CS348 – Project – Stage 3

Due date: <mark>5/3/2021 at 11:59 PM</mark>.

The main deliverables of Stage 3 are the following:

1. A document in your shared folder to describe what indexes you have on your tables and what queries and reports those indexes support. For each index, list the queries that benefit from the index and where the queries are used (e.g., a specific report).
2. A final demo of your project. You will record a 10- to 20-minute demo and save your demo (video) in your shared folder. In the demo, **show your website/tool features and how to use them**. You will also **describe parts of your code where you implemented the following course concepts**:
   a. Different types of SQL queries (especially Group BY, aggregate functions, and subqueries).
   b. Using at least two of the following methods: **prepared statements**, **ORM**, and **stored procedures**. Each method should account for at least 20% of your database-access code (e.g., 80% prepared statements and 20% ORM). You may consider using ORM for data entry and updates as well as simple queries and use prepared statements for complex reports.
   c. Transactions and your choice of isolation levels and why.
   d. Discuss the lessons learned during the project phases. What would you change if you could start over.
3. A url to your application (if available) and your application's code (e.g., a GitHub link).
4. Any slides you used in your demo.

Grading:

Stage 3 is worth 70% of the project grade. Your assigned TA will grade your demo and code. Grading will focus on the database concepts and whether you implemented them correctly in your project. For example, did you use the right indexes to support your important reports. Did you use transactions and an appropriate isolation level. Any user interface is acceptable as long as it is a GUI (web, mobile, or desktop application).

Extra credit:

1% of the course grade if you deploy your project (**database and code**) to Google Cloud Platform or any other cloud provider (e.g., Amazon AWS or Microsoft Azure). If you want to deploy your code to GCP you may use the app engine or compute engine.