Project Phase 4

CS4.301: Data and Applications
Course Instructor: Kamal Karlapalem

Due:11:59 PM, October 24, 2021
Released: October 13, 2021

1 The Task

This is the final part of the course! Using the previously modelled relational schemas, you must create and populate the database as per your relational schema in MySQL. You must then build a command line interface in Python3 to satisfy the functional requirements specified earlier. This can be done using libraries like PyMySQL.

2 How to Code

There are two parts to this project

- Creating the database and defining all tables, and loading it with relevant data
- Performing queries on the database: at least 5 queries & 3 updates (all functional requirements to be satisfied too)

The first part can be done purely using the MySQL CLI. For the second part, you are expected to create a Python script that can connect to the database using MySQL. You may not use built in commands and functions to make queries. In other words, you must write SQL queries to satisfy each of the functional requirements.

A boilerplate with more instructions has been uploaded here.

3 Submission Instructions

Submit a single zip file named $< teamname > .zip$ containing the Python script(s). Attach a video (maximum five minutes) along with the code. The video should be named as $< team\_number > .mp4$. You must populate your database with legitimate data before starting to record (screen record) the video. While presenting in the video, you must have two terminals open. In one terminal, you would be entering commands and in the second terminal, you will access the database and show the desired change in your SQL tables before and after running the command in the other terminal. You must also submit a README with a list of all the commands your code can run along with a small description for each of them. The commands you run in the video must be in the same order that you list in your README. Attach your Phase 3 report renamed as $phase3.pdf$. Zip all of the above mentioned files, and submit the zipped file.