AEIOU CANVAS

SILVER OAK UNIVERSITY
EDUCATION TO INNOVATION

Domin Name : smart attendance system

Team ID : 3

Enrollment No. : 24020304300681
240203043016
24020304300889
2030304300064
2030430043

Date :

Version :

🚲 Activities

- * face recognition or RFID card scanning for attendance.
- * Automatic attendance recording at the start of class.
- * Notifications about attendance status to students and teachers.
- * Teachers and admins monitoring attendance logs.
- * reports generated automatically based on attendance data.

⇄ Interactions :

- * Students walking into the classroom, getting their attendance marked automatically through cameras or scanners.
- * Teachers checking attendance data through apps or dashboards.
- * Students receiving notifications if they have low attendance.
- * admins accessing cumulative attendance reports for compliance or reporting.

👥 Users :

- * Students where attendance is auto matically recorded.
- * admins : managing and maintaining attendance data and reports.
- * Teacher's reviewing attendance records, confirming attendance.
- * parents : to monitor their child's attendance status.
- * It Teams : Ensuring the systems works smoothly without any errors.

📍 Objects :

- * cameras, RFID readers, or biometric scanners.
- * User login credentials (for teach- ers / admins)
- * Database for attendance records.
- * mobile or web- based dash board for viewing attendance status
- * Notifications through SMS or app.

🌐 Environment :

- * Secure or cloud based systems for storing and proces- sing data.
- * Educational insti- tutions (schools, college, universities)
- * Secure networks (wi-fi or LAN) to transmit attendan- ce data in real-time.
- * classrooms equipped with cameras or biometric /RFID readers.

IDEATION CANVAS

SILVER OAK UNIVERSITY — EDUCATION TO INNOVATION

Domin Name : Smart Attendance System.com

Team ID : 3

Enrollment No. :
2402030430087
2402030430106
2402030430083
2402030430064
2402030430046

Version :

Date :

People

STUDENTS

TEACHERS

ADMINISTRATORS

NON-TEACHING STAFF

Activities

① marking Attendance by the System.

② students logging into the platform.

① Teachers Verifying students Presence.
② Generating Attendance Reports.

① Real-time Attendance tracking.
② Automated notifications for absentees.

Situation / Context / Location

① covid-19 or Pandemic sistution leading to an online Education.

① Remote Work enviroments. where attendance tracking is required.

② schools, colleges, or Universities implementing Hybride or online learning.

Props / Possible Solutions

① face Recognization or biometric attendance.
② GPS tracking to Verify location.

① Automated E-mail or sms alerts to students and Parents.
② mobile apps or web-based Platforms for marking attendance.

① Integration with Learning managment system (LMS).
② Analytics for tracking attendance Patterns and student Performance.

PRODUCTION DEVELOPMENT CANVAS

SILVER OAK UNIVERSITY — EDUCATION TO INNOVATION

Domin Name :	SmartAttendanceSystemicoM2
Team ID : 3	Date :
Enrollment No. : 24020304300891, 24020304300064 24020304300043, 24020304300087, 24020304300106	Version :

🔍 Problem Recognition

- High costs associated with implementing advanced technologies such as facial recognition hardware
- Different methods of attendance tracking may lead to inconsistencies in data collection.
- Protecting sensitive attendance data from unauthorized access or breaches.
- ongoing costs for system maintenance, updates and users support.
- Difficulty in integrating the attendance system with existing management system, LMS & HRMS

☀ Problem Resolution

- Design a centralized database to store attendance records and analysis cloud based storage
- Implement robust security measures to protect sensitive attendance data. - Encryption for data protection.
- Data management issues
- Security and privacy

🖼 Product Illustration (Prototype)

- QR code Attendance
- Users can scan a QR code displayed on their device to mark attendance quickly.
- Facial Recognition.
- Optional feature for automatic attendance marking using facial recognition technology.
- Key Features.
- Analytics Dashboard.
- Graphs and charts showing attendance rates by class or individual.

🔧 Product Remodelling (Redesign)

- User Engagement feature
- Security and Privacy
- Implementation plan - Uses Research, prototyping, Development
- Enhanced Attendance Tracking
- Simple Navigation

MIND MAPPING

Smart Attendance System

Limitations

Environmental Factor: Face Detection (Accuracy issue)

Privacy Concern: User Data (Data Protection Regulation.)

Technical Complexity: System Implementation

Future Enhancement

Improval Algorithm Face Detection (Increase Accuracy)

Mobile App User Access (Convenience for Users)

User Training: User Adaptability (Easy to use)

User

Students-Face Detection (scan Face For attendance)

Teachers-Dashboard (Monitor attendance)

HOD - Reporting (Generates Report)

Core Features

Face Detection - Attendance Marking (Real-time Attendance tracking)

Dashboards - User Actions (View Records, manage data.)

Reporting - Notifications (send alerts for absences.)

Development Resources

Cameras: Face Detection [Hardware Requirement]

Server Infrastructure System Performance (support for Operations)

Security Protocals User Data (Protect Biometric Info)