MIDDLE EAST TECHNICAL UNIVERSITY
NORTHERN CYPRUS CAMPUS

CNG350 Software Engineering
Spring 2023/2024
Term Project

In the term project of this course, you are expected to work on the requirements specification and design description of a particular software system. You will be required to provide Software Requirements Specification (SRS) as your first deliverable and Software Design Description (SDD) as your second deliverable. SRS will cover the functional and non-functional requirements of the system, and it will comply with ISO-IEC IEEE 29148-2011. SDD will cover the design of the architecture for the system, and it will comply with IEEE 1016-2009. The templates of SRS and SDD will be provided separately.

The tentative project schedule is provided below. You will be required to submit a use-case diagram before you submit the full report of SRS and a class diagram before you submit the full report of SDD. The objective of the use-case diagram and class diagram submissions is to provide you feedback and help you fix possible major problems before you submit your full reports. Please note that if you do not submit a use-case diagram, you will not be allowed to submit the full report of SRS. Similarly, if you do not submit a class diagram, you will not be able to submit the full report of SDD.

When you submit your **use-case** and **class diagrams**, you need to submit them as a .pdf file and you can add your assumptions to that file, if any. You need to make sure that these diagrams are readable, otherwise they will not be evaluated.

SRS and SDD reports should be **comprehensive** and **informative**. You need to consider all required details, even if they are not explicitly mentioned in the project description; for example, which details are required for the registration, and what will happen if the payment cannot be completed due to insufficient balance? Please also note that failure to consider the feedback from your use-case diagram and class diagram submissions may lead to a deduction in marks for your report submission.

These reports should be submitted as a .pdf file. You need to make sure that all diagrams and figures are readable, otherwise, they will not be evaluated. These reports should be named with student ID numbers, such as 1234567_1234568_SRS.pdf.

Project Schedule

This project has four submissions as shown below.

Week No	Topic
4	SRS: Release
5	SRS: Use-case Diagram Submission
7	SRS: Full Report Submission
10	SDD: Release
11	SDD: Class Diagram Submission
13	SDD: Full Report Submission

Grading

This project is worth 25% of your overall course grade as follows:

Grading Item	Weight
SRS: Use-case Diagram Submission	2%
SRS: Full Report Submission	6%
SDD: Class Diagram Submission	2%
SDD: Full Report Submission	10%

Problem Statement:

The online bookstore system is a web-based platform that allows users to browse, search, purchase, and rent books. Users can create accounts, edit their account details, add books to their cart, and proceed to checkout to purchase or rent books. Additionally, the system includes a special feature that assists users in listening to books and interacting in live discussions on YouTube. Further, users can report issues they encounter within the system, which administrators can address, and mark as resolved. This online bookstore system offers a comprehensive and engaging platform for book lovers, providing a rich array of features that enhance the reading experience, foster community interaction, and promote continuous learning and exploration.

Users can register by providing details like email, password, full name, telephone number and postal address. Alternatively, users can sign up quickly using their Google account and log in with their Google account and password. However, during the sign-up process, they will be asked to allow the bookstore to save their Google account email and password, and they will be required to provide other details, including their full name, telephone number, and postal address.

After signing into the system, users should be able to browse books by category, author, or title. If they want to browse books by category, they must select one or more categories from the list of

given categories. However, if they want to browse books by author or title, they must provide keywords so the system will search them and list the matching books. Once the books are listed, they can select a particular book to see further details, including title, author, description, price, and availability.

Users will also have an option to add books to their shopping cart for buying or renting. They need to specify whether they want to buy or rent a book. They can add a book to their cart without opening the full details of the book. They will be able to view shopping carts anytime. While viewing their shopping carts, they can edit or proceed to checkout to buy or rent books. To check out, they need to provide shipping and payment details. Once the payment is completed, they should receive a confirmation email.

Users will also be able to view the history of their orders. If a user rents a book for a specific period. They will also be able to view the duration of their rented books and receive a reminder email if the period is about to end. Users should be able to join live streaming channels on YouTube where books are being read aloud and interact in live chatting.

Users should also be able to report issues encountered within the system, such as technical glitches, incorrect book information, or payment failures. The system should have admins whose responsibilities include addressing and resolving reported issues. Additionally, admins should be able to add new books to the system and update the details of existing ones. There will be a separate admin panel for these admin operations where new admins can also register. However, access to log in will only be granted upon approval by the super admin. Upon approval, admins will receive an email containing an auto-generated password.

Google will be used as the email service provider, and all data will be managed in an internal database.

Important Notes

- You need to work on your project as a team. If your team member does not contribute to the project, you need to inform the course instructor as soon as possible.
- SRS and SDD reports should have proper formatting by applying consistent and appropriate styles (font size, alignment, spacing, margins, page numbers, etc.). You are also expected to introduce each of your figures/tables and briefly explain them, e.g., "Figure 1 shows the structured use-case diagram comprising five major use cases. [...]."