

3. External Interface Requirements

3.1 User Interfaces

3.1.1. Web design

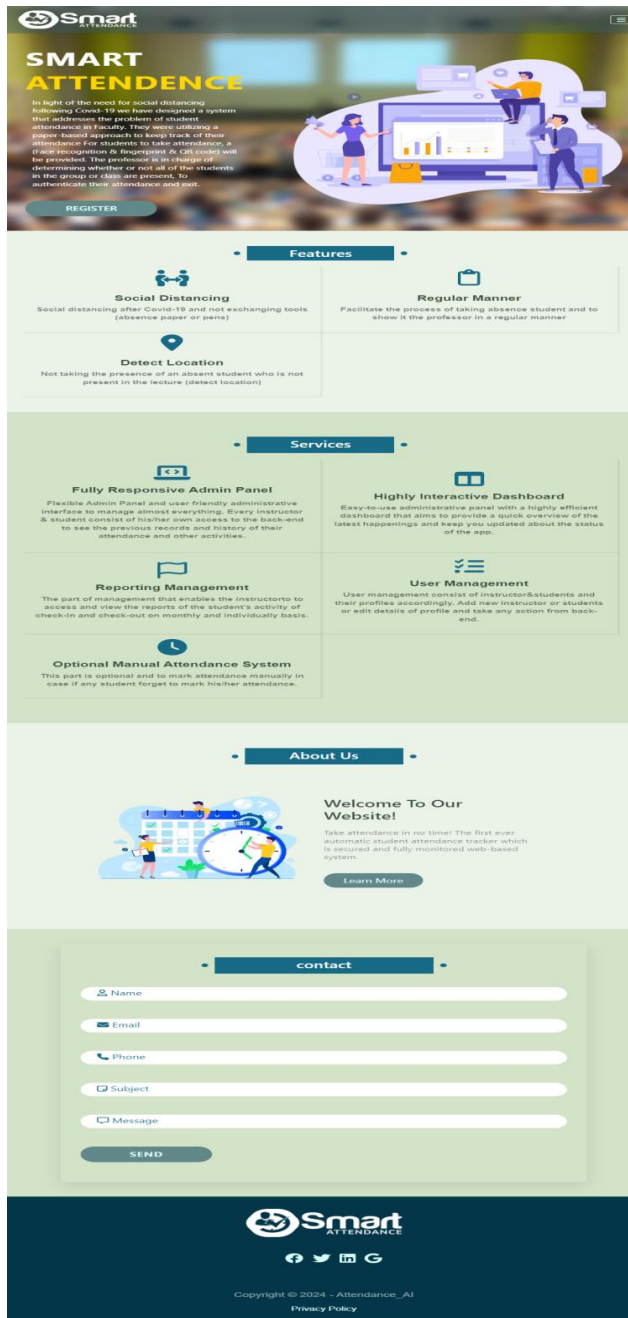


Fig (2): Intro page

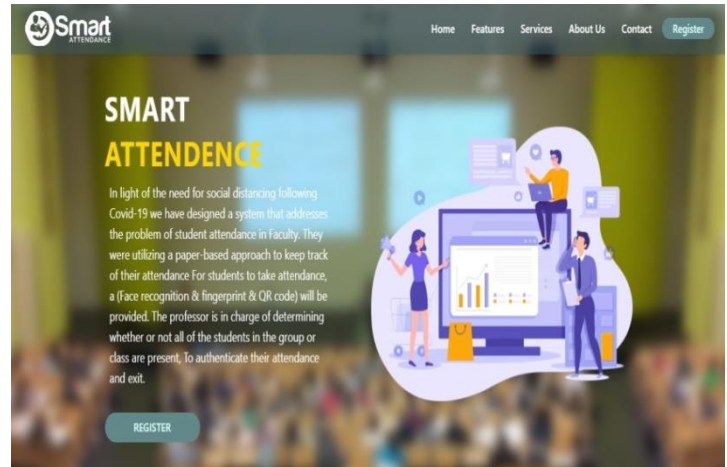


Fig (3): First page

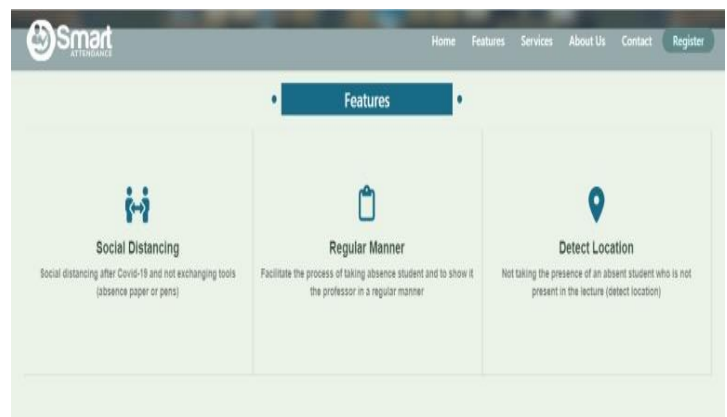


Fig (4): Features

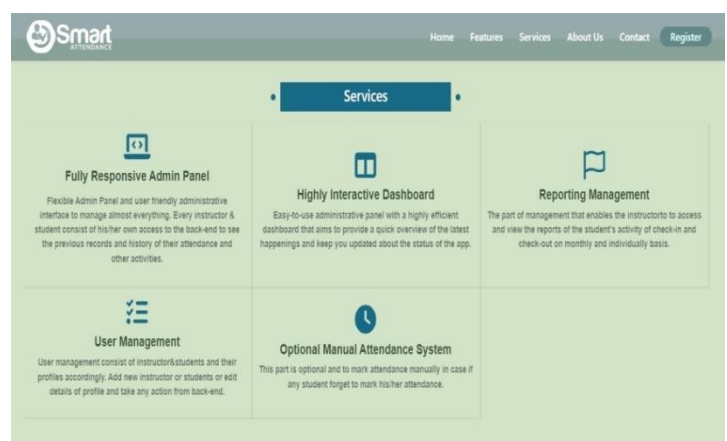


Fig (5): Service

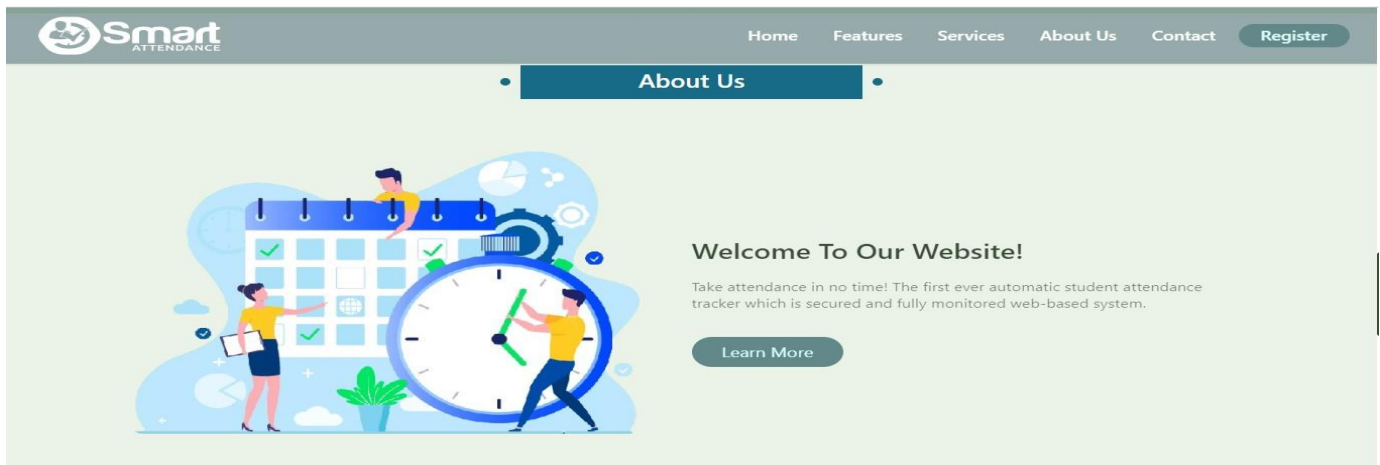


Fig (6): First about us



Fig (7): First contact

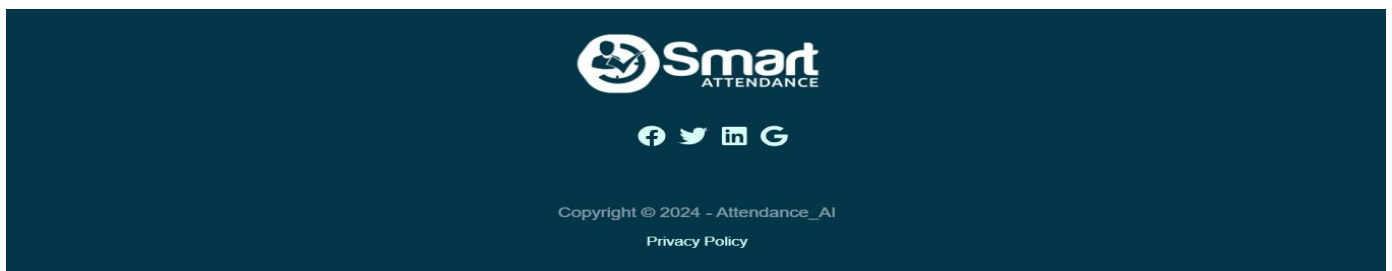
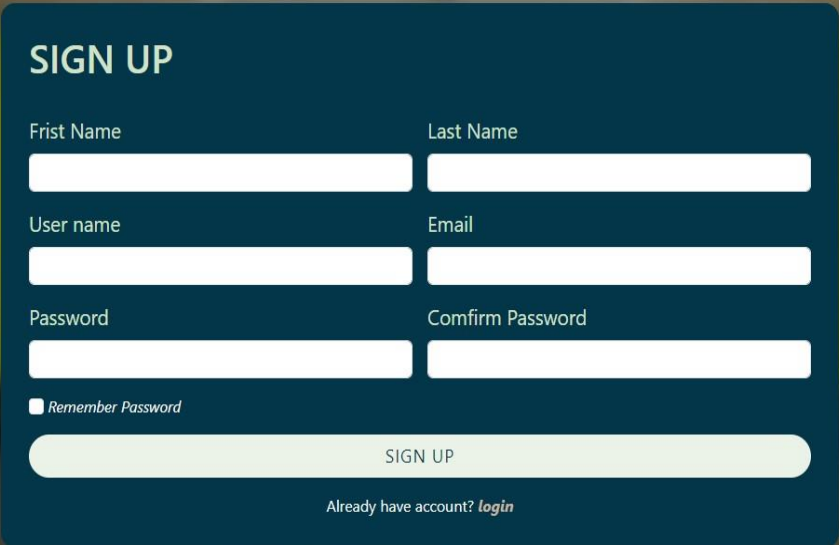
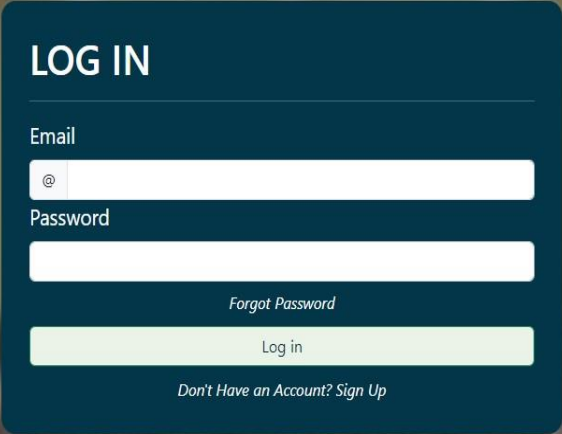


Fig (8): Footer



A dark teal rectangular form titled "SIGN UP" in white. It contains six input fields: "Frist Name" and "Last Name" (top row), "User name" and "Email" (second row), and "Password" and "Comfirm Password" (third row). Below the password fields is a checkbox labeled "Remember Password". At the bottom is a light green "SIGN UP" button and a link "Already have account? *login*".

