

Final Project Overview

In this final project, you'll get to bring together all of the concepts you've learned during class. For this project, select one of the listed publicly available datasets on BigQuery and select an analytics question to answer.

Requirements

- A SQL query where you demonstrate filtering, aggregating, and summarizing your dataset to answer a meaningful question, demonstrating efficiency. Create at least one materialized view in BigQuery that summarizes your results.
- A Looker Studio dashboard including at least 2 visual elements (charts, scorecards, or tables), clear labeling and formatting, and interactivity. This dashboard should connect to your BigQuery view.
- A 5 minute presentation outlining the question you set out to answer, an overview of your dataset, a summary of your SQL logic, and key insights and takeaways from your Looker Studio dashboard. Presentations will be done on Thursday, December 4 at 6:00 pm.

Dataset and Question Options

- [GitHub Repos](#)
 - How has the popularity of different programming languages changed by year among public GitHub repositories?
 - When do commits tend to happen? (time of day, day of week, etc.)
- [NCAA Basketball](#)
 - How has the volume of three-point shows changed over time and across conferences?
 - Investigate home court advantage in the NCAA. Does there appear to be an overall home court advantage? Are there certain venues that seem to have a higher home court advantage?
 - Tournament-based question? Momentum going into the tournament?
- [New York Citibike](#)
 - When are Citi Bikes used the most? Look by hour of day, day of week, and time of year.
- [CMS Synthetic Patient](#)
 - Examining readmissions: What percentage of hospital visits are followed by another inpatient visit for the same patient within 30 days? How does this vary by age or condition?
 - Comorbidity Patterns: What conditions co-occur with Diabetes? Look in the concept table for Diabetes. What are frequently-co-occurring conditions?
- [NOAA GSOD](#)
 - Which days had extreme precipitation in Nashville? How often do these extreme rain events occur each year?
 - How does the average temperature vary by month in Nashville? How has it changed over time?