

#### **Project Requirements:**

Purpose: The purpose of this project is to create a web-based system that allows news reporters to schedule a meeting with the president, and for the system to facilitate the approval process by the system administrator. The system will help in presidential protection by ensuring that only approved reporters can schedule meetings with the president.



# **Expected Outcomes: The expected outcomes of this project are:**

- A user-friendly web-based system that allows reporters to register, login, and schedule meetings with the president
- The system should allow reporters to upload their image, name, and a PDF document for verification purposes
- Reporters should be able to schedule the meeting date, start time, and end time
- The system administrator should receive an email notification when a reporter schedules a meeting and can approve, deny or reschedule the meeting
- The system should send email notifications to reporters to confirm or deny the meeting
- Approved reporters should be the only ones allowed to meet with the president
- The system should have adequate security measures to prevent unauthorized access



#### **Specific Constraints or Limitations:**

- The system should be accessible from any device with an internet connection
- The system should be designed to be user-friendly and easy to navigate
- The system should have adequate security measures to protect user data and prevent unauthorized access
- The system should be able to handle a large number of users simultaneously
- The system should be able to handle a large number of meeting requests and approvals simultaneously
- The system should be scalable and able to handle future expansions or updates.

#### Project Plan:

Scope: The scope of this project is to create a web-based system that allows news reporters to schedule meetings with the president, while ensuring that only approved reporters are allowed to do so. The system will require reporters to register, login, and upload their image, name, and a PDF document for verification purposes. Reporters will then be able to schedule a meeting by specifying the meeting date, start time, and end time. The system administrator will receive email notifications when a meeting is scheduled and can approve, deny, or reschedule the meeting based on the president's schedule. The system will also send email notifications to reporters to confirm or deny the meeting.



#### Timeline:

- Day 1: Project planning and requirements gathering
- Day 2-3: Design the database schema, user interface, and system architecture
- Day 4: Implement the administrator and user registration, login, and scheduling functionalities
- Day 5: Implement the approval, denial, and rescheduling functionalities
- Day 6: Implement the email notifications and system security features
- Day 7: Testing and debugging
- Day 8: Finalize documentation, deployment.

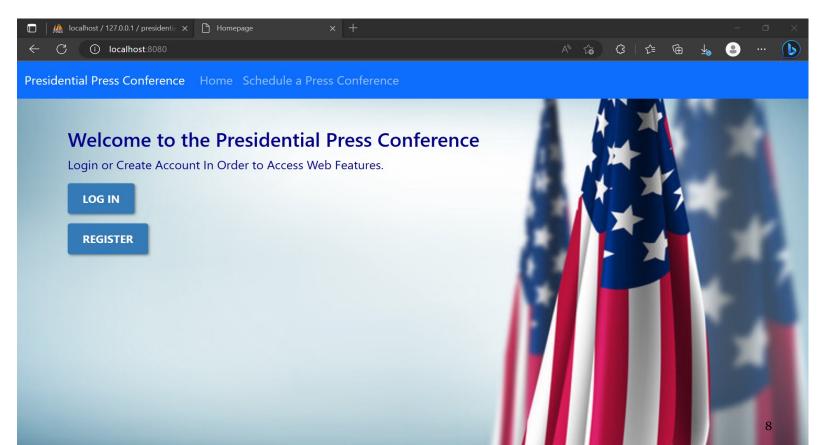


#### **Resources:**

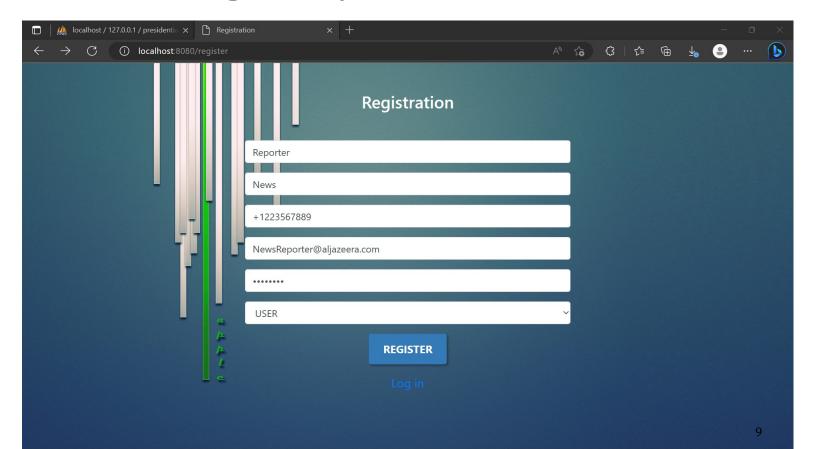
- Spring Boot: A framework for building web applications
- JPA: A Java Persistence API for mapping objects to relational databases
- Thymeleaf: A server-side template engine for rendering web pages
- Validation: A library for validating user input and data
- Spring Security: A framework for securing web applications
- MySQL: A relational database management system
- Mail: A library for sending email notifications
- Tomcat Embedded: An embedded servlet container for running the application locally



