

FINAL PROJECT REPORT

Project Title: Attendance Management System

Course Name: BCA

Batch: 2024

Section: B

Team Members:

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2. Keerthana R
3. Bijjam Sharvani

GITHUB LINKS:

- Keerthana R : <https://github.com/Keerthana2562006/Agentic-AI>
- Adarsh Kumar Gupta Kasaudhan: <https://github.com/AdarshKasaudhan1/Agentic-AI-project-Attendance-management-system->
- Bijjam Sharvani: https://github.com/sharvani801/Agentic_AI_Project

1. Introduction

The goal of this project is to build an AI-based system that can analyse student attendance, provide alerts when attendance is low, and guide students on how many more classes they need to attend to reach a safe percentage. To demonstrate this AI feature, a basic attendance management system was first created as a foundation.

2. Project Purpose

The purpose of the system is:

- To help students track their attendance more accurately
- To alert students automatically when attendance falls below a set percentage (such as 75%)
- To allow students to ask questions and receive responses through an AI chat system
- To predict how many more present days are required to reach their attendance target

3. Tools and Technology Used

- **HTML** (Interface structure)
- **CSS** (UI styling and design)
- **JavaScript** (Logic, calculations, chatbot, AI responses)
- **LocalStorage** (Data storage in browser)

4. System Features

Basic Attendance System

- Enter student attendance
- View attendance records
- Calculate attendance percentage
- Edit and delete entries
- Data saved even after refresh

Advanced System Features

- Calendar-style attendance history
- Keyboard navigation support
- Duplicate entry handling
- Statistics dashboard

AI Features

- Answers student attendance questions
- Predicts how many classes are needed to reach a target percentage
- Alerts students if attendance drops below 75%
- Displays at-risk students in a warning panel

5. Progress Summary

Day 1–2

Created basic attendance management interface, stored data, displayed records, and calculated attendance.

Day 3–4

Added history modal, edit features, keyboard navigation, modern UI design.

Day 5–6

Integrated AI chat assistant, attendance prediction feature, alerts for low attendance.

6. Working of the AI

The AI analyses attendance entered by the user. When a student asks:

- “What is my attendance?”

- “How many classes should I attend?”

- “Can I miss more classes?”

The system calculates data instantly and responds.

If the percentage is low, the AI warns the student and shows how many classes they need to reach 75%.

7. Advantages of the System

- Saves time
- Easy to understand
- Removes manual calculations
- Helps students stay aware
- Reduces attendance shortage risk
- Smart, interactive, AI-based

8. Limitations

- Works only in the browser
- No login system
- No cloud database

9. Future Scope

- Mobile app version
- Cloud storage system
- Face recognition attendance
- Voice-based AI assistant
- Fully automated agentic AI predictions

10. Conclusion

This project successfully achieved its goal of creating an AI system that helps students understand and improve their attendance. The basic attendance management system provides the required data, while the AI layer adds intelligence, predictions, alerts, and interaction. The final outcome is a smart and student-friendly tool that can support academic awareness and performance.