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## **UNILAG Event Registration System Technical Report**

#### **Table of Contents**

- 1. Introduction
- 2. Project Objectives
- 3. System Architecture
- 4. Features and Functionalities
- 5. Implementation Details
- 6. Validation Rules
- 7. Technologies Used
- 8. How to Run The Project
- 9. How to Use The Project
- 10. Challenges and Solutions
- 11. Future Enhancements
- 12. 10. Conclusion

#### 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

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                                                                                                        JS script.js
                                               JS script.js > 🕅 document.addEventListener('DOMContentLoaded') callback

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                              中になり自
                                                     ment.addEventListener('DOMContentLoaded', function() {
       .vscode
       {} launch.json
                                                     const modal = document.getElementById('registrationModal');
      {} departments.json
                                                     const openBtn = document.getElementById('openModal');
      index.html
                                                     const closeBtn = document.querySelector('.close');

    README.md

       report.PDF
      JS script.js
                                                     const form = document.getElementById('registrationForm');
                                                     const academicLevel = document.getElementById('academicLevel'
       # style.css
                                                   const matricNo = document.getElementById('matricNo');
                                                11 const matricError = document.getElementById('matricError');
©
                                                     const dob = document.getElementById('dob');
                                                     const dobError = document.getElementById('dobError');
                                                     const departmentSelect = document.getElementById('department
                                                     const ugFields = document.getElementById('ugFields');
                                                     const pgFields = document.getElementById('pgFields');
                                                     const formSteps = document.querySelectorAll('.form-step');
                                                     const progressSteps = document.querySelectorAll('.progress-ba
                                                     const nextBtns = document.querySelectorAll('.next-btn');
                                                     const prevBtns = document.querySelectorAll('.prev-btn');
```

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.

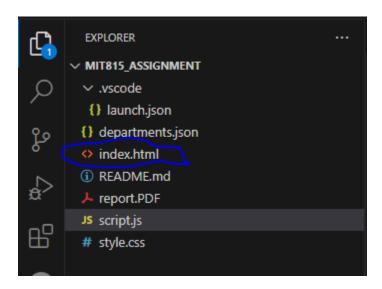
## 7. Technologies Used

Frontend: HTML, CSS, and JavaScript.

Data Storage: JSON for department data.

# 8. How to Run the Project

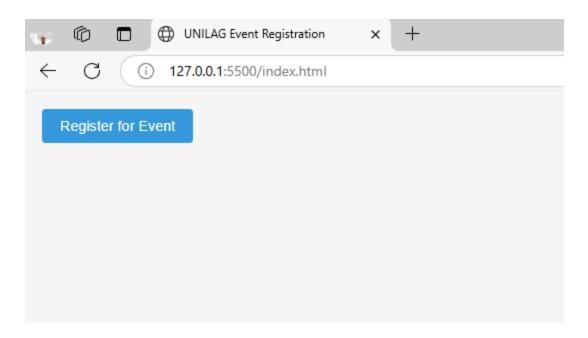
- 1. Install the Live Server extension in Visual Studio Code.
- 2. Open the project folder in Visual Studio Code.
- 3. Right-click on the **index.html** file and select **Open with Live Server**. Eg; <a href="http://127.0.0.1:5500/index.html">http://127.0.0.1:5500/index.html</a>



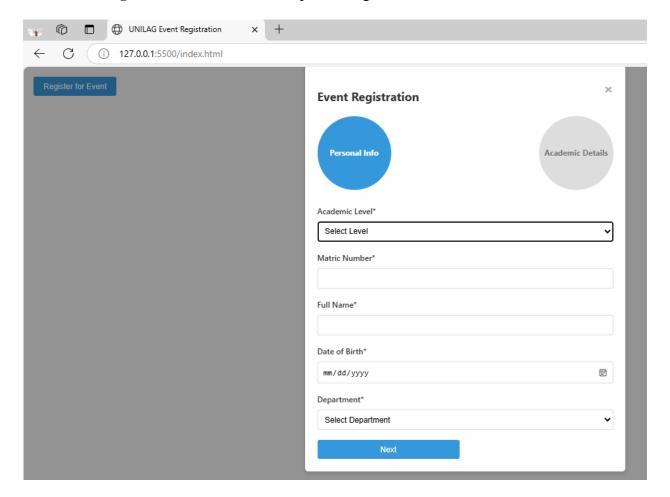
8. The project will open in your default browser, and you can interact with the registration system.

# 9. How to Use the Project

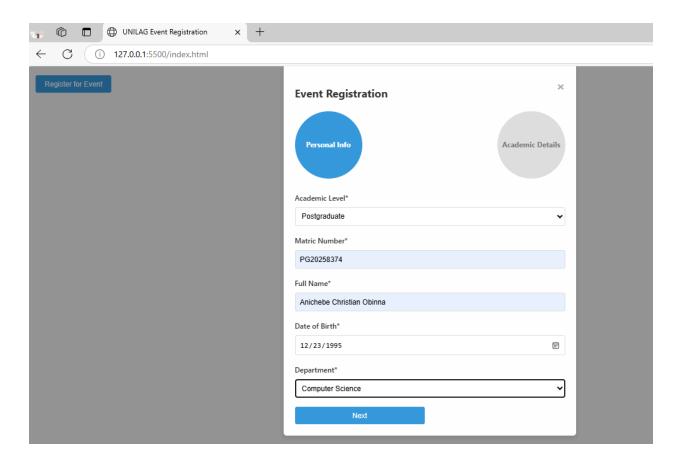
1. Open the **index.html** file in a browser.



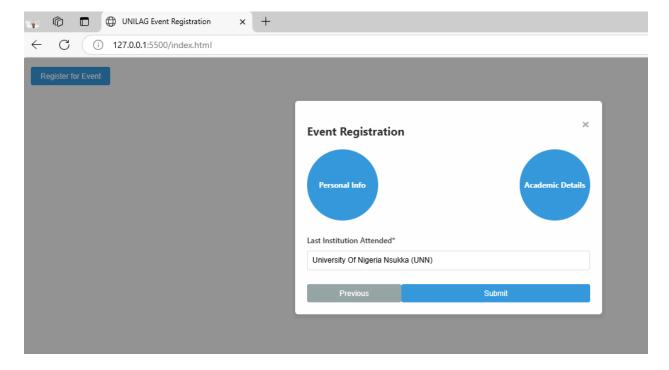
2. Click the **Register for Event** button to open the registration modal.



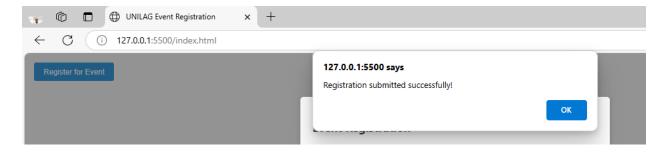
3. Fill in the required fields in the form.



4. Navigate through the steps using the **Next** and **Previous** buttons.



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.