

CS 327E Milestone 11 due Sunday, 05/03.

Create an Airflow DAG that automates the data processing pipeline you built for your secondary dataset.

Required functionality:

- DAG creates a new BQ dataset named `<source>_workflow_staging` to store the staging tables.
- DAG creates a new BQ dataset named `<source>_workflow_modeled` to store the modeled tables.
- DAG loads the CSV files for your dataset into `<source>_workflow_staging` and runs through the series of SQL and Beam transformations, writing the modeled tables to `<source>_workflow_modeled`.
- DAG executes dependent tasks in proper sequence.
- DAG executes independent tasks in parallel.
- DAG is implemented in a standard Python file named `<source>_workflow.py`

Not in-scope:

- DAG copies the CSV files into GCS.
- DAG creates the database views for reporting.

Testing and verification:

- DAG must produce the same end-results as the Dataflow jobs and/or SQL scripts from Milestone 10.

CS 327E Milestone 11 Rubric

Due Date: 05/03/20

<p>Create file <code><source>_workflow.py</code> that implements the transforms you built for your secondary dataset. The DAG should run operations in a decently efficient manner (operations that don't depend on one another should run concurrently, etc.)</p> <ul style="list-style-type: none"> -100 <code><source>_workflow.py</code> does not exist in the repository -50 <code><source>_workflow_staging</code> dataset does not exist in BQ -50 <code><source>_workflow_modeled</code> dataset does not exist in BQ -20 <code><source>_workflow_staging != <source>_staging</code> -20 <code><source>_workflow_modeled != <source>_modeled</code> -15 for each missing Dataflow job dependency -15 for each missing SQL dependency -10 each task that runs in parallel with its dependency -10 each task that runs after another task it does not depend on 	<p>100</p>
<p><code>submission.json</code> submitted into Canvas. Your project will not 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>Total Credit:</p>	<p>100</p>