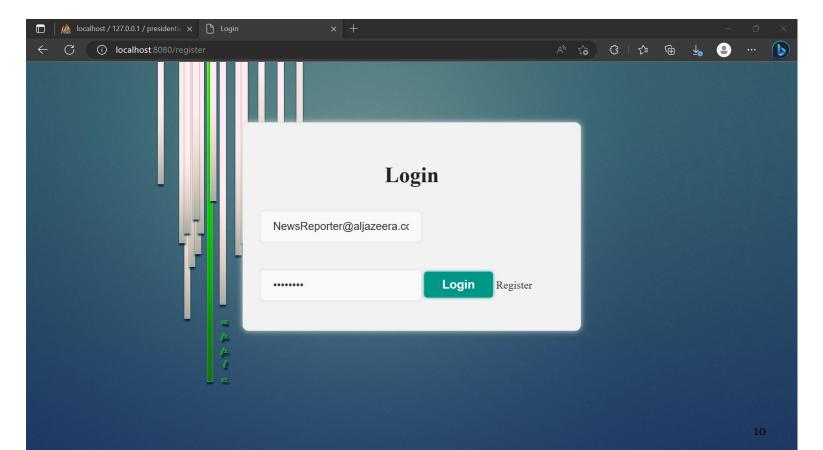
### Register your Account as: admin/user.



