CS355 – Database Project Proposal Form

Section 1: Metadata

to be filled by the student

1.1. Project Information to be filled by the student

Title: **Habib University Student Government Management System**	
Section: L1	Instructor: Umer Tariq

1.2. Student(s) Information

Name: Syeda Alishba Zaidi	ID: 08339
Section: L1	Batch: 2026

Name: Huzaifa Ahmed Khan	ID: 08437
Section: L1	Batch: 2026

Name: Aamaina Mukarram Tahir Ali	ID: 08391
Section: L1	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.*

The HUSG (Habib University Student Government) Management System is designed to manage the internal operations of the HUSG. This system focuses on 5 key functionalities that are essential for smooth operation, including user login and registration, tracking member progress, scheduling internal meetings, assigning tasks to members, and managing the budget. The project scope includes designing interfaces and database interactions for different users such as members of the Executive Council (EC), Cabinet Chair's and Members of the cabinet enabling them to perform their tasks efficiently. This system is intended to improve the coordination and overall management within the student government by providing user-friendly screens for each functionality.

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 and Registration:

The system provides login and registration functionalities to allow users to access the main dashboard.

• Function 1a - Login Screen: The login screen is the first interface presented to the user. It prompts the user to enter their HU ID and Password. If the user has already registered, they can input their credentials and click the "Login" button. If the credentials are correct, the user is redirected to the Dashboard screen. If the user has not registered, they can click the "Register button", which will take them to the registration screen. The "Close" button exits the program.

• Function 1b – Registration Screen: If the user is not registered, they are directed to the registration form by clicking the "Register" button on the login screen. The registration form prompts the user to enter their details: HU ID, Password, Confirm Password, Email, Department, and Contact Number. Users must also select their role (Executive Council, Cabinet Chair or Member). After filling in the details and clicking the "Register" button, an account is created, and the user is redirected back to the login screen to log in with the new credentials.

• Function 1c – Dashboard Screen: After a successful login, the user is taken to the Dashboard screen. This screen provides four main options: Meetings, Calendar, Finance and Work Allocation. Each button serves as a shortcut to the corresponding functionalities, allowing users to manage various tasks based on their selection. The "Close" button exits the Dashboard.

Module 2: View Scheduled Meetings and Scheduling Meeting:

• All members of the cabinet can view the scheduled meetings through the system. The meetings are displayed with details such as Meeting ID, time, and date, providing a clear schedule for everyone involved. Only Executive Members (EC) and Cabinet Chairs have permission to schedule meetings. The scheduling process involves entering the meeting time, date, meeting ID, and selecting the participants. There are 3 options for scheduling a meeting **"Meeting for EC Only"**, This option allows scheduling a meeting exclusively for executive members. "**Meeting for EC and Cabinet Chairs**", this option allows scheduling a meeting that includes all cabinet chairs and executive council. And "**Internal Cabinet Meeting**", Cabinet Chairs can schedule meetings for their internal cabinet members only. These options are available in a dropdown menu. After filling in the required details, pressing the "Add" button will add the meeting to the schedule, which can be viewed by all HUSG members.

Module 3: Events Calendar:

• All users can view the events calendar, which displays upcoming events with details such as Event Name, Date, and Location. This feature ensures that all members are informed of scheduled events. Only Cabinet Chairs and Executive Members (EC) have the authority to add events to the calendar. To add an event, the authorized user must enter the event date, time, and location. After filling in the details, clicking the "Add" button will add the event to the calendar, making it visible to all users. Cabinet Chairs and EC members can also remove events from the calendar. By selecting an event and clicking the "Delete" button, the event will be permanently removed from the calendar for all users, maintaining the schedule's accuracy.

Module 4: Task Allocation:

• The Task Allocation Module is designed for the Cabinet Chair to manage and assign tasks to team members. It enables the selection of team members, departments, and designations, and allows for task descriptions, deadlines, and statuses to be set or updated. Key features include: "**Team Member Selection**" that will display member details such as name, department, and designation. "**Task Assignment**", *Creation of new tasks with descriptions and deadlines for selected mem*bers. "**Task Tracking**" is a table that lists all tasks assigned to a member, showing Task ID, Description and status. "**Status Management**" where tasks can be updated to "Completed". "Pending" or dropped using radio buttons.

Module 5: Finance and Budget Allocation:

• The Budget and Finance Allocation Module allows the Executive Chair to allocate, deallocate, and manage departmental budgets efficiently to Cabinet Chairs only and Cabinet Chairs to their members. The interface includes functionality for adding or subtracting amounts from the total budget of each department and tracking the allocated funds. Key features include: "**Recipient and Department Selection**" that enables the user to select a department and input the recipient's name for budget allocation. "**Amount Allocation**" that allows the user to input a specific amount to allocate or deallocate (using negative values) to the department's budget. "**Current Balance**" this will display the total available balance in the system, ensuring the user knows the remaining funds. "**Add/Subtract Balance**", Users can adjust the system's total balance manually by entering an amount and saving the change. "**Allocation Table**", that displays a list of current allocations, showing the department head, department and allocated budget for easy reference. "**Edit Allocation"** that allows the user to modify existing budget allocations, updating details such as recipient, department and amount.

