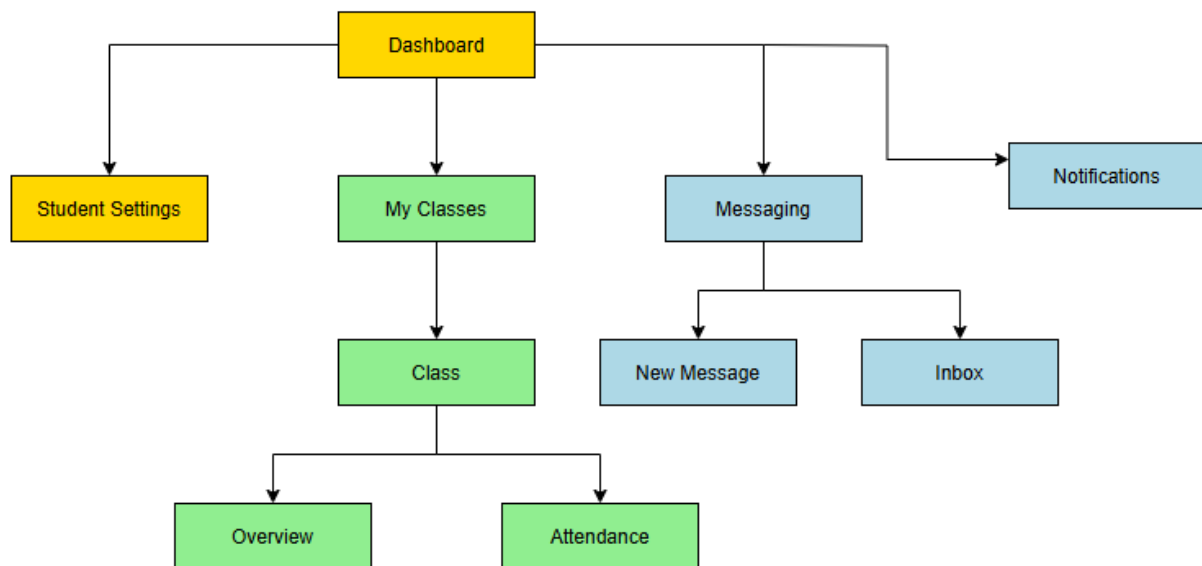


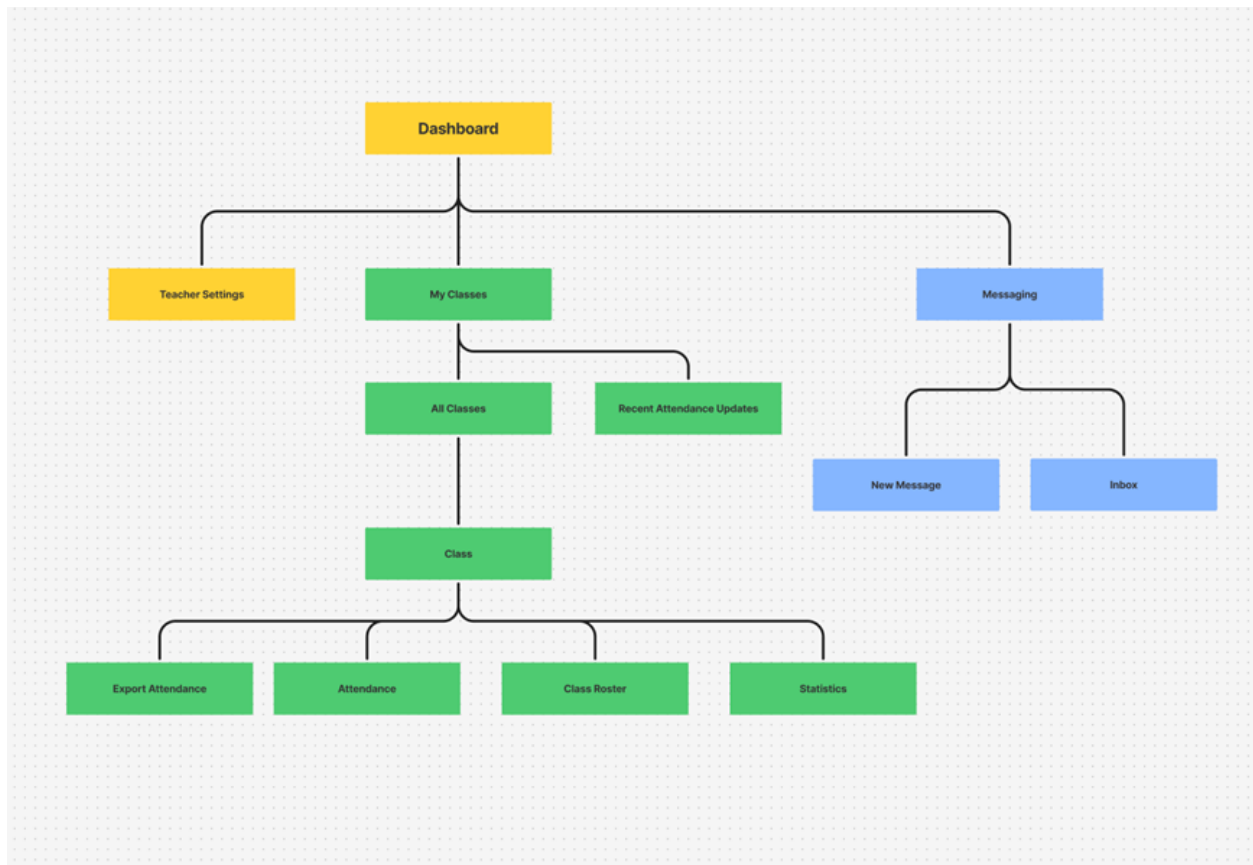
# Detailed Design Specification - AttendU

