

# AttendIn - Attendance Tracker



Project Purpose: To increase integrity by using geolocation to confirm a student's location in class

Goals Statements:

- To automate and streamline the attendance process
- To ensure academic integrity by accurately verifying a student's location
- To provide a seamless mobile check-in experience for students while having minimal disruption to class.



# Names & Information

- ▶ Group Members:
  - ▶ Dominic Iquina, CS - [lquinadj@mail.uc.edu](mailto:lquinadj@mail.uc.edu)
  - ▶ Mutazz Zeidan, CE - [zeidanmz@mail.uc.edu](mailto:zeidanmz@mail.uc.edu)
- ▶ Advisor:
  - ▶ Elizabeth Pawley - [pawleyek@mail.uc.edu](mailto:pawleyek@mail.uc.edu)



# Project Abstract

This project introduces AttendIn, a modern solution designed to combat classroom attendance fraud. Traditional systems like QR codes or paper sign-ins are easily exploited, compromising academic integrity. AttendIn solves this by requiring students to be physically present, using geofencing technology. We are developing a cross-platform mobile application in Flutter that uses the device's GPS to verify a student's location is within the classroom's predefined boundaries at check-in. This system provides a secure, automated attendance tracking process for students and a simple interface for faculty to manage records, ensuring a reliable and efficient alternative to outdated methods