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).*

We plan to work on the entire project together, and every weekend, we will complete the project tasks that are taught to us in the lab and lecture during that week.

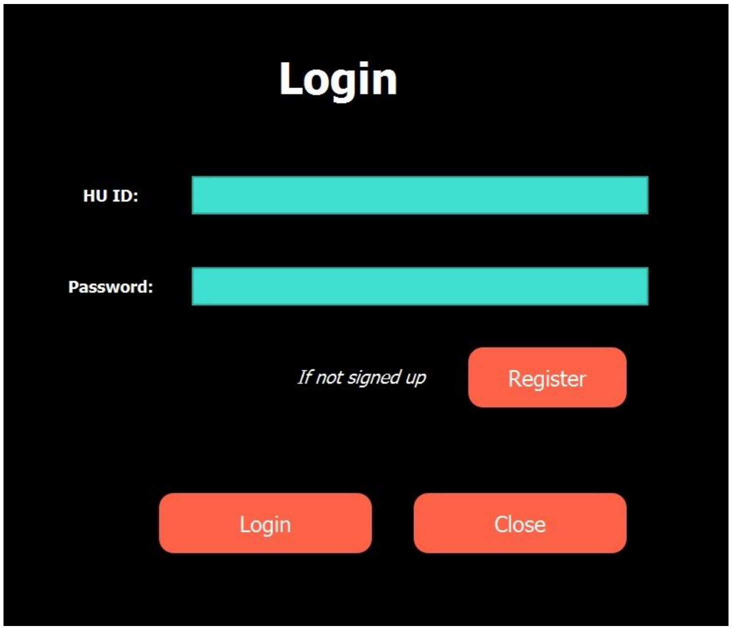
For example,

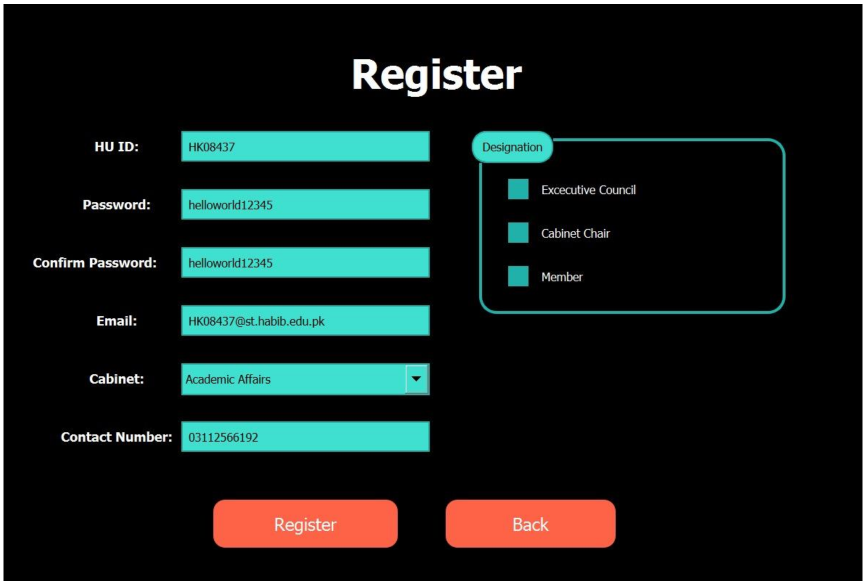
14th-16th September, we plan on doing the Relational Schema Diagram and the Entity Relationship Diagram.