## Register your Account.

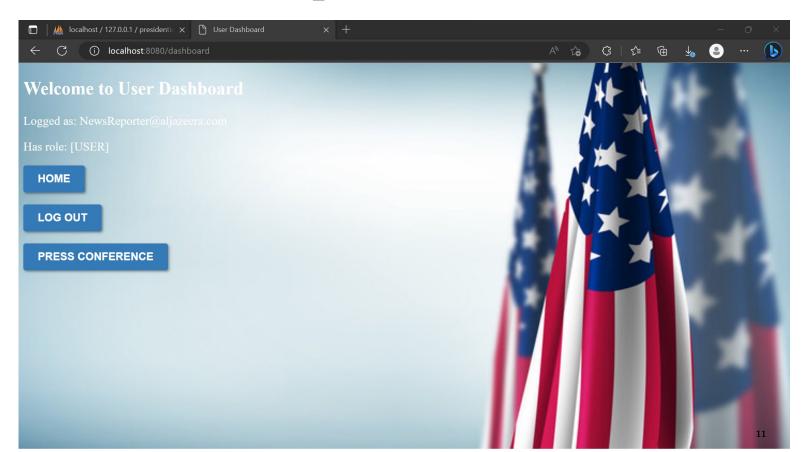


#### Login with your created Account.



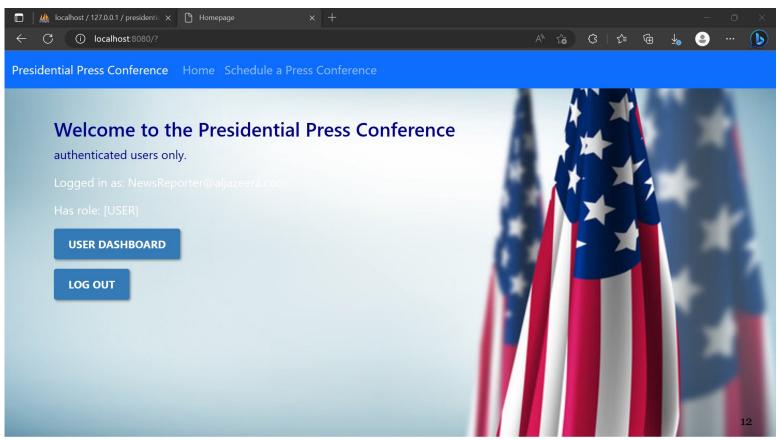


#### Dashboard: press Home Button.

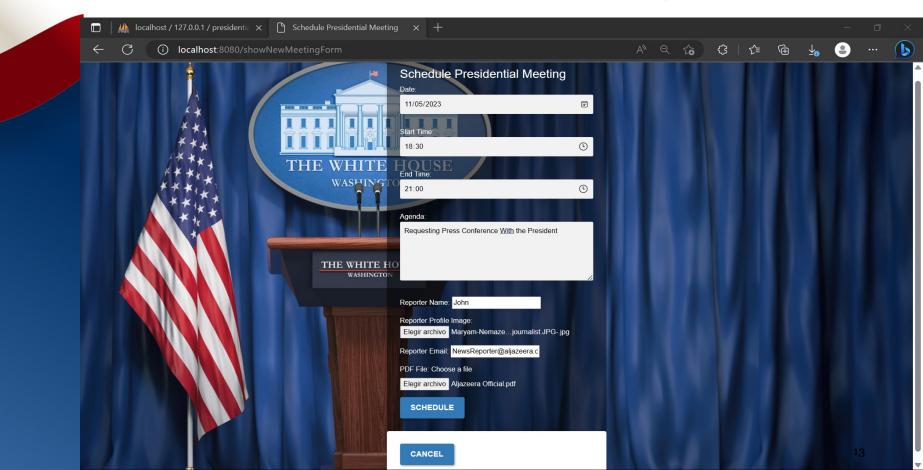




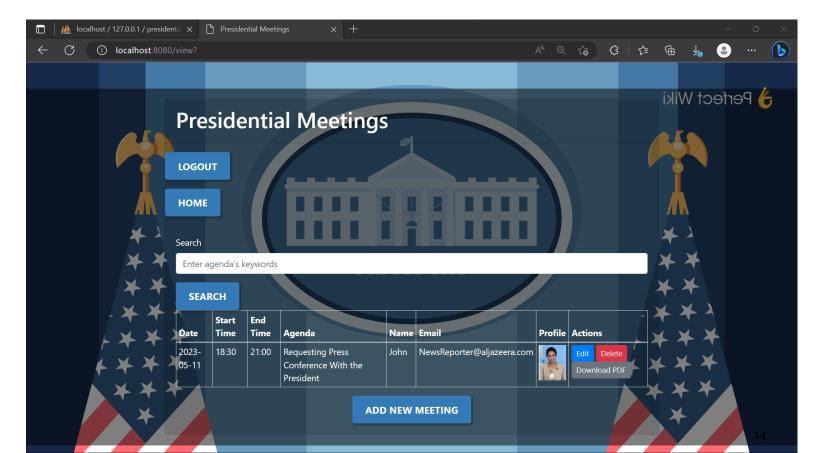
#### Homepage: Choose Schedule a press conference.



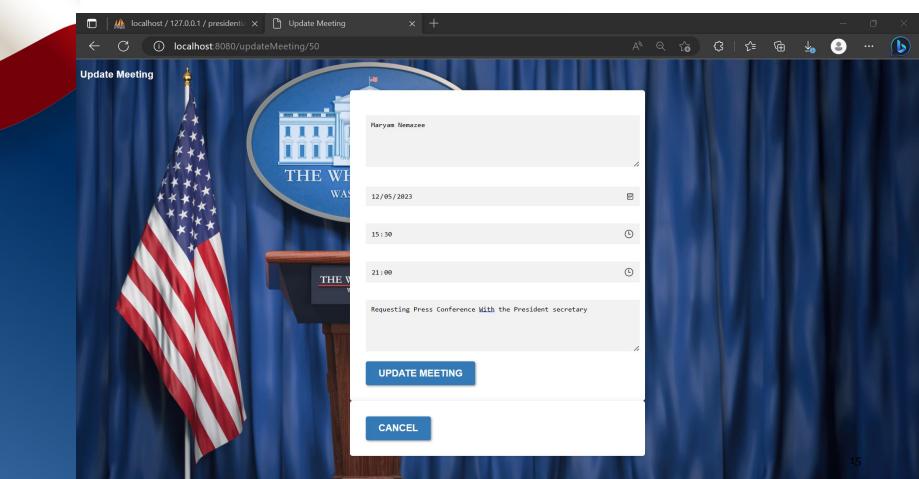
#### Schedule Presidential Meeting.



