

PROJECT SPECIFICATION

Investigate a Relational Database

Queries

CRITERIA	MEETS SPECIFICATIONS
The student can write error-free SQL queries.	All SQL queries run without errors and produce the intended results.
The student can use JOINs correctly in SQL queries.	Each SQL query needs to include one or more explicit JOINs. The JOIN or JOINs should be necessary to the query. If a question does not require a JOIN please change the question to be one that does.
The student can use aggregations correctly in SQL queries.	Each SQL query needs to include one or more aggregations. This could be a COUNT, AVG, SUM, or other aggregation.

CRITERIA	MEETS SPECIFICATIONS
The student can use subqueries and Common Table Expressions.	At least 2 of the 4 SQL queries need to include either a subquery OR a CTE.
The student can use Window Functions.	At least 1 of the 4 queries should use a Window Function.
The SQL queries are well formatted.	The SQL queries are well formatted and use aliases.

Presentation

CRITERIA	MEETS SPECIFICATIONS
The student's slides are organized well and are easy to read and understand.	Each slide should have a question and an appropriate visualization descriptions to address the question. The slides should be free of significant factual, spelling and grammatical mistakes.

CRITERIA	MEETS SPECIFICATIONS
The student can create data visualizations that provide useful information.	All visualizations should make logical sense and provide accurate analysis based on their query results.
The student can format data visualizations clearly and make good use of labeling.	 1. All visualizations include a title and axis labels, have a legend where applicable, and are easily understood. 2. Every visualization should have: chart title x axis title x axis label y axis labels

Suggestions to Make Your Project Stand Out!

Submission Phase

Reviewer Tips

- 1. Even if the student does not upload the correct file types please try and open what they have submitted and give them as much feedback as possible. Please include a screenshot of how to save to .txt if the student saves the queries as a different file type not do this correctly.
- 2. Look for interesting patterns and insights in the data rather than simply providing summary statistics.
 - Use other advanced SQL functions, such as the CASE function, DATE functions; as well as other SQL data cleaning functions, such as the CONCAT

function.

- Use a combination of Window functions, CTE and/or subqueries in your SQL queries.
- Make good use of color, size, and shape in your visualizations.
- Use the slide title and/or chart description on each slide to state the key insight of the visualization.