

Section 1: Metadata

to be filled by the student

1.1. Project Information to be filled by the student

Title: Enrollment Management System	
Section: L5	Instructor: Sir Umer Tariq

1.2. Student(s) Information

Name: Muhmmad Shayan Wasif	ID: 08071
Section: L5	Batch: 2026

Name: Salman Adnan	ID: 07885
Section: L5	Batch: 2026

Name: Hussain Umer Farooqui	ID: 08040
Section: L5	Batch: 2026

Submission guideline: Save your project proposal as a pdf file and rename as Project Proposal_L1_ProposedTitle where L1 is to be replaced with your section

Section 2: The Project

to be filled by the student

2.1. Project Description: *Please provide a brief introduction of the project including its scope.*

Our project centers on an enrollment system, enabling students to construct their timetables from a provided list of courses. Additionally, students have the flexibility to make adjustments, including adding, dropping, or swapping courses up-to a specific date. The system will incorporate safeguards to prevent any scheduling conflicts. Each student will be provided with unique credentials for secure access to the system.

2.2 Functional Requirements

This section describes each function/feature provided by your system. These functions are logically grouped into modules based on their purposes. The users in your system must be categorized such as client, customer or administrator etc. These users will be accessing the database with the level of access that they are authorized with.

Sample functional Requirements:

Module 1: Login

- **Function 1: Login:** Allows students to securely access the system using their unique student IDs, ensuring personalized and confidential interaction with their timetables.

Module 2: Timetable

- **Function 2: Create and Edit Timetable:** Empowers students to select from a list of available courses and construct a personalized timetable tailored to their preferences and academic requirements.
- **Function 3: View and Filter Timetable:** Provides students with the ability to easily review their chosen timetable, with options to refine the view based on specific days or weeks, optimizing accessibility and convenience.
- **Function 4: Course List:** Offers students a comprehensive list of available courses, enabling them to efficiently make selections and populate their timetables.
- **Function 5: Activity Log:** Maintains a detailed record of all student activities within the system, such as course swaps, add/drop actions, providing transparency and accountability.
- **Function 6: Export Timetable:** Enables students to generate and download their timetable in an Excel format, facilitating easy access and sharing of their schedules.
- **Function 7: Conflict Resolution:** Check if there is a clash in time and day.

2.3. Planned Schedule: *Kindly list the start/end dates and the timeline for the achievement of any intermediate milestones and the expected contribution to be made by the participant(s).*

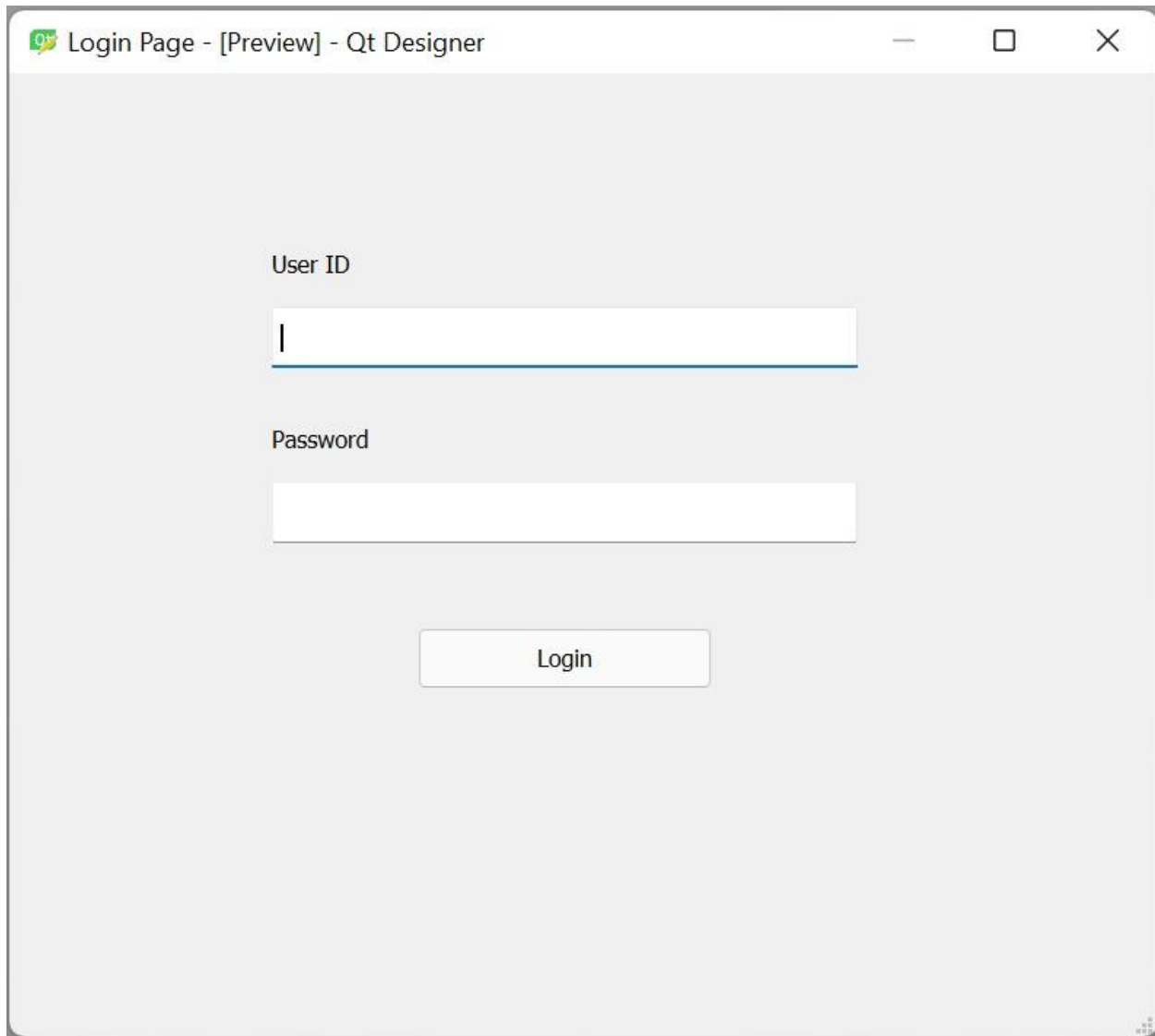
Start date : 25th September: start making the ERD and overall schema of the database. End date : Project Deadline. Equal contribution by all three partners and progress will depend on the pace of the class as we will be employing the knowledge we learn in class as we go along.

