

TCSS445B Wi17 Group Project

Overview

Groups of 3-4 members per group will design an application, written in Java or PHP that solves a problem, hypothetical or real, by using a database management system. Some examples may be a personal music library database, movie database or meeting schedule system. The possibilities are quite limitless. Toy examples of applications (one in Java and one in PHP) will be provided to the students. The code can be reused without limit, however the project must show the implementation of novel features not provided in the sample code.

Deliverables

Project Proposal (3 pts)

Each group will write a proposal for a system that solves a real or fictitious problem. The proposal should describe the problem and how this database driven application will solve it. Your proposal should include the choice of technology (e.g. Java on MariaDB... PHP on MySQL) etc. If there is a change of technology prior to the project submission, you must inform the instructor of the change.

The proposal should also describe the users of the system, and what they each will want to do with the system. You must include at least 2 different user types. List the requirements in the following user story form:

As a <User Class>, I would like to <Requirement>, so that <Reason for Story>

There is not a limit to the number of requirements to be implemented and just because a story exists, does not mean it *has* to be implemented in the final product. Least the stories in priority order. The stories higher on the list should be implemented first, and lower on the list implemented later. The final product must include the ability to Create, Read, Update and Delete records (CRUD).

Design Documentation (5pts)

In phase II you will submit a list of technical requirements and as they relate to the database that will drive your software. Include explanations of the data requirement and which user story or stories it supports.

Include with a list of requirements an ER Diagram drawn in Visio, draw.io, ERWin or any other ER Diagram supporting software. Included in the ERD should be datatypes, keys, and relationship types.

Implementation Presentation (5pts)

On the last day of class, groups will introduce their software and demo the working features to the class. The presentation should be brief (<10 minutes). The demo should include a demo of how records are created, read, updated and deleted. Each student should also share briefly what their role was in the project and what specifically they learned from the implementation.

Source Code Submission (7pts)

All code and scripts must be packaged into a single zip file and submitted. Code should be well documented with header comments describing what the class or script does and which student(s) are responsible for authoring the script. Scripts should also be included for creating the tables within your database. This can be one long SQL file with a series of CREATE and INSERT statements, and should also be well commented.

If there are any special implementation instructions, such as non-default PHP modules or Java Libraries that must be installed, they must be explained in a README file included in the submitted zip file.