

EventHub: A Volunteering App for Busy Students

By

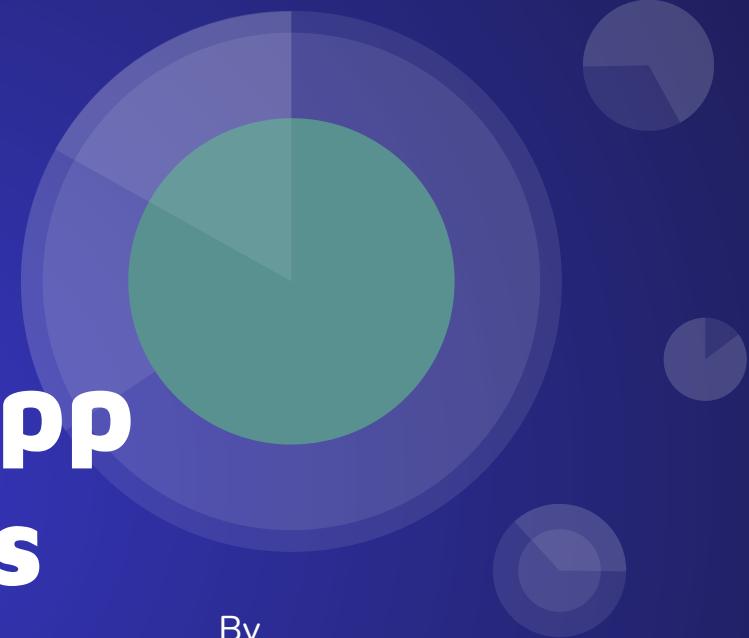
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EventHub

Let's face it, between classes, assignments, and a social life, finding time to volunteer can be tough



CONTENTS

- Introduction
- Our Solution
- ER Diagram
- Intro to the UI - FrontEnd
- Working- BackEnd
- Key Functionalities
- Demo
- Conclusion





Introduction

Volunteering is a powerful way to make a positive impact in your community and build a stronger society.

But finding the right volunteering opportunities can be challenging

Many people struggle to find volunteering opportunities that align with their interests and availability.

Limited awareness of available opportunities can lead to missed chances to contribute

This presentation explores a user-friendly volunteering application designed to streamline the process.



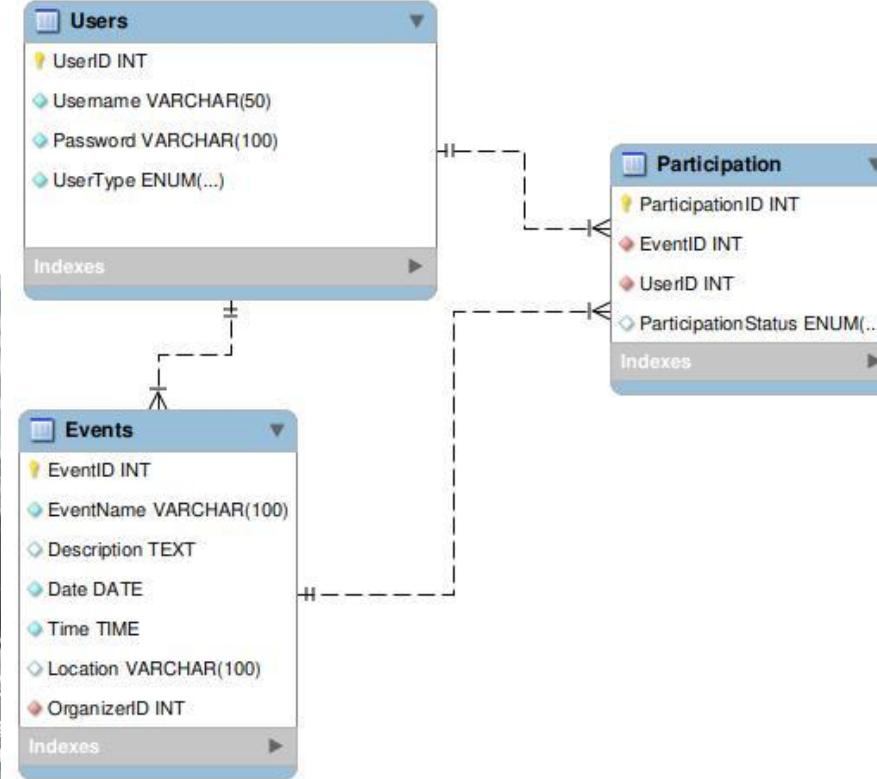
Our Solution

This application addresses these challenges by providing a centralized platform for all your volunteering needs

It's designed to be convenient and user-friendly, making it accessible to everyone

Our solution is a dynamic web application using Java technologies to simplify the process of registering for events and receiving updates.

ER Diagram





Intro to the UI



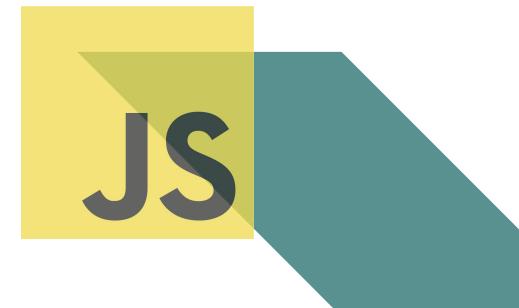
Design Philosophy: The interface is designed to be intuitive, accessible, and responsive across all devices.