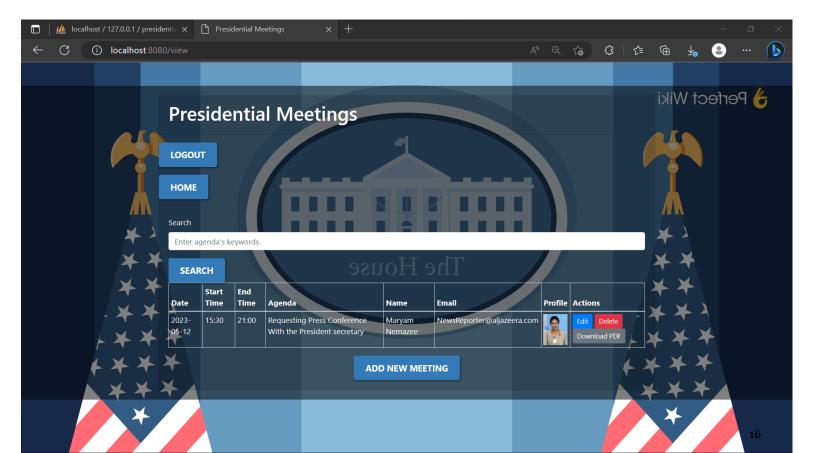
#### Scheduled meetings Table.



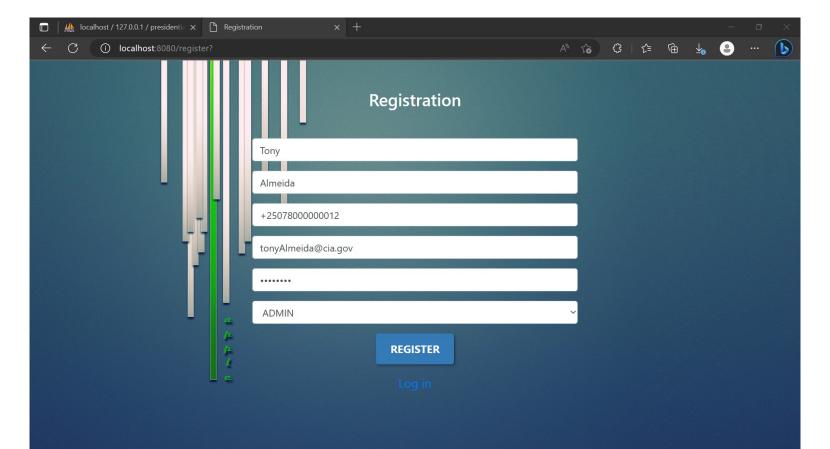
## Update The scheduled meeting.



