SPORT CLUB MANAGEMENT SYSTEM

Name:- N.G.Kaween Newmal

Reg.No:- 123643509

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Introduction

The purpose of the Sports Club Management System is to provide an efficient and user friendly platform for managing sports-related activities within a club. The system enables administrators to manage events, equipment, and users, while members can view schedules, register for events, reserve equipment message communications through a centralized web-based interface. This project aims to improve organization, reduce paperwork, and support smooth communication between admins and members.

The system is implemented as a PHP and MySQL web application hosted on AwardSpace. It uses a MySQL database to store users, events, registrations, equipment reservations and messages. The interface is designed to be simple and easy to understand, so that even non-technical users can operate it with minimum training.

Through this project I also wanted to practice the complete web development lifecycle:

- requirement gathering
- design
- implementation
- testing
- deployment and documentation

The developed Sports Club Management System has been deployed as a live web application and can be accessed through the following URL:

• Website: http://sportsclubmanagementsystem.sportsontheweb.net/index.php

For evaluation and demonstration purposes, an administrator test account has been created:

• Admin Username: admin

• Admin Password: admin123

In summary, the SCMS project not only supports the club to run more smoothly, but also helped me to understand how a real-world information system is built and deployed on an online hosting environment.

System Requirements Summary

Functional requirements

- REQ-1: Member registration
  The system must allow new members to create an account by providing username, email and password through the registration page. Their details should be stored in the users table.

- REQ-2: Login and authentication
  The system must validate login details against the database and only allow correct users to enter the system. Depending on the role, users should be redirected either to the admin dashboard or the member dashboard.

- REQ-3: View scheduled events
  Logged-in members should be able to see a list of upcoming sports events with date, time, location and capacity.

- REQ-4: Register for an event
  Members must be able to register for an event. A record should be inserted into event_registrations and the system should avoid duplicate registrations by the same member for the same event.

- REQ-5: Event management by admin
  Admin users should be able to add new events and delete existing events through the admin events page. When an event is deleted, its registrations must also be removed.

- REQ-6: Check equipment availability
  Members must be able to view the list of equipment items and see the current available quantity.

- REQ-7: Book / reserve equipment
  Members must be able to request a reservation for a particular equipment item by

selecting quantity and date. A record must be inserted into equipment_reservations and the available quantity kept up to date.

- REQ-8: Manage equipment inventory (admin)
  Admins should be able to add new equipment items, update quantities and remove items from the system.

- REQ-9: User messaging platform
  The system must provide a simple messaging feature where a member can send a message to the admin using a subject and body.

- REQ-10: Admin message handling
  Admins must be able to view all messages addressed to them, reply to those messages and see which messages are already read.

- REQ-11: Event attendance report
  The system should be able to show, for each event, how many members registered. This is used as a basic attendance report.

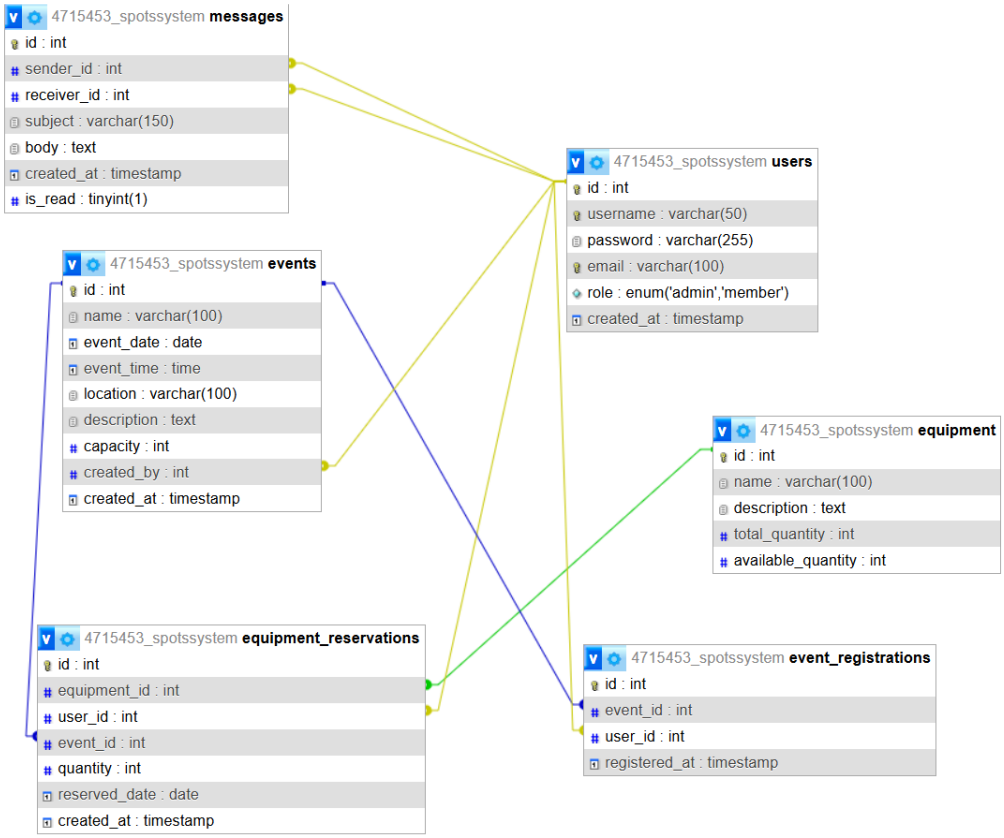
- REQ-12 & REQ-13: Reports on equipment usage and event participation
  The admin reports page should show how many times each equipment item was reserved and the registration count per event so that the club can analyze usage patterns.

Nonfunctional Requirements

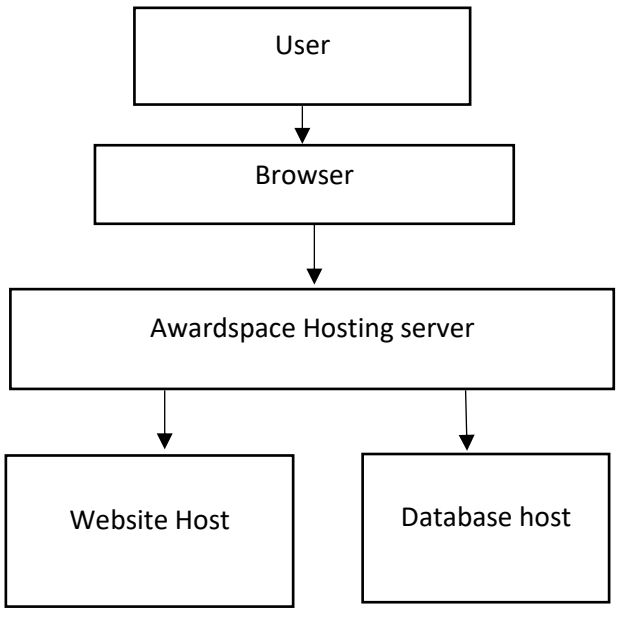
- REQ-NF1: Performance – Pages should respond to user actions within about 2 seconds under normal load so that the system feels responsive.
- REQ-NF2: Security of credentials – User passwords must not be stored in plain text. The system uses hashing in PHP and in the MySQL INSERT scripts.
- REQ-NF3: Access control – Only authenticated admins should be able to access the admin dashboard and admin-only pages. Members should be blocked from those pages and redirected to the member dashboard.