HTML

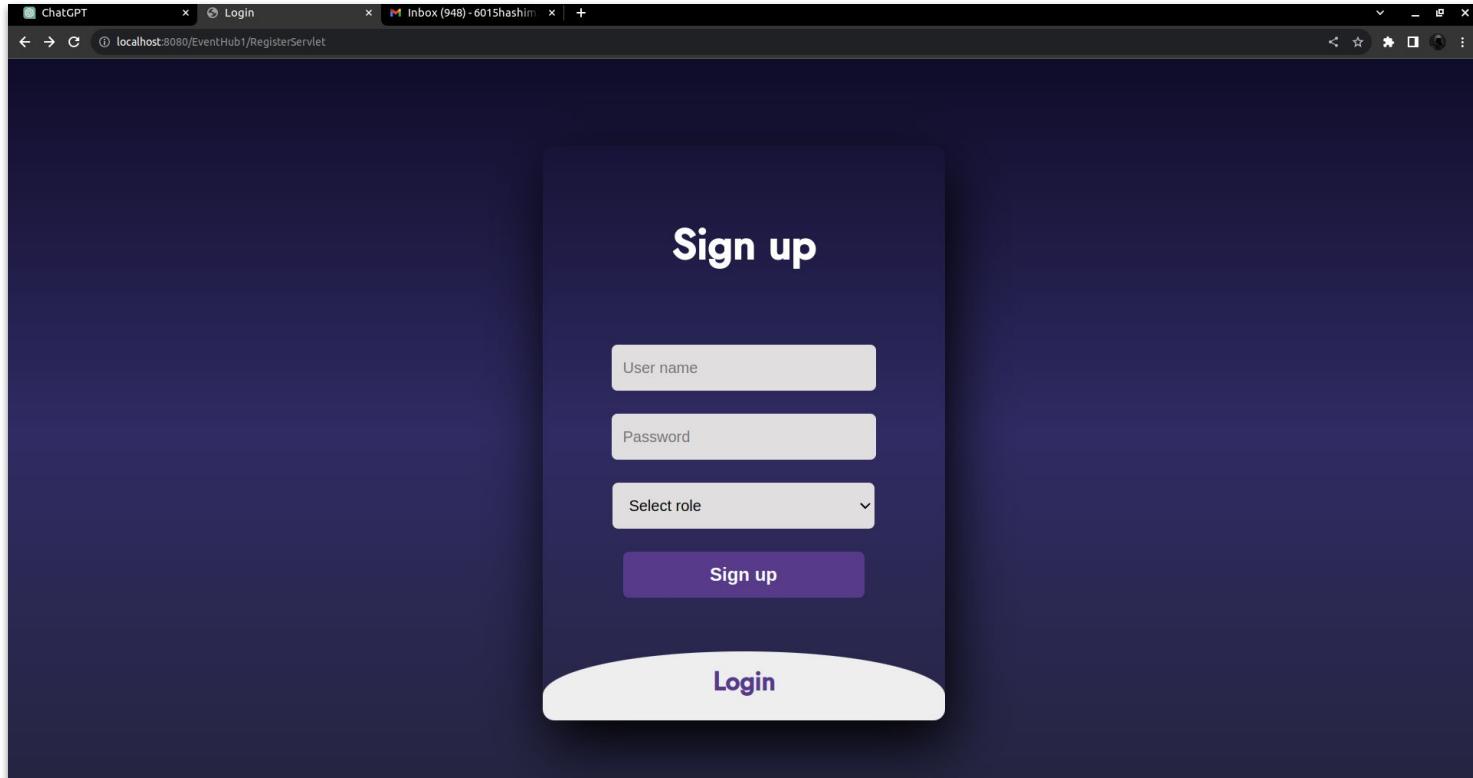


Technologies Used: Front-end crafted with HTML5, CSS, and JavaScript for a dynamic and responsive user experience.

