see the table schema as in screenshot.



Finally, in Advanced options we set Header **Rows to Skip** to 1,

as CSV has a header that doesn't follow the table's schema and that couldn't allow its creation.



4. Once setup finished you are able to query on the table created (ie. using the following query or pressing query button from the UI)

```
SELECT *
FROM `efood2022.main_assessment.orders`
```