

Milestone 3 due Friday, 09/27.

1. Create an initial ERD for your `dataset1` using a diagramming tool called [Lucidchart](#):
  - Each relation in the diagram should contain the relation's field names and associated data types.
  - If a field is a primary key, it should be marked as such in the diagram.
  - If a field is a foreign key, it should be marked as such via a relationship with the primary key that it refers to.
  - If a table is wide and contains 30+ fields, only list the fields that represent keys on this table (i.e. PK, FK) as well as those which you consider informative and plan to query.
  - Draw all valid relationships between tables (i.e. 1:1, 1:m, m:1, m:n), remembering that a table can have a self-relationship.
  - Save all queries used to discover the keys and relationships between tables. Copy the SQL text into a text file `ERD-queries-dataset1-staging.sql`.
  - Name the ERD file `ERD-dataset1-staging.pdf`.
2. In the BQ Console, practice writing some queries with joins using `dataset1`:
  - You should have **6** queries with at least 1 join per query.
  - At least **3** queries must use outer joins.
  - Copy the SQL from your **6** queries into a `join-queries.sql` file.
  - Add a short comment above each SQL statement to describe the query. Comments should begin with a "--" (e.g. `--this is a legal comment in SQL`).
  - You do not need to add the results of your query to the file.

CS 327E Milestone 3 Rubric

**Due Date: 09/27/19**

<p>Create an ERD for dataset1 and save it as ERD-dataset1-staging.pdf. Create a file ERD-queries-dataset1-staging.sql containing the queries to discover the primary keys and foreign keys for dataset1.</p> <p>The PDF should contain entities for all the tables, with each table named &lt;dataset&gt;.&lt;table name&gt;.</p> <p><b>-40</b> ./ERD-dataset1-staging.pdf or          ./ERD-queries-dataset1-staging.sql not found in repository</p> <p><b>-5</b> each incorrect relationship, up to <b>-20</b>  <b>-10</b> each primary key/foreign key missing  <b>-10</b> missing data types or fields of tables</p>	<p>40</p>
<p>Create a file join-queries.sql containing 6 queries involving joins. 3 queries should contain outer joins. Each SQL query should have a comment preceding it, describing its function.</p> <p><b>-60</b> ./join-queries.sql not found in repository</p> <p><b>-10</b> each missing statement, up to <b>-60</b>  <b>-5</b> each missing or incorrect comment, up to <b>-30</b>  <b>-10</b> each missing outer join, up to <b>-30</b></p>	<p>60</p>
<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>	<p>Required</p>
<p><b>Total Credit:</b></p>	<p><b>100</b></p>