CIS560 Class Project – Database Application

Final Report and Presentation/Demo

Final Report (6-8 pages)

The final report can include contents from previous reports. Reused contents should be updated to reflect your final design and implementation. The report should include the following sections:

1. Introduction – give an overview of the system, its functions and potential users.
2. Design and implementation – talk about what's "behind the scene." Ensure that a database knowledgeable reader can understand how your project is implemented. Include:
   - A technical description of the system, design criteria, and requirements.
   - Features implemented, and how they work.
   - E/R Diagram and Database Schema.
   - Diagrams that can help you explain the implementation of the project. These diagrams should show software/code components and their relationship (i.e., system architecture). Include everything that can clarify how your application is composed, how the tasks and data are processed, how the software components are organized to work together. You may want to use a specific task to explain the data flow and steps involved in handling the task.
3. System features and usage - use example scenarios (and screenshots) to explain the system. Show how users interact with the system. Highlight the strengths and limitations of your system.
4. Evaluation – explain how you have evaluated your system (specifically, performance and easiness to use).
   - How have you populated your database? What is the size of your tables? Remember that it is anticipated that at least one table will be large enough to support your queries and reports in a meaningful way. Create at least 5 indexes (in addition to indexes created by default for primary keys) that will increase the performance for some of your queries. Submit the indexing commands in a tune.sql file. Using comments, specify what queries would mostly benefit from what index(es).
   - It is expected that you demonstrate your program through some sort of interface - see some guidelines are in the Interface.pdf document.
5. Summary and discussion
   - The completeness of your project compared with your initial design.
   - What you have learned, what would you change if you'd do it again.
   - Discussion of possible improvements, ideas for future work.
6. Team work experience.

Note: submit your code and documentation, together with your final report. In addition, each team member should submit the TeamMemberEvaluationForm.

<u>Final Presentation / Demo</u> (20 min)

- Prepare a 20 minutes presentation and system demo (including questions).
- What should be in the presentation:
    - Brief overview of the project, including a clear definition of target users.
    - A good scenario to demonstrate the most important/frequently used features. Try to come up with a good story and have smooth flow to help the audience understand how users interact with your system.
    - Technical details about design and implementation. Demonstrate your knowledge of database design, your skills to operate database systems, and your ability to implement a database application.
    - Explain why the system is important for the target users. Show the audience that the system has potential for future expansion.
    - Team work division.
- Be ready for questions.

Note: each student should fill in the project-eval-final form and submit it along with some meaningful comments regarding group presentations.