FINAL PROJECT REQUIREMENTS FOR CS3200

This document describes the final delivery of the class project. Students are expected to think of some project which satisfies all the following criteria. The user interface for the project may be a simple command line argument project or a GUI based project. The basic assumption is that your project will use MY SQL as your DBMS. The project must demonstrate your mastery of the relational model as well as your ability to code a system using a relational database as its storage mechanism.

Analysis & Class Diagram (25 Points)

Provide a document containing the following content:

- 1. Provide a final class diagram of your project. (10 Points)
- Identify the nouns and verbs from your project and document them in a tabular form explaining relationship between two nouns. We should be able to understand this from the class diagram you submit. (5 Points)
 (For example: If there are two classes named car and person, then the nouns would be car, person and verb would be owns. Therefore, the table would look like the one below)

Serial No	Noun	Verb	Noun
1	Person	Owns	Car

- 3. Decide which nouns should be classes and which should be attributes. (5 Points)
- 4. There should be at-least one Composition / Aggregation in your project. (5 Points)
- 5. BONUS POINTS: At-least one generalization. (5 Points)

MySQL Database Schema (30 Points)

Provide a SQL file of your schema. This should contain at least the create commands for the objects within your database: tables, indexes, constraints etc. It may also contain a dump of the data. The schema should contain the following:

- 1. There should be at-least 3 tables in your schema. (10 Points)
- 2. Tables should have primary key or foreign key representing relationships in your class diagram. (10 Points)
- 3. Use primary keys and foreign keys wherever applicable. (5 Points)
- 4. All tables should be normalized (at least 3rd normal form). There should not be any redundancies in your tables. (5 Points)

5. BONUS POINTS: Delete and/or Update Cascade on tables.(10 Points)

Front End (30 Points)

Provide one file that contains a subset of the front end code used to build your system. You may use any language which you are confortable in. You should be able to connect your MySQL database with this language. Please be sure to include all operations that have not been demonstrated during your presentation.

- 1. User should be able to insert, update and view data from database. (20 Points)
- 2. User should be able to delete data from database. (10 Points)

Mini Presentation (15 Points)

Please provide a verbal 5 minute description of your project. It should contain a brief description of the schema, the architecture, and utility. You can provide a visual representation such as a power point slide that described your system and schema. You need to provide a demonstration of the front end. It is important that you be able to describe and demonstrate your project succinctly so please do not exceed the time limit. Presentations are scheduled for Aug 18th, 19th and Aug 20th.

Final Project due August 20, 2015