## System Architecture

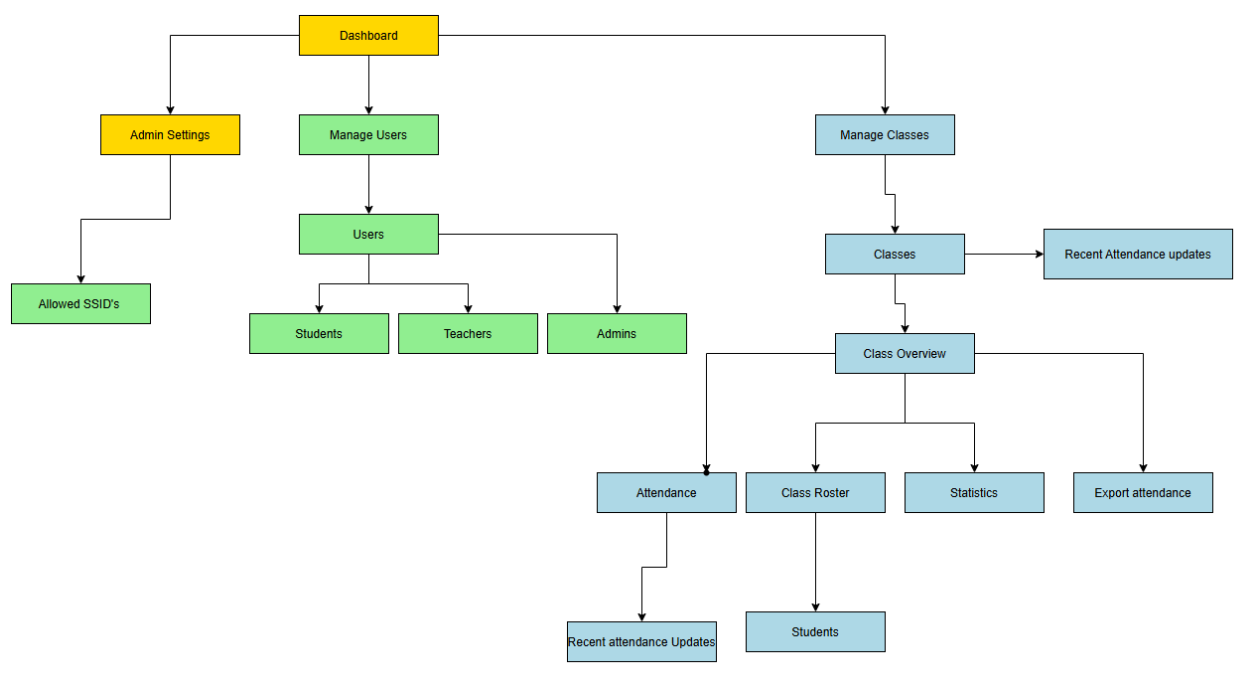
### Student



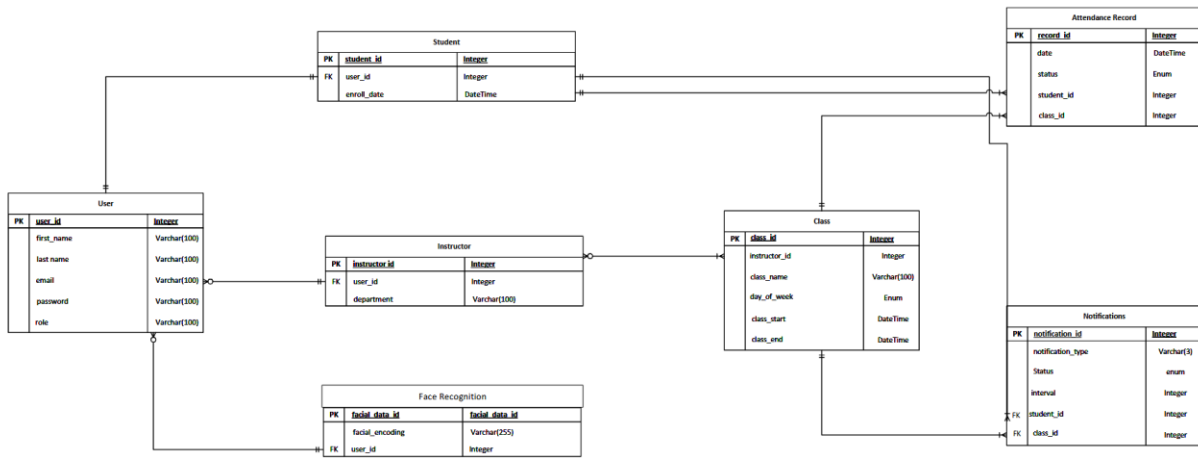
## Teacher



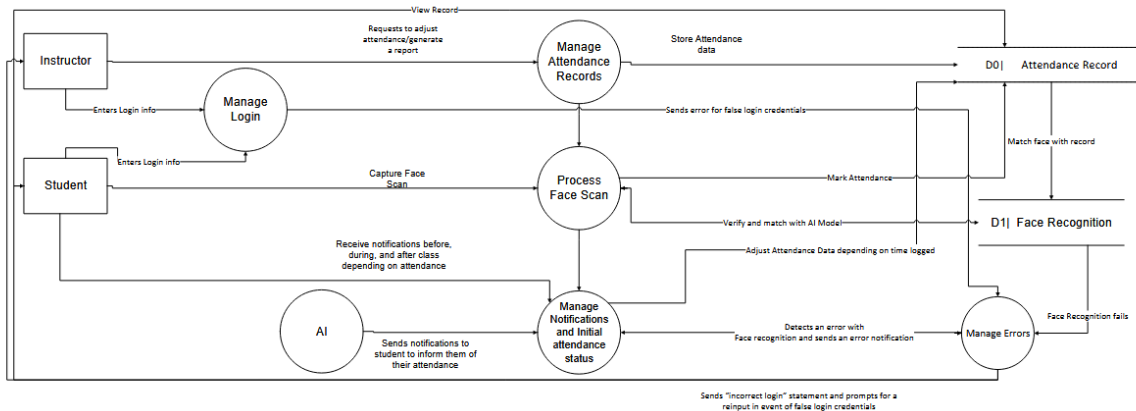
## Administrator



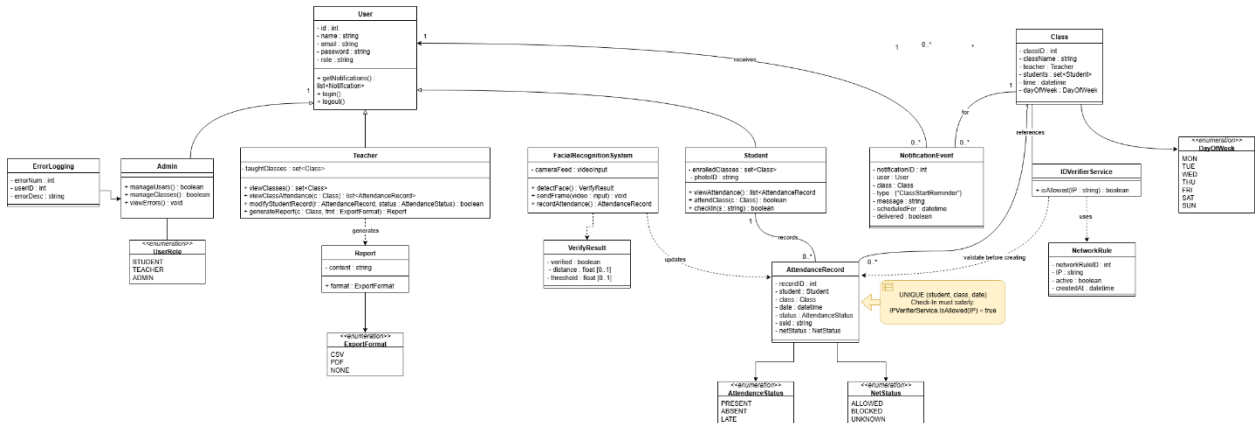
# Entity Relationship Diagram



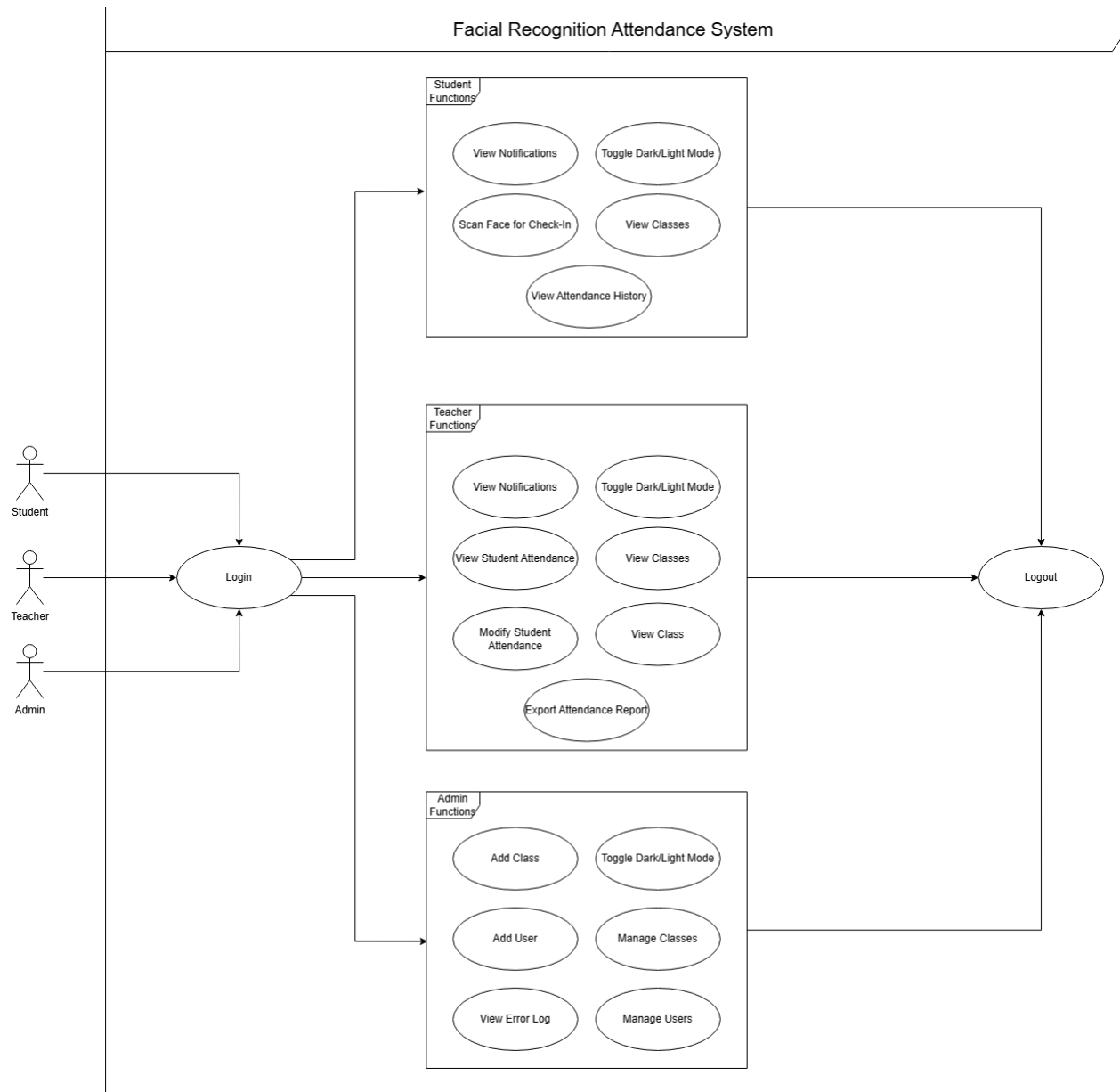
# Data Flow Diagram



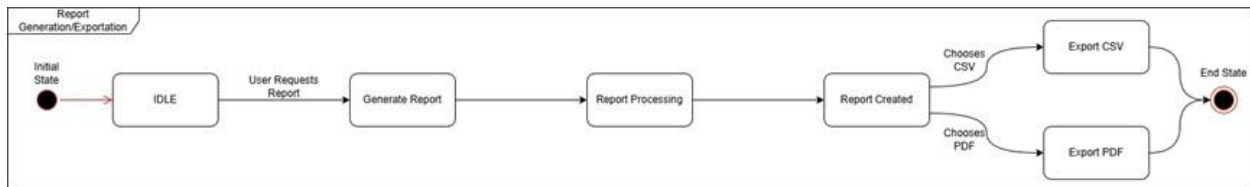
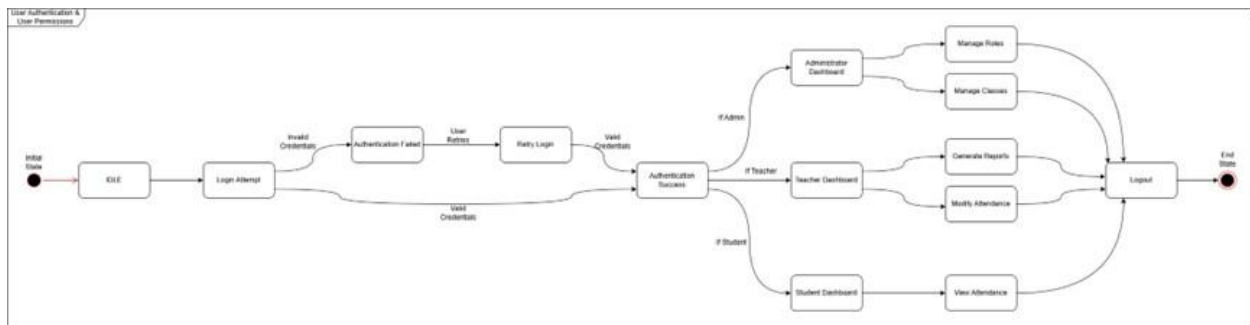
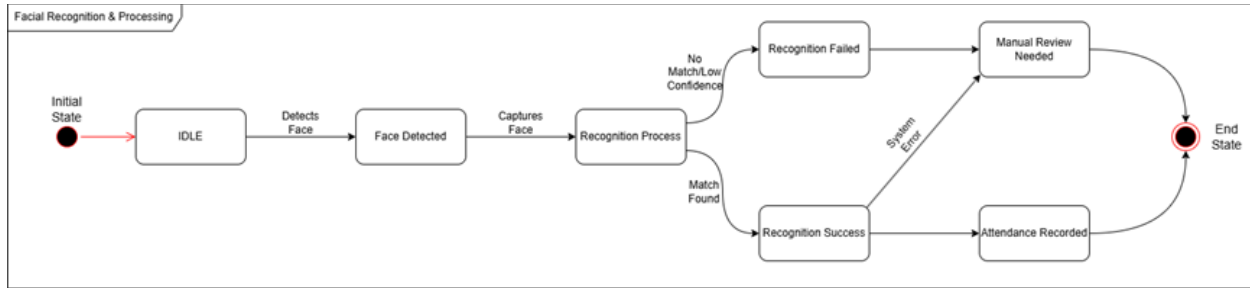
# Class Diagram