Fig (9): Sign up page



A dark teal rectangular form titled "LOG IN" in white. It contains two input fields: "Email" (with an '@' icon) and "Password". Below the password field is a link "Forgot Password". At the bottom is a light green "Log in" button and a link "Don't Have an Account? *Sign Up*".

Fig (10): Log in page

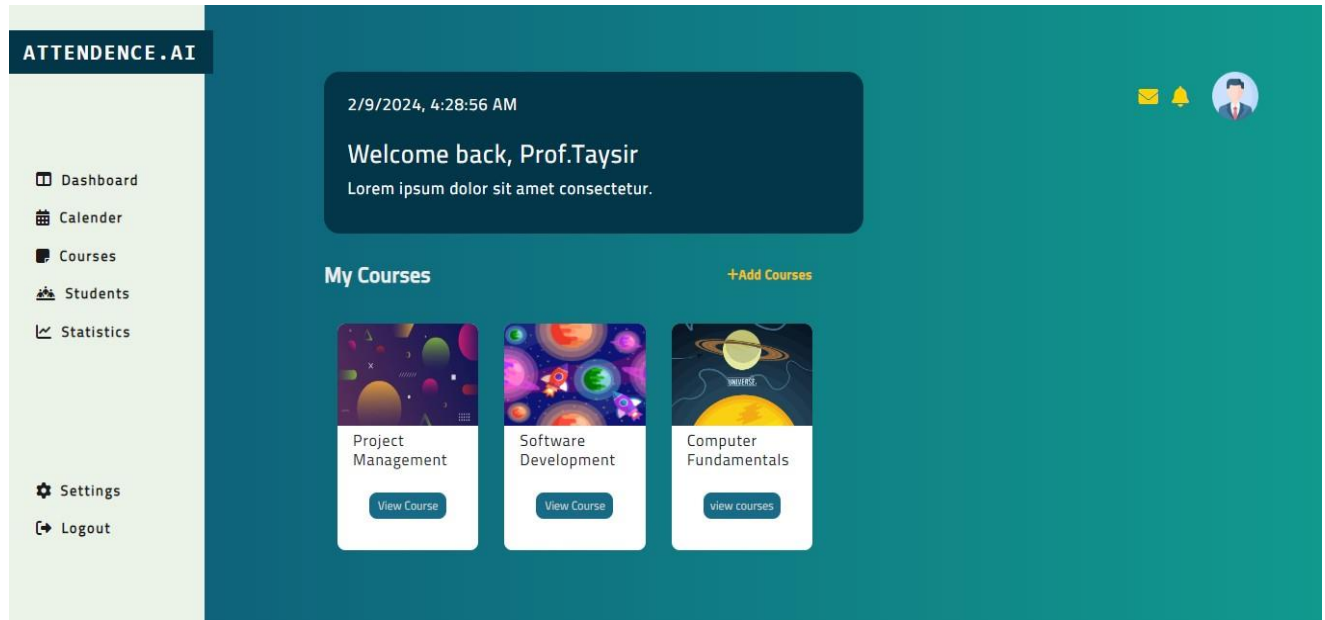


Fig (11): main page

The screenshot shows the 'Add Course' form in the Smart ATTENDANCE system. The form is set against a light green background. At the top, there is a dark blue header with the 'Smart ATTENDANCE' logo and navigation links: Home, Statistics, About Us, and Contact. The form fields are arranged in two columns. The first column contains 'Course name*' (text input), 'Semester*' (text input), 'Minimum Attendance Rate' (text input with placeholder 'from 1 to a'), and 'Attendance instructions' (text area). The second column contains 'Credit hours*' (text input), 'Level*' (text input), and 'Departement*' (text input). At the bottom, there are two buttons: 'BACK' and 'ADD'.

