



FACIAL RECOGNITION ATTENDANCE SYSTEM

Design Document

Group 3:

Brendon Stepanek

Zain Jamal

Maximiliano Hernandez

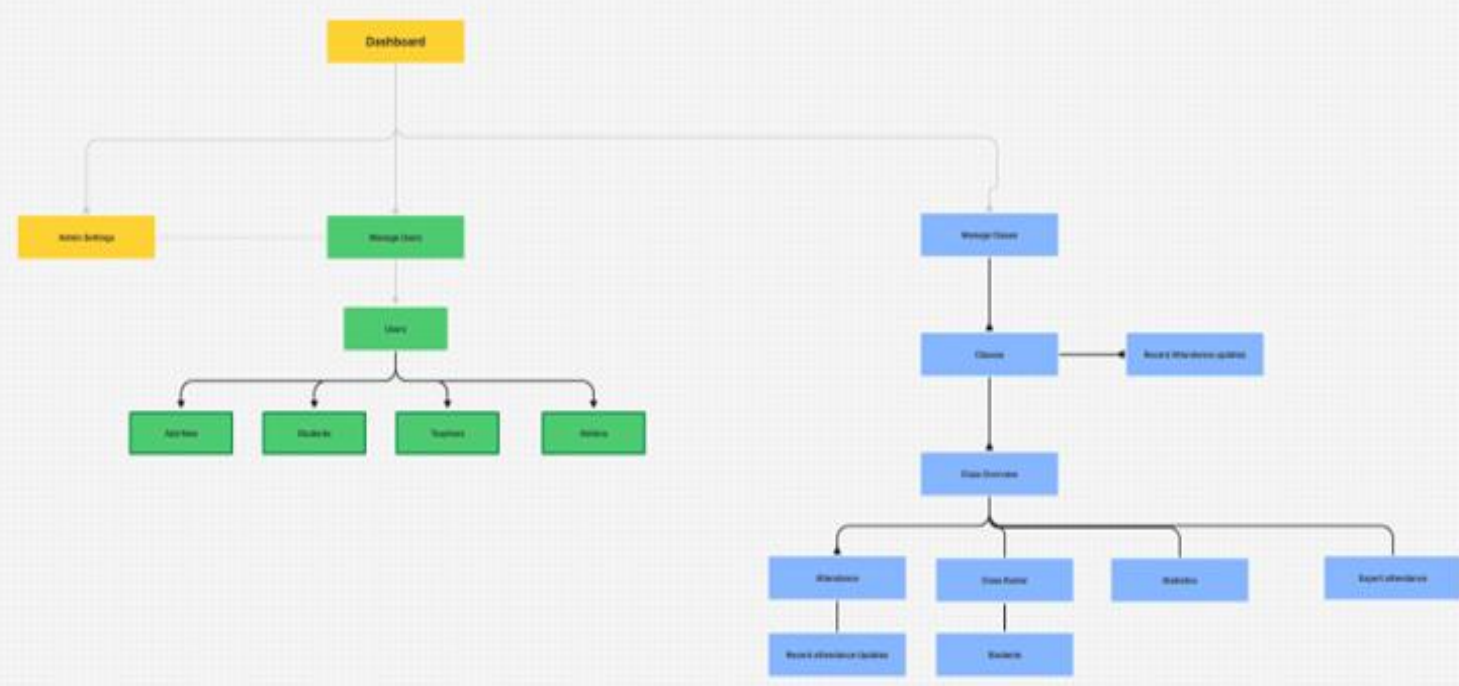
Neel Patel

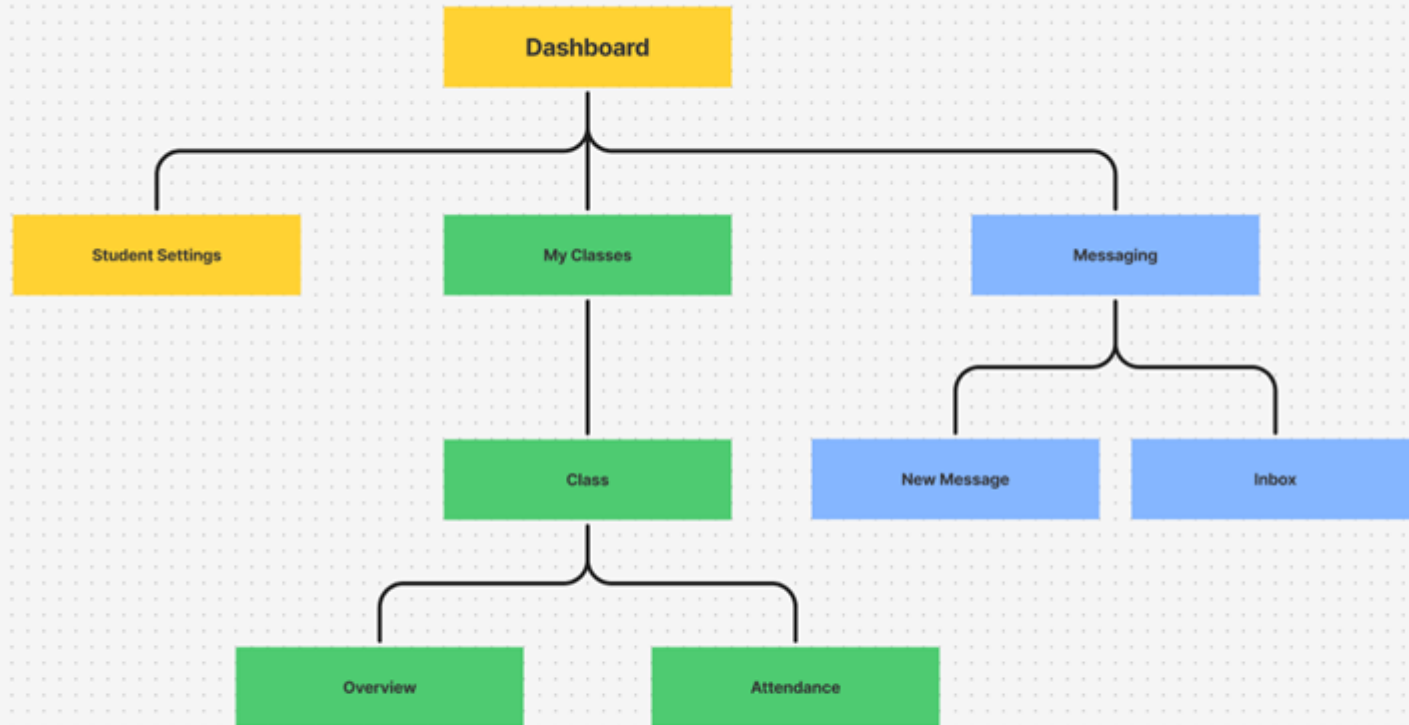
Josh Odegga

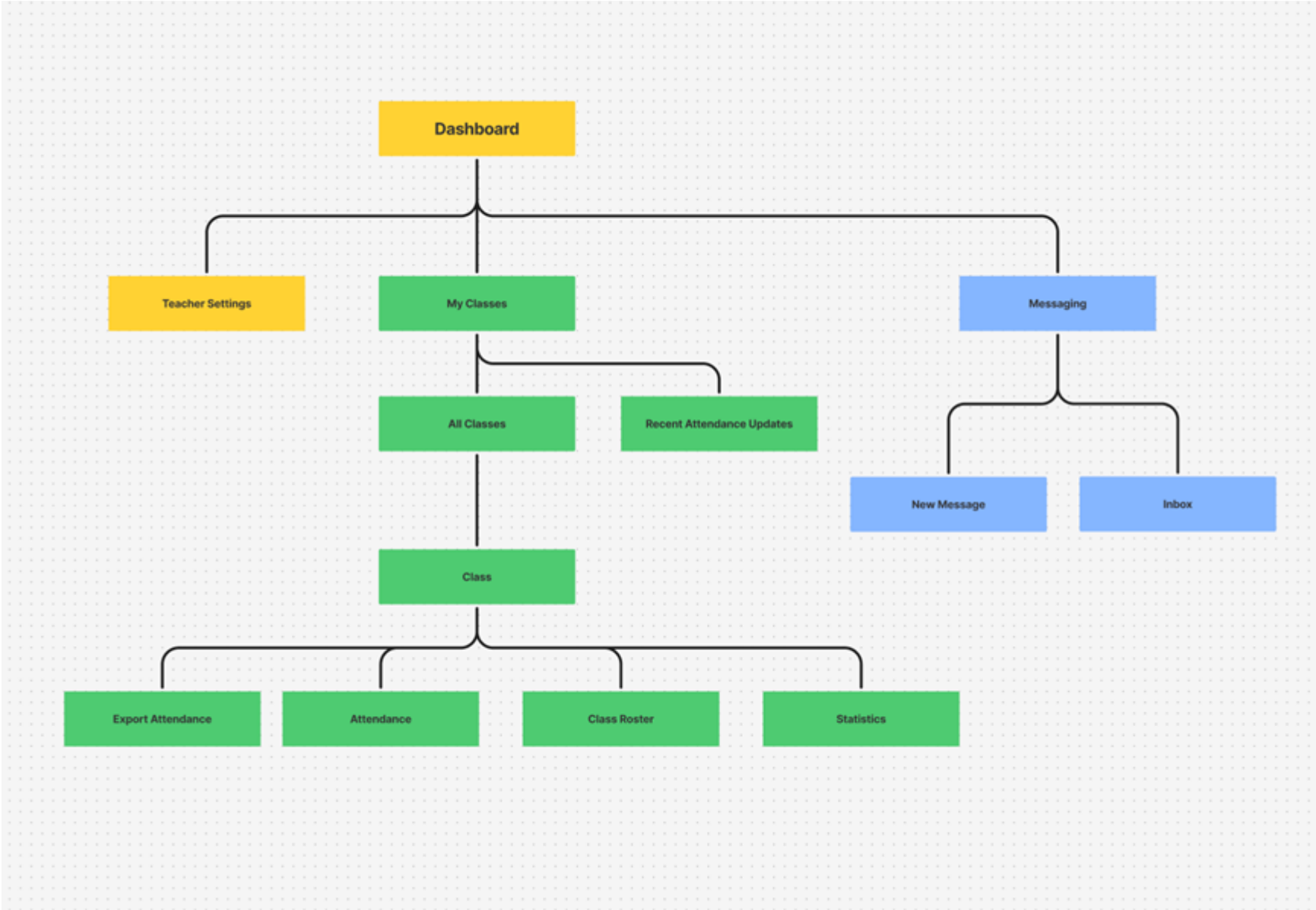
Sponsor:

Diana Rabah

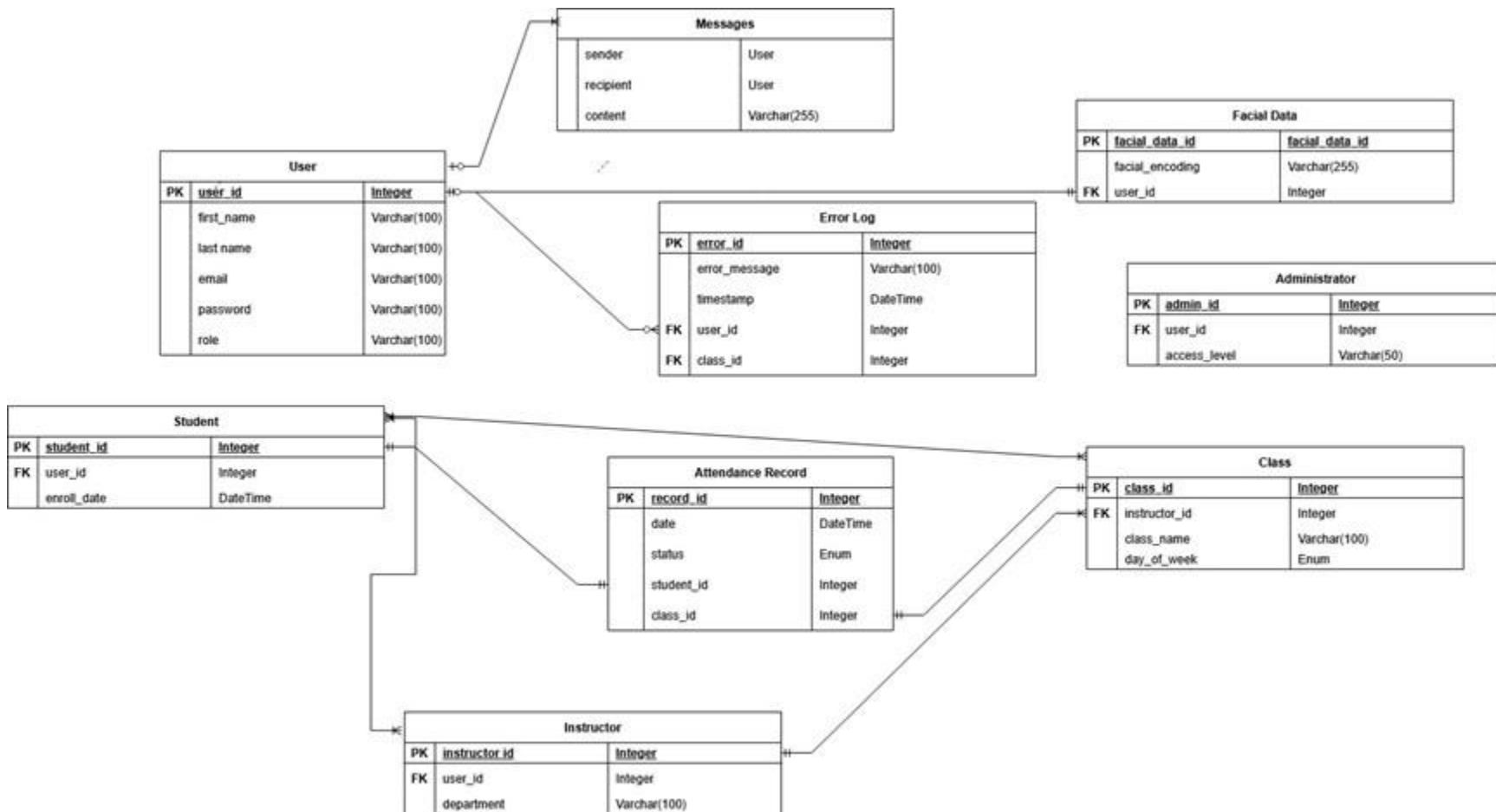
System Information Architecture





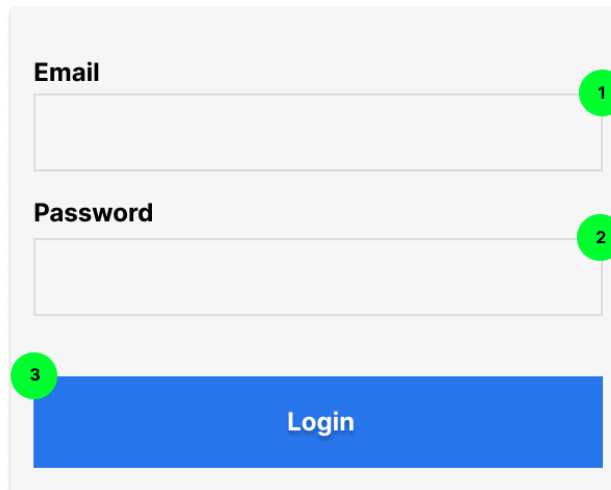


Database Design



User Interface Design

Login



A login form with a light gray background. It contains three main elements: an 'Email' input field, a 'Password' input field, and a blue 'Login' button. Each element is annotated with a green circle containing a number. The 'Email' field is labeled '1', the 'Password' field is labeled '2', and the 'Login' button is labeled '3'.

