ENSF 608 Fall 2021 – Lab 11

November 24, 2021
Dr. Emily Marasco

Recording Notice

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Goals for Today

- Assignment 4 Clarifications

- Connecting with Java

- Connecting with Python

- Open design project question/work time

Reminder: Virtual Office Hours

- New form posted on D2L for each week

- 10 minute appointments with myself and the TAs

- Use D2L Zoom links for chosen session

- Must reserve 30 minutes ahead of **session** start time

- Contact Dr. Marasco for any changes

Assignment 4

- Assignment file re-uploaded

- Typo fixed- Query 7 refers to intermediary steps in Query 6

- Change in mark distribution- Query 6 is 4 marks, Query 7 is 2 marks

- Question 8: Don't assume which events are held on the specified dates, but you CAN assume they are individual events

Connecting to a Database

- Requires a connecting driver

- Examples: JBDC for Java, Connector/Python for Python

- May be included with your MySQL installation

- If not:
  - Java: Connector/J – Recommend using platform independent .jar
  - https://dev.mysql.com/downloads/connector/j/
  - Python: Module installation – pip install mysql-connector-python
  - https://dev.mysql.com/downloads/connector/python/

- Java: Must add .jar to classpath (use -cp command in terminal or add to project classpath)
  - Watch your directory structure!

- Python: Install and import module

General Steps

- Step 1: Create a connection
    - Either have the user enter their credentials, or have them hard-coded

- Step 2: Create a statement
    - Consider SQL injections and security
    - Prepared statements are better!

- Step 3: Execute the query
    - "Sends" to database

- Step 4: Process the retrieved results
    - "Retrieves" from database

- Step 5: Close the connection and release resources

Demonstration

Refer to documents posted on D2L and lab session recording.

Open Work Time

Refer to documents posted on D2L and lab session recording.

Upcoming Deliverables

- Assignment 4 (12%) – November 26th

- Quiz 2 (10%) – Access Dec. 2nd/3rd

- Assignment 5 (6%) – Due last day of classes

- Joint ENSF 607/608 Project (30%) – Due last day of classes

This week:

- Keep the conversation going! Share interesting stories on data and databases in the world.

- Complete Assignment 4

- Work on design project

- No more technical videos – one industry interview video