Term Project Final Report Guide

ACS575-01 Database Systems, Spring 2024

I. **Deadline:** May 3, 2024

II. Submission Instructions

- **Deliverables**
  1. **Final Report File (.docx)**
     - Submit as a .docx file. While there's no strict page limit, ensure all recommended sections are thoroughly addressed.
  2. **Program Codes**
     - Submit all scripts and program codes used or developed during the project

- **Submission Method:** Upload your report named 'ACS575-*team number*_**Final_Report.zip**' to the course assignment page before the deadline.

- **Team Submissions:** Only one submission per team is required. Ensure that all team members' contributions included in the submitted materials.

III. Final Report Content

The structure of your final report builds upon the mid-way report, adapting and expanding to include the full scope of your project. While the format may vary based on project specifics, the following sections are generated included:

1. **Title**: Select a title that accurately captures the essence of your project.
2. **Authors**: Include the names, departments, and email addresses of all team members.
3. **Abstract (Executive Summary):** Provide a concise summary of the project, highlighting its objectives, and major accomplishments.
4. **Project Description:** Detail the motivation behind the project, challenges encountered, a brief of methodologies employed and an overview of results.
5. **Problem Statement:** Clearly articulate the problem based on the work completed
6. **Objectives and Scope:** Define the goals and the scope of the project
7. **Related Work**: Highlight relevant literature with appropriate citations or projects that inform or compare to your own, if applicable.
8. **Database Schemas:** Present the final versions of your database schemas - conceptual schema, logical schema and physical schema, explaining how data is structured and interrelated
9. **System Architecture:** Describe the complete system architecture, including both back-end and front-end components, data flow and integration of technologies.

10. **DBMS Technology and Development Methods**: Discuss the selection of DBMS technologies (like SQL databases, NoSQL solutions, etc.) and the development methodologies (like JDBC, Agile, DevOps, etc.) used.
11. **Data and CRUD Operations:** Elaborate on the data used in the project. Explain how CRUD (Create, Read, Update, Delete) operations are implemented within your system.
12. **Prototype Functionality:** Provide description of all functionalities and features of your prototype system, supported by screenshots, code snippets, or other illustrative materials
13. **Validation:** Explain how you tested the functionality of your prototype system
14. **Discussion:** Analyze the outcomes of your project. Discuss challenges faced, solutions implemented, and any limitations or areas for future work.
15. **Conclusion:** Summarize the key accomplishments and reflect on the learning outcomes and real-world applicability of your work.
16. **References:** Include a list of all references.
17. **Appendix** (if applicable): Include any additional material that supports your report.

IV. Evaluation Criteria

1. Database Schema and System Architecture

- Clarity and correctness of the database schemas provided (conceptual, logical, and physical). Application of appropriate modeling techniques
- Detailed description of system architecture, including the integration of back-end and front-end components, data flow and the development methods used.

2. Implementation and Functionality

- Correctness in the implementation of CRUD operations.
- How these operations are integrated into the system to support functionality

3. Application Creativity and Problem Solving

- Creativity in the application concept and problem-solving effectiveness.
- Utilization of database features to address real-world problems.

4. Prototype System and Testing

- Details of the prototype system developed and comprehensive testing procedures

5. Advanced Features and Technologies (Optional)

- Demonstration of understanding and integration of advanced database concepts.

6. Documentation Quality and Professionalism

- Completeness and clarity of the final report, including the discussion of the project's goals, methodology, results, and limitations.
- Professional formatting, grammar, and citation of sources.

V. Term Project Grading

- **Grading Weights (Total 12% of Course Grade)**

	Score Scale	Weight in Grade
(1) Project Proposal and Mid-way report	Full Credit (100%): Both are submitted on time. No Credit (0%): If either is missing	2%
(2) Project presentation	A: 85 – 100%, B: 75 – 84%, C: 65 – 74%, D: 0 – 64%	4%
(3) Project final report	A: 85 – 100%, B: 75 – 84%, C: 65 – 74%, D: 0 – 64%	6%

Note: The **s**ubmission of all required deliverables, including the project proposal, is mandatory to be eligible for scoring.