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MIT 815 ASSIGNMENT

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UNILAG Event Registration System Technical Report

Link to my GitHub Repository: [Christiancode-beep/MIT815_ASSIGNMENT](https://github.com/Christiancode-beep/MIT815_ASSIGNMENT)

NB: To View the Report in the PDF file attached as part of the project. Be sure to install (vscode-pdf) extension to be able to view the PDF file directly from visual studio code.

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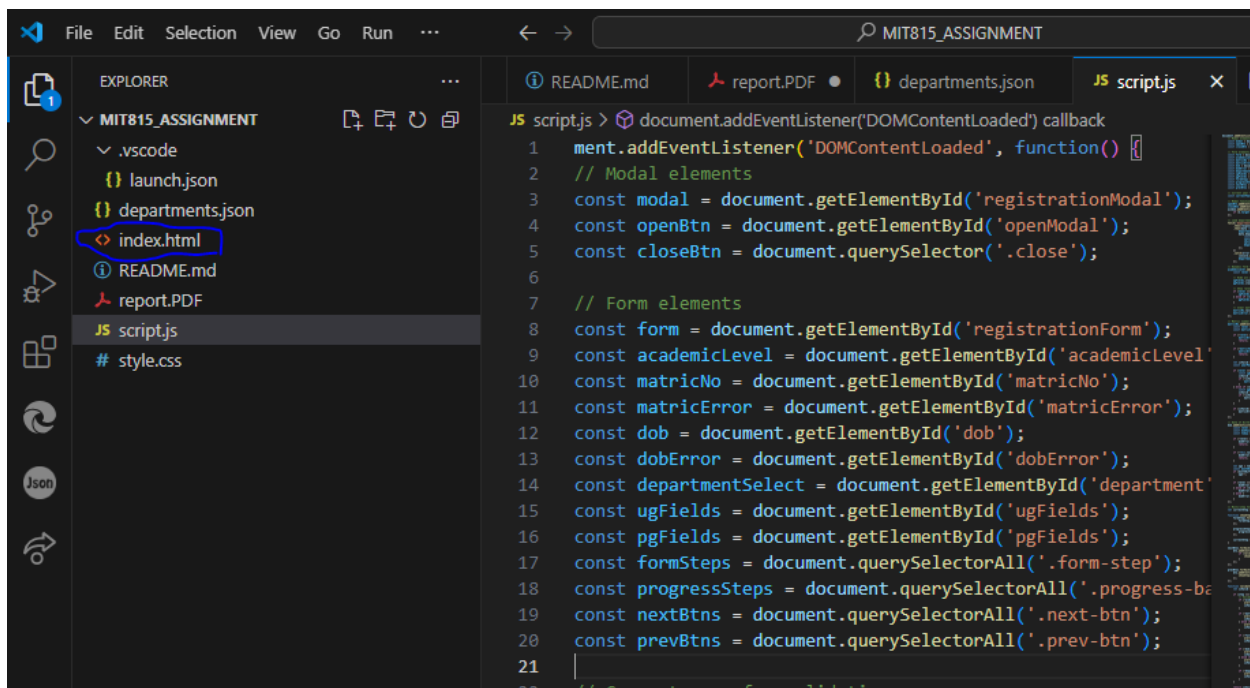
1.Introduction

The UNILAG Event Registration System is a web-based application designed to streamline the process of event registration for students. It provides a user-friendly interface for students to register for events by submitting their personal and academic details. The system ensures data accuracy through dynamic validation and responsive design.

2. Project Objectives

1. Simplify the event registration process for students.
2. Ensure accurate data collection through validation.
3. Provide a responsive and dynamic user interface.

3. System Architecture



The system is built using a client-side architecture with the following components:

Frontend: HTML, CSS, and JavaScript for the user interface and logic.

Data Storage: JSON file for storing department data.

4. Features and Functionalities

Multi-Step Form: Collects personal and academic details in a structured manner.

Dynamic Form Rendering: Adjusts form fields based on the selected academic level.

Validation: Ensures data integrity with real-time checks.

Responsive Design: Adapts to various screen sizes for better usability.

5. Implementation Details

Frontend:

The **index.html** file contains the structure of the registration modal and form.

The **style.css** file styles the form, modal, and progress bar.

The **script.js** file handles form logic, validation, and dynamic rendering.

Data Handling:

Departments are loaded dynamically from the **departments.json** file.

6. Validation Rules

Matric Number:

Undergraduate: Format UG<currentYear><4 digits> (e.g., UG20231023).

Postgraduate: Format PG<currentYear><4 digits> (e.g., PG20230987).

Date of Birth:

Undergraduate: Must be younger than 25 years.

Postgraduate: Must be at least 22 years old.

