CSC 455- Spring 2007

Relational Database Project

Design and implement a database application using a relational database management system of your choice. You are free to use any relational database product, and any supporting technology, provided the platform you use allows you to demonstrate the fully functional project in class. The basic idea is to write an application that uses the DBMS for data storage, retrieval etc. However, an application user need not have any knowledge of the DBMS and ideally should not be aware of the presence of the DBMS.

- **You may choose a project described in the handout.** In this case you are expected to implement all the functionality proposed in the handout.

- **You may propose your own project.** If you propose your own project, it is your responsibility to convince me that the scope of your proposal is comparable to that of the projects in the handout. The scope refers to both the richness and the amount of information being managed and the queries implemented.

In order to facilitate the project, the following procedures and deadlines have been established.

- All project documentation should be prepared on a computer. Adopt some uniform, professional format for your submissions, and use the same format for all submissions. Write well and use a spell checker on your submissions.

- Each submission must be accompanied by a cover sheet signed by all group members. This sheet will include a peer evaluation matrix where each team member evaluates the contribution of every other team member to that project component. Scoring will be on a 10 point scale, with 10 being the maximum. Include the summary score for each student in addition to the individual ratings. If a student has a summary score of 9, and I assign a 90 to a particular project component, the student in question will receive a score of 81 for that project component.

- Collect all project material in a 3-prong folder. You will continue to add material to this folder through the semester.

- Poorly presented material will not be accepted.

1. **Tuesday, January 30, 2007.**

   - Project team member names due. **There will be two persons in each team.** All exceptions to the two-persons/team rule will be at the discretion of the instructor.

2. **Tuesday, February 13, 2007.** This is worth 10% of your project grade.

   - Name and brief description of your project.
   - **Specification of functional requirements.** Operations to be supported. Think about the kinds of queries that are likely for your application. Think about ways in which data will be inserted, retrieved, or modified.
• **User interface specification.** For instance, if menu-based, menu and submenu options.

3. **Tuesday, February 27, 2007.** This is worth 10% of your project grade.

  • Tables that you will create. For each table list:
    – all attributes and their types
    – primary key and foreign key, if any
    – not null specifications, if any.

4. **Tuesday, March 13, 2007.** This is worth 10% of your project grade.

  • Preliminary demonstration of the back-end of your project. Tables, queries etc.

5. **Thursday, March 29, 2007.** This is worth 10% of your project grade.

  • Preliminary demonstration of the front-end of your project, including ability to communicate with the back-end.

6. **April 24, 26, 2007.** Demonstrate final version of project in class. You should plan on having about 20 minutes for your demonstration. During this presentation you will demonstrate your fully-functional implementation and also be prepared to **answer questions about any aspect of your project.** You will also electronically (as a zip file) submit all code for your project and the E-R diagram and any normalization performed on your design. Your project will be graded using the rubric provided.