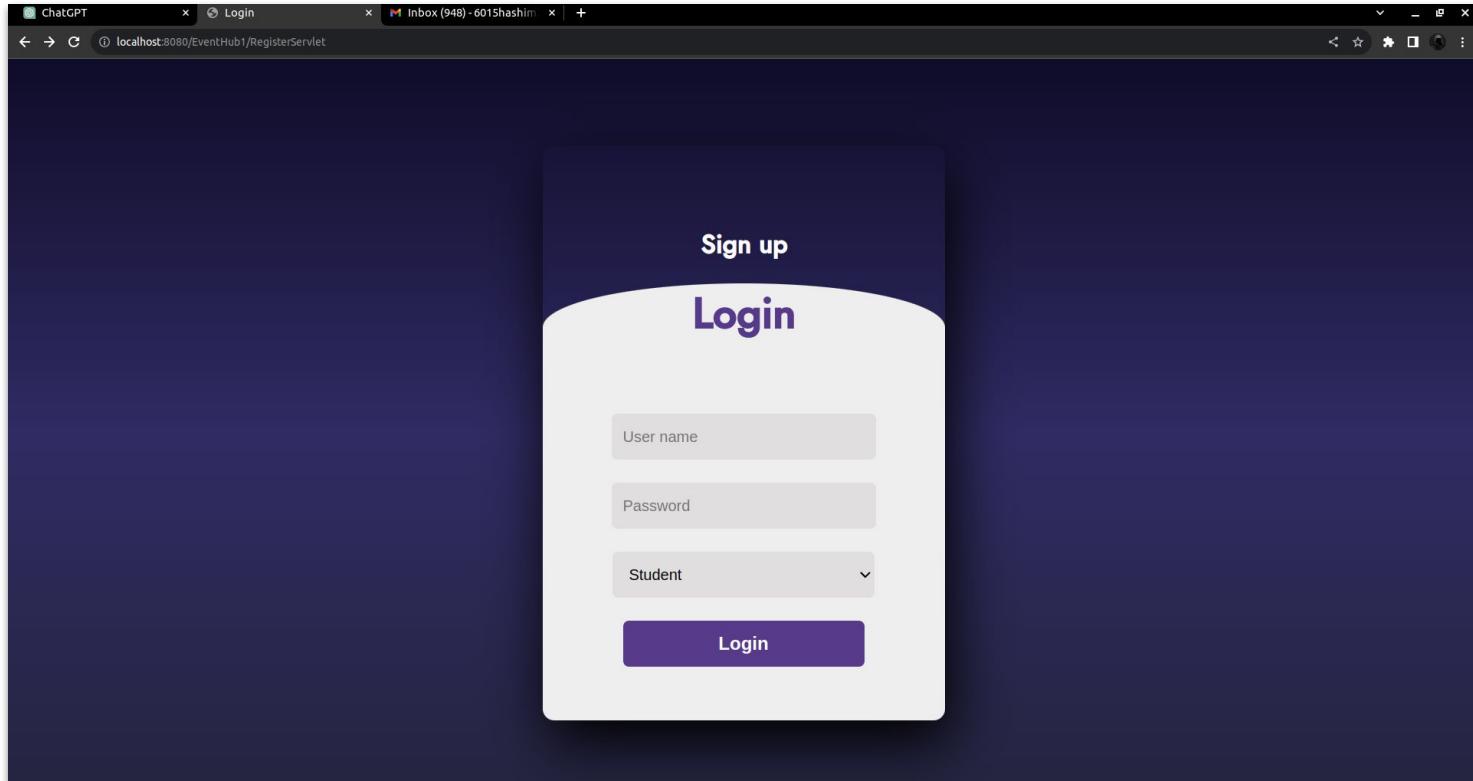
CSS



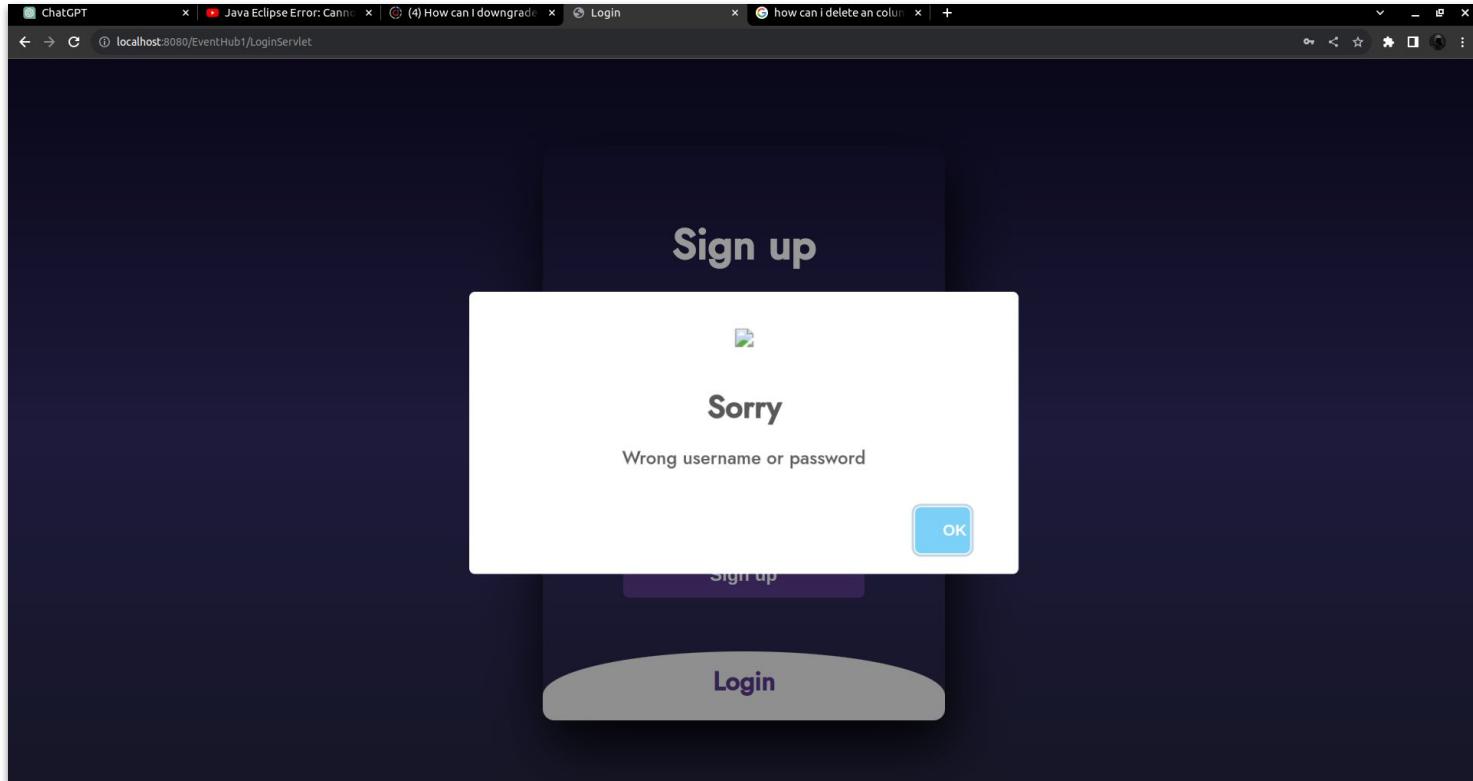
Intro to the UI -Sign Up



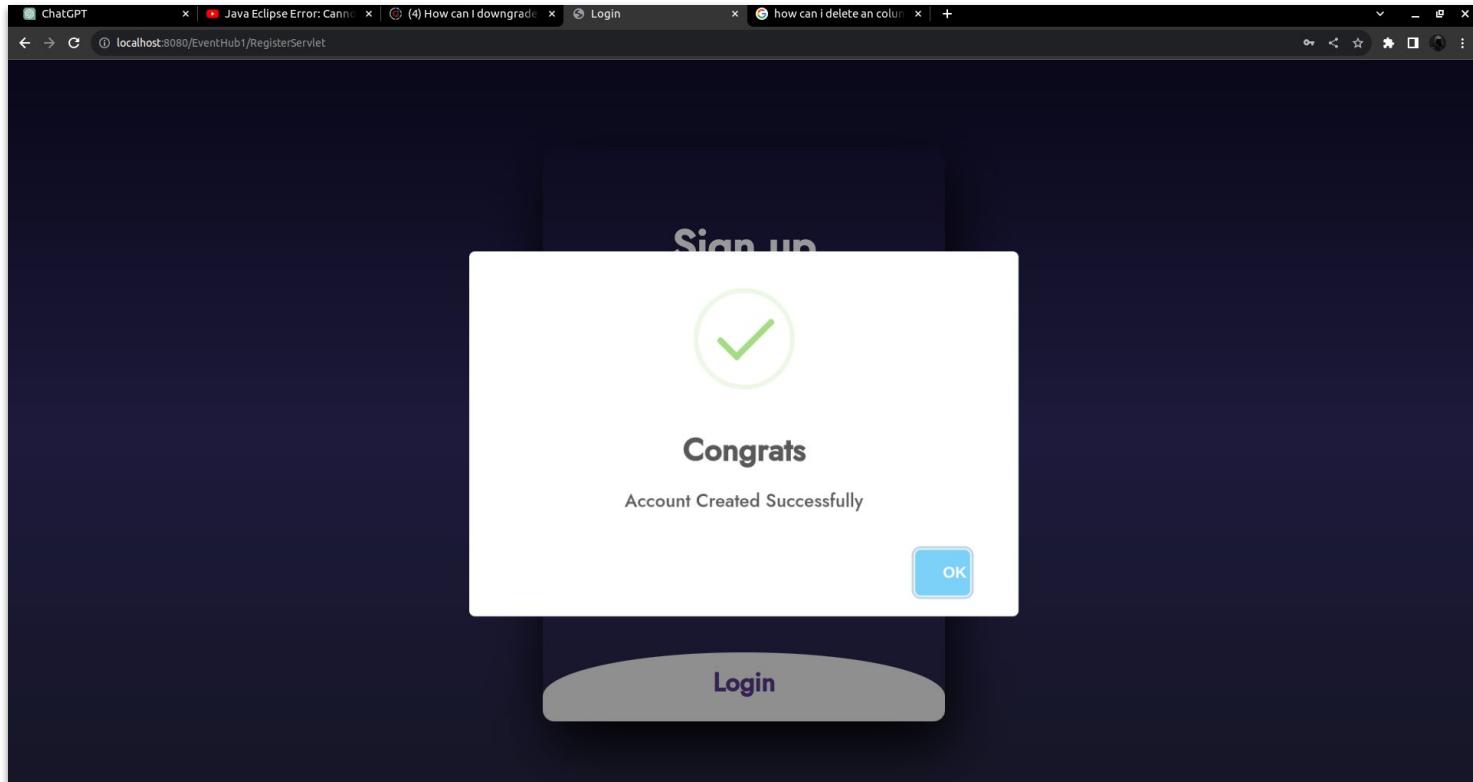
Login



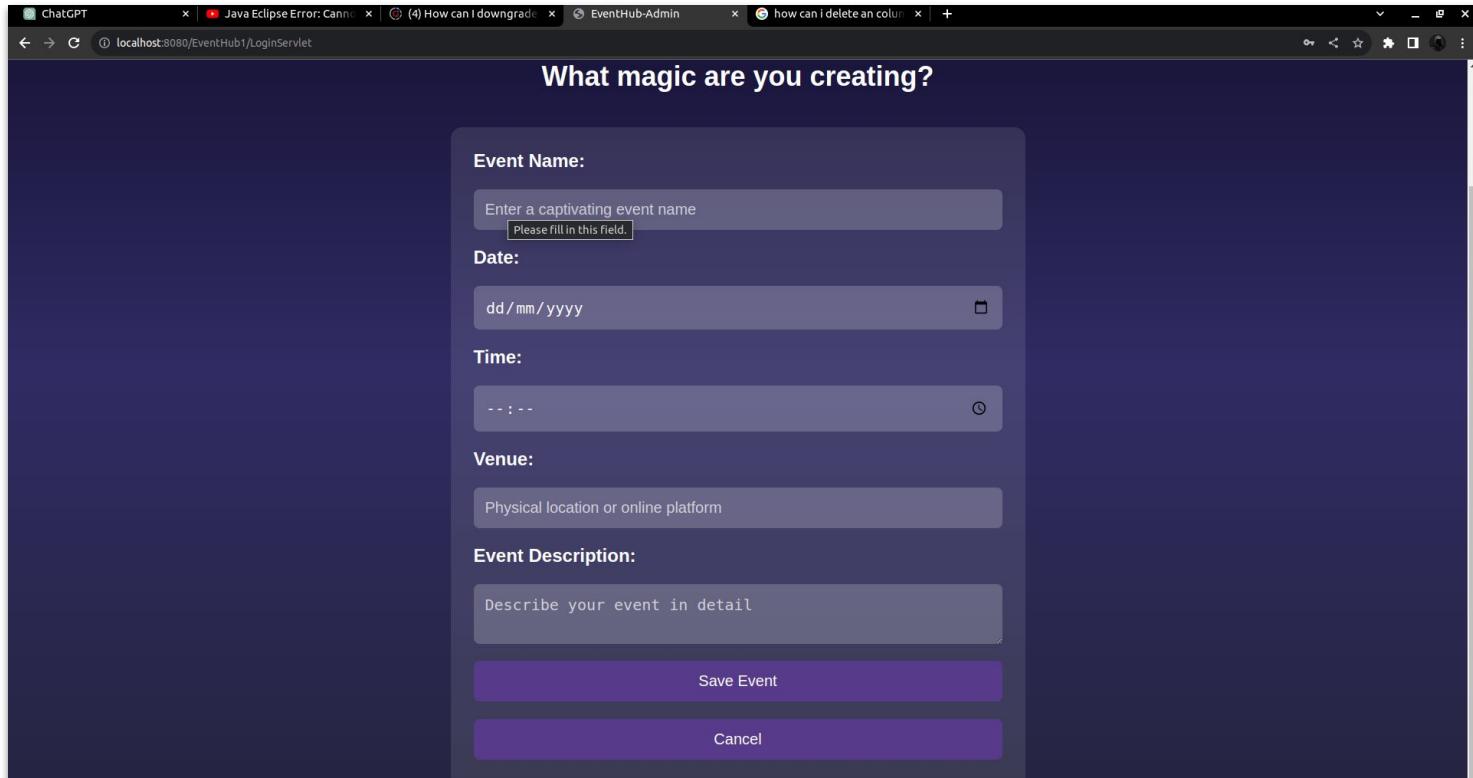
Pop Up for Wrong credentials



Successful Account Creation



Posting an Event



The screenshot shows a web browser window with a dark blue header bar. The title bar includes tabs