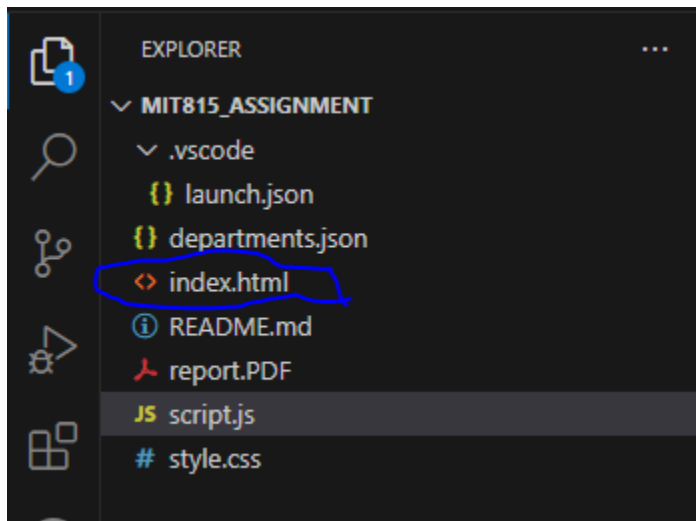
7. Technologies Used

Frontend: HTML, CSS, and JavaScript.

Data Storage: JSON for department data.

8. How to Run the Project

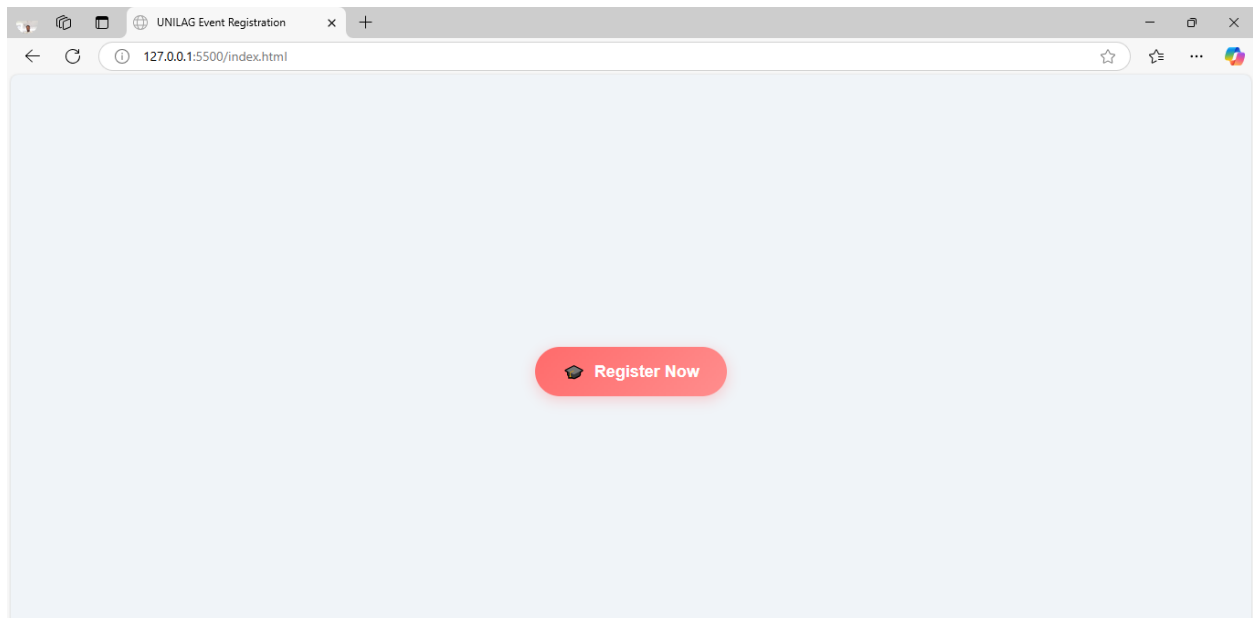
1. Install the **Live Server** extension in Visual Studio Code.
2. Open the project folder in Visual Studio Code.
3. Right-click on the **index.html** file and select **Open with Live Server**. Eg;
<http://127.0.0.1:5500/index.html>