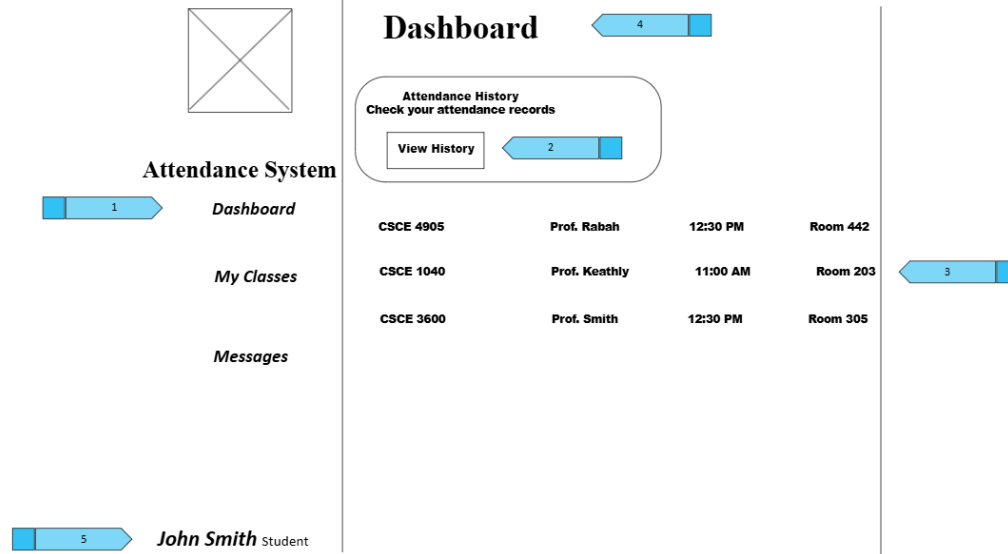
Email 1

Password 2

3 Login

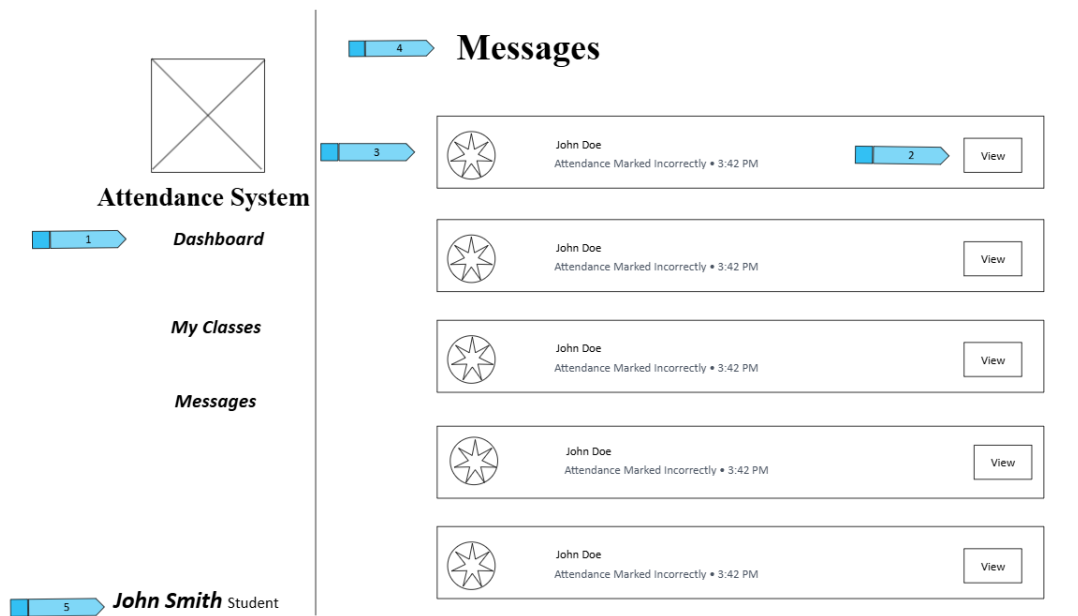
Annotations

- 1 This is the email input field. It allows users to enter their email.
- 2 This is the password input field. It allows users to enter their email.
- 3 Login button should trigger form validation and redirect users based on role.



Annotations

1. The sidebar will provide quick access to essential sections like Dashboard, My Classes, and Messages. By clicking the Dashboard tab will direct the student to their home dashboard. If they click My Classes it will lead them to a list of the classes they have registered for that semester. Clicking Messages will take the student to a overview of all the open chats they have open with their professors.
2. Clicking on view history will take the student to a page where they can see a complete overview of their entire attendance history.
3. Each card represents a class the student is registered in, clicking the class will show the student their attendance history for that specific class.
4. The page header messages lets the student know what page they are in.
5. This section will display the students name as well as their role.



Annotations

1. The sidebar will provide quick access to essential sections like Dashboard, My Classes, and Messages. By clicking the Dashboard tab will direct the student to their home dashboard. If they click My Classes it will lead them to a list of the classes they have registered for that semester. Clicking Messages will take the student to a overview of all the open chats they have open with their professors.

2. Clicking on view will take the student to the chat with the professor.

3. Each card represents a open chat the student has with a professor, the newest chats are automatically at the top.

4. The page header messages lets the student know what page they are in.

5. This section will display the students name as well as their role.

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson
Teacher

CSCE 4905 Overview

Student List

Search student name

Brendon Stepanek

Josh Odegai

Maximiliano Hernandez

Neel Patel

Zain Jamal

Edit

Edit

Edit

Edit

Edit

Export Attendance

Annotations

1

The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the dashboard page. Clicking "My Classes" will lead to page that lists all the classes a teacher teaches. Clicking "Messages" will lead to a list of conversations that the teacher has with students.

2

The page header clearly indicates the current section "CSCE 4905 Overview".

3

The "Student List" section will list all the students that are enrolled in the class. It will feature a search bar for teachers to quickly find a specific student. Each student in the list will have their own "Edit" button that will allow the teacher to modify the student's attendance records manually.

4

The "Export Attendance" button will allow a teacher to export attendance for a class in PDF or CSV format.

5

This section will display the user's name as well as their user role.

6

This represents the logo for our system.

7

This will feature a pie chart containing the attendance data. It will be divided by statuses like Present, Absent, and Late.

8

Upon clicking the "Edit" button, a modal window will open allowing for the user to select a date and an attendance status.

Edit Attendance

Student: Brendon Stepanek

Select Date:

March 20, 2025

Attendance Status:

Present

Cancel

Save Changes

1

6

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

5

My Classes2

All Classes3

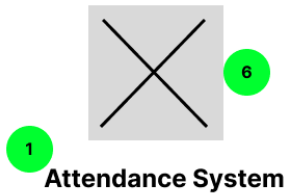
CSCE 4905 28 Students Enrolled	<div>View</div>
CSCE 3055 17 Students Enrolled	<div>View</div>
CSCE 1040 47 Students Enrolled	<div>View</div>

Recent Attendance Updates4

CSCE 4905	Alice Johnson	Present	(1 hour ago)
CSCE 1040	Jane Smith	Absent	(14 mins ago)
CSCE 3055	John Doe	Late	(4 mins ago)

Annotations

- 1
- The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the dashboard page. Clicking "My Classes" will lead to the currently viewed page. Clicking "Messages" will lead to a list of conversations that the teacher has with students.
- 2
- The page header clearly indicates the current section "My Classes".
- 3
- The "All Classes" will contains each class that a teacher is teaching. Here it shows the number of students enrolled in that class as well as a button to view a detailed class page for each class.
- 4
- The "Recent Attendance Updates" section will display recent student attendance status updates for specific classes.
- 5
- This section will display the user's name as well as their user role.
- 6
- This represents the logo for our system.