2.4. Technology Stack: *If you are utilizing any language or database besides PyQt and SQL Server, please complete this section; otherwise, leave it blank. Specify the programming language and database management system intended for constructing this application, as well as the application type (Desktop, Web, or Mobile).*

SQLAlchemy or MySQL

PyQt6

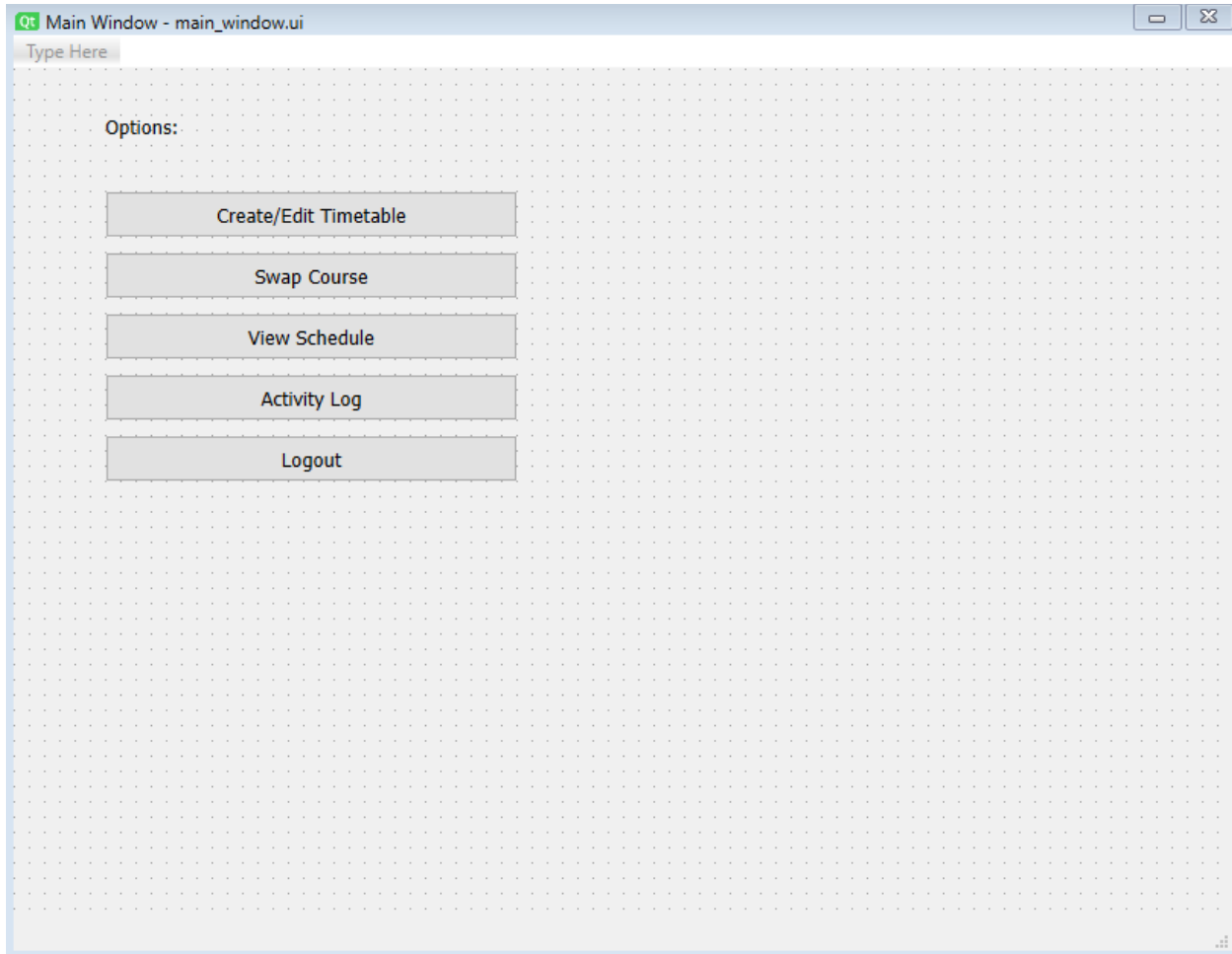
2.5. Screens: *Provide images of all application screens, showcasing clear input and corresponding outputs. Ensure each image includes a concise caption explaining user action and expected/observed output. You can create these screens using Qt Designer.*



