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# User Manual

For

# MIST Automated Attendance System

Prepared by

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# **1 Chapter 1: Introduction**

## **1.1 About the project**

Attendance is not only track also a regulation and scope of learning especially for engineering students. As a Military and Engineering institution proper attendance system is important. Current system has some loophole which helps students with proxy system, late coming and skipping class. So we are presenting an attendance system with biometric system so that class attendance is tracked properly.

## **1.2 Target user**

The attendance system is designed for the students, teachers and the authority of military institution of science and technology (MIST) for the proper attendance system. But with a simple modification it can be used in any educational institution.

## **1.3 Outline of the System**

### **1.3.1 Software**

We designed the web based system so that it can be accessed from any devices. It is mainly used for showing the outcome of the system.

### **1.3.2 Hardware**

Here sensors read all the parameter and pass these value to the database through Wi-Fi module.

## **2 Chapter 2: How to Use the System**

### **2.1 Hardware**



- The fingerprint sensor is connected with the MCU module and attached outside the gate so that one can scan his/her finger. It will confirm the match and push a notification.
- At the bottom of the door there will be LDR sensor at one side and a laser in another. The laser ray has no side effect on us. If one cross the laser rays after the finger scanning only then the attendance will be counted.

Apart from the discussed issues, the user has nothing to do more with the hardware part. The other task of user is in software section (as described in next section (number)).

### **2.2 Software**

The software of the system is a web based system.  
The user can go to [maas.mist.ac.bd](http://maas.mist.ac.bd) to login.  
For software use there is the manual to follow.

## 2.2.1 Login

By clicking on the login button present in the top right corner of the home page user can find the login page of the system



Welcome to MIST Automated Attendance System

Figure 1: Home Page

A user ID and password is required to log onto the database server.

For the initial handover the system developer will assign admin. The admin can assign another admin. For MIST ICT division will be the initial admin. Admin will assign the Username and password for the users.

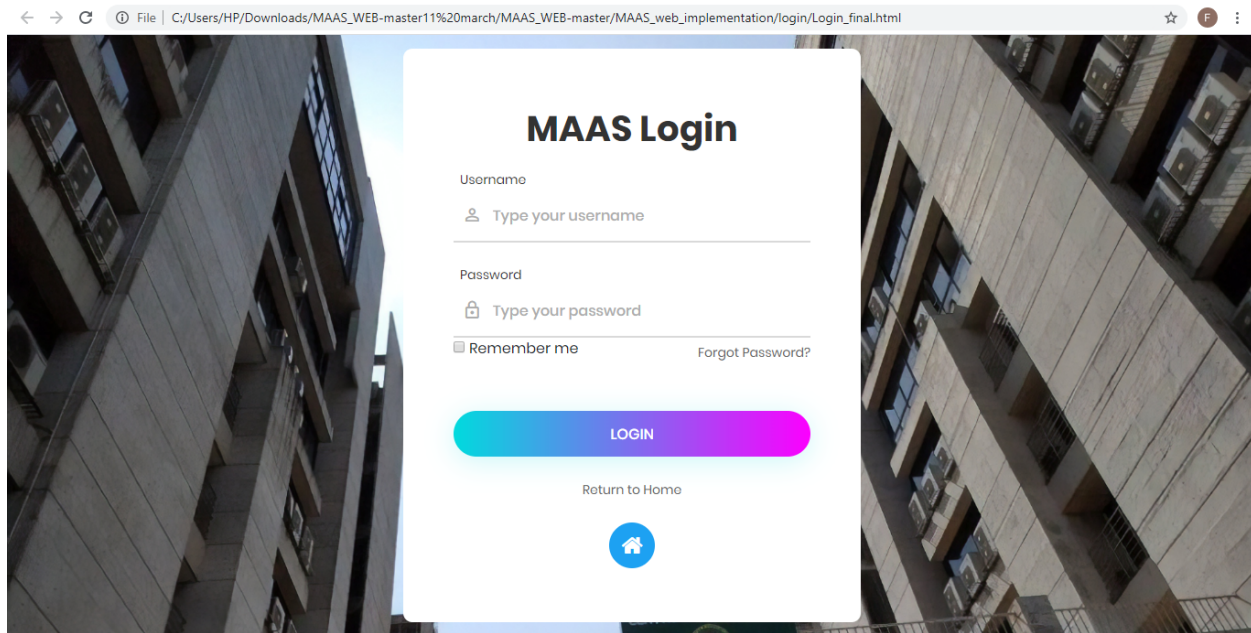


Figure 2: Login Page

If one forgot his/her password they can click Forgot Password.