# Use Case Diagram

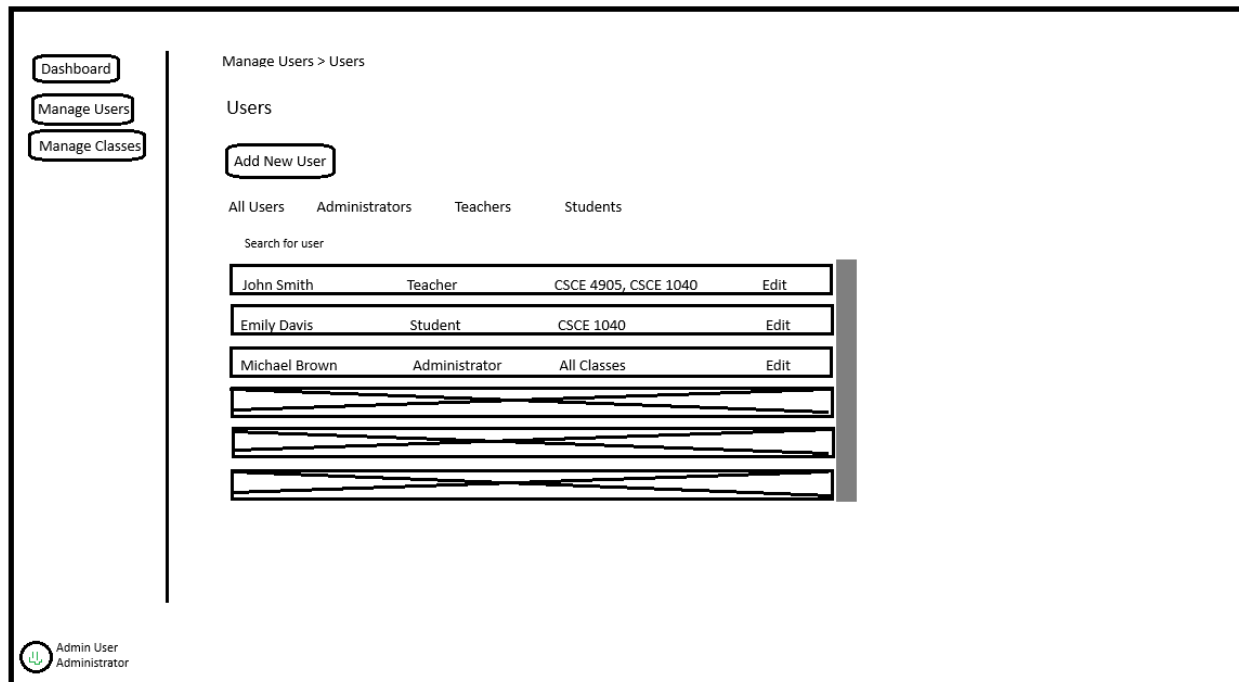
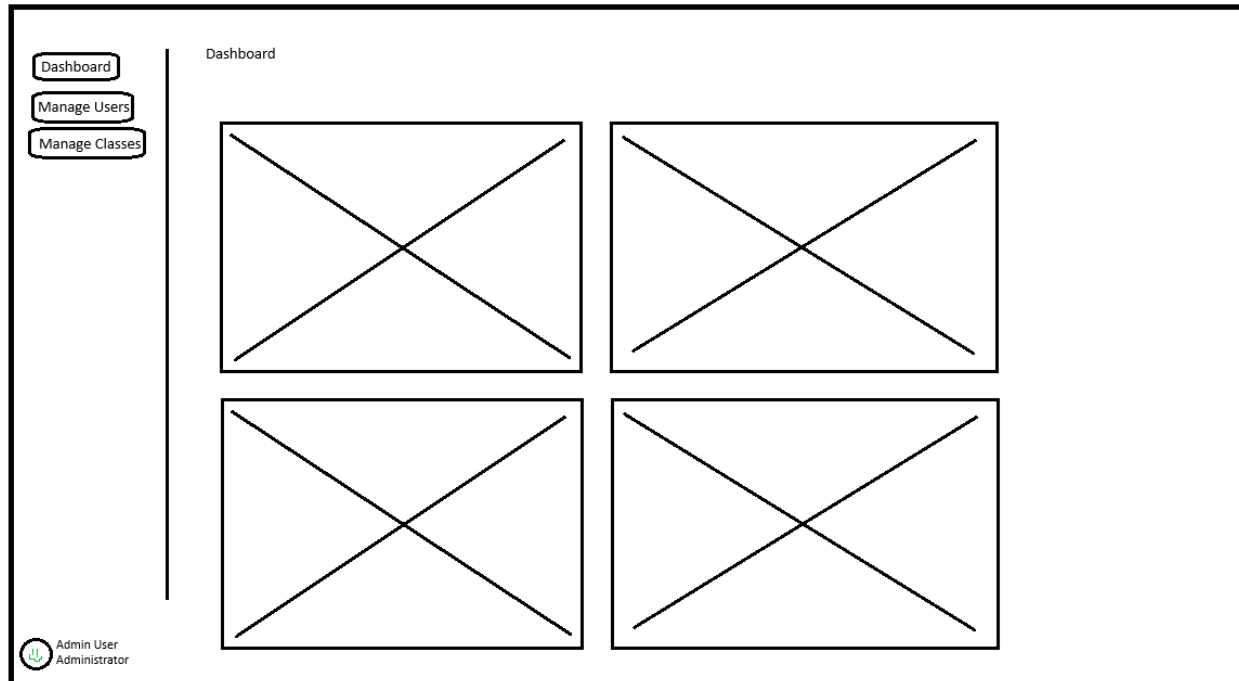


## State Transition Diagram



# UI Design

## Low Fidelity



Dashboard

Manage Users

Manage Classes

Dashboard > Manage Classes > Classes

CSCE 4905

CSCE 1040

CSCE 3055

Recent Attendance Updates

CSCE 4905	John Doe	Present	4 mins ago
CSCE 1040	John Smith	Present	14 mins ago
CSCE 3055	John Apple	Present	36 mins ago