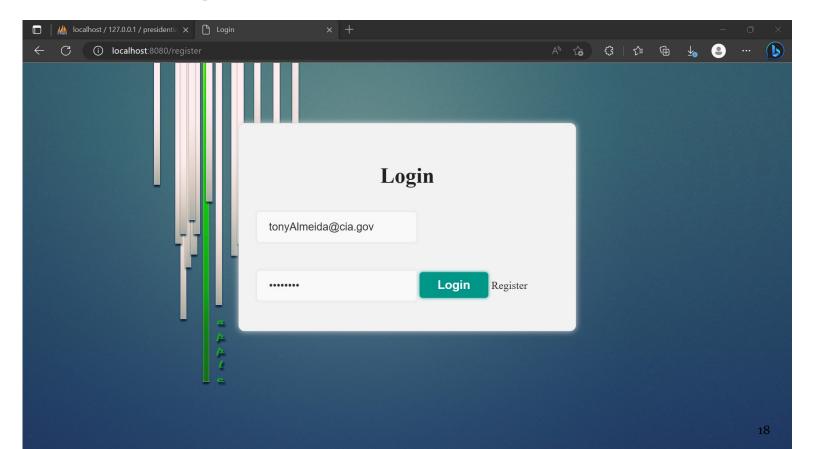
## Updated meeting



### Admin Registration.

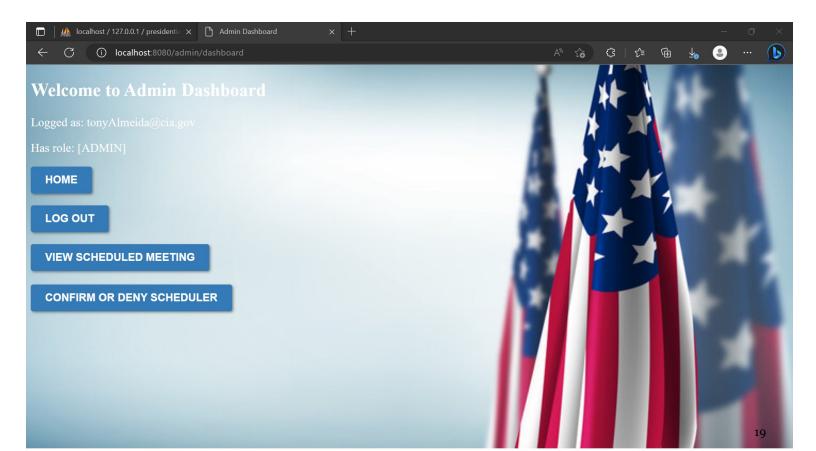


## Login as an Administrator.





#### Admin Dashboard: press view Scheduled Meeting.



# Search for meetings: use Agenda's keywords.







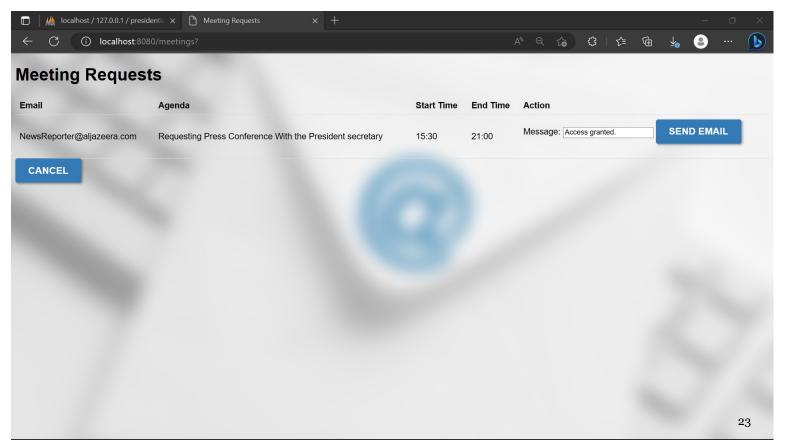
#### **Search Results**

Meeting Date	Start Time	End Time	Agenda	Action
2023-05-12	15:30	21:00	Requesting Press Conference With the President secretary	Cancel

## Deleting Meetings: Press Delete Button.







#### **Architecture:**

The presidential web app is built using the Spring Boot framework, which provides a robust and scalable platform for developing web applications. The app uses a three-tier architecture, consisting of a presentation layer, a business logic layer, and a data access layer. The presentation layer is implemented using Thymeleaf templates, which are rendered by the Spring MVC controller. The business logic layer is implemented using Spring services, which perform the necessary operations to fulfill the user's request. The data access layer is implemented using Spring Data JPA, which provides a powerful mechanism for interacting with the MySQL database.

## **Implementation:** The presidential web app was implemented using the following technologies:

- Spring Boot: Spring Boot was used as the primary framework for building the web app. It provides a variety of features and tools, including auto-configuration, embedded Tomcat server, and robust security.
- Spring Data JPA: Spring Data JPA was used as the ORM framework to interact with the MySQL database. It provides an easy-to-use API for performing CRUD operations and querying the database.
- Thymeleaf: Thymeleaf was used as the template engine to render dynamic content in the web app. It provides a powerful mechanism for template inheritance, and HTML5 validation.
- Spring Security: Spring Security was used to provide secure authentication and authorization for the web app. It provides a flexible and powerful mechanism for securing web applications.
- MySQL: MySQL was used as the relational database management system to store the data for the web app. It provides a scalable and reliable platform for storing and retrieving data.

#### Other relevant technical details:

- Validation: The web app uses Spring validation to validate user input and prevent invalid data from being submitted.
- Mail: The web app uses Spring Mail to send notification emails to the administrator and reporters.
- Tomcat embedded: The web app uses the embedded Tomcat server provided by Spring Boot to run the web application.

#### Conclusion.

- 1. In conclusion, the presidential web app I have built is a shining example of the power of modern technology to streamline and secure complex processes. I am proud to have contributed to the important task of protecting the President's interactions with the press, and I believe that this app will be an invaluable tool for years to come."
- 2. "As I wrap up this presentation, I want to thank you for your attention and viewing my Spring Boot project. I hope that you have seen the passion and dedication that went into building this app, and that you share your excitement for the possibilities it holds."
- 3. "Finally, I would like to express my gratitude to our Professors who puts too much efforts in teaching us in a well defined manner Without their tireless work and dedication, we would not have been able to deliver such a powerful and elegant solution." "In God we trust, everything is possible!"<sub>27</sub>