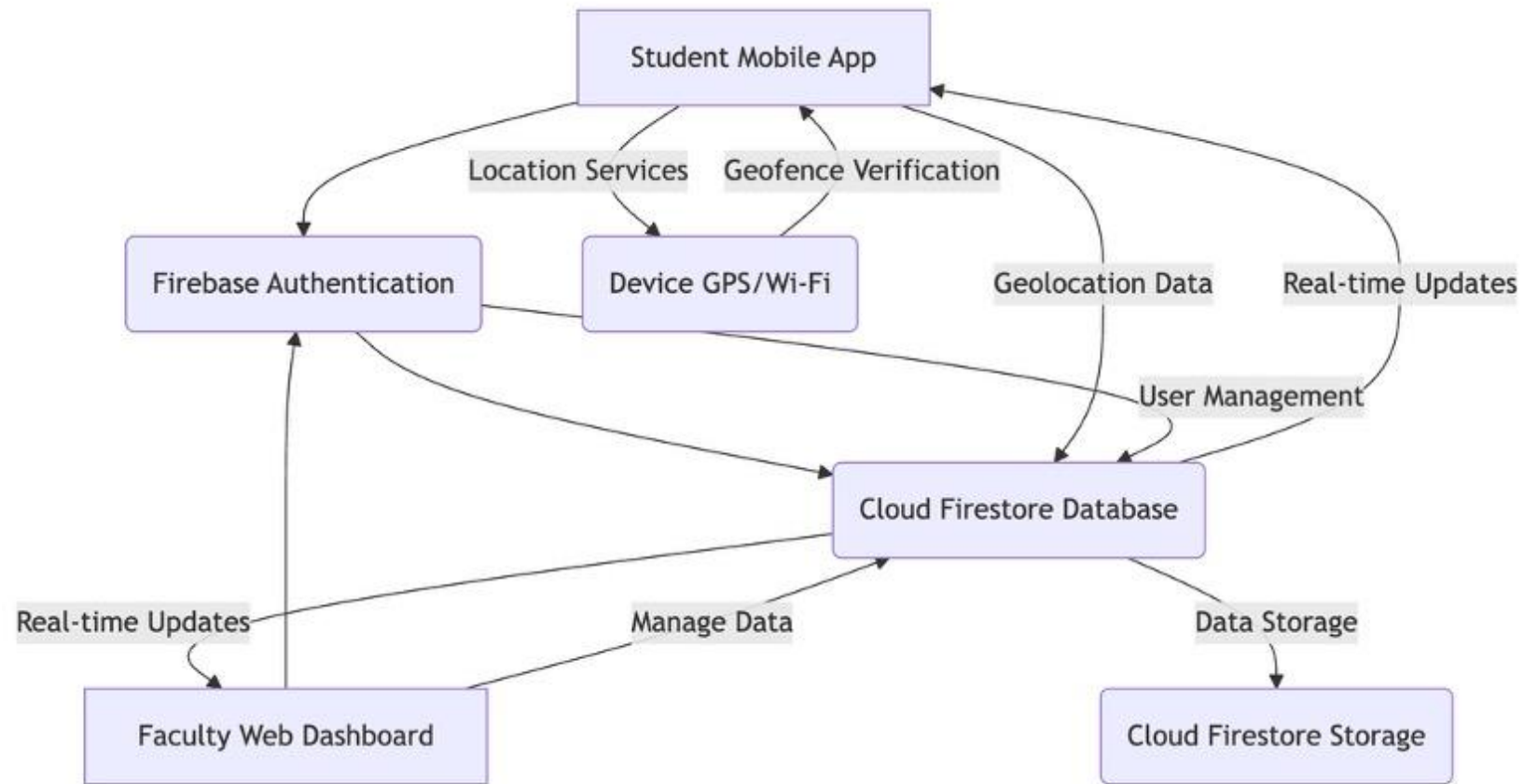


# User Stories

- ▶ As a student, I want to log into my account so that I can access my schedule and check in for class.
- ▶ As a student who is physically present in the classroom, I want to check in for class using my mobile device's location so that my attendance can be marked as present.
- ▶ As a student, I want to receive clear confirmation or an error message after attempting to check in so that I know if my attendance was recorded successfully.
- ▶ As a faculty member, I want to view a list of students who have successfully checked in for an active session so I can know who has missed class.
- ▶ As a faculty member, I want to log in to the faculty dashboard so that I can manage my classes and start attendance sessions.



# Design Diagram



# Major Project Constraints

- ▶ **Time** - The project must be completed in two semesters
- ▶ **Budget** - Limited/No budget so must use free or low-cost tools
- ▶ **Legal & Privacy** - Strict FERPA regulations must be followed for protecting student privacy
- ▶ **User Requirements** - The system's core functionality relies on students possessing a location aware device.



# Project Progress

Completed	In Progress	Next Steps
Full UI/UX Design	Creating Front-End Web Application Skeleton	Build the Backend API
Component Architecture	Creating Front-End Mobile Application Skeleton	Develop/Implement the Database
User Stories & Requirements	Designing Mock Data To Test	Expand the Core Functionality



# Expected Accomplishments by End Of Semester

- ▶ **Complete Application UI**
  - ▶ Build all the screens for each app, and have full app navigation
- ▶ **Mock User Interactions**
  - ▶ Use Simulated Data to mock interactions on both the Web and Mobile Applications
- ▶ **Set the Foundation for Continued Work**
  - ▶ We will have component-based code ready for the backend, making it so we have a more straightforward process for using live data.





# Division Of Work

The shared responsibilities are split in half between the two of us, though being in different Capstone Courses there are differing class assignments for each.

Dominic (CS)	Mutazz (CE)
Primary Focus: Student Mobile App	Primary Focus: Faculty Web App
Designing/Implementing work more focused on the Student Mobile App	Designing/Implementing work more focused on the Faculty Web App
Helping/Contributing to Faculty Web App	Helping/Contributing to Student Mobile App
CS-Specific Capstone Work	EECE-Specific Capstone Work



# Expected Demo At Expo

At the Demo we expect to show most of the functionality of both our Faculty and Student apps.

- ▶ The Student App will have core functionality along with interacting with the Faculty App. Students can check in, view schedule, history of check ins, and other features.
- ▶ The Faculty App will have the core functionality of setting up classes, viewing attendance, and other features. It will receive interactions with the Student App through a shared database.