Admin User

Administrator

Dashboard

Manage Users

Manage Classes

Dashboard > Manage Classes > Class Name

CSCE 4905 Overview

Attendance   Class Roster   Statistics

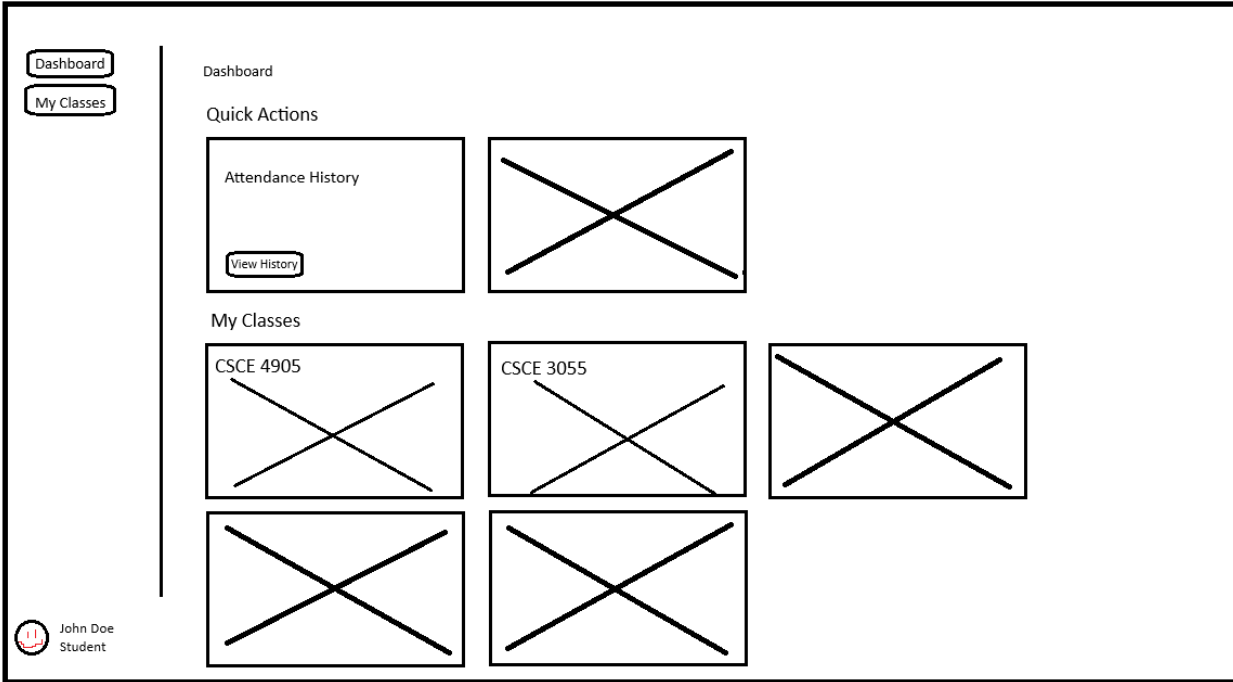
Search student name

Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit

Export Attendance

Admin User

Administrator





Dashboard

My Classes

My Classes > CSCE 4905

CSCE 4905 - IT Capstone I

Professor Rabah


T 12:30PM

Room 1

Overview

Attendance

Jan 18th, 2025	12:30 PM	Present
Jan 25th, 2025	12:30 PM	Present
Feb 1st, 2025	12:30 PM	Absent

 John Doe  
Student

Dashboard

My Classes

Dashboard

Quick Actions

Generate Report

XXXXXXXXXXXXXXXXXX


My Classes

CSCE 4905

CSCE 3055

XXXXXXXXXXXXXX

Recent Attendance Updates

 Sarah Johnson  
Teacher

Dashboard

My Classes

My Classes > All Classes

CSCE 4905	28 Students enrolled	Edit
CSCE 3055	17 Students enrolled	Edit
CSCE 1040	47 Students enrolled	Edit
XXXXXXXXXXXXXXXXXXXXXXXXXXXX		

Recent Attendance Updates

Sarah Johnson

Teacher

Dashboard

My Classes

My Classes > CSCE 4905

CSCE 4905 Overview

Attendance   Class Roster   Statistics

Search student name

Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit
Mark Wilson	Present	Edit

Sarah Johnson

Teacher

Export Attendance

Medium Fidelity

1

Attendance System

Dashboard

Manage Users

Manage Classes

5 Admin User  
Admin

2

Dashboard

3

Manage Users

4

Manage Classes

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

3

Add New Class

4

Search for Class:

6

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

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

3

Add New User

4

All Users Administrators Teachers Students

6

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

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

## Login

Email

Password

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.

Attendance System

1

Dashboard

My Classes

Messages

John Smith Student

5

Dashboard

4

Attendance History

Check your attendance records

View History

2

CSCE 4905	Prof. Rabah	12:30 PM	Room 442
CSCE 1040	Prof. Keathly	11:00 AM	Room 203
CSCE 3600	Prof. Smith	12:30 PM	Room 305

3

## 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.

Attendance System

1

Dashboard

My Classes

Messages

5

John Smith Student

4

Messages

3

John Doe

Attendance Marked Incorrectly • 3:42 PM

2

View

John Doe

Attendance Marked Incorrectly • 3:42 PM

View

John Doe

Attendance Marked Incorrectly • 3:42 PM

View

John Doe

Attendance Marked Incorrectly • 3:42 PM

View

John Doe

Attendance Marked Incorrectly • 3:42 PM

View

### 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

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

Sarah Johnson

Teacher

Annotations

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.

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

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.

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

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

This represents the logo for our system.

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

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

1

6

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

5

2

My Classes

3

All Classes

CSCE 4905

28 Students Enrolled

View

CSCE 3055

17 Students Enrolled

View

CSCE 1040

47 Students Enrolled

View

4

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)

Sarah Johnson

Teacher

5

- 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.

1

6

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

5

2

Dashboard

3

My Classes

CSCE 4905

CSCE 3055

CSCE 1040

4

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)

Sarah Johnson

Teacher

5

- 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.

1

6

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

5

## Chat with John Doe 2

3

Example test to show chat box

Example test to show chat box

Type a message...

4

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.