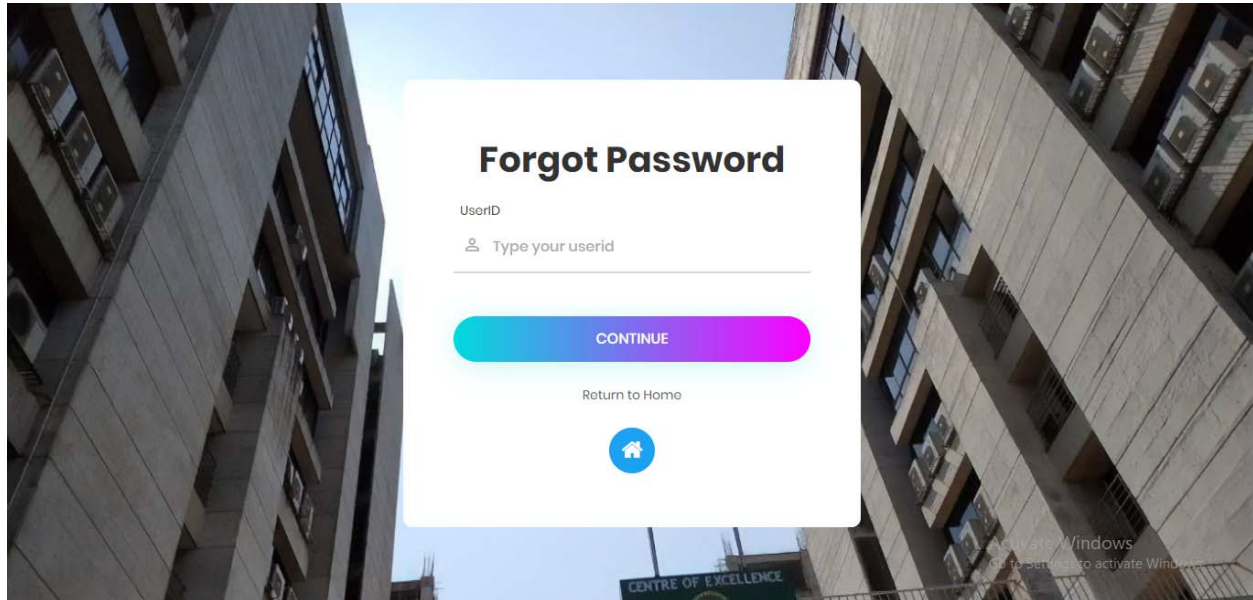


Figure 3 Forgot Password

If user enters the UserID they will get a email which contain their current password. By using current password they can they can enter and change their password.

## 2.2.2 Dashboard's common feature

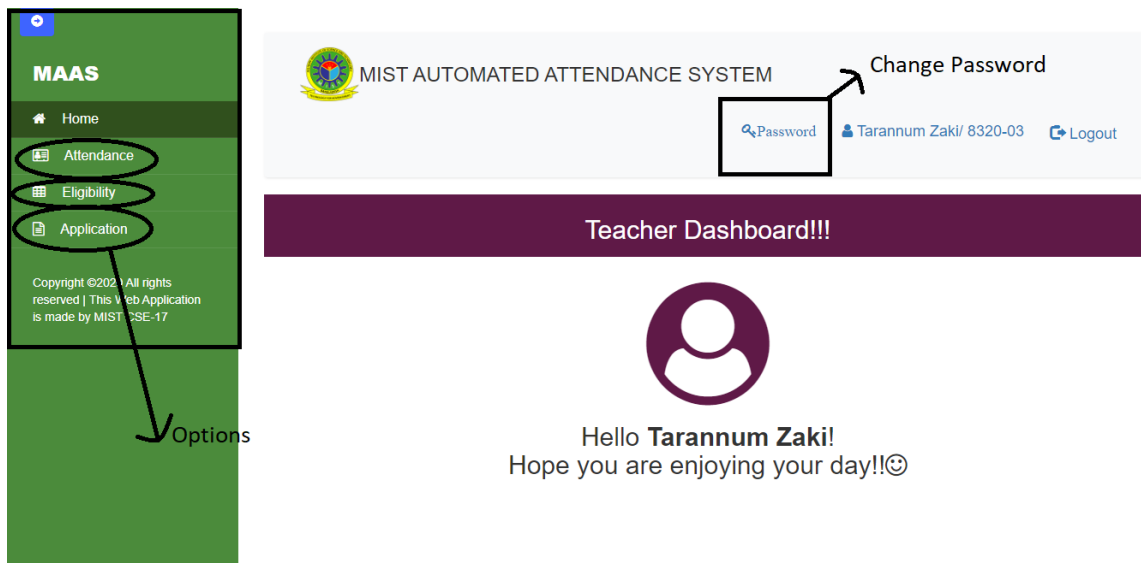


Figure 4: Common feature Dashboard

If you click the Password you will get this one. All types of user will get find the same dashboard while changing the password.