System Design Overview

Database Schema



Architecture Diagram



Implementation Details

Technologies Used

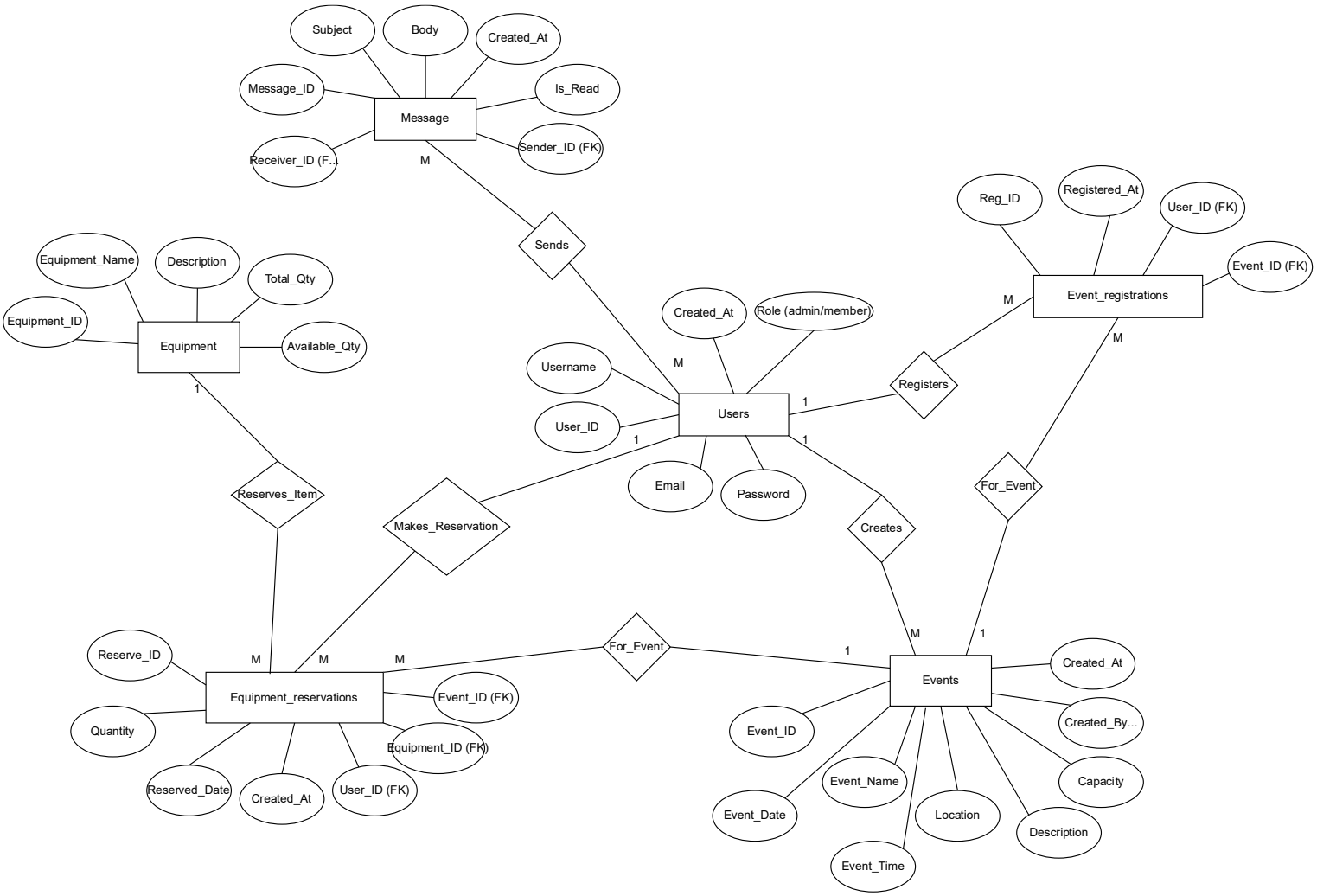
- **Frontend:** HTML, CSS , minimal JS
- **Backend:** PHP
- **Database:** MySQL (Awardspace)
- **Hosting:** Awardspace
- **Tools:** phpMyAdmin, VS Code

Main Modules / Pages

- index.php- Details about Sport Club and Register or Login.
- register.php- Register to the system
- admin_dashboard.php- Admin home page
- member_dashboard.php- Member home page
- member_equipment.php- Member can book equipment by referring this page
- events.php- Member can register for the event by reffering this page
- admin_equipments.php- Admin can manage equipments by referring this page
- admin_events.php- Admin can manage events by referring this page
- manage_members.php- Admin can manage members by referring this page
- message.php- Member can send messages by referring this page