Dashboard

My Classes

Messages

Sarah Johnson
Teacher



Dashboard

My Classes

CSCE 4905


CSCE 3055


CSCE 1040


Recent Attendance Updates


CSCE 4905	Alice Johnson	Present	(1 hour ago)
CSCE 1040	Jane Smith	Absent	(14 mins ago)
CSCE 3055	John Doe	Late	(4 mins ago)


Annotations

 The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the currently viewed page. Clicking "My Classes" leads to a list of classes assigned to the teacher. Clicking "Messages" will lead to a list of conversations that the teacher has with students.

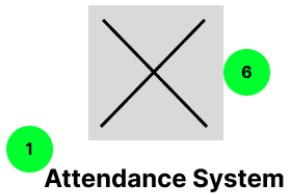
 The page header clearly indicates the current section "Dashboard".

 Each card represents a class that the teacher teaches. Clicking on a class card will redirect the teacher to the class view page.

 The "Recent Attendance Updates" section will display recent student attendance status updates for specific classes.

 This section will display the user's name as well as their user role.

 This represents the logo for our system.



Dashboard

My Classes

Messages

Sarah Johnson
Teacher

Chat with John Doe

Hello, I need help with my attendance.

Example test to show chat box

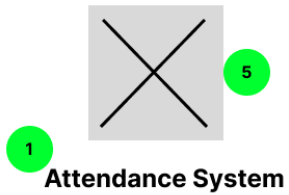
Example test to show chat box

Type a message...

Send

Annotations

- 1 The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the dashboard page. Clicking "My Classes" will lead to page that lists all the classes a teacher teaches. Clicking "Messages" will lead to the page that displays all of the teacher's ongoing chat conversations.
- 2 The page header clearly indicates the current section "Chat with XYZ student".
- 3 This section contains the conversation between the teacher and their student. Gray text boxes represent the student's messages and blue text boxes represent the teacher's messages.
- 4 This section contains a text box where the user will begin to type their message before clicking "Send" to send the message to the conversation.
- 5 This section will display the user's name as well as their user role
- 6 This represents the logo for our system.








Dashboard

My Classes

Messages

Sarah Johnson
Teacher

Messages

	John Doe Attendance Marked Incorrectly - 3:42 PM	View
	Emily Smith Absence Notification - Yesterday	View
	Michael Brown I won't be in class today - 2 days ago	View
	Sarah Johnson Attendance Question - 1 week ago	View
	David Garcia I'll be late to class today - 2 weeks ago	View

Annotations

- 1 The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the dashboard page. Clicking "My Classes" will lead to page that lists all the classes a teacher teaches. Clicking "Messages" will lead to the currently viewed page.
- 2 The page header clearly indicates the current section "Messages".
- 3 This section is the teacher's inbox. It's going to contain all of the messages that a teacher receives from their students. Clicking on the "View" button will take you to another page to view the entire conversation.
- 4 This section will display the user's name as well as their user role
- 5 This represents the logo for our system.



Attendance System

Dashboard

Manage Users

Manage Classes

5 Admin User
Admin

Dashboard 2

Manage Users 3

Manage Classes 4

Annotations

- 1 The sidebar will provide quick access to key sections: Dashboard, Manage User and Manage Classes. Clicking "Dashboard" would direct the user to the currently viewed page. Clicking "Manage Users" leads to a complete list of users on the system. Clicking "Manage Classes" leads to a complete list of classes for the institution.
- 2 The page header clearly indicates the current section "Dashboard"
- 3 The "Manage Users" Card provides another link to allow the user to view the Manage Users page
- 4 The "Manage Classes" Card provides another link to allow the user to view the Manage Classes page
- 5 This section will display the User's name as well as their role.

1

Attendance System

Dashboard

Manage Users

Manage Classes

5

Admin User

Admin

2

Manage Classes

Classes

3

Add New Class

4

Search for Class:

Class:	# of Users:	Instructor:	
CSCE 4905.001	32	John Smith	Edit
CSCE 1040.001	56	William Brown	Edit
CSCE 3955.501	28	Jane Greene	Edit
CSCE 4010.002	107	John Smith	Edit

6

1

The sidebar will provide quick access to key sections: Dashboard, Manage User and Manage Classes. Clicking "Dashboard" would direct the user to the currently viewed page. Clicking "Manage Users" leads to a complete list of users on the system. Clicking "Manage Classes" leads to a complete list of classes for the institution.

2

The page header clearly indicates the current section "Manage Classes"

3

The "Add New Class" Button brings up a prompt where the admin is able to add a class to the system

4

The "Search for Class" section provides a search bar to find a specific class and display only that class on the list

5

This section will display the User's name as well as their role.

6

The "Classes" list lists all classes in the system as well as shows the number of users (Teachers and Students), who is the instructor of the class, and an edit feature to adjust anything related to the class in the system

1

Attendance System

Dashboard

Manage Users

Manage Classes

5

Admin User

Admin

2

Manage Users

Users

3

Add New User

4

Search for User:

Name:	Role:	Classes:	
John Smith	Teacher	CSCE 4905, CSCE 1040	Edit
Emily Davis	Student	CSCE 1040	Edit
Michael Brown	Administrator	All Classes	Edit
Jerry Hicks	Student	CSCE 4905	Edit

6

Annotations

1

The sidebar will provide quick access to key sections: Dashboard, Manage User and Manage Classes. Clicking "Dashboard" would direct the user to the currently viewed page. Clicking "Manage Users" leads to a complete list of users on the system. Clicking "Manage Classes" leads to a complete list of classes for the institution.