The image shows a Qt Designer window titled "Login Page - [Preview] - Qt Designer". The window contains a login form with the following elements:

- A label "User ID" above a text input field.
- A label "Password" above a password input field.
- A "Login" button centered below the input fields.

Login Window: Student will login using their unique credentials



The screenshot shows a Qt application window titled "Main Window - main_window.ui". The window has a light blue title bar with standard window controls (minimize, maximize, close). Below the title bar is a text input field with the placeholder text "Type Here". The main content area has a light gray background with a fine grid pattern. In the upper left of this area, the text "Options:" is displayed. Below it, there are five rectangular buttons stacked vertically, each with a thin border and a light gray fill. The buttons are labeled: "Create/Edit Timetable", "Swap Course", "View Schedule", "Activity Log", and "Logout".

Main Window: All the options students have are mentioned here.

CS355 – Database Project Proposal Form

Create/Edit Timetable - [Preview] - Qt Designer

Course List

Course ID	Course Name	Section	Instructor	Days	Time	Room	Status
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Add

Course ID	Course Name	Section	Instructor	Days	Time	Room	Status
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Remove

Submit

Create/Edit Timetable: Shows course list from which students can add/remove courses.

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Qt Swap Courses - swap_courses.ui

Type Here

Swap Courses

Course ID	Course Name	Section	Date	Time	Instructor	Room
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< >

Select

Course ID	Course Name	Section	Date	Time	Instructor	Room
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< >

Swap

Submit

Swap Courses: Students can swap their courses.

Qt View Schedule - view_schedule.ui

Type Here

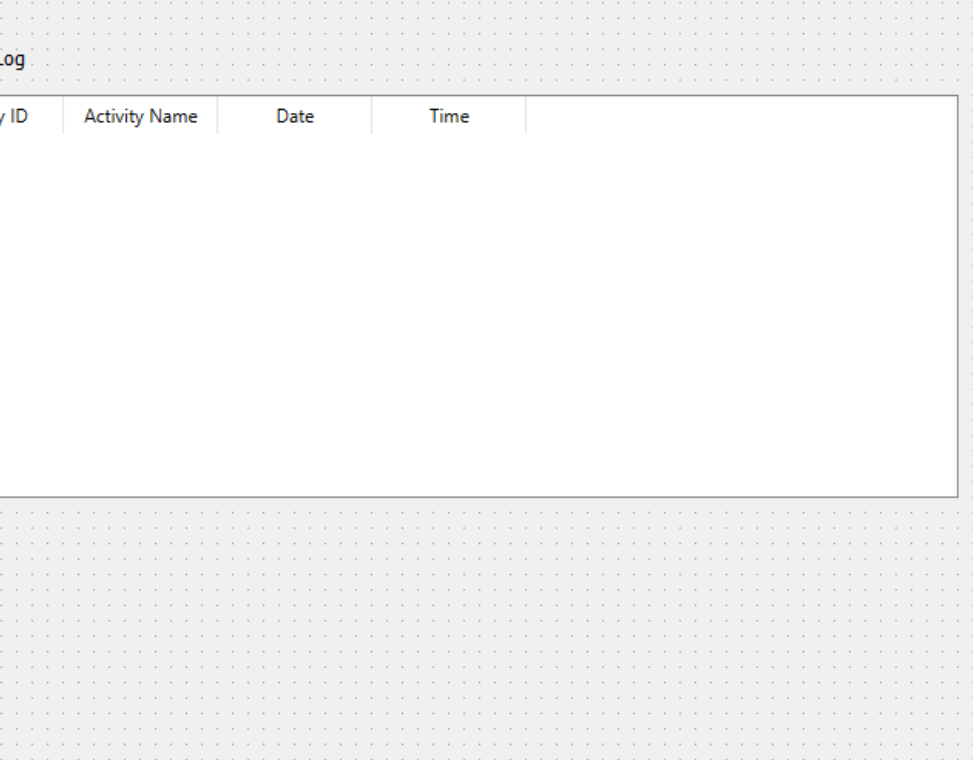
Schedule

Course ID	Course Name	Section	Date	Time	Instructor	Room
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Filter By:

View Schedule: Their daily/weekly schedule is mentioned here.



Qt Activity Log - activity_log.ui

Type Here

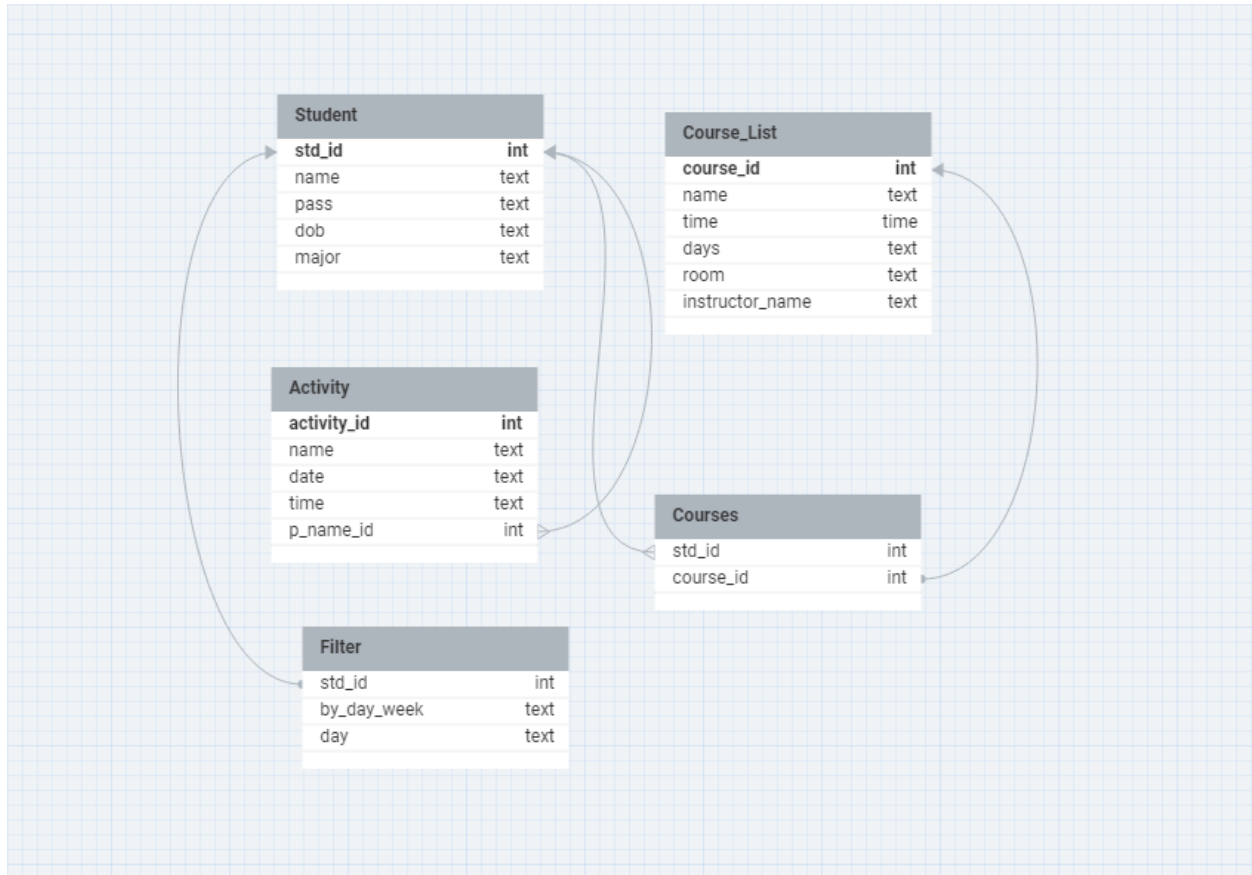
Activity Log

Activity ID	Activity Name	Date	Time
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Activity Log: Any changes they have e.g. create timetable or swap course

2.5. ERD: Please incorporate an initial ERD for your project, ensuring clear highlighting of primary keys and accurate depiction of table relationships. Avoid manual ERD creation; utilize tools like DBdesigner for this purpose.

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ER Diagram: Showing relationships and tables for the database.