1

5

Attendance System

Dashboard

My Classes

Messages

Sarah Johnson

Teacher

4

## Messages 2

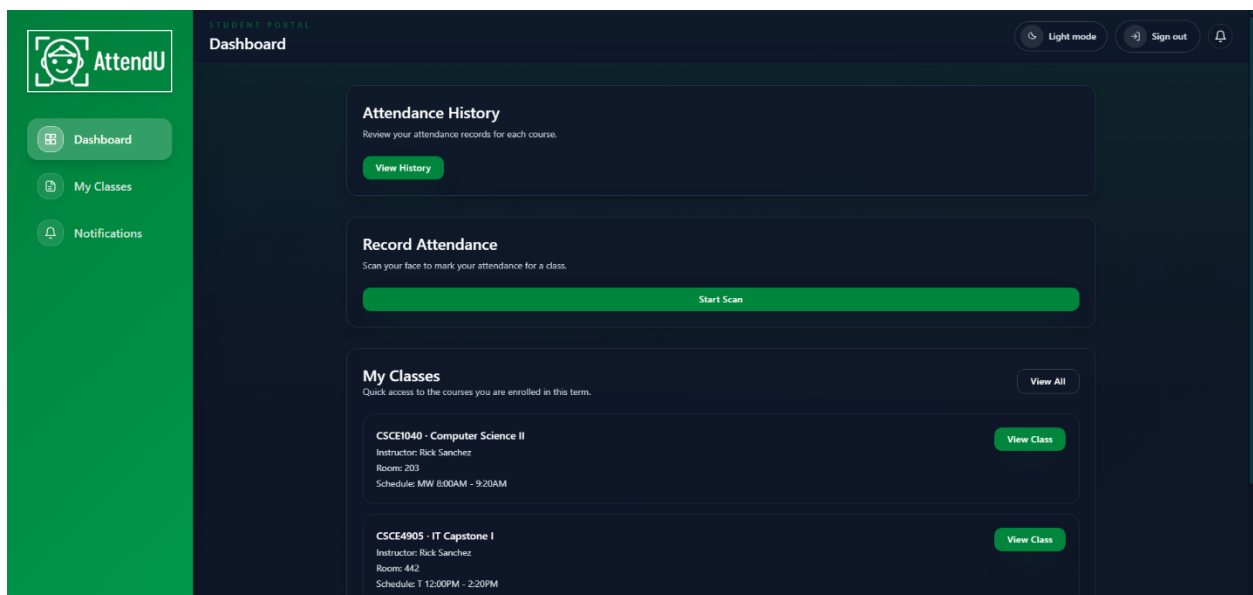
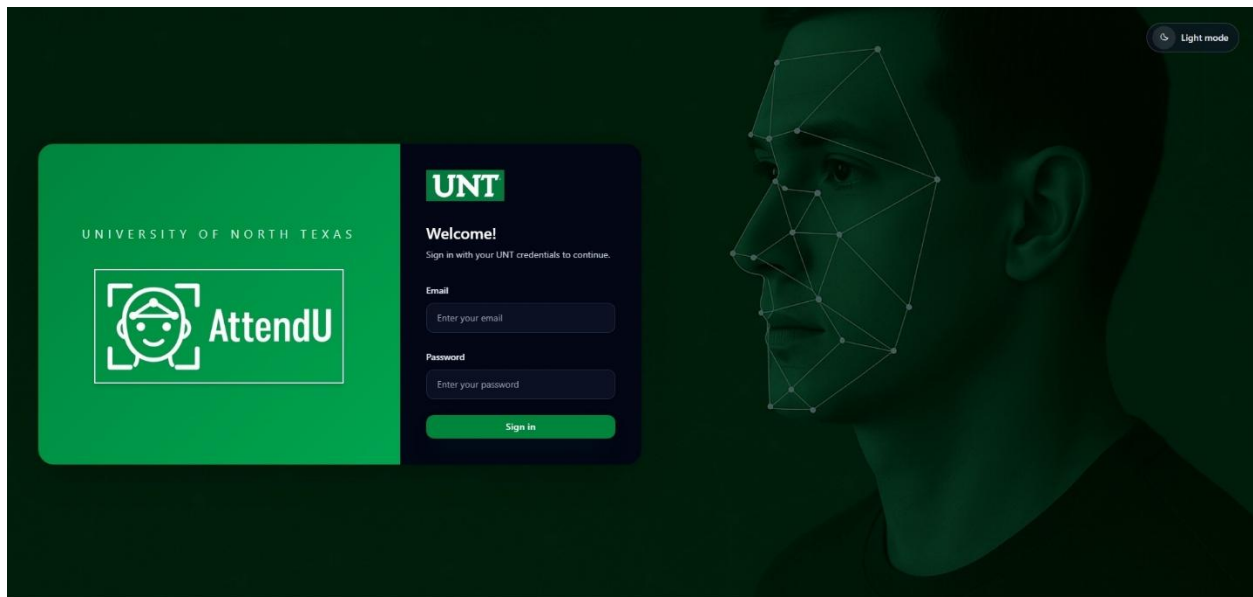
3	<div><div>John Doe</div><div>Attendance Marked Incorrectly - 3:42 PM</div><div>View</div></div>
	<div><div>Emily Smith</div><div>Absence Notification - Yesterday</div><div>View</div></div>
	<div><div>Michael Brown</div><div>I won't be in class today - 2 days ago</div><div>View</div></div>
	<div><div>Sarah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


### 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.



## High Fidelity



AttendU

Dashboard

My Classes

Notifications

James Smith

teststudent@student.c...

STUDENT PORTAL

Attendance for CSCE1040

Light mode

Sign out

Back to classes

Previous

Next

Attendance Calendar

November 2025

SUN	MON	TUE	WED	THU	FRI	SAT
26 ● No record	27 ● No record	28 ● Present	29 ● Present	30 ● Present	31 ● Absent	1 ● No record
2 ● No record	3 ● No record	4 ● No record	5 ● No record	6 ● No record	7 ● No record	8 ● No record
9 ● No record	10 ● No record	11 ● No record	12 ● No record	13 ● No record	14 ● No record	15 ● No record
16 ● No record	17 ● No record	18 ● No record	19 ● No record	20 ● No record	21 ● No record	22 ● No record
23 ● No record	24 ● No record	25 ● No record	26 ● No record	27 ● No record	28 ● No record	29 ● No record
30 ● No record	1 ● No record	2 ● No record	3 ● No record	4 ● No record	5 ● No record	6 ● No record

● Present

● Absent

● No record

Record Attendance

Scan your face to mark your attendance for a class.

Cancel

Select Class

Choose the class you want to check in for and begin scanning.

CSCE1040 - Computer Science II

Capture Face

AttendU

Dashboard

My Classes

Notifications

INSTRUCTOR PORTAL

Dashboard

Light mode

Sign out

Welcome, Rick Sanchez!

Active Classes

3

Enrolled Students

3

My Classes

View class rosters and manage attendance.

View All

Computer Science II

Room: 203

Schedule: MW 8:00AM - 9:20AM

Students Enrolled: 1

Open Class

IT Project Management

Room: 305

Schedule: TTH 8:30AM - 9:50AM

Students Enrolled: 1

Open Class

IT Capstone I

Room: 442

Schedule: T 12:00PM - 2:20PM

Students Enrolled: 1

Open Class

AttendU

Dashboard

My Classes

Notifications

INSTRUCTOR PORTAL

CSCE1040 Overview

Light mode

Sign out

Back to classes

Attendance Overview

Review class-wide attendance at a glance.