2

The page header clearly indicates the current section "Manage Users"

3

The "Add New User" Button brings up a prompt where the admin is able to add a user to the system

4

The "Search for User" section provides a search bar to find a specific user as well as filters to narrow down the list depending on role

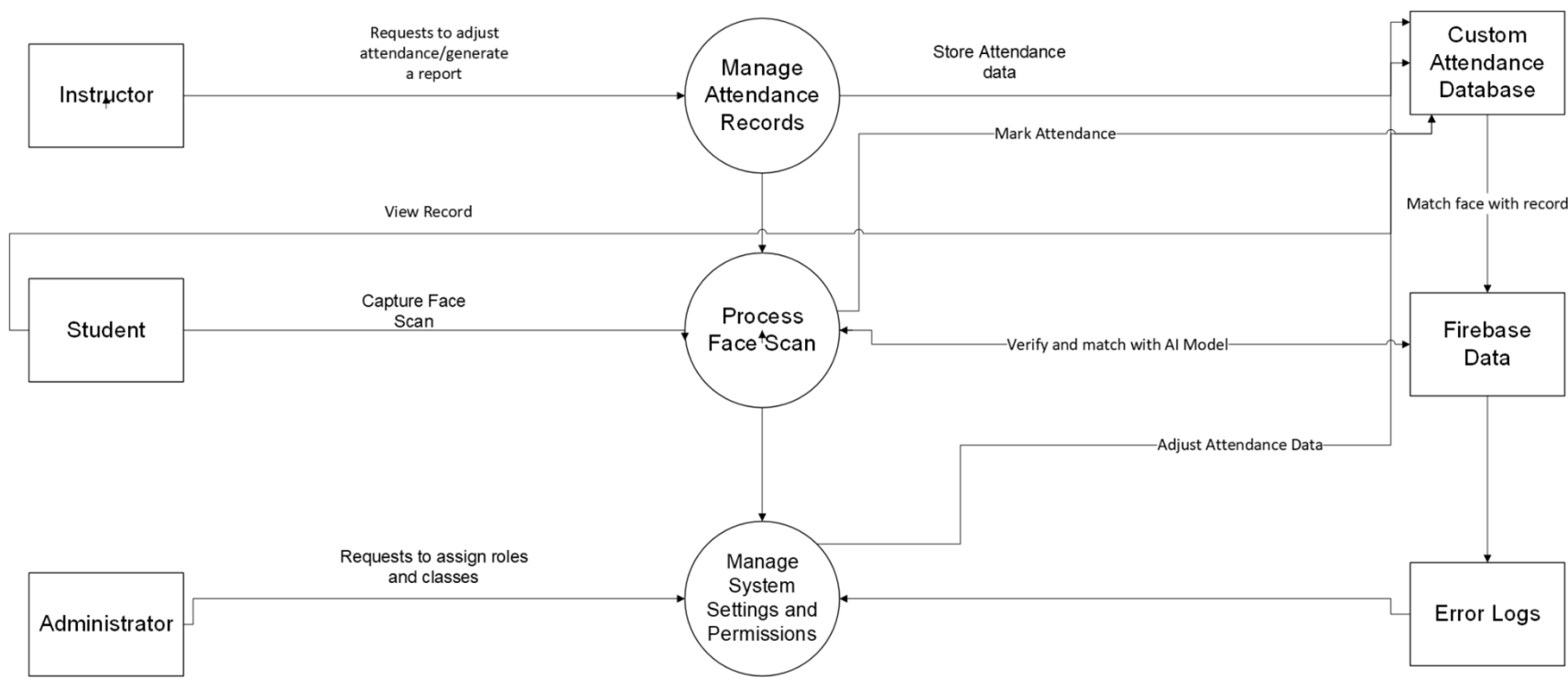
5

This section will display the User's name as well as their role.

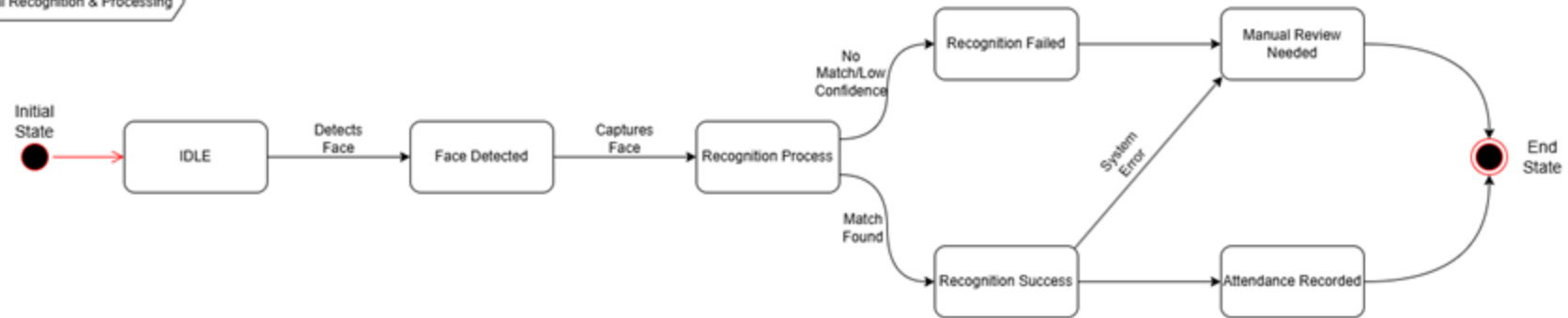
6

The "Users" list lists all users in the system as well as shows their role, classes they have access to, and an edit feature to adjust anything related to the user in the system