Diagrams

ER diagram



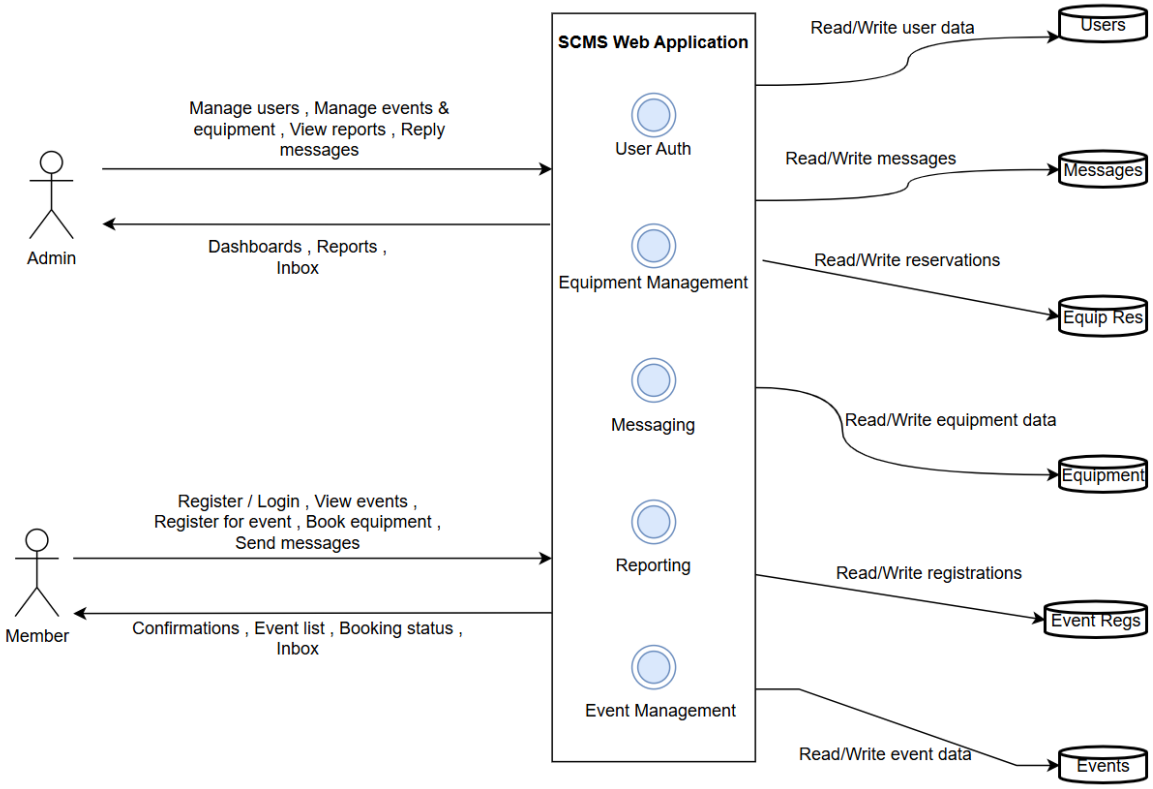
Data Flow Diagram (DFD) Level 1

This figure shows the DFD Level 1 of the Sports Club Management System (SCMS). The main system (Level 0) is decomposed into five internal processes:

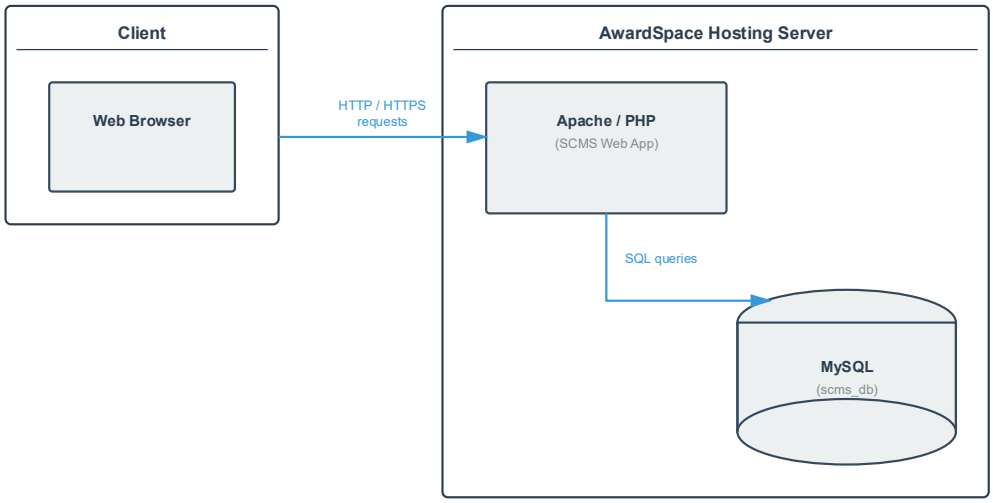
- User Authentication,
- Event Management,
- Equipment Management,
- Messaging
- Reporting.

The diagram also shows how Member and Admin interact with these processes and how data is stored/retrieved from the system's data stores

