



‘येथे बहुतांचे हित ।’

Marathwada Mitra mandal's
COLLEGE OF ENGINEERING

Karvenagar, Pune

An Autonomous Institute

Presentation

On

**USER FRIENDLY & IMPACTFUL ACADEMIC
ENVIRONMENT**



Group Information

Sr.No	Prn No	Name of students
1	B24IT1083	RADHIKA SURYATAL
2	B24IT1081	RUTUJA GHODEKAR
3	B24IT1100	SAI MALI
4	B24IT1063	SANKET GHODKE

Outline:

- A. Introduction
- B. Research
- C. Analysis
- D. Ideate
- E. Build
- F. Test
- G. Implement
- H. Links
- I. reference

A. Introduction

❖ **Purpose:**

To create a user-friendly & impactful academic environment through visual & graphical demonstration.

❖ **Overview:**

The project focuses on re-envisioning learning methodologies to move away from rote memorization.

❖ **Key Themes:**

Interactive Learning: Engaging students with animated lessons and gamified activities.

Customization: Providing educators with tools to tailor lessons to their specific requirements.

B.RESEARCH—

Key Challenges Identified:

1. Traditional teaching methods lack interactivity and engagement.
2. Manual student management is time-consuming and error-prone.
3. Lack of personalized feedback for students on performance and attendance.

Trends and Solutions:

1. Digital tools are increasingly being integrated into classrooms.
2. Programming languages like C are used to create management systems that simplify tasks.
3. Incorporating animations and visual aids enhances student understanding.

Existing Tools:

1. Student Management Systems: Help manage data but often lack interactive interfaces.
2. Animation Libraries: Focus on delivering visual content to support better understanding.

C.ANALYSIS--

Strengths of the Proposed System:

Simplifies student data management.Provides real-time calculations for grades.Displays announcements effectively for better communication.

Weaknesses to Address:

Limited interactivity in the current system.May require a learning curve for educators unfamiliar with digital tools.

Opportunities:

Scalability to include features like attendance tracking and performance analytics.Integration with online learning platforms for remote accessibility.

Threats:

Resistance to change from traditional systems.

Dependence on hardware and software availability

D.IDEATE-

1. Interactive Features: Incorporate visual aids like pie charts for attendance or performance trends.
2. Automation: Add features to calculate grades automatically or send notifications.
3. Gamification: Include fun quizzes or reward systems to motivate students.
4. Customization: Allow teachers to adapt the system for different subjects or courses.

E. BUILD-

Code Functionality Overview:

Add Student: Inputs essential data like name, roll number, marks, and attendance. **View Students:** Displays student records with details in a readable format.

Calculate Grades: Automatically determines grades based on marks, providing feedback to students.

Show Announcements: Displays important academic updates like exam dates and assignment deadlines.

Technologies Used:

C Language: Efficient for creating lightweight systems.

Standard Libraries: For input/output operations and memory management.

F. TEST-

1. Functional Testing:

Verify if student details are stored and displayed correctly.

Check the accuracy of grade calculation.

2. Usability Testing:

Ensure the menu is intuitive for users with minimal technical knowledge.

Validate that error messages guide users effectively (e.g., invalid input).