Fig (12): Add course

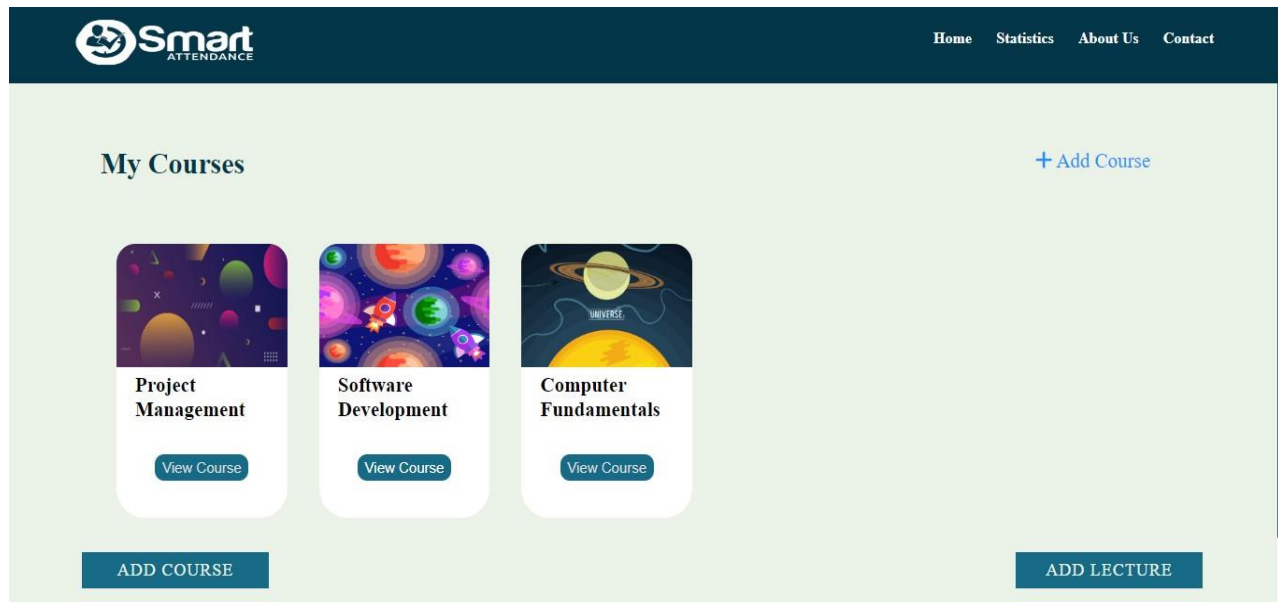


Fig (13): View course

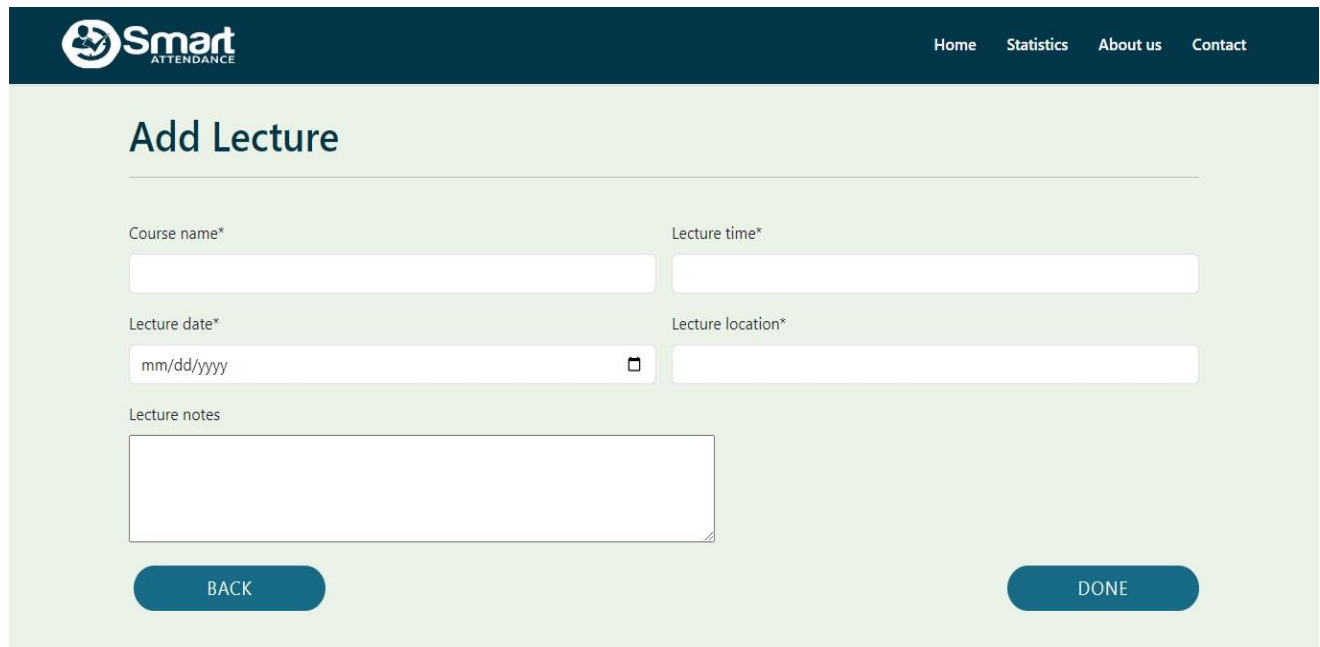


Fig (14): Add lecture

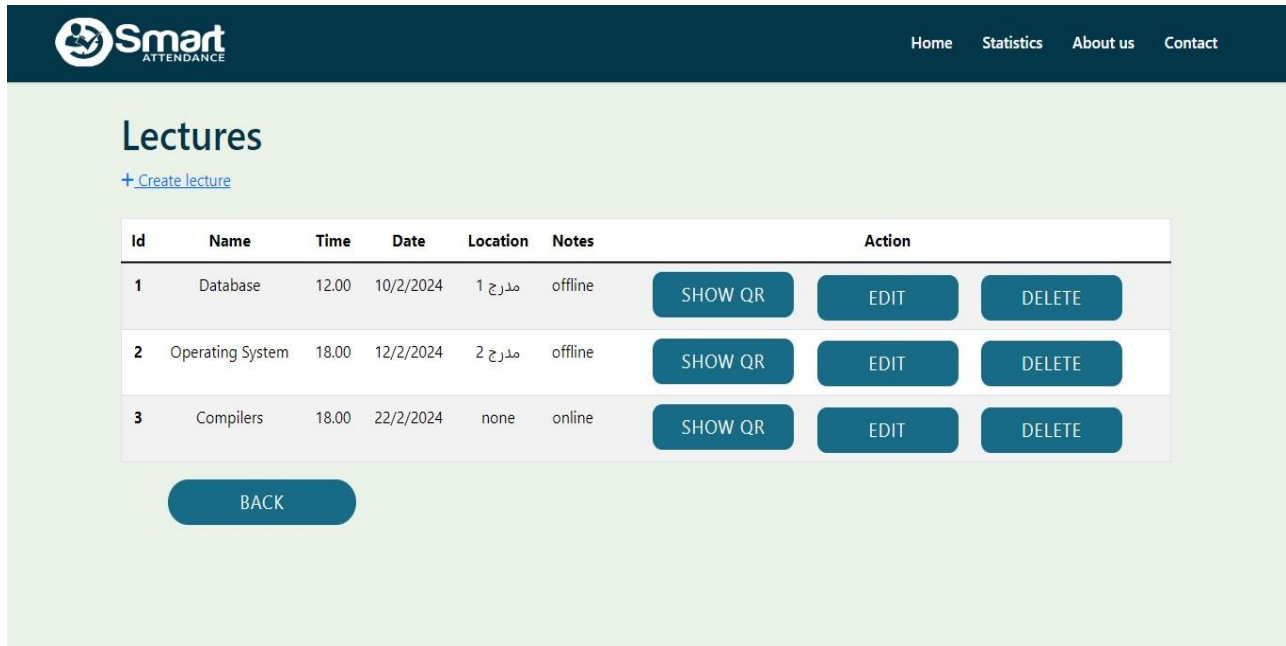


Fig (15): View lecture

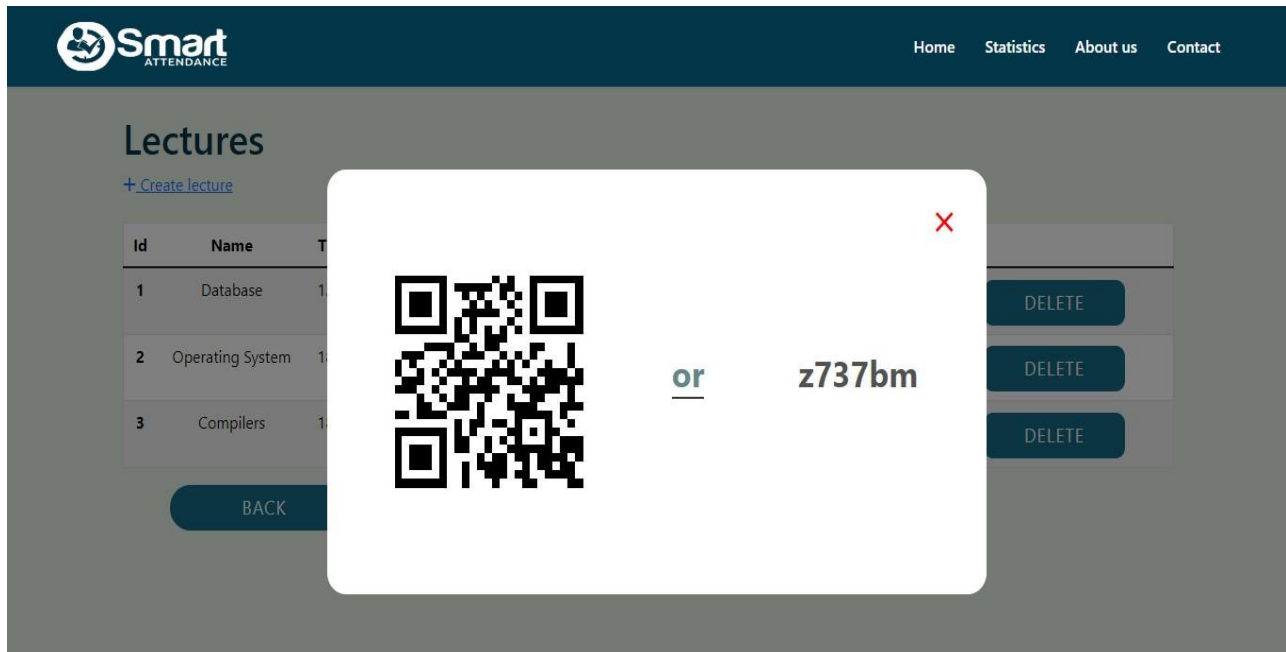



Fig (16): Show QR code



Home Statistics About us Contact

Courses/Database

#	Name	Attendance	Delay
1	Mark	×	4-minute
2	Jacob	×	
3	Larry	✓	33-minute
4	Mark	×	4-minute
5	Jacob	✓	
6	Larry	✓	33-minute
7	Mark	×	4-minute
8	Jacob	×	
9	Larry	✓	33-minute
10	Mark	×	4-minute
11	Jacob	×	
12	Larry	✓	33-minute
13	Mark	×	4-minute
14	Jacob	×	
15	Larry	✓	33-minute