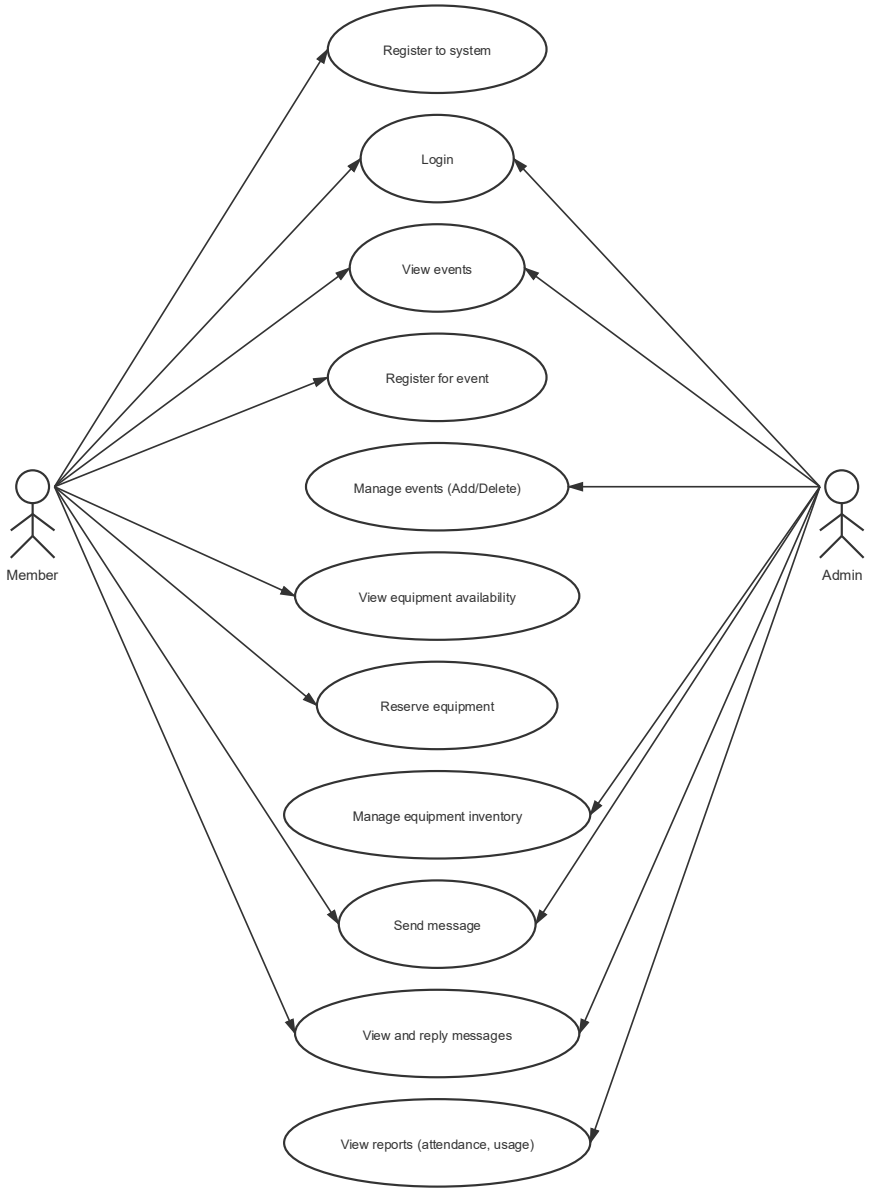
Data Stores



Deployment diagram

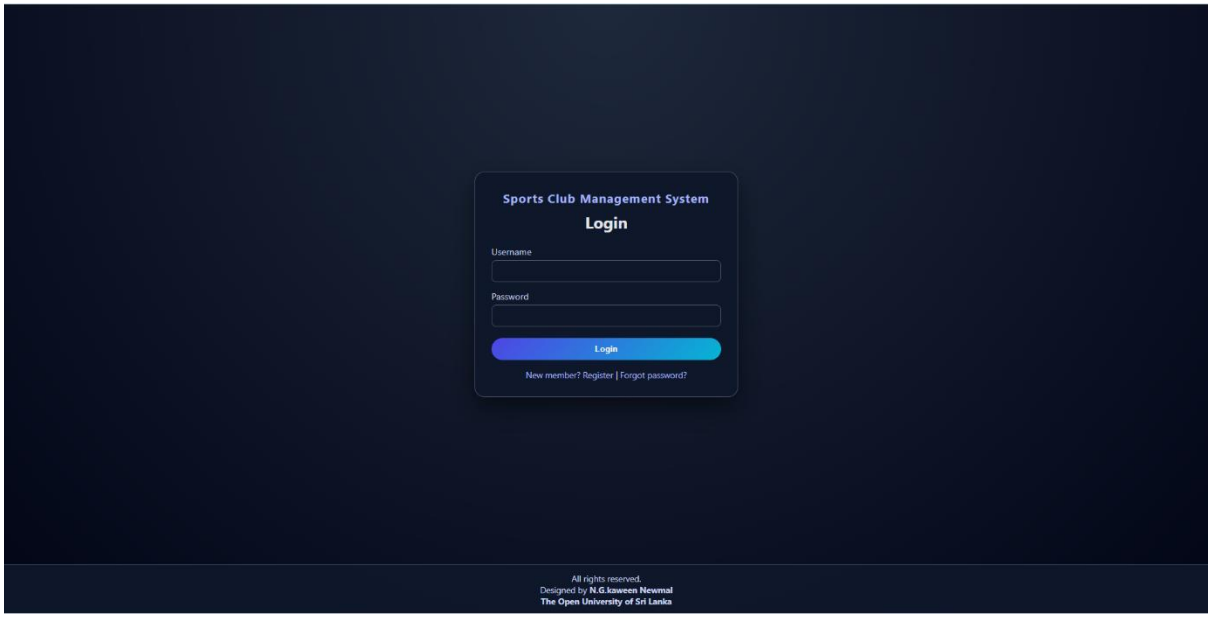


use case diagram

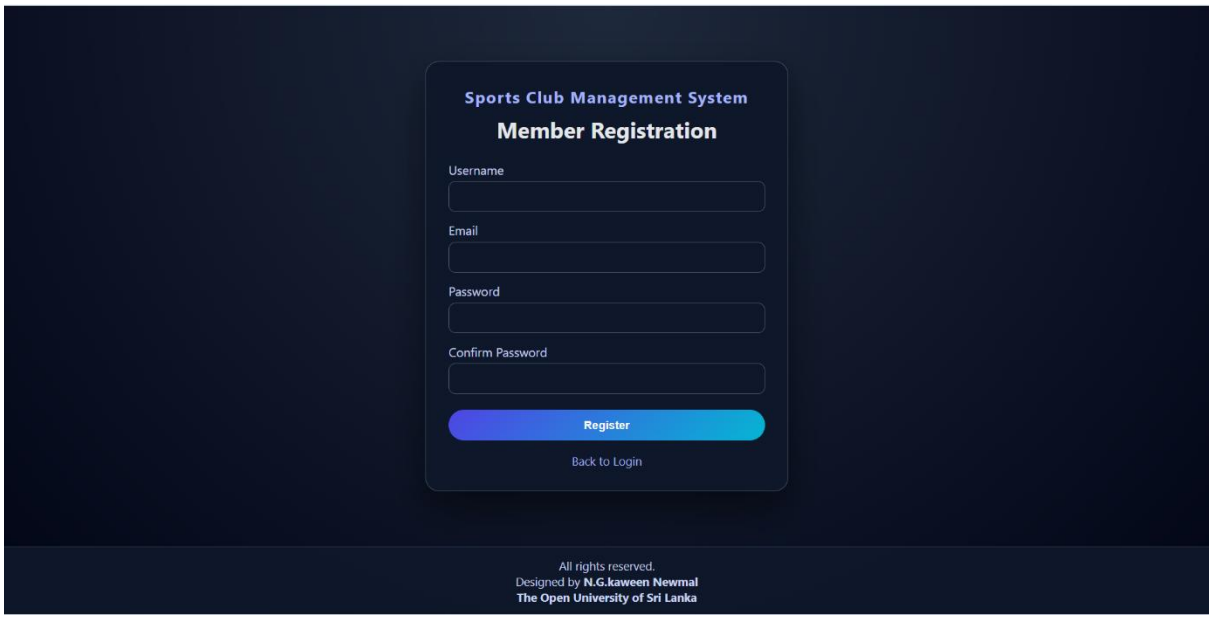


Screenshots

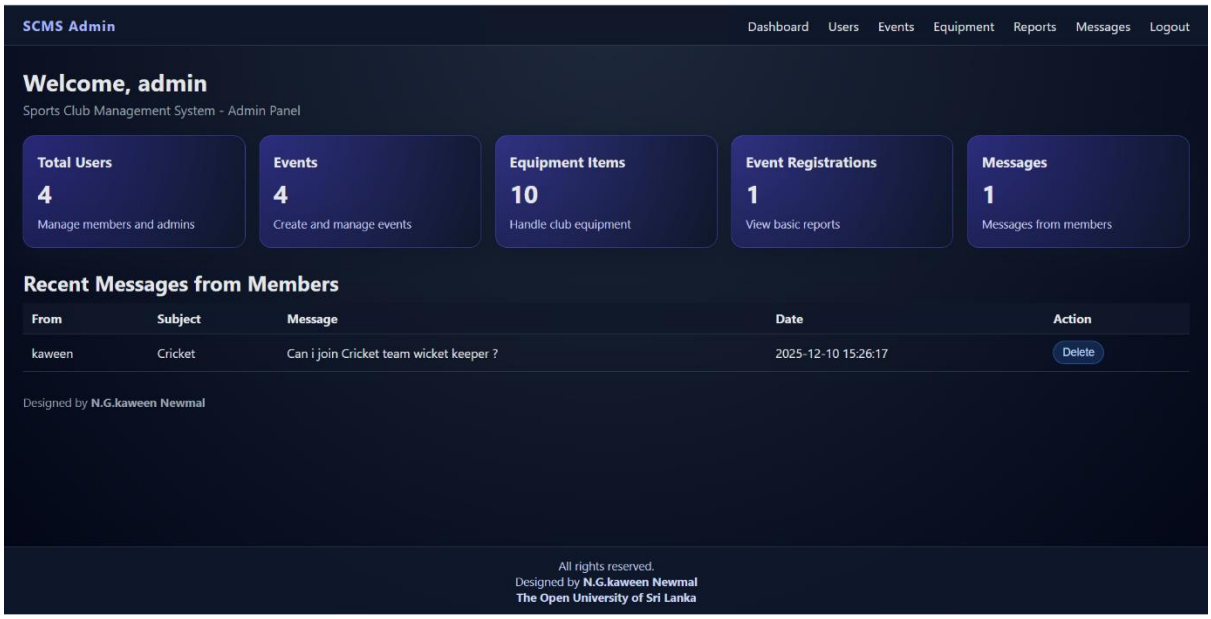
Index page



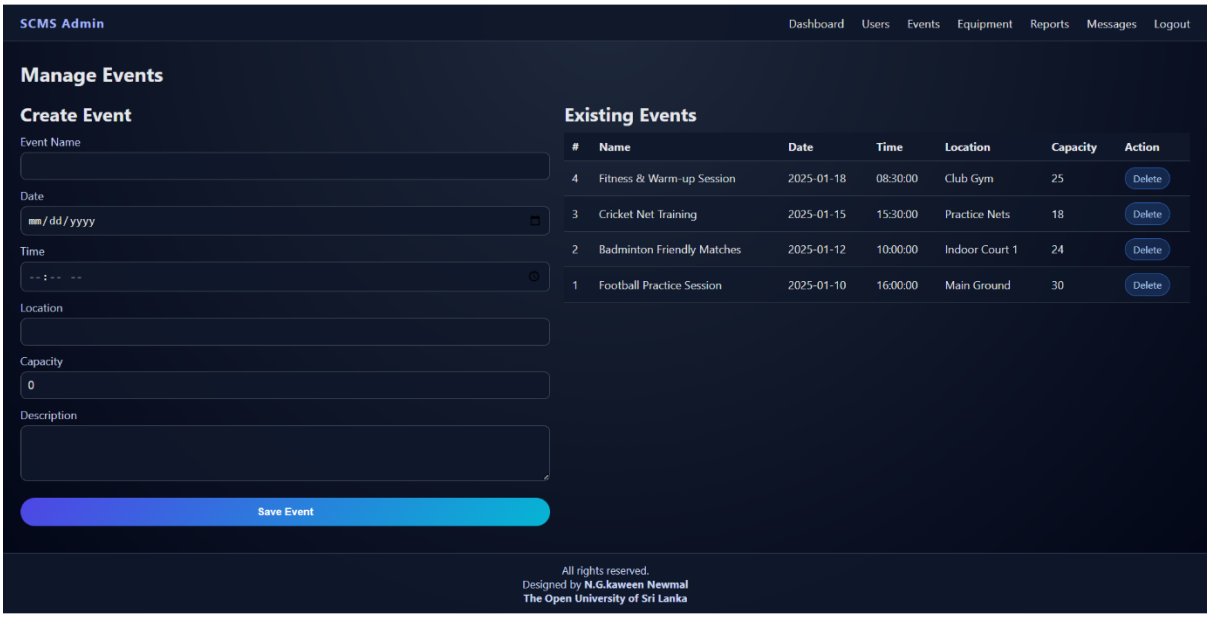
Register Page



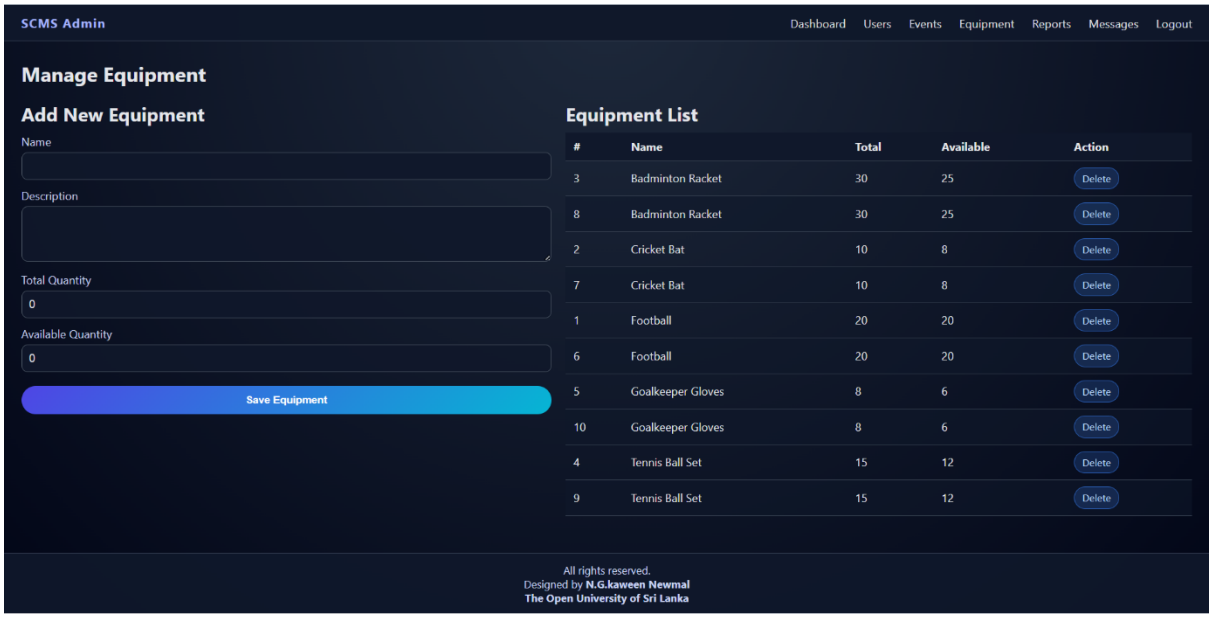
Admin dashboard page



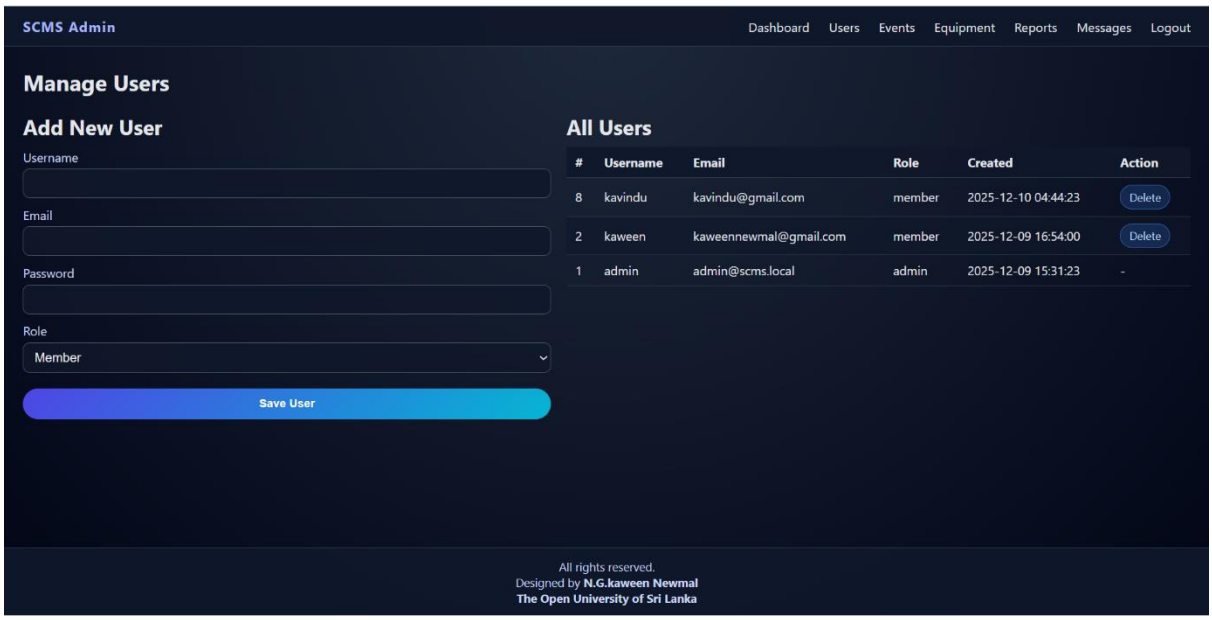
Manage Events page



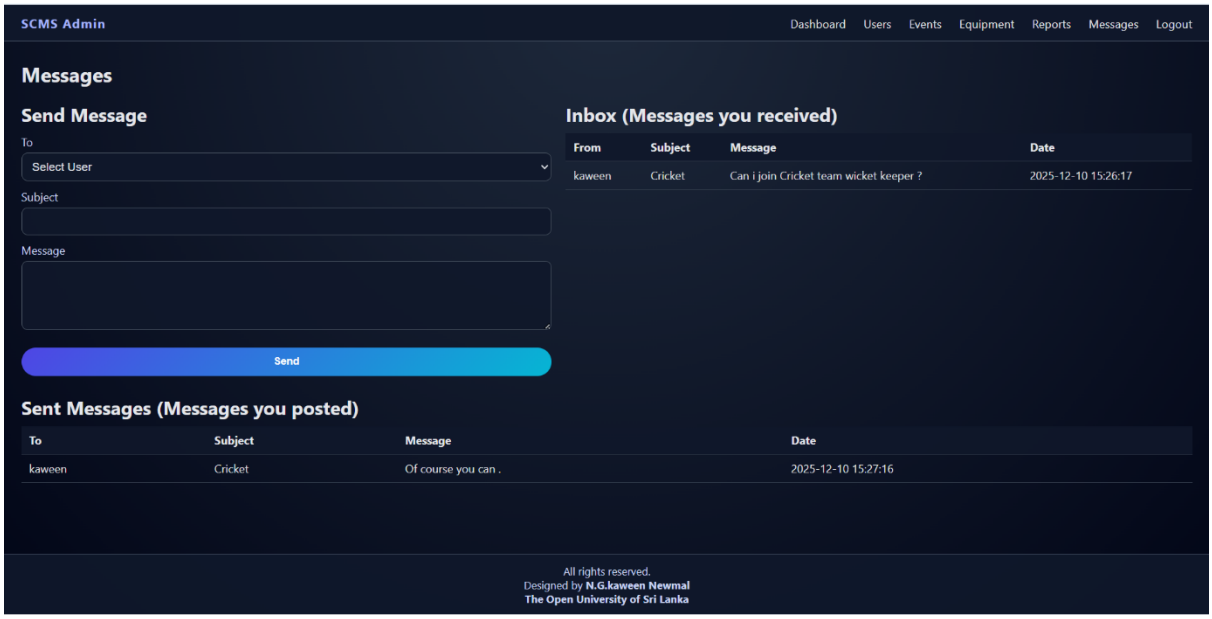
Manage Equipments page



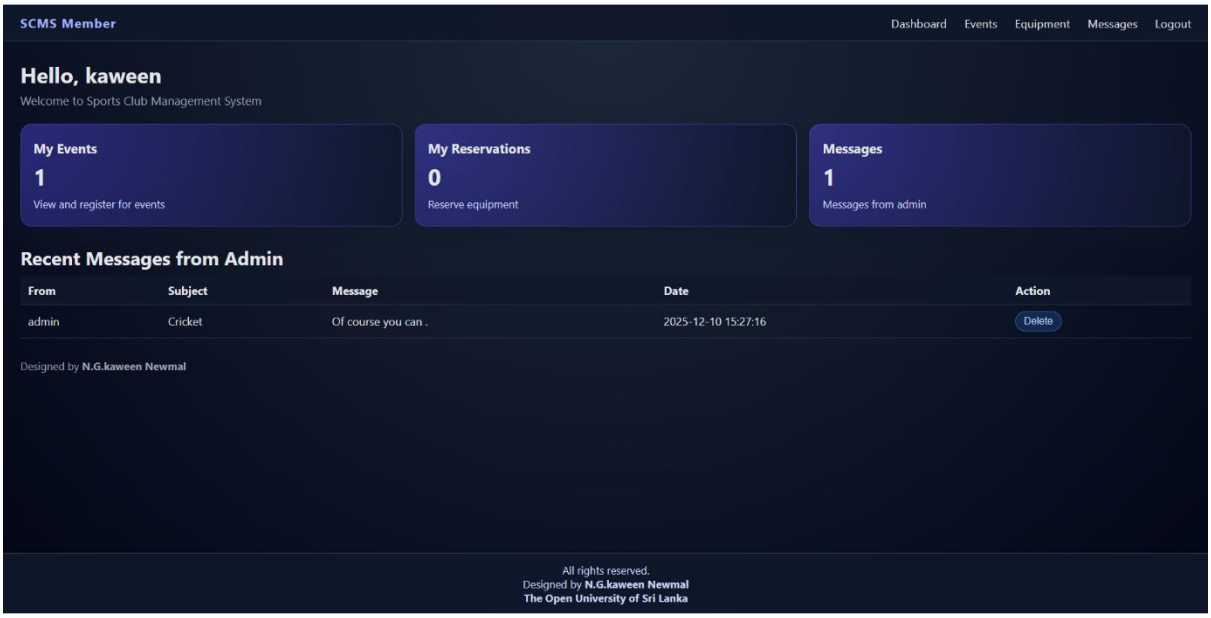
Manage Members Page



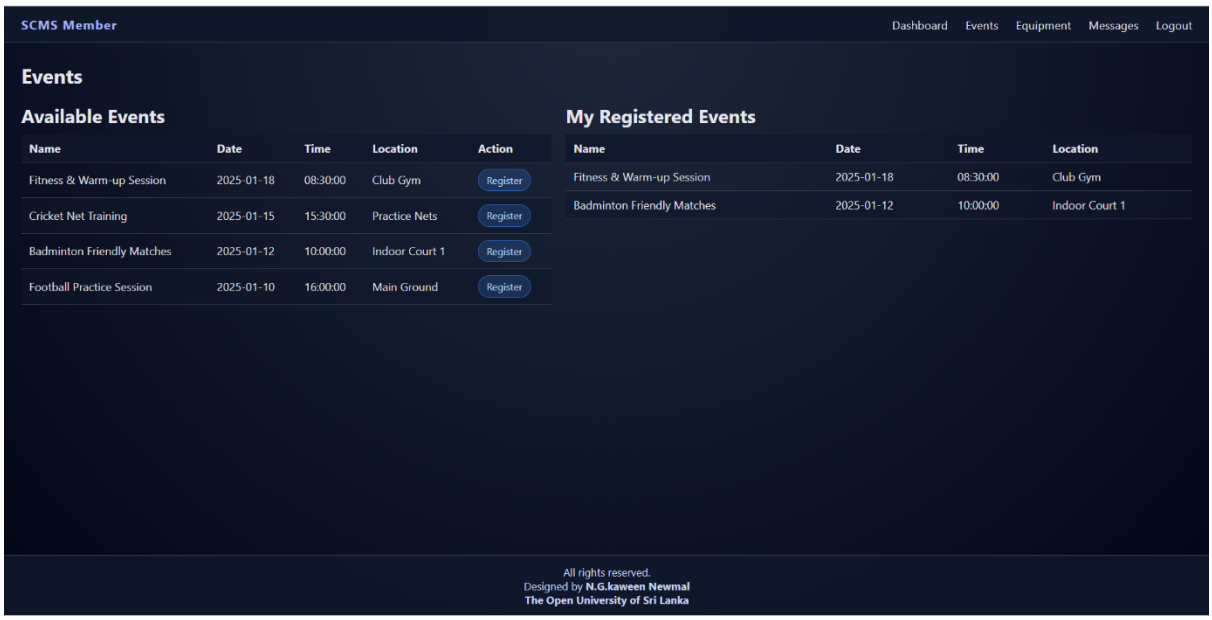
Message Respond Page



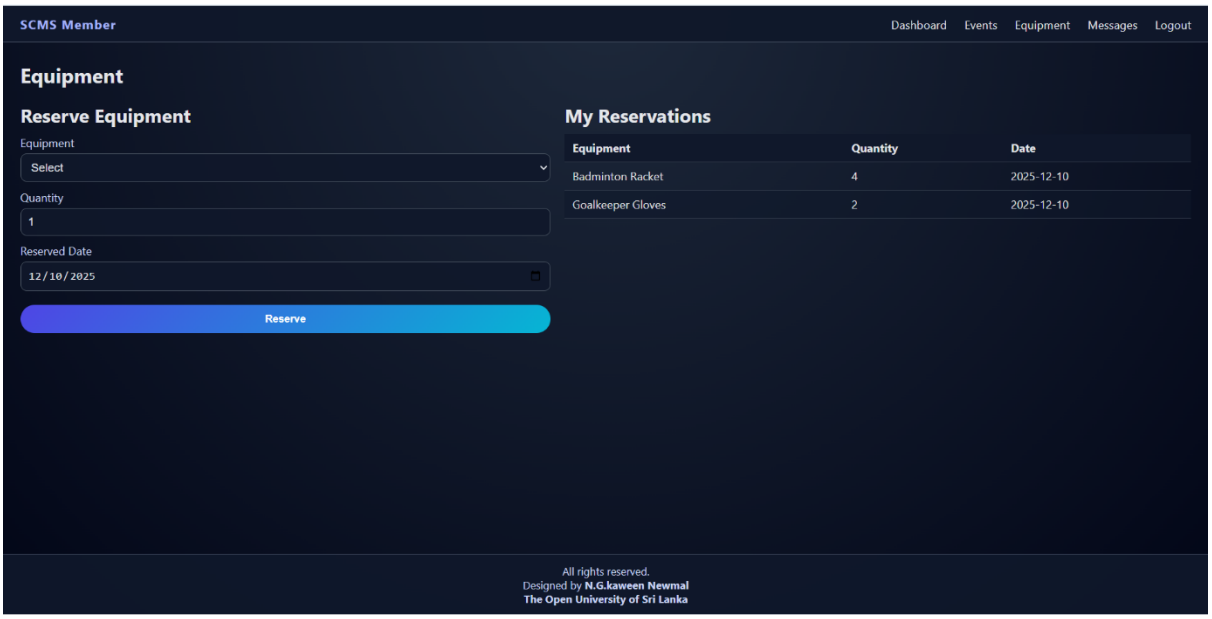
Member dashboard page



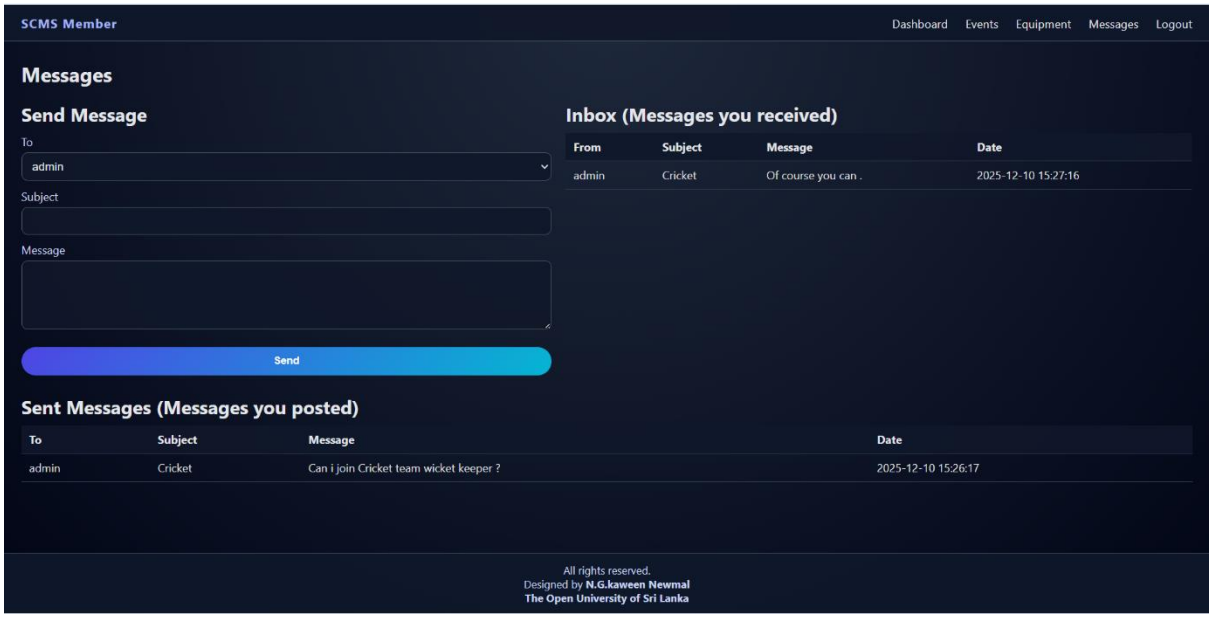
Events register page



Equipment booking page



Message page

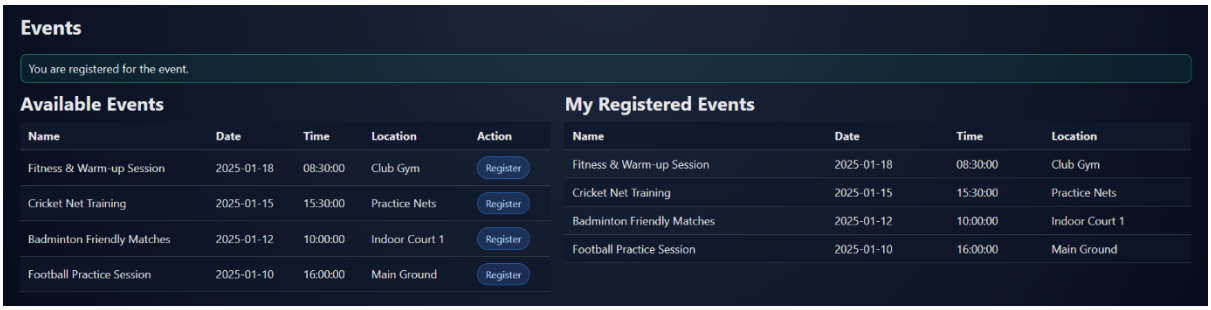


Testing and Evaluvation

Test Case ID	Description / Steps	Expected Output	Result
TC-01	Login with valid admin username & password	System logs in and redirects to admin_dashboard.php	Pass
TC-02	Login with valid member username & password	System logs in and redirects to member_dashboard.php	Pass