for "ChatGPT", "Java Eclipse Error: Cannot", "(4) How can I downgrade", "EventHub-Admin", and "how can I delete an column". The main content area has a dark background with white text and light gray input fields.

What magic are you creating?

Event Name:
Enter a captivating event name
Please fill in this field.

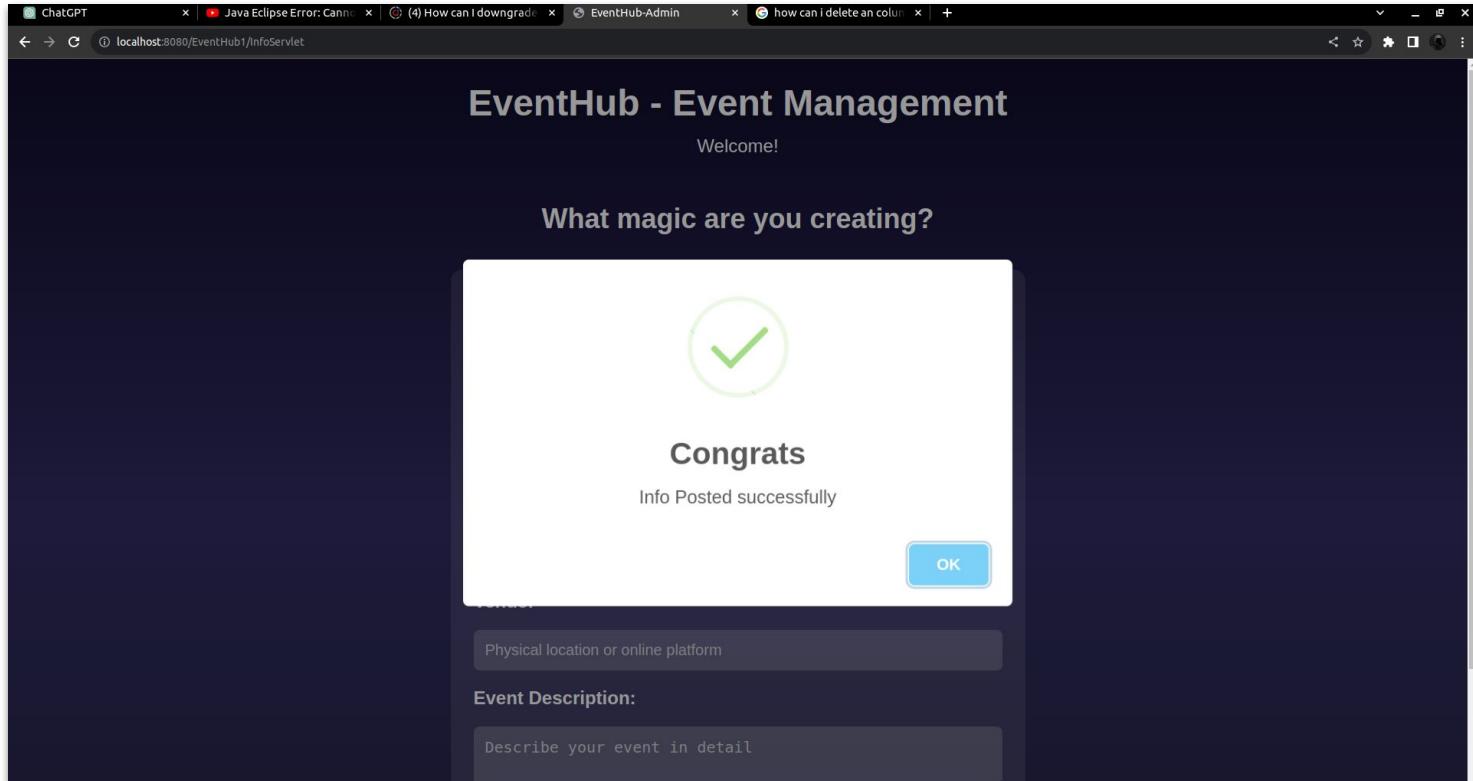
Date:
dd / mm / yyyy

Time:
-- : --

Venue:
Physical location or online platform

Event Description:
Describe your event in detail

Posting an Event



Event Dashboard

localhost:8080/EventHub1/LoginServlet

Upcoming Events

Tejaswi

Description: Tejaswi, our college fest, is a vibrant celebration showcasing a diverse array of talents and passions, fostering a spirited atmosphere of creativity and camaraderie among students.

