DATA 201
Database Technologies
for Data Analytics

Spring 2025
Sections 21 and 71
Instructor: Ron Mak

Assignment #7a

Assigned: Thursday, March 6
Due: Thursday, March 13 at 5:30 pm
              <u>Team assignment</u>, 100 points max

GUI programming

The purpose of this assignment is to give you practice creating a GUI-based database application. You can think of this assignment as a prototype of your team semester project.

Create a GUI-based Python application using **PyQt5** where the user can enter parameter values, and then the application can execute SQL code or call stored procedures.

The GUI should include a variety of widgets (at least three different ones other than push button, menu, table, and tab) well laid out in windows and/or dialog boxes and display results in tables with proper column headers. Note that Qt Designer calls a menu a combo box.

What to submit

A zip file containing

- Jupyter notebook and/or standalone Python files.
- `.ui` file(s) of your GUI-based application.
- Screenshots of your application in action.
- Instructions (if necessary) on how to run your application.

Rubric

Criteria	Max points
• Well laid out windows and/or dialog boxes.	• 30
• At least three different widgets (besides push button, menu, table, and tab).	• 30
• Results displayed in tables with proper column headers.	• 30
• Screenshots.	• 10