

# **USER MANUAL**

## **SMART ATTENDANCE MARKING SYSTEM (SAMS)**

**Presented by:**

**Muthucumarana P.N.N. (E/15/233)**

**Opanayake R.L. (E/15/246)**

**Weerasinghe S.P.A.P.E. (E/15/385)**

## **ABSTRACT**

This project aims at designing a Smart Attendance Marking System which could be used to manage attendance of students at institutes like universities and colleges. A fingerprint recognition based identification system is used to identify the students and lecturers individually. Fingerprints are considered to be the best and fastest method of biometric identification. They are secure to use, unique for every person and do not change in one's lifetime. Through this system, the time consumed for regular attendance marking is reduced and this minimizes the illegal activities associated with attendance marking. The accuracy of the process is heightened through this system and the required analysis and reports are generated automatically. Students can go through their attendance reports and they can aware of their attendance progress easily and Teachers also can check their time tables, schedules through the web application.

# **TABLE OF CONTENT**

**ABSTRACT**

**TABLE OF CONTENT**

**INTRODUCTION**

## **1.Node Hardware (Finger Print, LCD, KeyPad, Wifi connectivity)**

- Steps to operate device
- Enroll mode
- Search mode
- Upload mode
- Change wifi settings
- KeyPad

## **2.Web interface**

- Steps to follow the web site
  - Student/Teacher
  - Admin
- State machine for users
- Navigations wire frame

# INTRODUCTION

In many institutions and organizations the attendance management is a very important factor for various purposes and its one of the important criteria that is to follow for students and for the organization. It's very important for the functioning of the institute whether it's an educational institute or a business organization. But the regular systems and methods for marking attendance are pretty much inconvenient. In most of the schools, teacher has to call students by their names and then mark the attendance. It is somewhat inconvenient to the teacher and it takes a considerable time also. So, designing a better attendance management system for students so that records are maintained with ease and accuracy was an important key behind motivating this project. This would improve accuracy of attendance records because it will remove all the hassles of roll calling and will save valuable time of the students as well as teachers.

Now we will see how to operate the device and how to follow the web site.

# 1. Node Hardware (Finger Print, LCD, KeyPad, Wifi connectivity)

## Steps to operate device

### 1. Turn on the device

When the device is new then it asks for the password for the device.

### 2. After that it will ask for the wifi ssid and the password.

(If the device is already used, after the power on it will ask for the password. Then it asks for whether the user need to change the previous wifi setting or continue)

### 3. In the select mode user can select following using push buttons

- Enroll- to register student
- Search- to mark the attendance of the student
- Upload-to upload the current data to the database

## Enroll mode

- To enter to enroll mode press Enroll button
- After enter to the enroll mode it will ask for the class name .user can enter the class name using the key pad. Then it will automatically download the id's of the user form the database.
- After the download complete user can give id numbers of the student and get their fingerprints.
- After the enroll done user can press back/ok button to go select mode state.
- Then the enrolled data should be upload. Press upload button to upload the enroll data. After the upload complete it will automatically come to the select mode state.

## Search mode

- To enter to search mode press Search button
- Then it will ask for the class.it can be given using keypad.
- After that device will automatically download the student id and fingerprint data to the device.
- Then the device will ready to mark the attendance.

- To get marked put finger in the fingerprint sensor. Fingerprint sensor will detect the finger and then will mark the attendance.
- To go out from the Search mode press back. Then it will go to the select mode state.
- Then user should upload the attendance using the upload button.
- Then it will upload the data automatically to the database. After the upload complete it will automatically come to the select mode state.

### **Upload mode**

- To enter Upload mode press upload button.
- Initially device will ask whether the user want to change wifi setting press enroll button to change or press back/ok button to neglect.
- Then the device will upload the corresponding data automatically.
- After the data upload complete it will automatically go to the select mode state.

### **Change Wifi Settings**

When the wifi change settings pop ups (after enter the password of the device or at the beginning of the upload mode) it will show the current wifi SSID and the password if the user want to change the setting press enroll button. To continue with the current SSID and password press back/ok button.

### **Keypad**

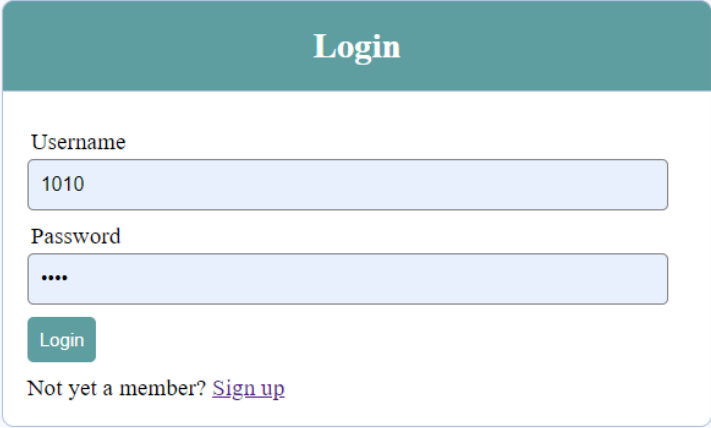
- To confirm the input press back/ok button.
- In selecting class or wifi ssid and password press upload/undo button to undo the given data.

## 2. Web interface

### Steps to follow the web site

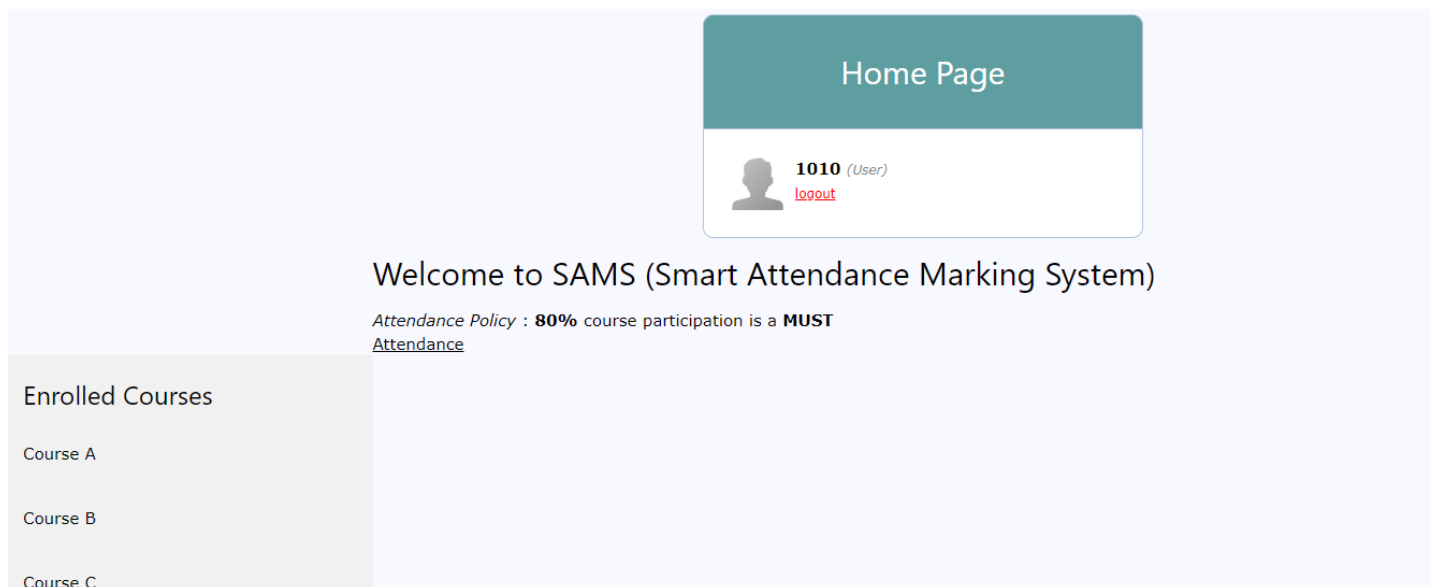
#### ➤ Students /teachers

#### 1. First user must enter User name and the password



The login form is titled "Login" in a teal header. It contains two input fields: "Username" with the value "1010" and "Password" with masked characters "....". Below the password field is a teal "Login" button. At the bottom, it says "Not yet a member? [Sign up](#)".

#### 2. Then User is shown enrolled courses



The home page has a teal header "Home Page". Below it is a user profile section showing a silhouette icon, the username "1010 (User)", and a red "logout" link. The main content area says "Welcome to SAMS (Smart Attendance Marking System)" followed by "Attendance Policy : **80%** course participation is a **MUST**" and a link to "[Attendance](#)". On the left, there is a sidebar titled "Enrolled Courses" listing "Course A", "Course B", and "Course C".