TC-03	Login with incorrect password	Error message shown / login fails, user stays on login page	Pass
TC-04	Register new member with valid details	Account created in users table (role → member), success message shown	Pass
TC-05	Register with missing required fields	System shows warning/error and does not create account	Pass
TC-06	Admin adds a new user from admin_users.php	New user appears in user list and saved in database	Pass
TC-07	Admin deletes a member user	Member is removed from users table and disappears from list	Pass
TC-08	Admin tries to delete an admin user	Admin user cannot be deleted	Pass
TC-09	Admin creates a new event	Event saved in events and appears in event list	Pass
TC-10	Admin deletes an event	Event removed from events; related registrations removed	Pass
TC-11	Member views events list	Events display correctly with date, time, location, capacity	Pass
TC-12	Member registers for an event	Record added to event_registrations; confirmation shown	Pass
TC-13	Member reserves equipment (valid quantity/date)	Record added to equipment_reservations; success message shown	Pass
TC-14	Admin adds equipment item	Item saved in equipment and shown in equipment list	Pass
TC-15	Member sends message to admin	Message saved in messages and visible in admin inbox	Pass
TC-16	Admin replies to member message	Reply saved in messages and visible in member inbox	Pass
TC-17	Admin views reports page	Tables show event registration counts and equipment usage totals	Pass
TC-18	Logout	Session ends and user returns to login page	Pass

Tested outputs

Member sends message



Problems and solutions

Problem	Solution
Website pages not loading correctly after uploading to hosting (AwardSpace)	Checked folder structure and fixed file paths (includes, CSS links). Re-uploaded with correct directories.
Database connection error	Verified host, database name, username and password in *config.php*. Tested connection and fixed wrong credentials.
Login not redirecting to correct dashboard	Added role checking after login and redirected based on *role* (admin → admin dashboard, member → member dashboard).
"Access denied" issue (member opening admin pages)	Used *check_login()* and *check_admin()* functions to block unauthorized users and redirect them properly.