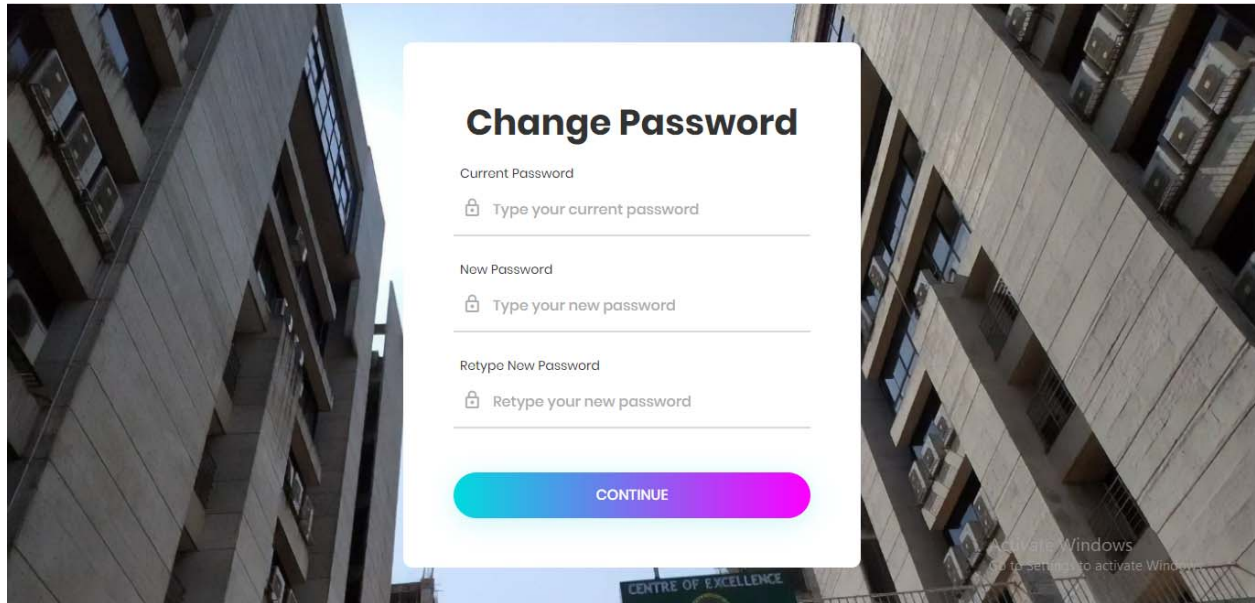
A screenshot of a 'Change Password' form overlaid on a background image of a modern building. The form is white with a rounded rectangle shape. It has a title 'Change Password' in bold black text. Below the title, there are three sections: 'Current Password' with a lock icon and the text 'Type your current password', 'Now Password' with a lock icon and the text 'Type your new password', and 'Retype Now Password' with a lock icon and the text 'Retype your new password'. Each section has a horizontal line for input. At the bottom of the form is a large, rounded button with a blue-to-purple gradient and the text 'CONTINUE' in white. In the bottom right corner of the background image, there is a small watermark that says 'Activate Windows Go to Settings to activate Windows'.

Figure 5: Change password

By typing the old password, new password & retyping the new password one can change his/her login info.

## 2.2.3 Teacher's Dashboard

### 2.2.3.1 Attendance

If teacher want to see the attendance then he/she must have to select the attendance option

Figure 6: Teacher Attendance Dashboard

After filling the four fields with valid data system, it will show the teacher attendance sheet specified by those four field where teacher is authorized to change the attendance of a particular student.

Ser No.	Roll No.	Name	Present	Absent	Excused
1	201714023	Farzana Faruk Jhumu	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	201714027	Masur Hasan Mahin	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	201714030	Lt Col Nazrul Islam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	201714043	Nafiz Imtiaz Khan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total Present : 0  
 Total Absent : 4  
 Percentage : 0%

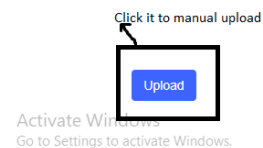


Figure 7: Teacher Attendance status dashboard



### 2.2.3.2 Eligibility List

Here teacher can see the status (collegiate, non-collegiate, dis-collegiate), present, absent info of a student of a particular course.

Ser No.	ID	Total Class	Total Present	Total Absent	Total Excused	Percentage	Status
1	201714023	11	1	10	0	9.090909090909092%	Dis-Collegiate
2	201714027	11	1	10	1	10%	Dis-Collegiate
3	201714030	11	2	9	0	18.181818181818183%	Dis-Collegiate
4	201714043	11	4	7	4	57.14285714285714%	Dis-Collegiate

Figure 8: Teacher eligibility list Dashboard

### 2.2.3.3 Application List

To see the application submitted by the students for being absent in the classes teacher have to use this option

Figure 9: Teacher Application Dashboard

After selecting an application teacher can accept or reject it based on its validity

Attendance  
Eligibility  
Application

## APPLICATION LIST!!

Fill up the followings:

Select Course:

CSE-460
▼

**Application list :**

201714052 02/05/2020
201714059 02/05/2020
201714045 01/05/2020
201714039 03/08/2019
201714043 02/05/2020

Total Applications :
7

Figure 10: Teacher Dashboard Application list

Teacher can save the application in the PDF format.

