

## CS 327E Milestone 2, due Sunday, 02/09.

1. Finalize your choice of primary dataset (aka `dataset1`). Your dataset should be made up of multiple CSV files from the same source and the data elements in these files should be related via a primary key to foreign key relationship. If you've made any changes to your selection since Milestone 1, update your `DATASETS.txt` file so that it reflects the current state.
2. Create a bucket in Google Cloud Storage (GCS) and a folder for your `dataset1`. Upload the files for `dataset1` into this folder. If you need help with this step, refer to [this guide](#).
3. Create a new Jupyter notebook. This notebook should be named `<source>_ingest.ipynb` where is the source of your `dataset1` (e.g. `musicbrainz`, `fda`, `bls`, etc.)
4. Implement the following logic in your Jupyter notebook:
  - Make a BQ dataset for storing the staging tables for `dataset1`. The dataset should be named `<source>_staging`.
  - Import the CSV files from GCS into your new dataset in BQ. Ensure that you import each file into its own table.
  - Check that each table was loaded correctly. Visually inspect the contents of each table by selecting a few sample records.
  - Write some simple queries to explore the data in the tables. You can start off by running these exploratory queries in the BQ Console. Once you have identified a few interesting queries, add them to your notebook. You should have at least 1 query per table. The queries should have a `WHERE` clause and `ORDER BY` clause.
  - Add a short comment above each SQL statement to describe the query.

CS 327E Milestone 2 Rubric

**Due Date: 02/09/20**

<p>Finalize selection of primary dataset for project.</p> <p>dataset1 should be described in a file named DATASETS.txt (named exactly like so, no extensions) and each dataset should meet the following criteria:</p> <ul style="list-style-type: none"> <li>- Be available to you as multiple CSV files</li> <li>- Contain multiple related files connected via a primary to foreign key</li> </ul> <p><b>-20</b> no DATASETS.txt file found  <b>-20</b> dataset is made up of only one file, or no files connect via a primary to foreign key</p>	20
<p>Jupyter notebook &lt;source&gt;_ingest.ipynb containing the ingestion pipeline for dataset1, as described in the outline.</p> <ul style="list-style-type: none"> <li><b>-40</b> no Jupyter notebook found in group's repository</li> <li><b>-30</b> no dataset present in group's BQ project</li> <li><b>-10</b> incorrect naming convention for Jupyter notebook</li> <li><b>-10</b> incorrect naming convention for BQ dataset</li> <li><b>-10</b> inconsistent naming conventions across tables</li> <li><b>-15/10</b> each missing table load</li> <li><b>-10/5</b> each missing sample records from table</li> </ul>	40
<p>Jupyter notebook &lt;source&gt;_ingest.ipynb containing SQL queries for dataset1, as described in the outline.</p> <ul style="list-style-type: none"> <li><b>-40</b> no queries found in Jupyter notebook             <ul style="list-style-type: none"> <li><b>-20</b> no queries use a WHERE clause</li> <li><b>-20</b> no queries use an ORDER BY clause</li> </ul> </li> <li><b>-20/15</b> each un-queried table, depending number of tables</li> <li><b>-10</b> each missing comment</li> <li><b>-5</b> each incorrect comment, or comment too similar to query</li> </ul>	40
<p>submission.json submitted into Canvas. Your project <b>will not</b> be graded without this submission. The file should have the following schema:</p> <pre>{   "commit-id": "your most recent commit ID from Github",   "project-id": "your project ID from GCP" }</pre> <p>Example:</p> <pre>{   "commit-id": "dab96492ac7d906368ac9c7a17cb0dbd670923d9",   "project-id": "some-project-id" }</pre>	Required

<b>Total Credit:</b>	<b>100</b>
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