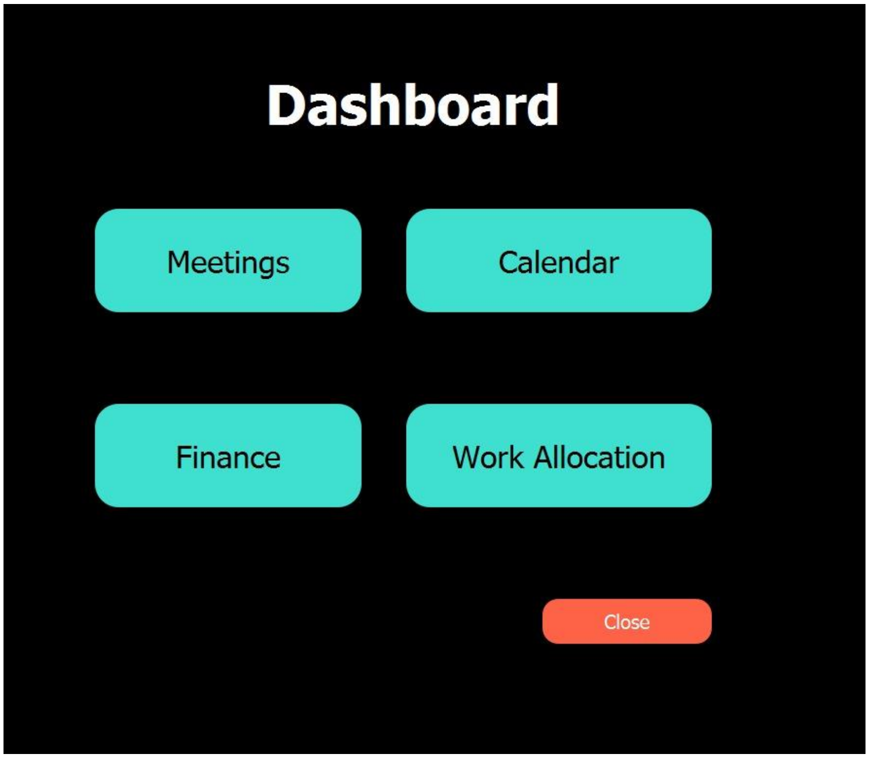
2.4. Technology Stack: *If you are utilizing any language or database besides PyQt and SQL Server, please complete this section; otherwise, leave it blank. Specify the programming language and database management system intended for constructing this application, as well as the application type (Desktop,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

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.*

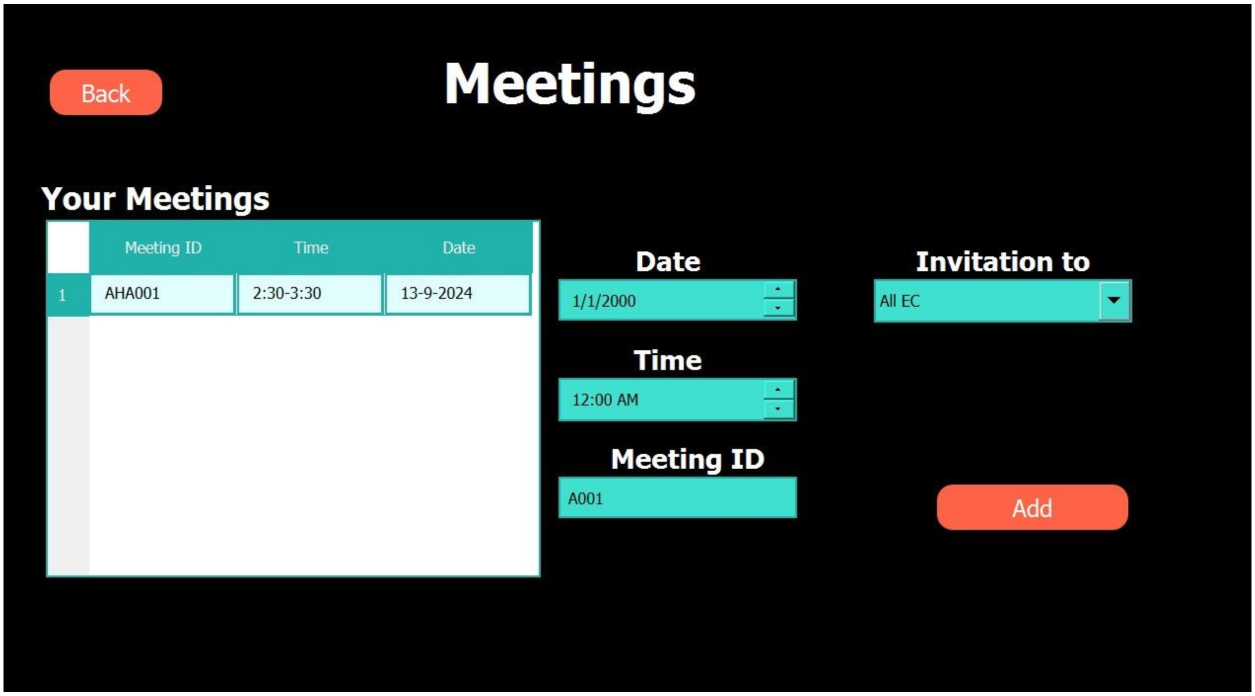
Module 1: Login and Register:



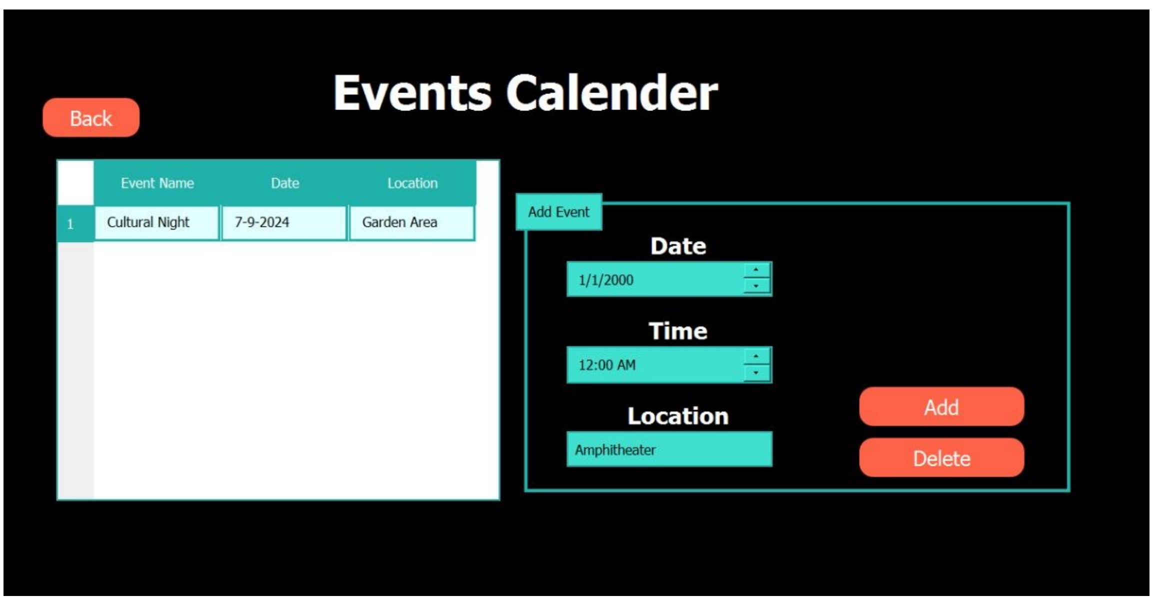

Register
HU ID:
HK08437
Password:
helloworld12345
Confirm Password:
helloworld12345
Email:
HK08437@st.habib.edu.pk
Cabinet:
Academic Affairs
Contact Number:
03112566192
Designation
Excecutive Council
Cabinet Chair
Member
Register
Back


Dashboard
Meetings
Calendar
Finance
Work Allocation
Close

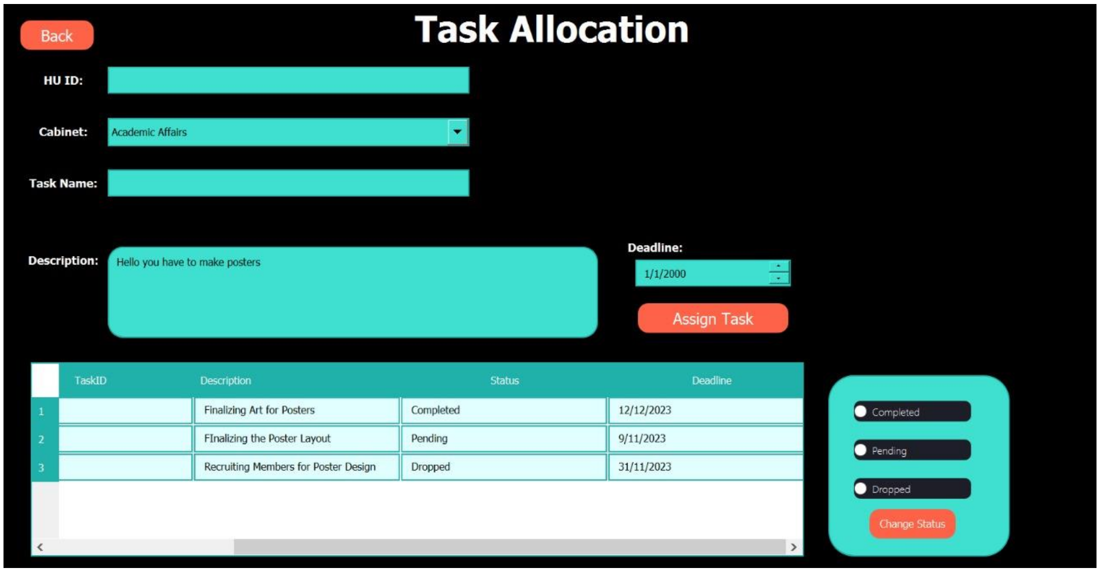
Module 2: Viewing Meetings and Scheduling Meetings:



Module 3: Events Calendar:



Module 5: Task Allocation:



Module 5: Finance and Budget Allocation: