# FACIAL RECOGNITION ATTENDANCE SYSTEM

Design Document #2


Group 3:

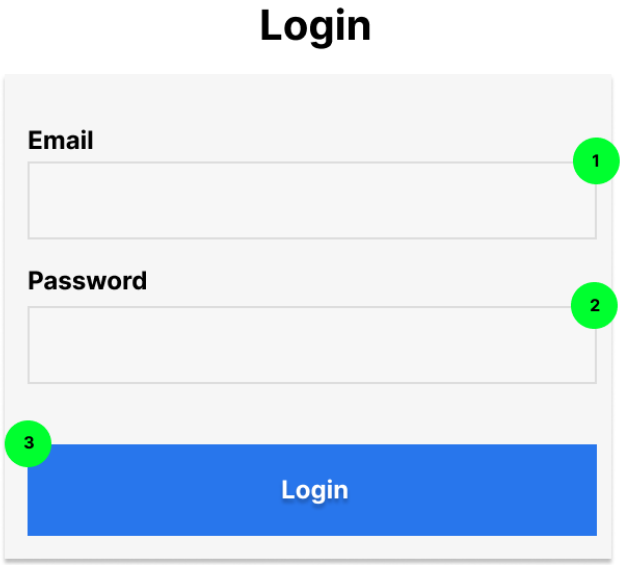
Brendon Stepanek
Zain Jamal
Maximiliano Hernandez
Neel Patel
Josh Odegai

Sponsor:

Diana Rabah

# Annotated Wireframes

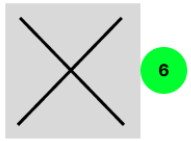
## Login Page




### 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.

# Teacher Pages



6

1

**Attendance System**

Dashboard

My Classes

Messages

Sarah Johnson
Teacher

5

## Dashboard 2

## My Classes 3

| CSCE 4905 | CSCE 3055 | CSCE 1040 |
|---|---|---|

## Recent Attendance Updates 4

| | | | |
|---|---|---|---|
| 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 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.

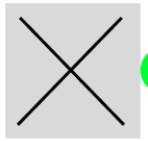
2. The page header clearly indicates the current section "Dashboard".

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

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.



6

1

**Attendance System**

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

5

# My Classes 2

## All Classes 3

**CSCE 4905**
28 Students Enrolled — View

**CSCE 3055**
17 Students Enrolled — View

**CSCE 1040**
47 Students Enrolled — View

## Recent Attendance Updates 4

| | | | |
|---|---|---|---|
| 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.**

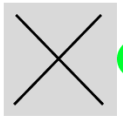
2 **The page header clearly indicates the current section "My Classes".**

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.**



6

1

**Attendance System**

Dashboard

My Classes

Messages

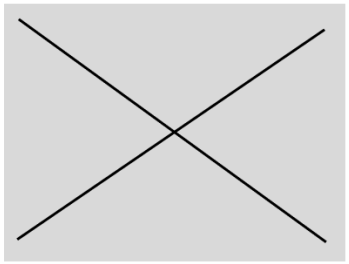
Sarah Johnson

Teacher

5

# CSCE 4905 Overview

2



7

## Student List

3

Search student name

| | |
|---|---|
| **Brendon Stepanek** | Edit |
| **Josh Odegai** | Edit |
| **Maximiliano Hernandez** | Edit |
| **Neel Patel** | Edit |
| **Zain Jamal** | Edit |

Export Attendance

4

## 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 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:

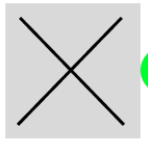
March 20, 2025 V

Attendance Status:

Present V

Cancel Save Changes

8



5

1

**Attendance System**

Dashboard

My Classes

Messages

Sarah Johnson
Teacher

4

# Messages

2

**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

3

**Sarah Johnson**
Attendance Question - 1 week ago
View

**David Garcia**
I'll be late to class today - 2 weeks ago
View

# Annotations

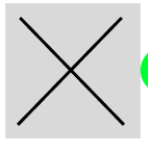
1 **The sidebar will provide quick access to key sections: Dashboard, My Classes, and Messages. Clicking "Dashboard" will direct the user to the dashboard page. Clicking "My Classes" will lead to page that lists all the classes a teacher teaches. Clicking "Messages" will lead to the currently viewed 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.**



6

1

**Attendance System**

Dashboard

My Classes

Messages

Sarah Johnson
Teacher

5

# Chat with John Doe

2

Hello, I need help with my attendance.