3. Stress Testing:

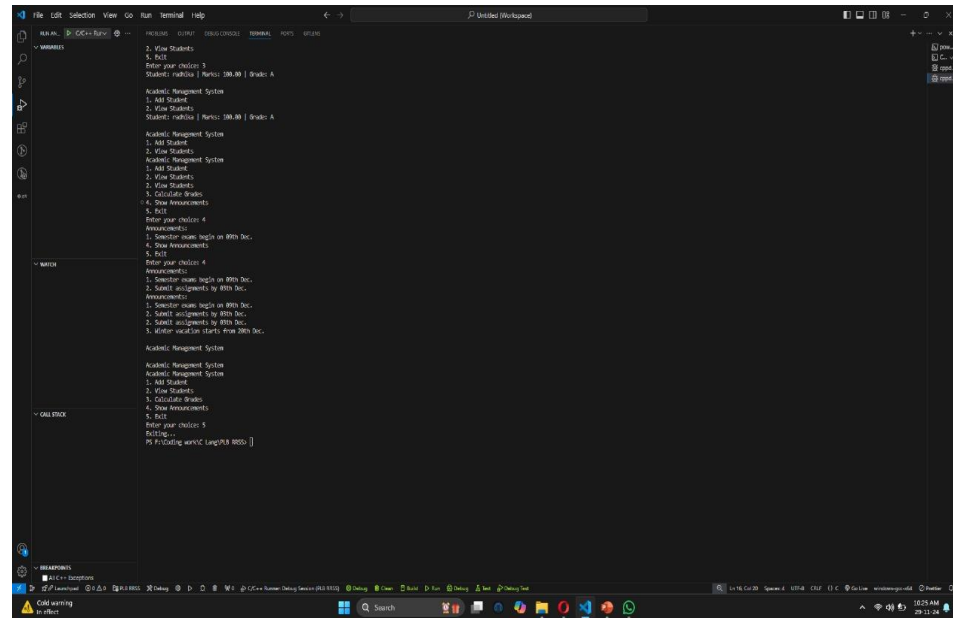
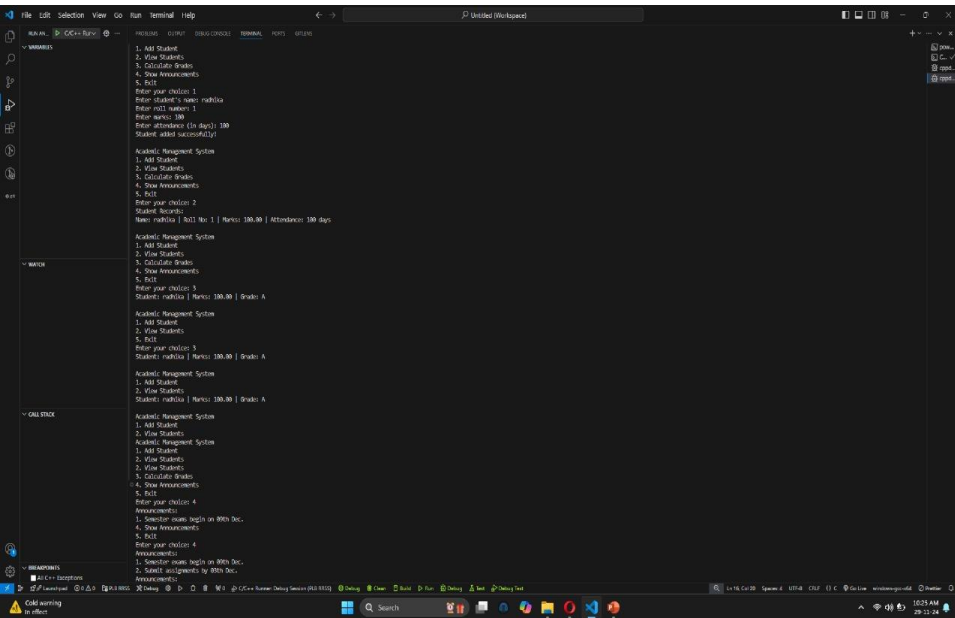
Test the system with the maximum number of students to ensure stability.