Date : 3/5/2020  
 The Course Coordinator  
 CSE-17A, CSE Department  
 Military Institute of Science & Technology  
 Mirpur Cantonment, Dhaka  
 Application for leave of absence

Dear sir  
 I am Nafiz Imtiaz Khan, a student of CSE-402 course kindly want to inform you that I was absent in class from the last undefined days from date undefined due to fever

Kindly grant me leave for those days. I shall be ever grateful to you for your kindness.

Yours sincerely,  
 Nafiz Imtiaz Khan  
 ID :201714043

Figure 11: Application in PDF format

## 2.2.4 Students Dashboard

After login as a student home page will be found like this

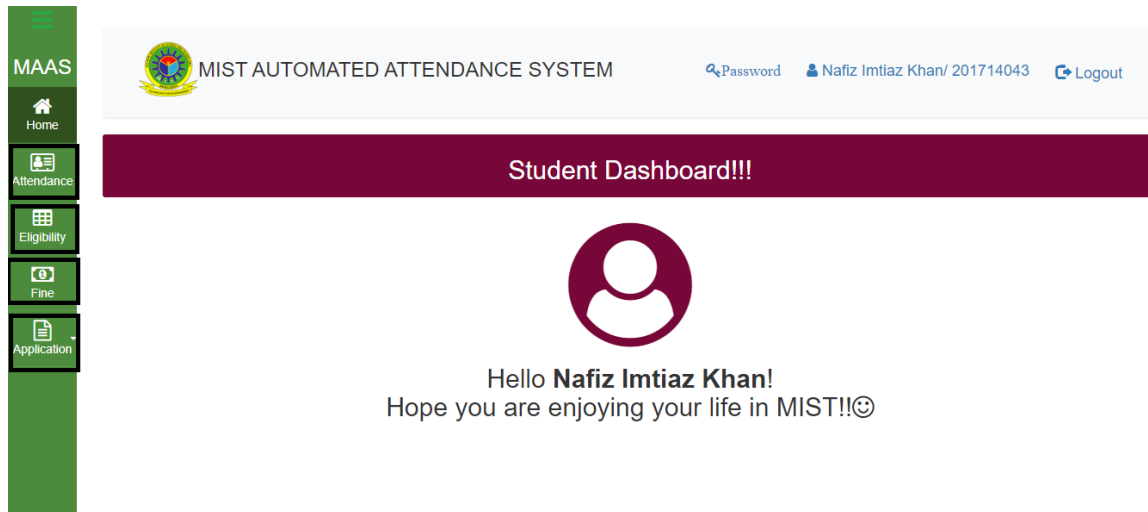


Figure 12: Student Dashboard

### 2.2.4.1 Students Attendance

By selecting the course & term student can see the attendance status(collegiate , non-collegiate, dis-collegiate) present, absent days of that course

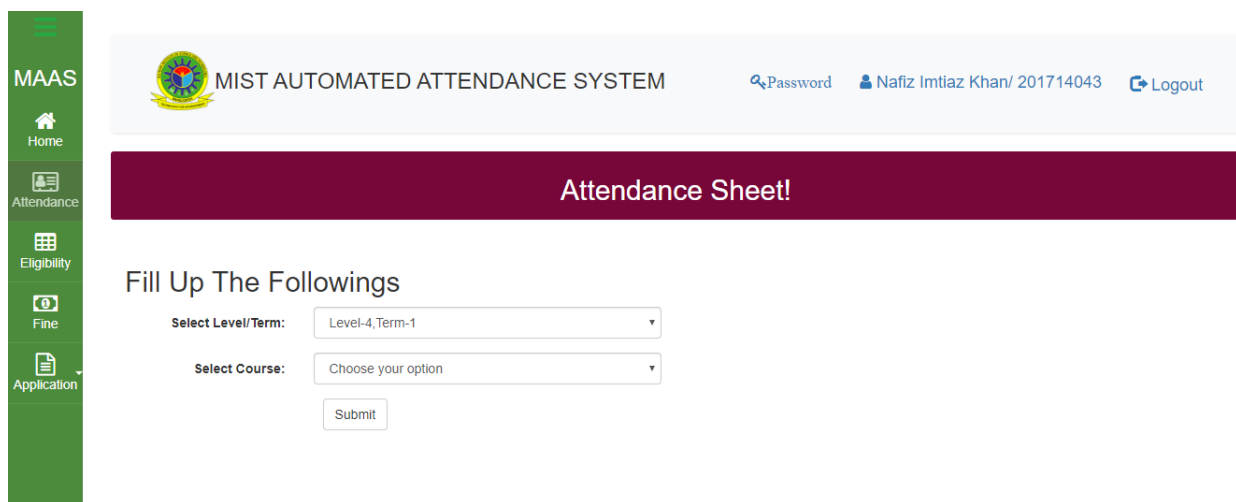


Figure 13: Student Attendance

Student can see the course-wise attendance of his own.