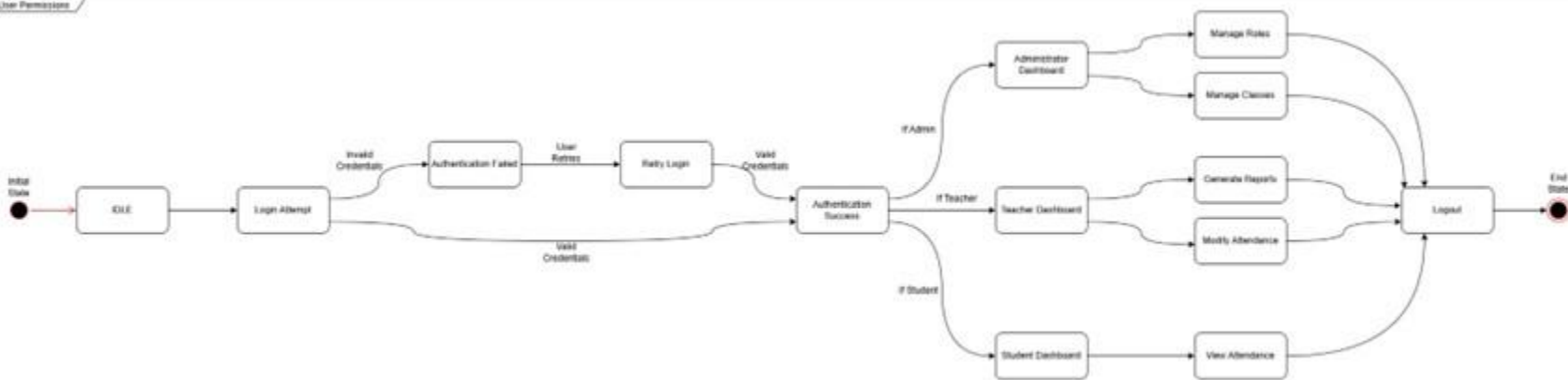
Diagrams and Models



Facial Recognition & Processing

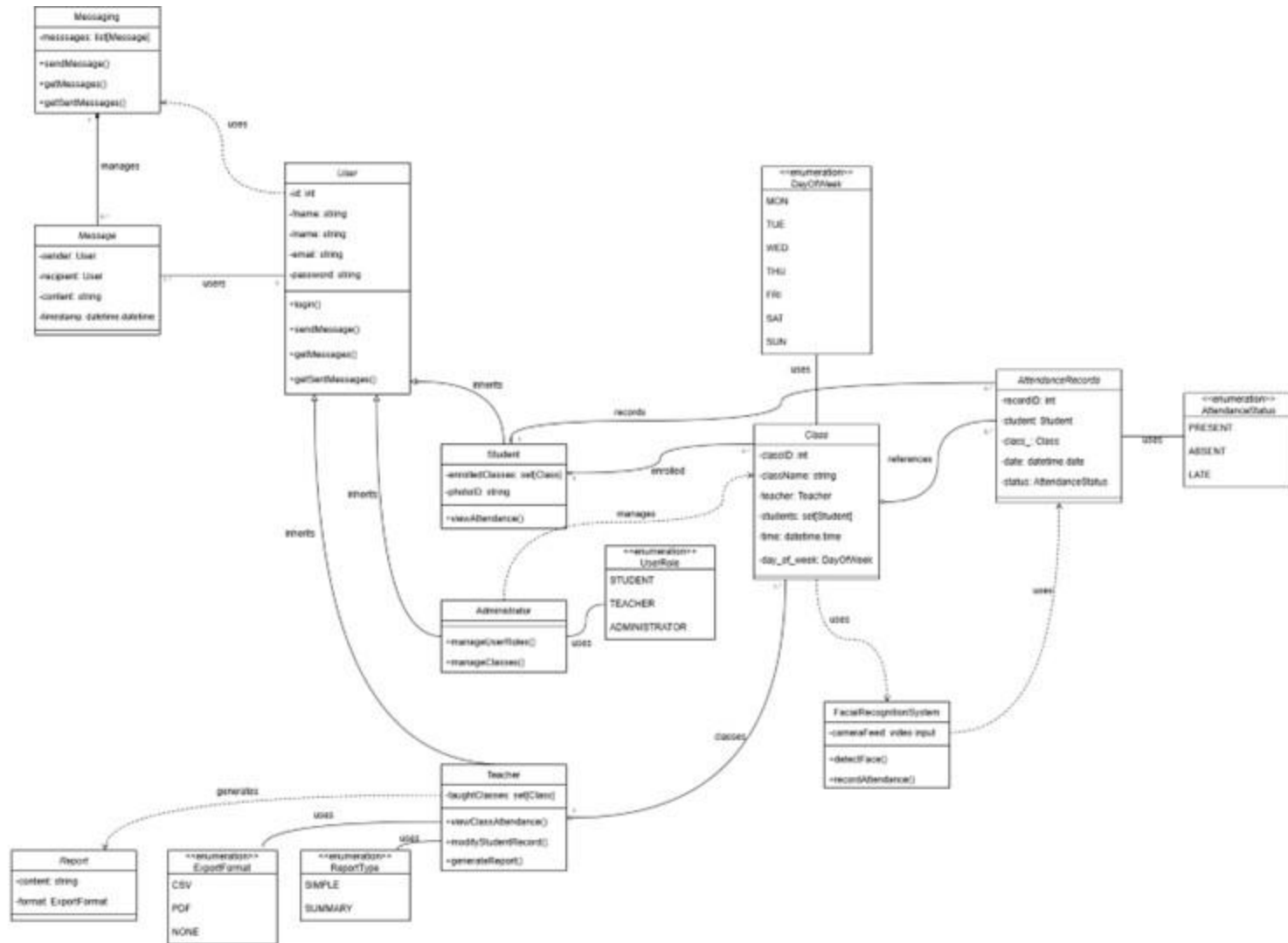


User Authentication & User Permissions

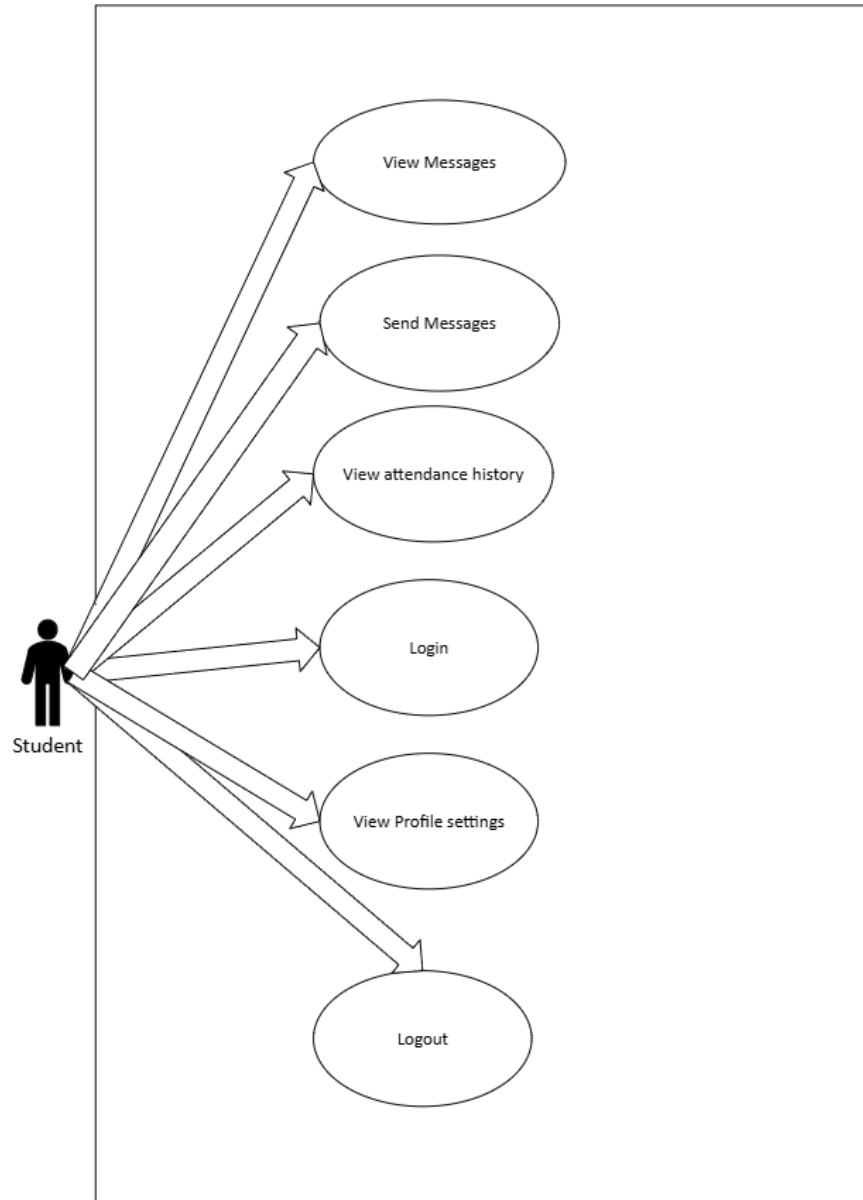