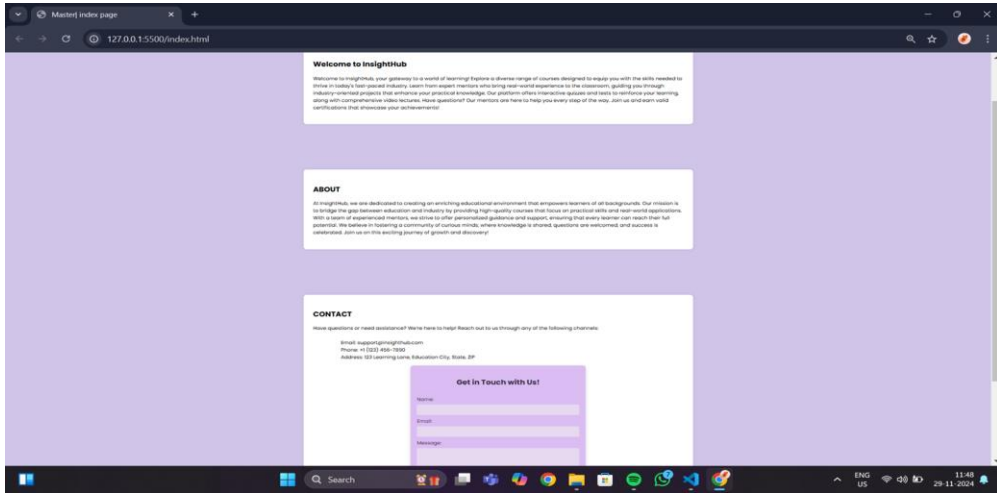
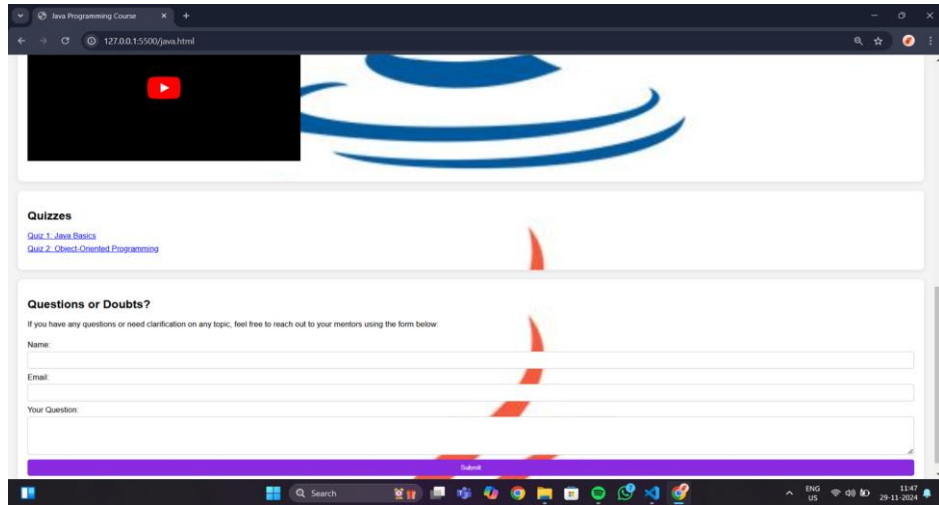
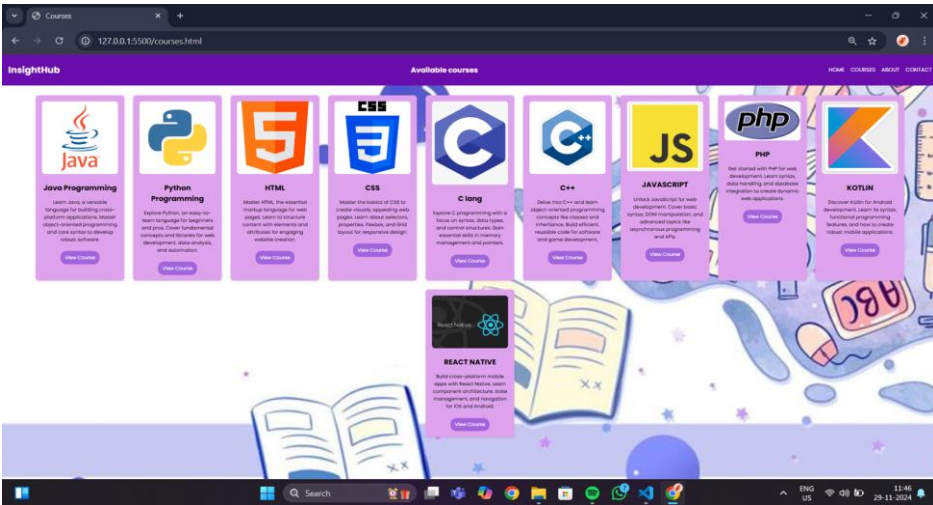
Sample Output:

Input a student with specific marks, verify if the grade matches expectations.

Add 100 students to confirm that the system handles the data without crashes.

G. IMPLEMENT-





H. Links

1.Upload Video Link Here :

https://drive.google.com/file/d/1lnqRzzmOLVFc6OS4fkTb7mhtbY1Gz7W9/view?usp=drive_link

. 2.Blog

https://github.com/RADHIKA533/USER_FRIENDLY_ACCADEMIC_ENVIRONMENT/blob/main/BLOG.jpg

3.Project

https://drive.google.com/file/d/1IleIL2zcg2oxX5TeX2e_T5URn-rXrCMQ/view?usp=drive_link
<https://drive.google.com/drive/u/0/folders/18JjSMmdF6nqyiodE3kxk6p4SqpXzfYjm>

I. Reference

Textbooks:

- *Programming in C* by Dennis Ritchie for foundational concepts.
- *Data Structures and Algorithm Analysis in C* by Mark Allen Weiss for efficient data handling.

Online Resources:

- GeeksforGeeks: <https://www.geeksforgeeks.org>
- Stack Overflow: <https://stackoverflow.com>
- ChatGPT

Documentation Tools:

- Visual Studio Code for code editing and testing.