Select Course:

CSE-401
▼

Submit

Ser No.	Course Code	Faculty	Date	Time	Present	Absent	Excused
1	CSE-401	Lt Cdr Anisur Rahman	12-3-2020	08:00-08:55	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	CSE-401	Lt Cdr Anisur Rahman	12-3-2020	09:00-09:55	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	CSE-401	Lt Col Nazrul Islam	11-3-2020	08:00-08:55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	CSE-401	Lt Col Nazrul Islam	12-3-2020	08:00 am - 08:55 am	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	CSE-401	Lt Col Nazrul Islam	12-3-2020	08:00-08:55	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	CSE-401	Lt Col Nazrul Islam	17-3-2020	08:00-08:55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	CSE-401	Lt Col Nazrul Islam	17-3-2020	09:00-09:55	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	CSE-401	Lt Col Nazrul Islam	18-3-2020	08:00-08:55	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	CSE-401	Lt Col Nazrul Islam	20-3-2020	08:00-08:55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	CSE-401	Tarannum Zaki	26-3-2020	08:00 am - 08:55 am	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	CSE-401	Tarannum Zaki	29-3-2020	10:00 am - 10:55 am	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Figure 14: Student Attendance

### 2.2.4.2 Eligibility

Eligibility shows the information (status, total class, present, absent, excused class) of all the courses for a particular term of a student

Attendance  
Eligibility  
Fine  
Application

Eligibility Info!!

**Data Found!**

Fill up the followings

Select Level-Term:

Level-4, Term-1
▼

Submit

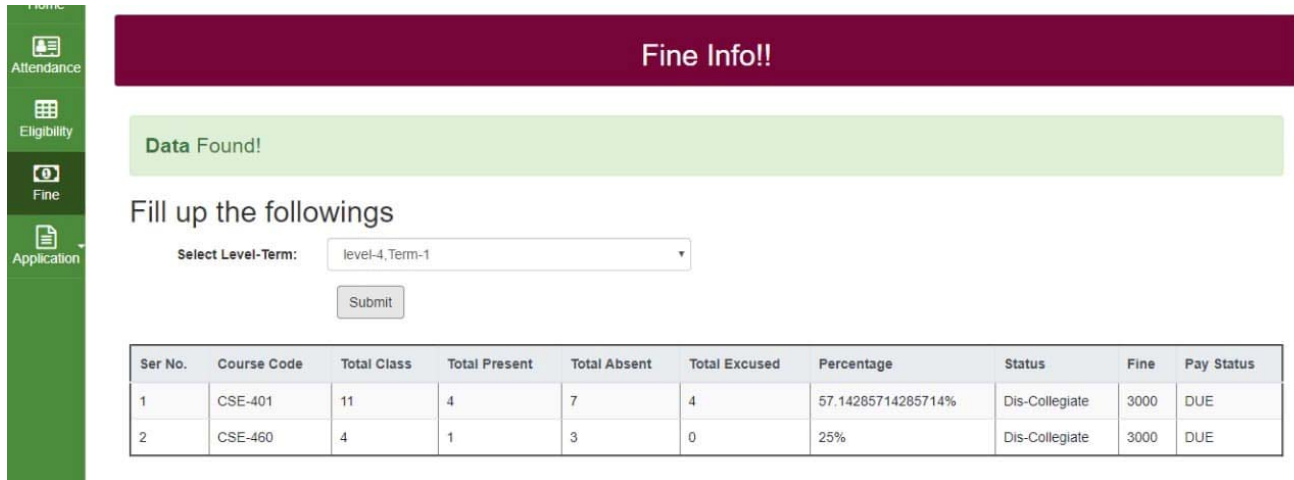
Ser No.	Course Code	Total Class	Total Present	Total Absent	Total Excused	Percentage	Status
1	CSE-401	11	4	7	4	57.14285714285714%	Dis-Collegiate
2	CSE-460	4	1	3	0	25%	Dis-Collegiate

Figure 15: Student Eligibility list

To show this student have to provide the level & click on submit button

### 2.2.4.3 Fine Dashboard

Fine dashboard shows a student the amount of fine(in Tk) for each course based on the attendance of a specific term



The screenshot shows the 'Fine Info!' dashboard. On the left is a green sidebar with navigation links: Home, Attendance, Eligibility, Fine (highlighted), and Application. The main content area has a maroon header 'Fine Info!'. Below it is a green box saying 'Data Found!'. The text 'Fill up the followings' is followed by a dropdown menu for 'Select Level-Term:' set to 'level-4, Term-1' and a 'Submit' button. Below this is a table with student fine information.