BACK

Fig (17): Show sheet

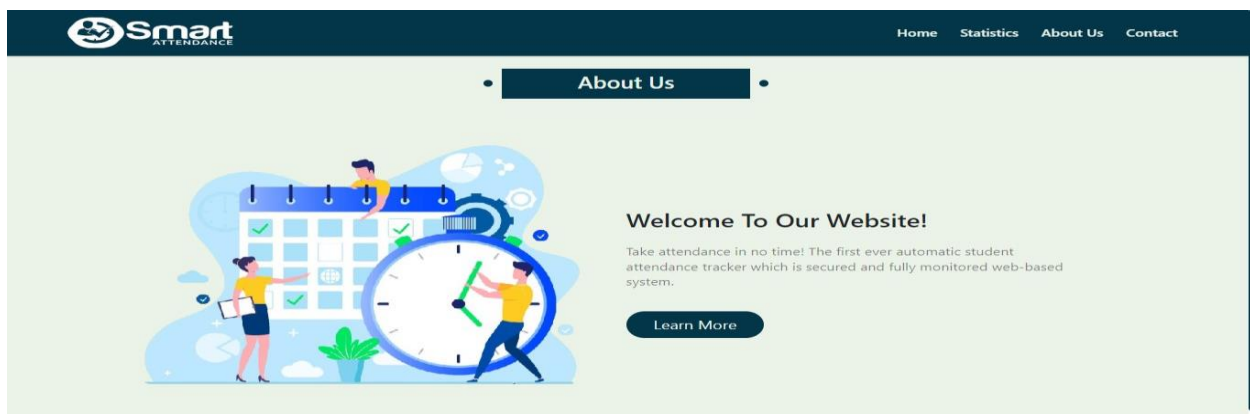



Fig (18): About page



Home Statistics About Contact

Contact

Name
 Email

Phone
 Subject

Message

SEND

BACK

Fig (19): Contact page

3.1.2. Mobile app

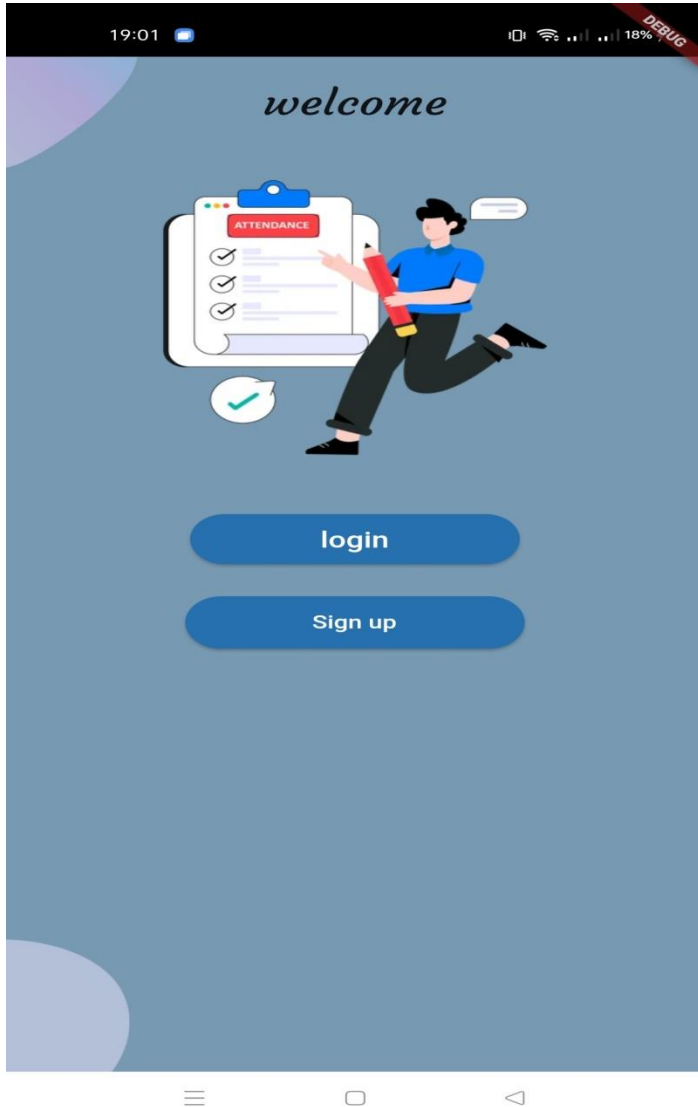


Fig (20): Welcome

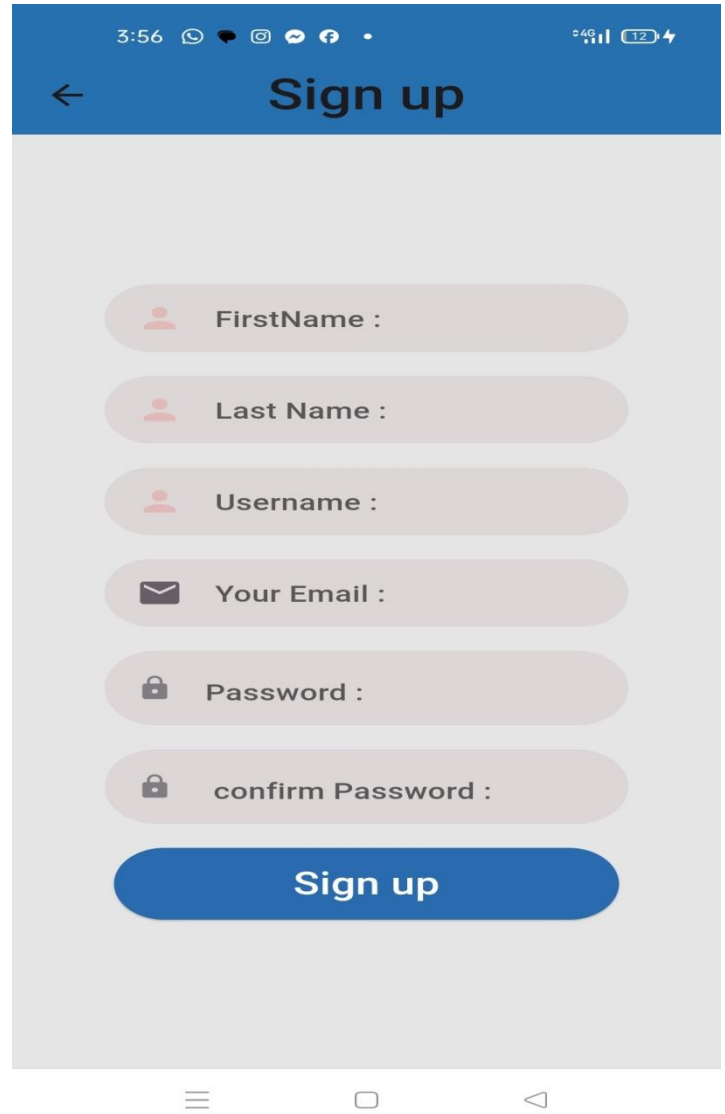


Fig (21): Sign up

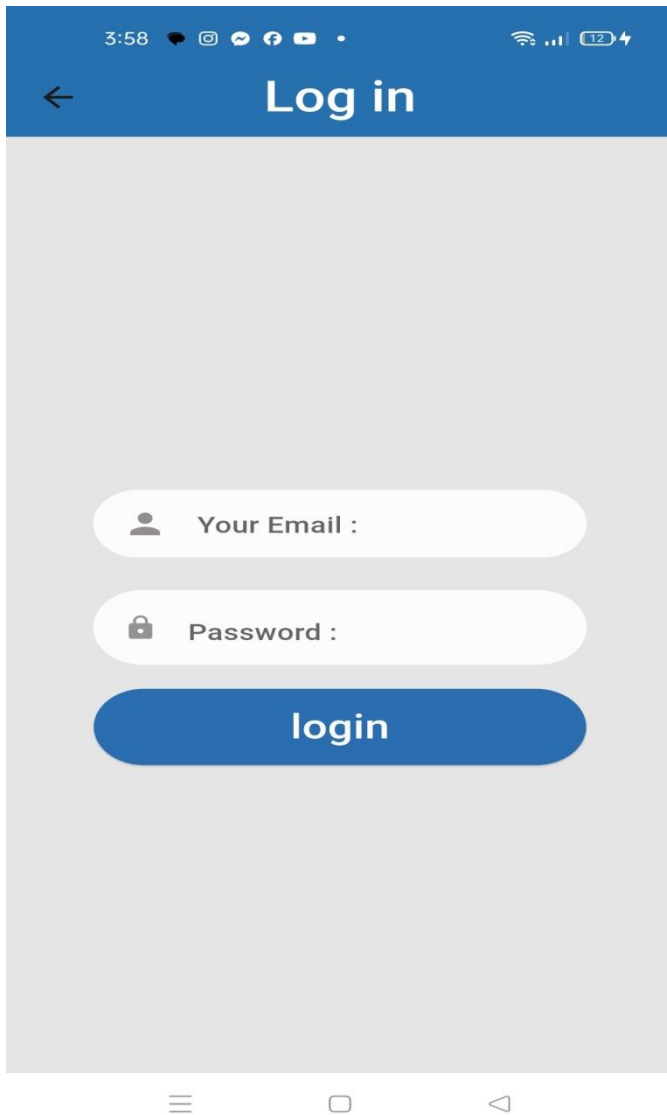


Fig (22): Log in

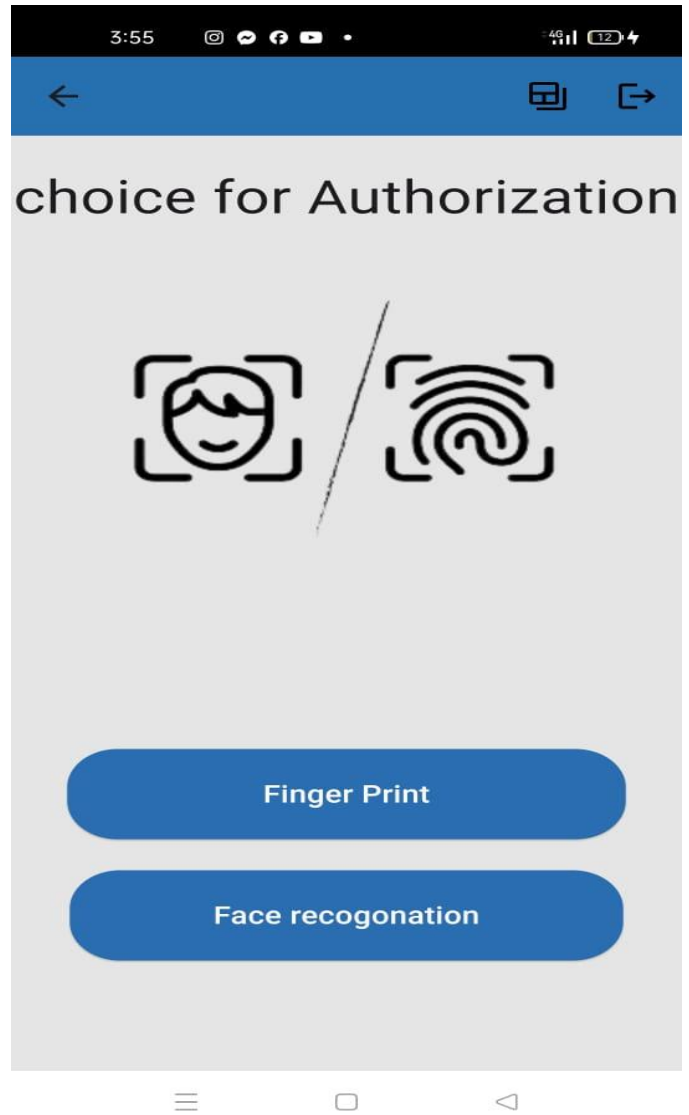


Fig (23): Main page

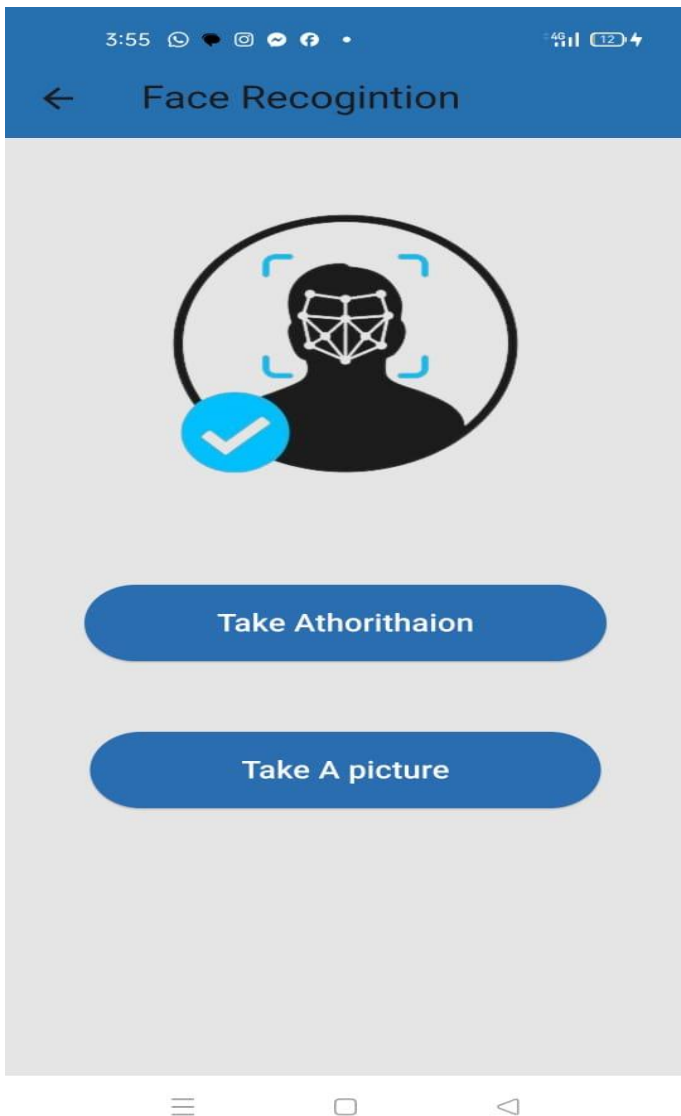
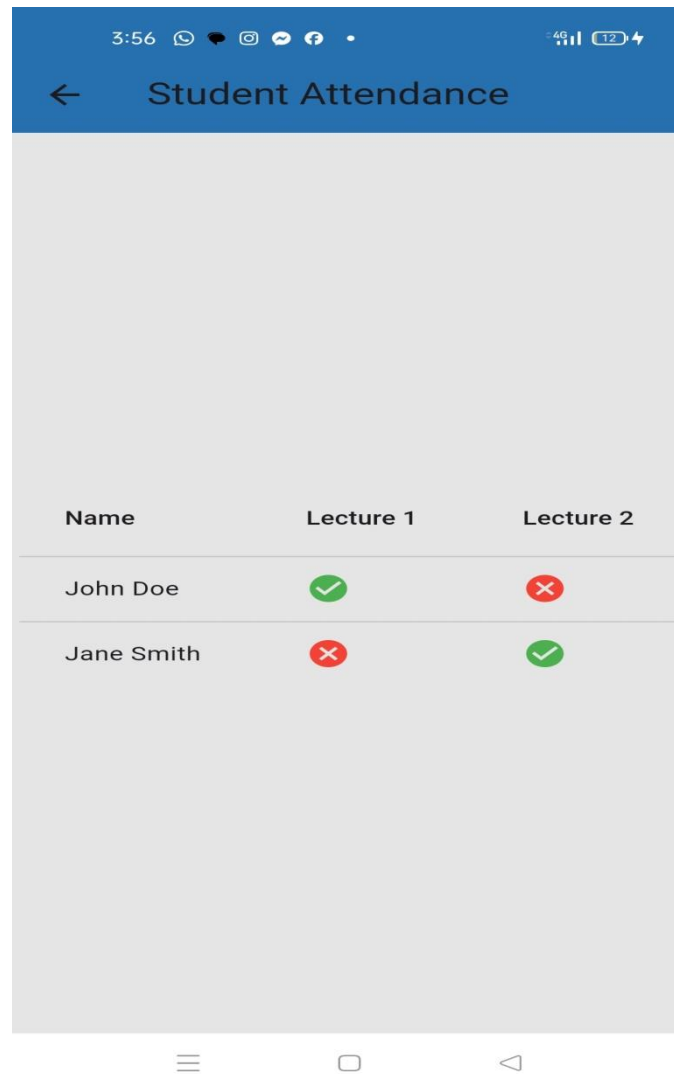


Fig (24): Face recognition



Fig (25): Fingerprint



The image shows a mobile application interface for 'Student Attendance'. At the top, there is a blue header bar with a back