Report Generation/Exportation

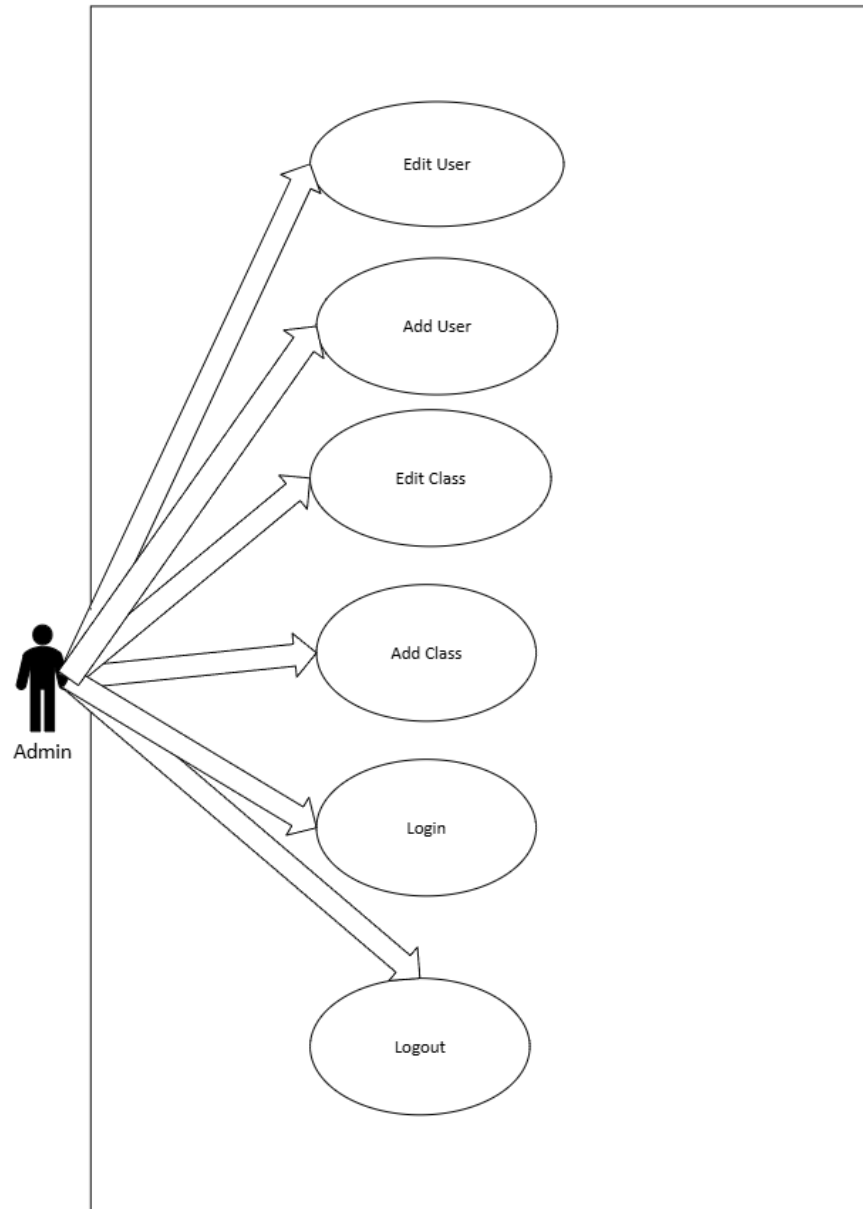




Facial Recognition Attendance System



Facial Recognition Attendance System



Facial Recognition Attendance System



Logo