Example test to show chat box

Example test to show chat box

3

Type a message...

Send

4

# 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 ".**

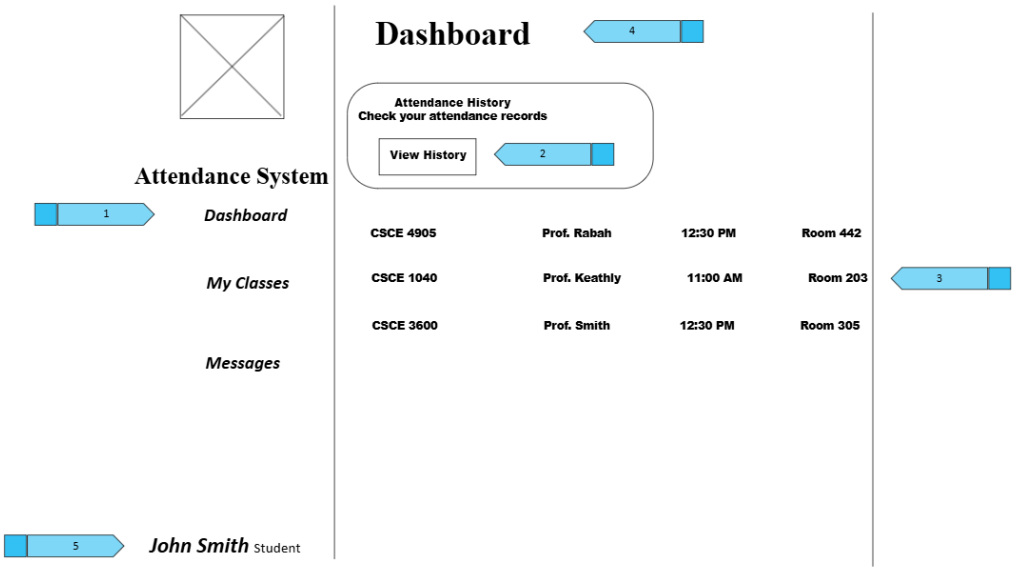
3 **This section contains the conversation between the teacher and their student. Gray text boxes represent the student's messages and blue text boxes represent the teacher's messages.**

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.**

# Student Pages




## Annotations

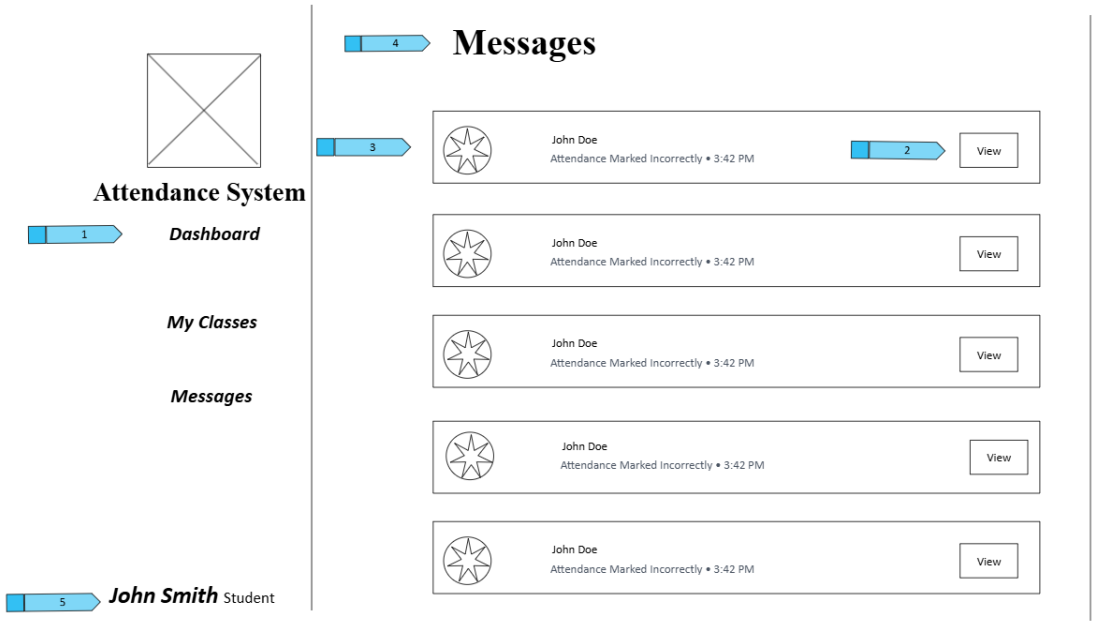
1. The sidebar will provide quick access to essential sections like Dashboard, My Classes, and Messages. By clicking the Dashboard tab will direct the student to their home dashboard. If they click My Classes it will lead them to a list of the classes they have registered for that semester. Clicking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