Event registrations not saving	Checked SQL insert query and confirmed correct event_id and user_id values. Fixed query and tested again.
Equipment reservation quantity issues	Added validation for quantity and ensured correct equipment_id is selected before inserting reservation.
Messages not showing in inbox	Corrected SQL query to filter by *receiver_id*. Added sorting by latest messages.
Styling (CSS) not applying	Fixed the stylesheet link path and confirmed *assets/css/style.css* is uploaded to server.
Duplicate usernames/emails during registration	Added UNIQUE constraints in DB (username/email) and showed an error message when insert fails.
Deleting events caused leftover registrations	When deleting an event, also deleted related rows in *event_registrations* to keep database clean.

Conclusion and Future Improvements

The Sports Club Management System project successfully met its main objectives. It provides a working web-based platform where admins and members can manage sports club operations such as event scheduling, event registration, equipment reservations and internal messaging. The application is deployed on a live AwardSpace server, so it can be accessed through a normal browser without any special software installation.

From the admin side, the system reduces manual work by giving clear screens to create events, update equipment, view participation reports and respond to member messages. From the member side, it becomes easier to see upcoming events, register in advance and reserve the equipment they need. Overall, the system improves communication and helps to keep accurate records compared to a purely paper-based approach.

Personally, this project helped me to connect theory with practice. I applied database design, PHP programming, HTML/CSS layout and basic security concepts in one complete system. I also learned how to deploy a website on a free hosting platform and debug common issues. The experience will be very useful for future academic modules and real projects.

Future Improvements:

- Add email/SMS notifications
- Add event attendance tracking
- Add payment integration for membership fees
- Include a mobile-responsive version
- Add advanced analytics dashboard

References

- ChatGPT
- Solo learn Courses
- Course materials