8. The project will open in your default browser, and you can interact with the registration system.

9. How to Use the Project

1. Open the **index.html** file in a browser.



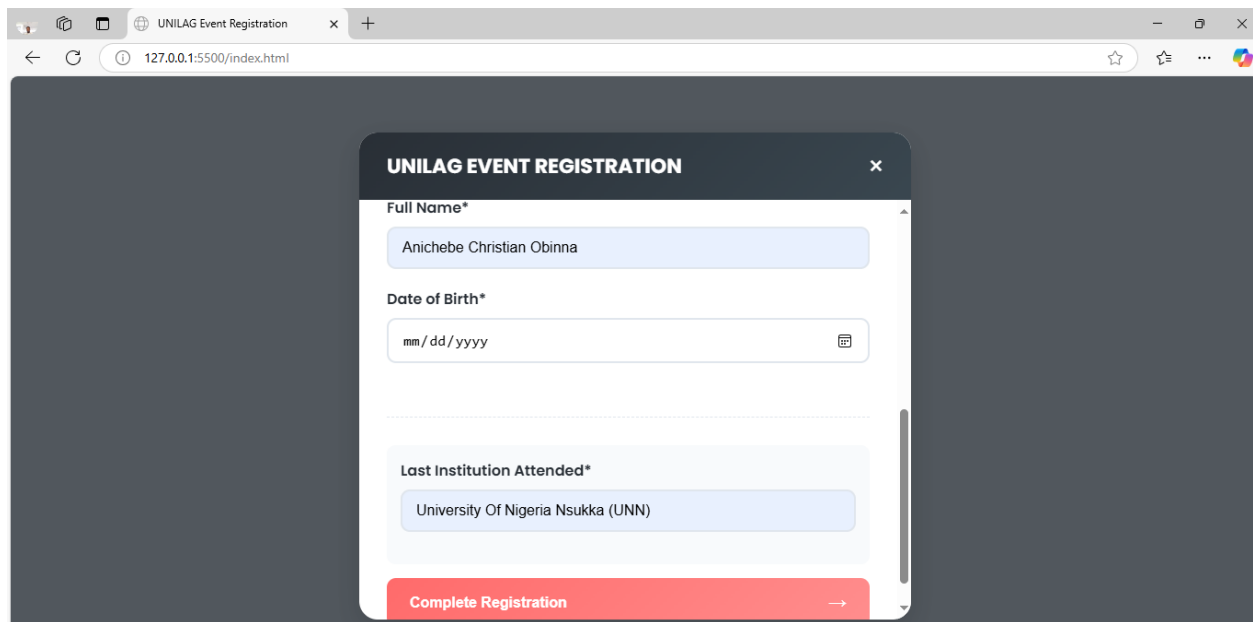
2. Click the **Register for Event** button to open the registration modal.

A screenshot of a web browser window showing a registration modal. The modal is titled 'UNILAG EVENT REGISTRATION' and has a close button. It contains two sections: 'Academic Information' and 'Personal Details'. Under 'Academic Information', there is a radio button for 'Academic Level*' with options 'Undergrad' (selected) and 'Postgrad'. Below that is a text input for 'Matric Number*' with the value 'UG20241023'. Below that is a dropdown menu for 'Department*' with the text 'Select Department'. The 'Personal Details' section is partially visible at the bottom.

The screenshot shows a web browser window with the address bar displaying "127.0.0.1:5500/index.html". The page features a dark grey background with a white modal box titled "UNILAG EVENT REGISTRATION". Inside the modal, the "Personal Details" section is active, indicated by a teal underline. It contains two required fields: "Full Name*" with an empty text input, and "Date of Birth*" with a date picker showing "mm / dd / yyyy". A red "Complete Registration" button with a right-pointing arrow is at the bottom of the form.

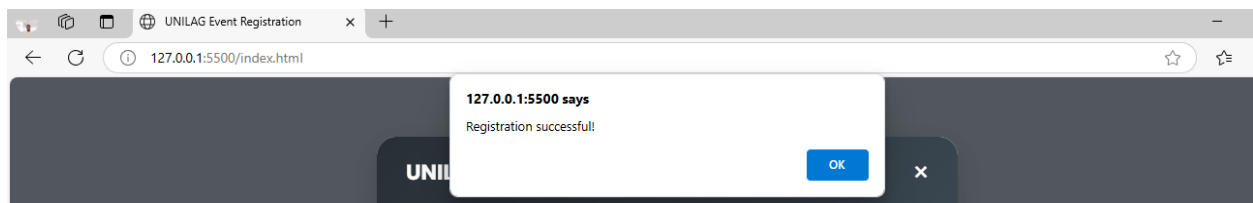
3. Fill in the required fields in the form.

The screenshot shows the same web browser window, but the "Academic Information" section is now active, indicated by a teal underline. It contains three required fields: "Academic Level*" with two radio buttons, "Undergrad" (unselected) and "Postgrad" (selected); "Matric Number*" with a text input containing "PG20258374"; and "Department*" with a dropdown menu showing "Computer Science". The "Personal Details" section is visible below but not yet active.



4. Navigate to **Complete Registration** button.

5. Submit the form after completing all required fields.



10. Challenges and Solutions

Challenge: Ensuring accurate validation for different academic levels.

Solution: Implemented dynamic validation logic in script.js.

Challenge: Loading department data dynamically.

Solution: Used JSON to store and fetch department data.

11. Future Enhancements

Add server-side validation and database integration.

Implement email notifications for successful registrations.

Expand support for additional academic levels and event types.

12. Conclusion

The UNILAG Event Registration System successfully simplifies the event registration process for students. With its dynamic features and responsive design, it provides a seamless user experience. Future enhancements will further improve its functionality and scalability.