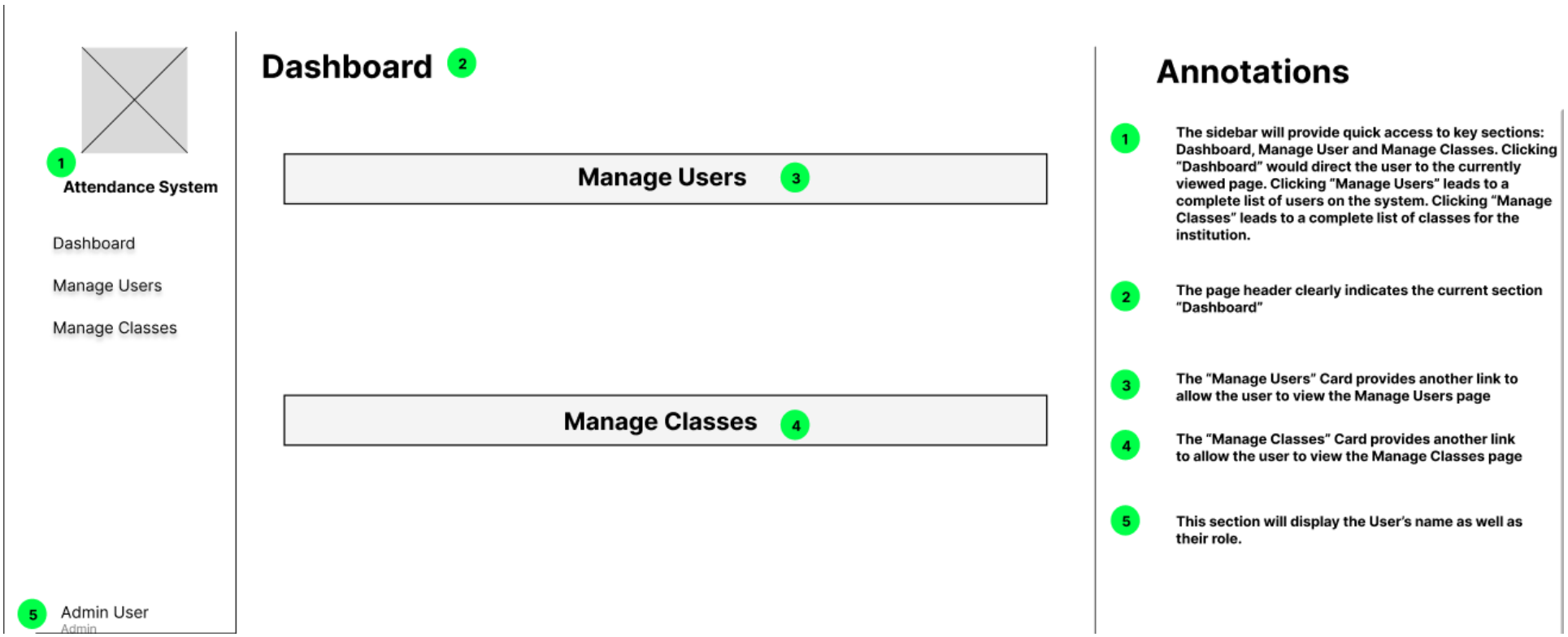
**2. Clicking on view will take the student to the chat with the professor.**