Present

Absent

Student List

Search student name

James Smith

September 20, 2025

Absent

Edit

James Smith

April 3, 2025

Present

Edit

## Attendance Overview

Attendance breakdown for this student.

### Edit Attendance

Student: **Brendon Stepanek**

Select Date

December 4, 2025

Attendance Status

Present

Reason For Edit (Optional)

0/50 characters

Cancel

Save changes

Add Attendance

## Attendance Records

Review or edit this student's attendance history.

## Attendance Overview

Attendance breakdown for this student.

Present Absent Pending

### Add Attendance

Create a new attendance record for Brendon Stepanek.

Attendance Date

12/04/2025



Status

Present

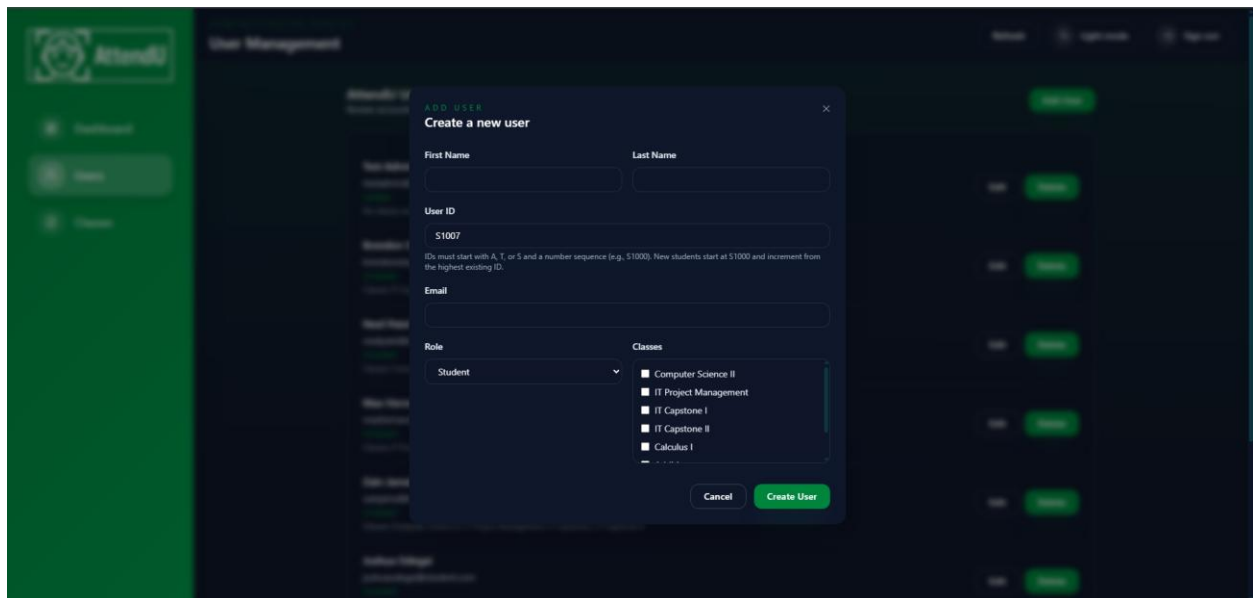
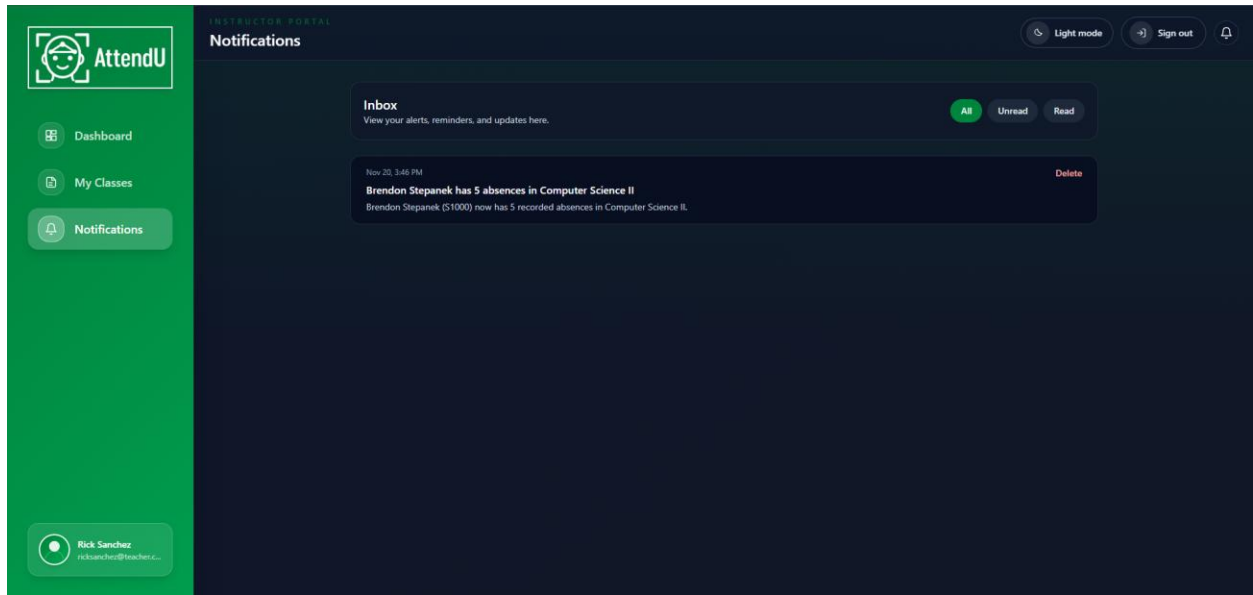
Cancel

Add attendance

## Attendance Records

Review or edit this student's attendance history.

Add Attendance



Logo