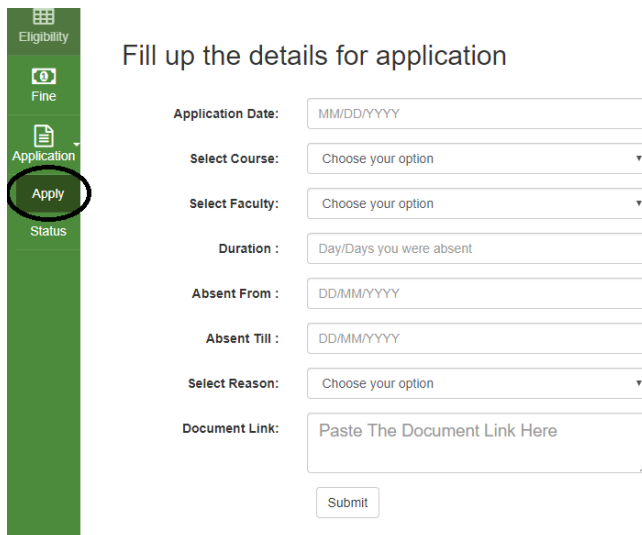
Ser No.	Course Code	Total Class	Total Present	Total Absent	Total Excused	Percentage	Status	Fine	Pay Status
1	CSE-401	11	4	7	4	57.14285714285714%	Dis-Collegiate	3000	DUE
2	CSE-460	4	1	3	0	25%	Dis-Collegiate	3000	DUE

Figure 16: Student fine list

### 2.2.4.4 Application Dashboard

Student can apply for leave in this dashboard and can also see the status whether his/her application is approved or not by selecting the respective option

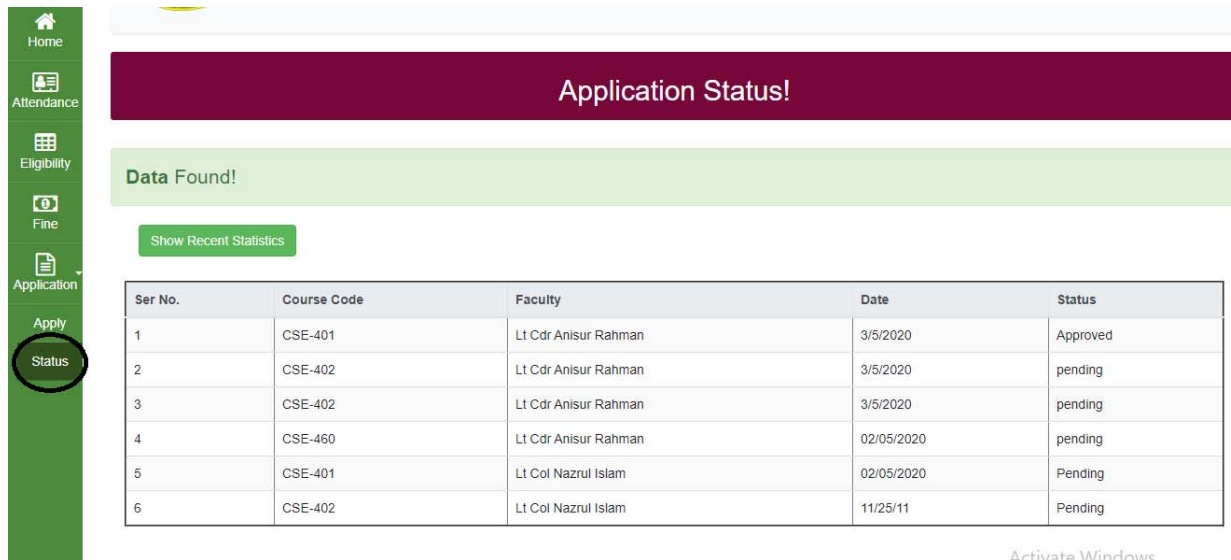
#### 2.2.4.4.1 Application form



The screenshot shows the 'Application' form. The left sidebar has 'Apply' highlighted. The main content area has the text 'Fill up the details for application'. The form includes fields for Application Date (MM/DD/YYYY), Select Course (Choose your option), Select Faculty (Choose your option), Duration (Day/Days you were absent), Absent From (DD/MM/YYYY), Absent Till (DD/MM/YYYY), Select Reason (Choose your option), and Document Link (Paste The Document Link Here). A 'Submit' button is at the bottom.

