CS 157 A Final Project

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In this project you will need to follow the formal process of designing a database based on the database life cycle that involves the following steps:

1. Problem statement (what problem are you are trying to solve) (1 pt)
2. Requirement gathering and analysis (collect and collect user views, identify initial entities) (9 pts)
3. Design Process (50 pts)
    a. Conceptual design (design screens/forms/reports, document business rules, storyboards and screen flows, conceptual data model)
    b. Logical design (Develop logical data model and Perform normalization to 3NF)
    c. Physical database design
    d. The design should include at least 3 separate views
4. Create development and test database. Test any required data conversion. (10 pts)
5. The design should be based on a client/server (can be monolithic) or similar architecture (5 pts)
6. Your design should demonstrate that SQL queries can be performed (CLI) on the client side. Optional/extra credit: you design a UI/UX for the front end instead of CLI (15% extra credit) (5pts for CLI, 15 pts for UI/UX)
7. Create a release version of the database (a release/production software so others can deploy your database) (10 pts)
8. A formal report is required that should include the following sections: (10 pts)
    a. Title
    b. Table of Contents
    c. Executive summary
    d. Background/Introduction
    e. Problem statement
    f. Purpose/Motivation
    g. Design (conceptual, logical, physical)
    h. Implementation & test report
    i. Conclusions
    j. Appendix, should include the following:
        - links to your source code on github (SQL commands)
        - References

You will upload your SQL code/accessible link and the final report to Canvas on/before the deadline.