C-S 341/CS741 Software Engineering

Fall 2023

Project Description

Software for Booking Appointments

Objective:

To develop a software system that allows users to book appointments with different types of service providers. The application can be a web application or a mobile app.

The following are the requirements for this problem:

- User registration and login
- Service provider registration and login
- Booking appointments by category (three categories: medical, beauty, fitness)
- Appointment history and trends
- Appointment reports by category and time period (e.g., monthly, yearly)
- Alerts when a user or service provider has an upcoming appointment.
- There are three types of users: user, service provider and admin.
- The user can make/search/modify his/her own appointment.
- The service provider can add/edit appointment slots, can only view his/her appointment user.
- The user can't make appointments with time conflicts.
- The admin can search any user/appointments/service providers.
- Each appointment can only have one user, first come first serve.

A graphical user interface must be developed for this software. The interface must consist of multiple screens for different tasks. For example, there should be a welcome screen to start with which displays the various functionalities of the software. If one chooses to login or register to the system, there must be a separate window/screen that displays the requested information. The number of screens, the screen layout, the type of information to be displayed etc. all depend on your design.

You must implement all the functionalities mentioned above.

CS341: You can associate a database with your product, if you wish; however, it is not required.

CS741: You are **required** to associate a database with your product.

Project Deliverables:

During the life cycle of this project, the following documents must be delivered.

Deliverable	Description	Mark	Due Date
Document 1	Product Overview and Project Plan	10	Sept. 15, 2023 (Friday)
Document 2	Functional Requirements/Use Case Models /User Stories, including Assumptions	15	Sept. 29, 2023 (Friday)
DEMO	**First Demo**	**10**	**Oct. 9 & 11, 2023 (Monday & Wednesday)**
Document 3	Architectural Design (UML Diagrams)	10	Oct. 27, 2023 (Friday)
DEMO	**Second Demo**	15	**Nov. 8 & 10, 2023 (Wednesday & Friday)**
Document 4	Updated Documents 2 & 3	15	Nov. 20, 2023 (Monday)
DEMO	**Final Project Demo**	**15**	**Dec. 11 & 13, 2023 (Monday & Wednesday)**
Document 5	Well-commented source code	5	Dec. 13, 2023 (Wednesday)
Document 6	User manual or online help system	5	Dec. 13, 2023 (Wednesday)

This is a team project for this course. Each team consists of 3-4 students. The project work involves developing software (program, documents, user manual etc.) for a given problem. The students should form the teams by themselves. In exceptional situations, the instructor will help in forming the teams. It is highly recommended to join with students who have different background and interests. By this way, a student will learn more on technical aspects as well as skills to work in different environments. Group work itself is an important software engineering skill.

Once joined in a team, no student is allowed to change teams until the project is completely finished (commitment!). Each member in a team will get the same mark for the project. In order to avoid conflicts on work assignments, the team members are expected to equally contribute to the project. In addition, **every document must be accompanied by a signature page that confirms that all members of the team agree to accept the same mark given to the team**. Submissions without the signature page will not be evaluated and consequently, the team may loose marks for that submission.

The team members must meet regularly; all discussions must be recorded and submitted to the instructor.

In addition to the above deliverables, the following documents must also be submitted; these documents will be evaluated to check for equal contribution from each team member. However, these documents will not carry any mark towards the grade. Failure to submit any of these documents will affect the grades of all members in the team.

- Meeting logs. Each team is expected to meet at least a couple of times before submitting a deliverable. The minutes of each meeting (called the meeting log) must be recorded in a predefined format and must be submitted along with the deliverables.
- Signature pages. Each deliverable must accompany a signature page. This page must contain the team identification, the names of all team members, the identification of the deliverable, the date of submission and the following sentence: "We, the team members, agree to share the mark for this document equally among ourselves." The signature must be signed by all the team members. The purpose of this signature page is to avoid potential conflicts in work-sharing, if they occur.
- Team member evaluation report. This document must be submitted at the end of the project separately by each team member. Each member must evaluate the contribution made by every other member in the team. The instructor will evaluate the contribution made by each team member. It is expected to have a close match between the project plan and the team member evaluations, even though in some cases there will be some changes in the work assignment during the development of the project. – Due: Tuesday Dec. 19, 2023

IMPORTANT: All documents must be typed. No hand-written documents will be accepted.