Figure 17: Student Application form

### 2.2.4.4.2 Status



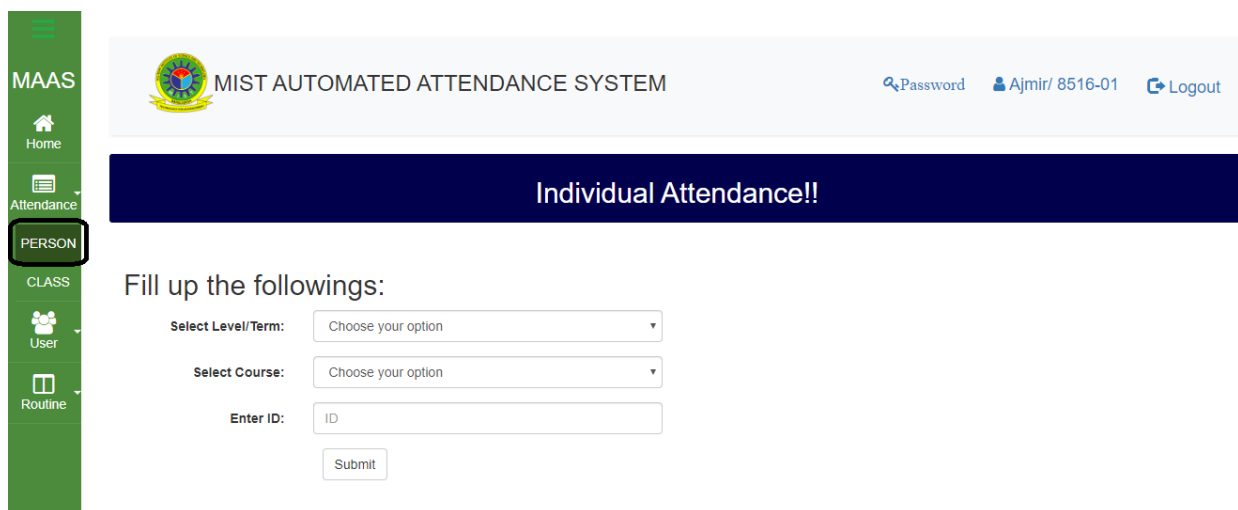
Ser No.	Course Code	Faculty	Date	Status
1	CSE-401	Lt Cdr Anisur Rahman	3/5/2020	Approved
2	CSE-402	Lt Cdr Anisur Rahman	3/5/2020	pending
3	CSE-402	Lt Cdr Anisur Rahman	3/5/2020	pending
4	CSE-460	Lt Cdr Anisur Rahman	02/05/2020	pending
5	CSE-401	Lt Col Nazrul Islam	02/05/2020	Pending
6	CSE-402	Lt Col Nazrul Islam	11/25/11	Pending

Figure 18: Student application status

## 2.2.5 Admin Dashboard

### 2.2.5.1 Attendance Dashboard

Admin can see the attendance of a particular student selecting the option in the attendance dashboard by submitting the required information



MAAS MIST AUTOMATED ATTENDANCE SYSTEM Password Ajmir/ 8516-01 Logout

### Individual Attendance!!

Fill up the followings:

Select Level/Term: Choose your option

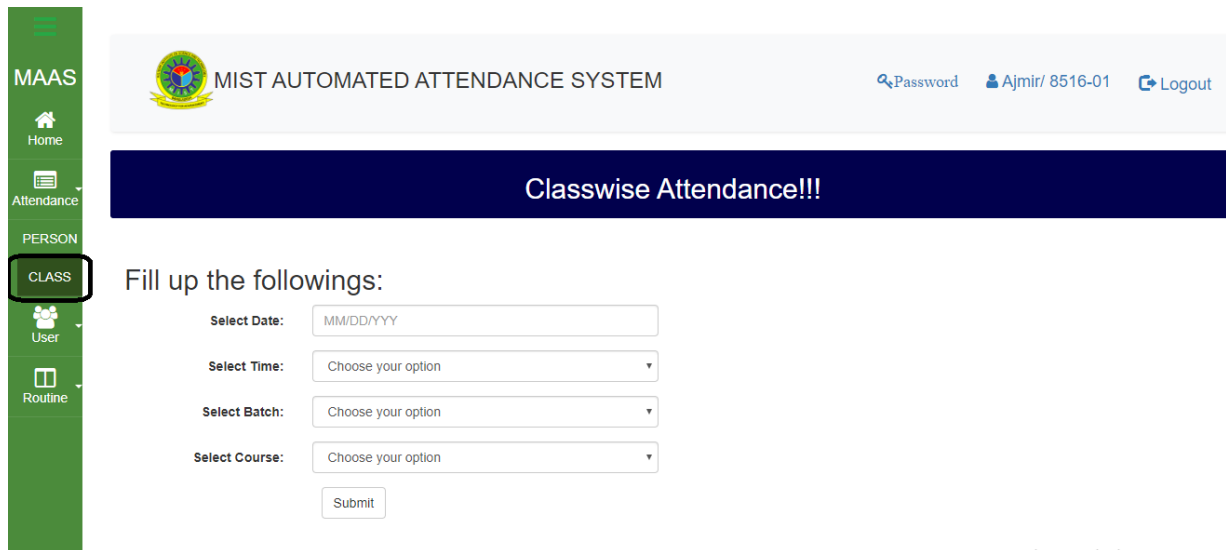
Select Course: Choose your option

Enter ID: ID

Submit

Figure 19: Admin individual Attendance

To see the attendance of a course admin has to select the class button in attendance dashboard and submit the required info



