

Database Systems 333

Project Specification

Overview

This main goal of the project is to develop a database application for a real client. The client should be some kind of organization (e.g. NGO, university, factory, chain-store such Bravo, etc..). The project is one of the main assessment criteria of this course and must be approved by the instructor by end of phase 0 (see below). Any projects not approved by the instructor will not be graded. The project represents 20% of the total course mark as stated in the course outline. Each student is required to actively participate and contribute to every phase of the project. Substantial programming must be done by each and every student regardless of the student groups.

Details

The students are expected to visit the organization to obtain the system and database requirements from the client. The project must be approved by the instructor. After several meetings with the client, students are expected to construct an ER diagram from the information gathered with meeting the client. Examples of last year's projects included pharmaceutical factories, culture centers, libraries, chocolate factories, and chain supermarkets.

Phases

The project will be delivered in multiple phases. Each phase must be handed in to the instructor (one submission per group)

1. **Phase 0:** Project Idea: This is the project preliminary idea along with a specific client with specific contact information for the client. One project idea per student group (students are required to split into groups of 3 or 4 during this phase).

Due Date: Week 2.

2. **Phase 1:** Software Requirements Document: This should contain the project scope and description, and some information about your client. You should also describe the technology you intend to use.

Due Date: Week 4.

3. **Phase 2:** Preliminary Design Document: This concerns with designing an entity-relationship diagram for your project in addition to the information contained in the previous phase.

Due Date: Week 6.

4. **Phase 3: Prototype** This phase concerns with developing a prototype. The prototype should include a complete database, and a fully functional module.

Due Date: Week 7.

5. **Phase 4: Final Project:** This phase includes all previous phases in addition to the fully functional project. You are required to present a demo of your project and submit complete functional code and working project.

Due Date: two weeks before end of teaching (tentative).

Assessment Criteria

Final project submission must include source code, database design and tables, and executable file (in case of java- executable jar). Specific appointments will be assigned to each student, and each student will be graded according to the following criteria:

- 1) Completeness (if not working/fail to connect to a database, automatic fail)
- 2) Group work - everyone should have programmed! Any student who has not programmed or programmed very little will receive a failing grade.
- 3) GUI and usability (a simple interface for each table to insert/update/delete/select is not enough)
- 4) Database design
- 5) Data Queries: many good query reports should be programmed (sql queries of data) e.g. Total sales for a certain period of time, e.g. number of books reserved for a certain period of time. e.g. number of free rooms in a school in certain time, etc. . Each student will be individually assessed on the data query reports he/she programmed.

Students failing to attend their final grade discussion appointment will receive a failing grade.

Honor Code

All work on this project must be your **own work that has been worked on this semester only**. You are not allowed to submit projects or parts of projects that are not your own. You are not allowed to copy code from your peers. You are not allowed to copy code from your instructor. You are not allowed to copy code from videos or social media (e.g. Facebook, YouTube, etc..). Furthermore, you are not allowed to share your code with other students (beyond your current student group) – even after you finish this class. You are also not allowed to work on your project with other students other than your current student group. In addition, you are not to ask others to show their work to you or write parts of the code for you. Finally, any assistance you receive, must be properly indicated and referenced accurately.

كل العمل في هذا المشروع يجب أن يكون عملك الخاص وتم عمله خلال هذا الفصل فقط. لا يُسمح لك بتقديم أو تسليم مشاريع أو أجزاء من مشاريع غير خاصة بك. غير مسموح لك بنسخ الكود من زملائك/زميلاتك. غير مسموح لك بنسخ الكود من معلمك. لا يُسمح لك بنسخ الكود من مقاطع الفيديو أو الوسائط الاجتماعية (مثل Facebook و YouTube وغيرها). علاوة على ذلك، لا يُسمح لك بمشاركة الكود الخاص بك مع طلاب آخرين (ما عدا مجموعتك الطلابية الحالية) - حتى بعد الانتهاء من هذا الفصل. كما لا يُسمح لك بالعمل في مشروعك مع طلاب آخرين غير مجموعتك الحالية. كما أنك لن تطلب من الآخرين إظهار أعمالهم لك أو كتابة أجزاء من الكود لك. أخيرًا، يجب الإشارة إلى أي مساعدة تتلقاها بشكل صحيح والإشارة إليها بدقة.