**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.**

# Administrator Pages



1

**Attendance System**

Dashboard

Manage Users

Manage Classes

5 Admin User
Admin

# Manage Classes 2

## Classes

Add New Class 3

**Search for Class:** 4

| 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

# 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.**

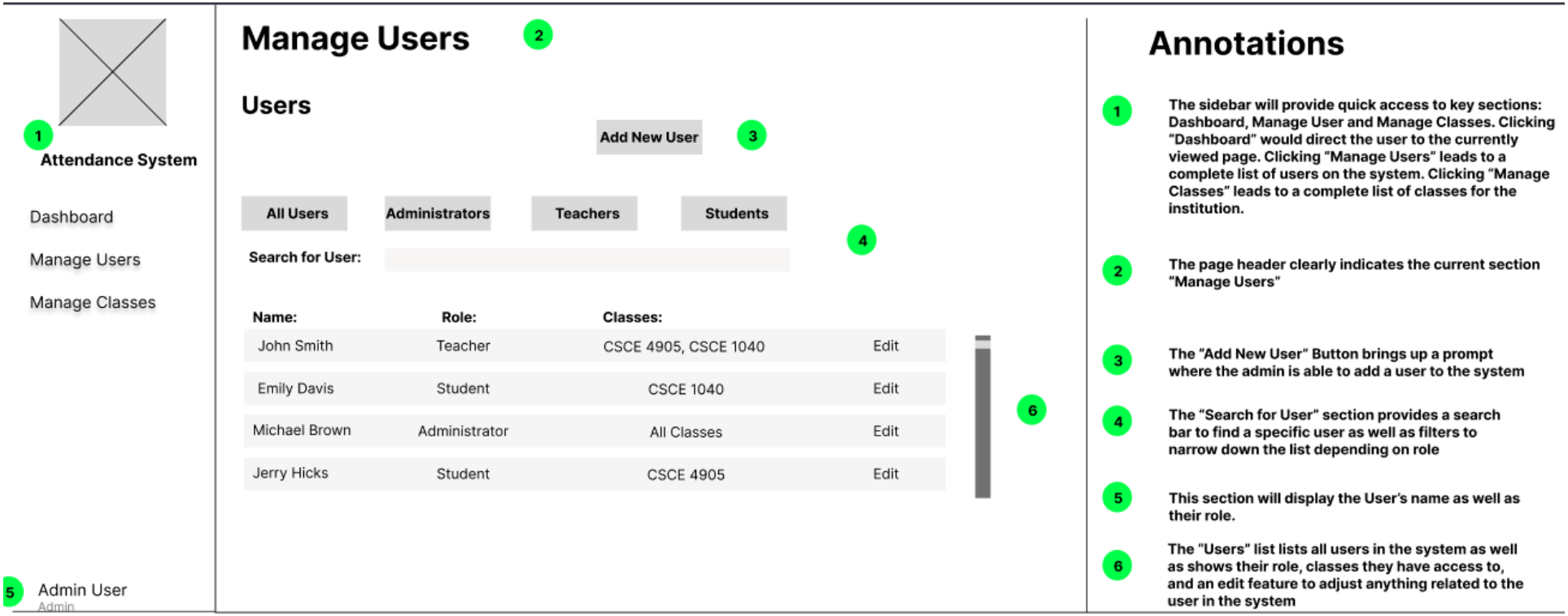
2 **The page header clearly indicates the current section "Manage Classes"**

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**




## Prototype

Our prototype can be accessed using this link:

https://csce-4095---it-capstone-i.web.app/

Once you open the page, you can use the login page to sign in to our prototype pages for users with the Teacher role.

To login, use:
Email: teacher@teacher.com
Password: password123

Once logged in, you can click through our prototype pages.

Logo

# Usability Testing

For the prototype of the Facial Recognition Attendance System, we decided on showcasing the login page and the teachers page to demonstrate how the full product would function. From the login page, we sought to test if logins would direct the user to the correct page based on their role as either a teacher, a student, or an admin. To do this we created three accounts each with different roles and tested each of them to ensure that not only did they log in but also went to the appropriate page. All three were able to successfully log in and each displayed the page that corresponded with their permissions with no recorded errors. We also ran quick tests for if the user inputs an incorrect user name and/or password to ensure that the system does not erroneously let them proceed and are pleased to report no errors from that end either.

Also included in the testing for the prototype would be the UI of the teachers page which would be what anyone classified as an 'instructor' would see and interact with. From here, we sought to test if each button would direct the user to the appropriate page implied by the name. Starting from the left side navigation panel, we tested the 'Dashboard', 'My Classes', 'Messages' button to ensure that it opened the correct tabs for the instructor to see an overview similar to the one on Canvas, their classes, and any messages they may have received from students respectively. While these tests were a success, we ran into an error later on in which the actual messages within the 'Messages' tab didn't actually direct the user to the message history like we intended. This error of not properly directing the user to the appropriate page was one that we had to deal with a few more times as other buttons such as the 'View' button for specific classes didn't direct to what we had originally intended. To fix these errors, we introduced new pages for the message inbox as well as a new overview page for the specific classes which shows an overview of student attendance in that class in both list and pie chart format.