Date: May 9, 2024
Time: 10:00 AM
Marian college of Engineering

[Register](#)

NSS Blood Donation

Description: Students giving life, one drop at a time. Join us in saving lives and spreading hope through the gift of blood donation.

Date: June 5, 2024
Time: 2:00 PM
Venue: Benziger Hall

[Register](#)

IEEE PES:Solar Power

Description: Full Day workshop on solar energy capturing and photovoltaic technology. Led by Industry Experts

Date: July 10, 2024
Time: 6:30 PM
Venue: IEDC Hall

[Register](#)

GDSC: AI Webdev

Description: Hands on session on

MySQL Database

```
hashim@night:~$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 55
Server version: 8.0.36-0ubuntu0.22.04.1 (Ubuntu)

Copyright (c) 2000, 2024, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use EventHub;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from Events;
Empty set (0.00 sec)

mysql> select * from Users;
Empty set (0.00 sec)

mysql> select * from Users;
+-----+-----+-----+
| UserID | Username | Password | UserType |
+-----+-----+-----+
|    19 | hashim   | 1234    | Admin    |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from Events;
+-----+-----+-----+-----+-----+-----+-----+
| EventID | EventName | Description | Date      | Time      | Location     | OrganizerID |
+-----+-----+-----+-----+-----+-----+-----+
|    12 | Tejaswi  | dsffadfa  | 2024-05-15 | 21:01:00  | benziger hall |        19 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

hashim@night: ~

Working

Brief Description:

- The system follows a client-server architecture model, where interactions are managed between a client and a server.

Components:

- Client-Side: Users interact with the system through web browsers, accessing the system's interface. UI is made dynamic using jsp files.
- Server-Side:
 - Servlets: Responsible for handling user requests, processing data, and interacting with the database to retrieve or store information.
 - Database: Stores event and user information, serving as the system's data repository.
- Communication: Communication between the client and server occurs through HTTP requests and responses, facilitating data exchange and interaction between the two components.

JSP