arrow and the title 'Student Attendance'. Below the header is a large grey rectangular area. At the bottom of this area is a table with three columns: 'Name', 'Lecture 1', and 'Lecture 2'. The table contains two rows of data. The first row shows 'John Doe' with a green checkmark for 'Lecture 1' and a red 'X' for 'Lecture 2'. The second row shows 'Jane Smith' with a red 'X' for 'Lecture 1' and a green checkmark for 'Lecture 2'. The bottom of the screen shows a standard Android navigation bar with three icons: a hamburger menu, a home button, and a back arrow.

Name	Lecture 1	Lecture 2
John Doe	✓	✗
Jane Smith	✗	✓

Fig (26): Dashboard

3.2 Hardware Interfaces:

The requirements of the desktop computer where the system going to be installed.

The requirements of a smartphone that has a camera or fingerprint and installing the application for the student to be able to attend.

3.3 Software Interfaces:

The computer this software going to be install need to have windows 10 operating system. On that Windows platform

.Net 7.0 will be installed and that will be the platform the particular software will be run. There will be Microsoft SQL Server Management Studio 2018 that should be installed. The operating system for Mobile devices should be Android.

3.4 Communications Interfaces:

When a student scans the QR code after verifying the identity using the fingerprint or facial recognition feature, it will be registered with the professor in the attendance table.