Team Database Projects

- Each project team produces:
  - Operational database
    + GUI-based Python application
  - Analytical database
    + GUI-based Python application

Analytical databases to be covered over the next few weeks.

- Demonstrate how well you can apply what you learned during the semester.
  - Not all technologies have to be used.
- Live demos
  - Evaluated by the class via Canvas surveys

Team Database Projects, *cont'd*

- Data for the operational database
  - Actual commerce or experimental data
  - Dataset(s) downloaded from the web
  - Artificially generated data (e.g., mockeroo)
- The frontend GUI-based Python application for the operational database should demonstrate user queries and updates and display their results.

Team Database Projects, *cont'd*

- Data for the analytical database
  - Extracted from the operational database.
  - ETL from external sources.
- The frontend GUI-based Python application for the analytical database should demonstrate analytical operations and display their results.

Analytical databases to be covered over the next few weeks.

Team Database Projects, *cont'd*

- Python code (notebook or standalone)
  - Use the shared school server (provide access info)
- Written report (10 – 20 pages)
  - What is the application?
  - Describe your operational and analytical databases.
  - What data did you use, and where did you get it?
  - Include:
    - ER diagram
    - Relational and star schemas
    - Operational and analytical queries
    - User scenarios with screen shots

Star schemas and analytical queries to be covered over the next few weeks.