JavaServer Pages (JSP): JSP is a technology used for creating dynamically generated web pages based on HTML, XML, or other document types. It is often used to create the front-end interface of Java-based web applications.

Role in EventHub: It is used primarily for building dynamic web pages that efficiently present content and interface with the backend.

We have 3 jsp files, one for login/registration , one for admin and one for students.

JSPs handle the presentation layer by displaying data processed by Servlets, such as event details or user profiles, and manage user inputs that are sent back to the server for further actions





Java Servlet



Java Servlets: Small, fast, and powerful server-side Java programs specifically designed to extend the capabilities of servers hosting applications accessed via a request-response programming model.



Seamlessly integrates with a wide range of Java-based technologies including JSP and JDBC, allowing for powerful web applications

Role in EventHub: Java Servlets are essential for handling user requests like registrations and profile updates. They manage data flow between the user interface and the MySQL database, ensuring efficient processing and retrieval.

We have 3 servlet, one for registering the user, one for login process of user and another for Storing the event details permanently in database

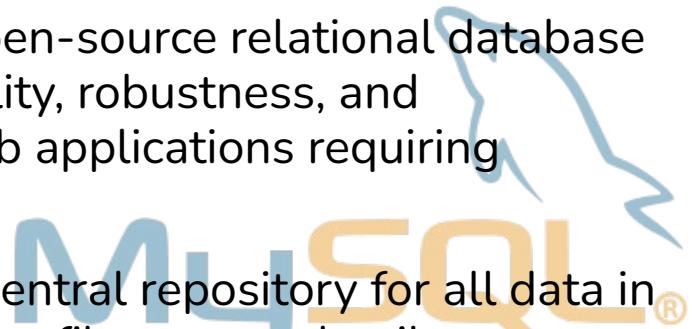
Servlets also facilitate smooth inter-window communication, maintaining data consistency throughout the user experience.





MySQL

MySQL Database: MySQL is a popular open-source relational database management system known for its reliability, robustness, and performance. It is used extensively for web applications requiring efficient data storage and retrievals.



Role in EventHub: MySQL serves as the central repository for all data in the EventHub application, including user profiles, event details, registrations, and administrative information.

Query Handling: It processes complex queries from the server side (handled by Java Servlets) to fetch, update, delete, or insert data, ensuring that the application delivers accurate and timely information to users.



Tomcat

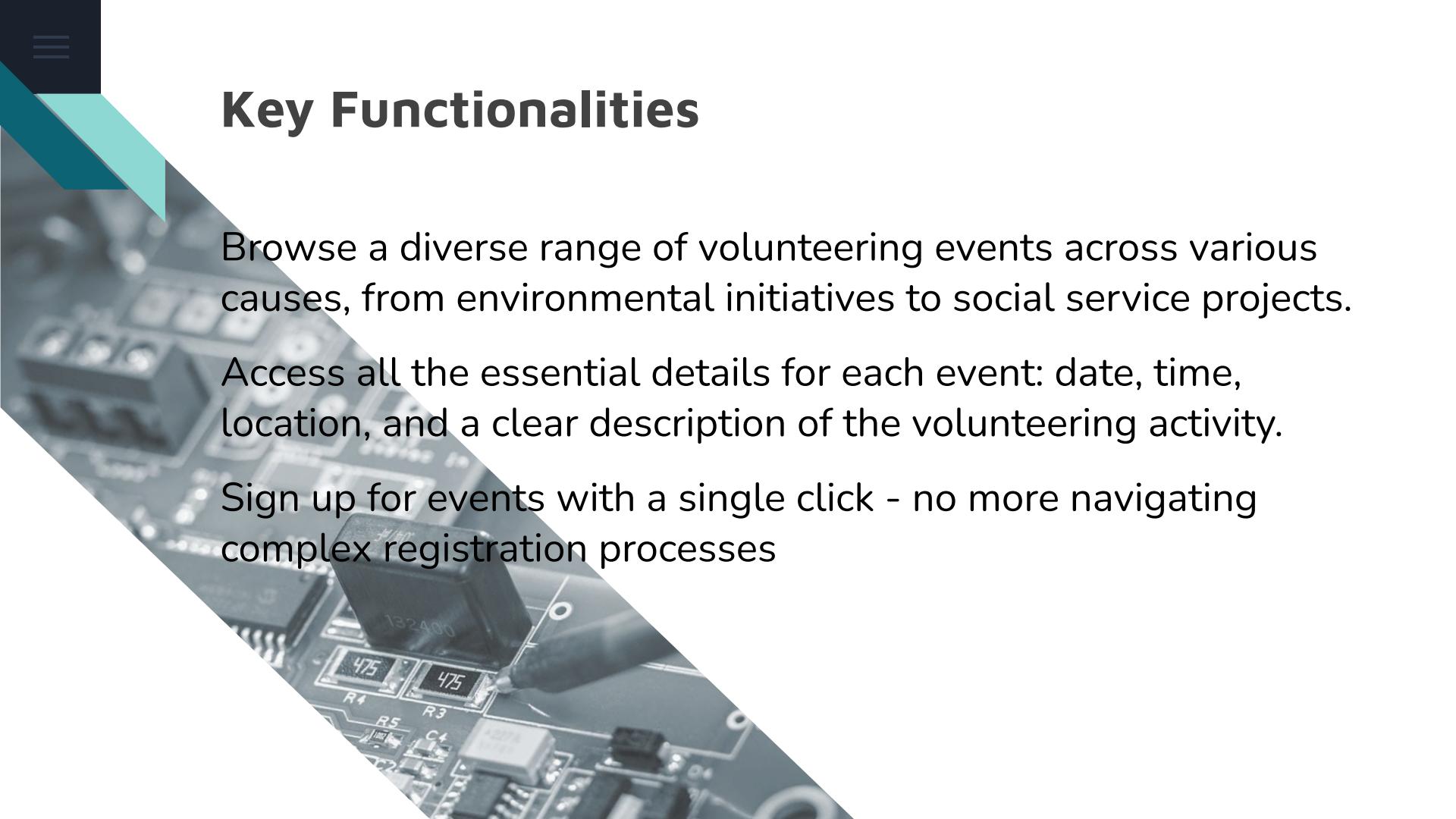
Apache Tomcat: A robust open-source Java Servlet Container that acts as a web server and servlet container for our Java code.