MAAS MIST AUTOMATED ATTENDANCE SYSTEM Password Ajmir/ 8516-01 Logout

**Classwise Attendance!!!**

Fill up the followings:

Select Date:

Select Time:

Select Batch:

Select Course:

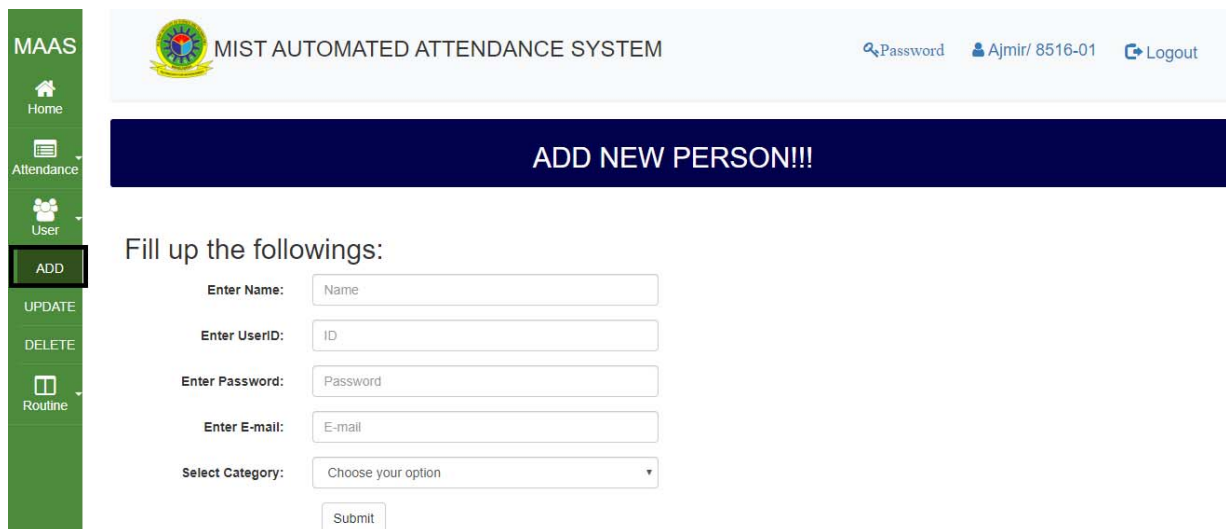
Figure 20: Admin class Attendance

## 2.2.5.2 User Dashboard

An admin can add or delete any user. Moreover an admin can update the personal information present on the system by selecting the option

### 2.2.5.2.1 Add User

By giving following info admin can add user in the database



MAAS MIST AUTOMATED ATTENDANCE SYSTEM Password Ajmir/ 8516-01 Logout

**ADD NEW PERSON!!!**

Fill up the followings:

Enter Name:

Enter UserID:

Enter Password:

Enter E-mail:

Select Category:

Figure 21: Add New Person in Admin

### 2.2.5.2.2 Update User

Admin can see the information of a user searching by their ID.

Figure 22: Update User in Person

Here he/she can change the info and submit it to the database

### 2.2.5.2.3 Remove User

To delete a user from the system admin has to type its id & submit it

Figure 23: Delete person in Admin

### 2.2.5.3 Routine Dashboard

Admin will specify routine for each class according to which the sensor of a class will match the finger print with the specific course students of that time. So admin can add and update routine by selecting the option



### 2.2.5.3.1 Add & Delete Routine

Day/Time	1st 0800-0855	2nd 0900-0955	3rd 1000-1055	1055-1145	4th 1145-1240	5th 1245-1340	6th 1345-1440	6th 1445-1550
Sun				B				
Mon				R				
Tue				E				
Wed				A				
Thu				K				

Figure 24: Add & Update Routine in Admin

By inserting the course code to each date and time slot admin can add or delete routine

### 2.2.5.3.2 Delete Routine

To remove a routine admin will select the classroom and click on delete button

Figure 25: Delete Routine in Admin

## **3 Chapter 3: Risk Management**

There are some precautions and security measure to be considered.

1. System should use a good sensor for fingerprint so that it can be used for long time and without the fear of being hacked.
2. Lasers battery needs to be checked for uninterrupted services.
3. As the password is sending in the Email, it should be secure also.