#### 3. Select the relevant course

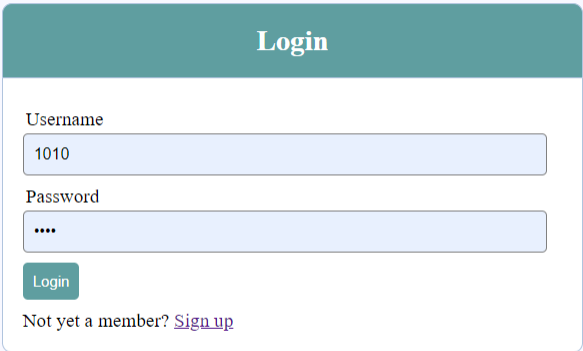
4. Then enter the index number

5. Your attendance percentage and number of attended days will be shown

6. In any case Please feel free to contact us through the CONTACT US forum


## ➤ ADMIN

1. Login using admin user name and password



The screenshot shows a 'Login' form with a teal header. It contains two input fields: 'Username' with the value '1010' and 'Password' with masked characters '....'. Below the password field is a teal 'Login' button. At the bottom, there is a link: 'Not yet a member? [Sign up](#)'. The form is set against a light purple background with faint architectural icons at the bottom.

2. Then admin will be sent to admin dashboard



The screenshot shows the 'Admin - Home Page' with a dark blue header. Below the header, there is a user profile section for 'admin (Admin)' featuring a user icon, the text 'admin (Admin)', and links for 'logout' and '+ add user'. To the left of this section, there is a link: '[Enter Admin details](#)'. The page has a light purple background.



3. Here you can select create a new user or navigate to user details

#### 4. Create new user page

Admin - create user

Username

1001

Name

FingerPrint ID

Email

User type

Password

....

Confirm password

+ Create user

#### 5. Details page

Hello Admin Welcome to SAMS!

Logout

Smart Attendance Marking System

Users

Class details

Teacher details

Course List

Add New Teacher

Teacher ID No	Teacher Name	Subject ID	Time Slot	Options
100	test	1000	10:10:00.000000	Modify   Delete
4521	Kamalanath Samarakoon	CO325	11:00:00.120000	Modify   Delete
4522	Isuru Navinne	CO321	09:00:00.000000	Modify   Delete
4523	Roshan Ragel	CO224	10:00:00.000000	Modify   Delete
4525	Asitha Bandaranayake	CO323	14:00:00.000000	Modify   Delete
4526	sagd	CO321	13:00:00.000000	Modify   Delete

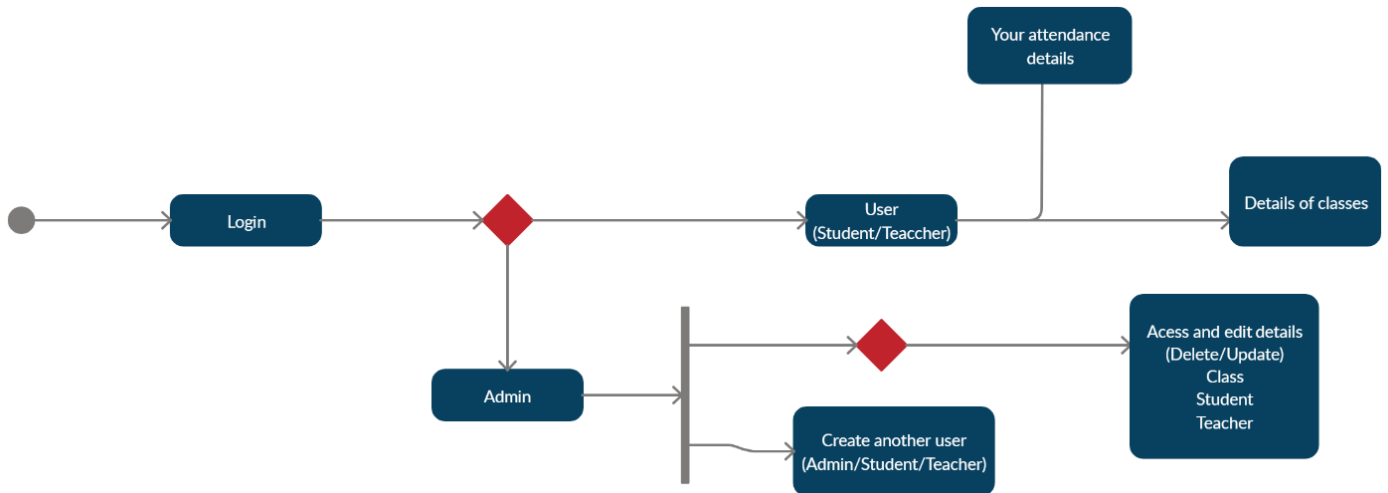
Deleted Records

S No	Course Name	Address	Options
1	E	10	Undelete

- Teacher details
- User details
- Course details

- Admin can modify delete create new details.

## State machine for users



## Navigations wire frame