It acts as a web server and servlet container that executes Java servlets and renders web pages that include Java Server Page coding.

Seamless integration with our chosen technologies (JSP, Servlets, MySQL) and excellent support for Java EE features, facilitating robust back-end logic and database interactions

Role in EventHub: Act as backbone, Hosts our JSP pages and Servlets, handling server-side logic and HTTP requests. Version 10.1 is used.



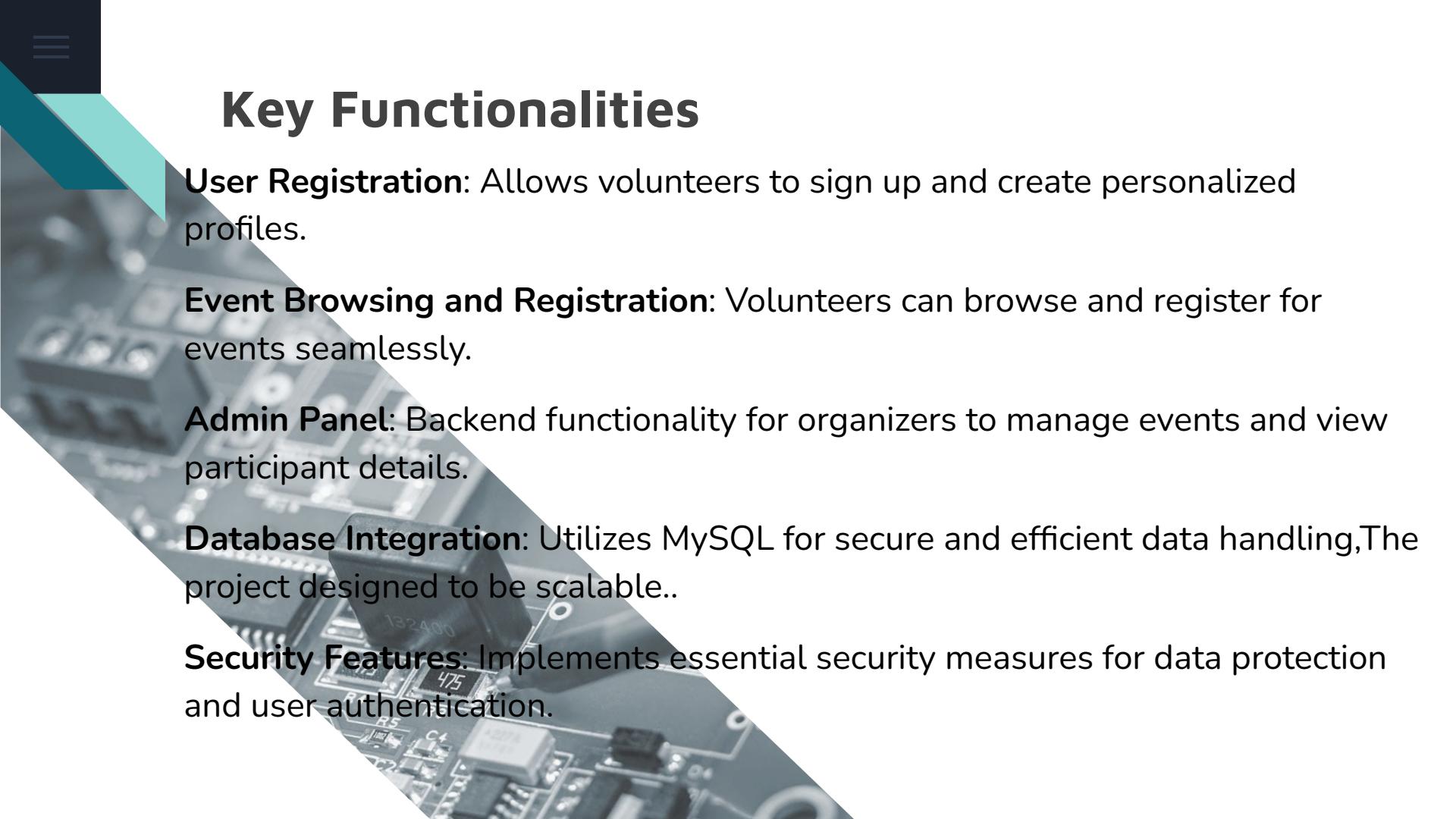


Key Functionalities

Browse a diverse range of volunteering events across various causes, from environmental initiatives to social service projects.

Access all the essential details for each event: date, time, location, and a clear description of the volunteering activity.

Sign up for events with a single click - no more navigating complex registration processes



Key Functionalities

User Registration: Allows volunteers to sign up and create personalized profiles.

Event Browsing and Registration: Volunteers can browse and register for events seamlessly.

Admin Panel: Backend functionality for organizers to manage events and view participant details.

Database Integration: Utilizes MySQL for secure and efficient data handling. The project designed to be scalable..

Security Features: Implements essential security measures for data protection and user authentication.



Conclusion

Volunteer Connect addresses significant hurdles in volunteer engagement by automating and simplifying processes. This structure will help you deliver a comprehensive and engaging presentation on the Volunteer Connect web app, highlighting its purpose, functionality, and the technologies behind it, alongside a practical demonstration of its capabilities.

Future Enhancements:

Data from the SQL can be displayed in user profile and as a Dashboard with data represented in charts and graphs and introduce a point system.

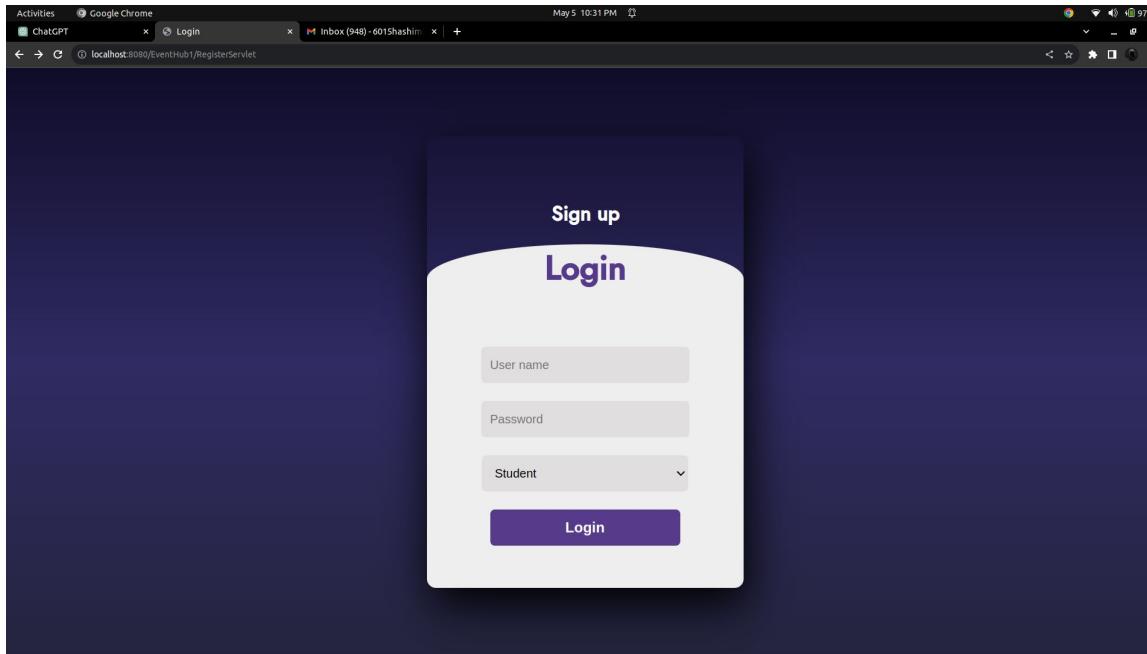
Development of a complementary mobile application.

Expansion of features like social media integration and advanced analytics for organizers.

Can be implemented in societies like NSS, IEEE, and other College events.



Demo



[Demo Video Link](#)



Thank you!

