



Minor Project Presentation



IHA

(IOT enabled Hostel Attendance system)

Project Number: 71

- Yash Raj Pandey (191B295)
- Aryman Tripathi (191B309)
- Samarth Dubey (191B304)

Mentored by: Mrs. Babita Tiwari

Contents

Overview

Requirements Analysis

Understanding the Problems

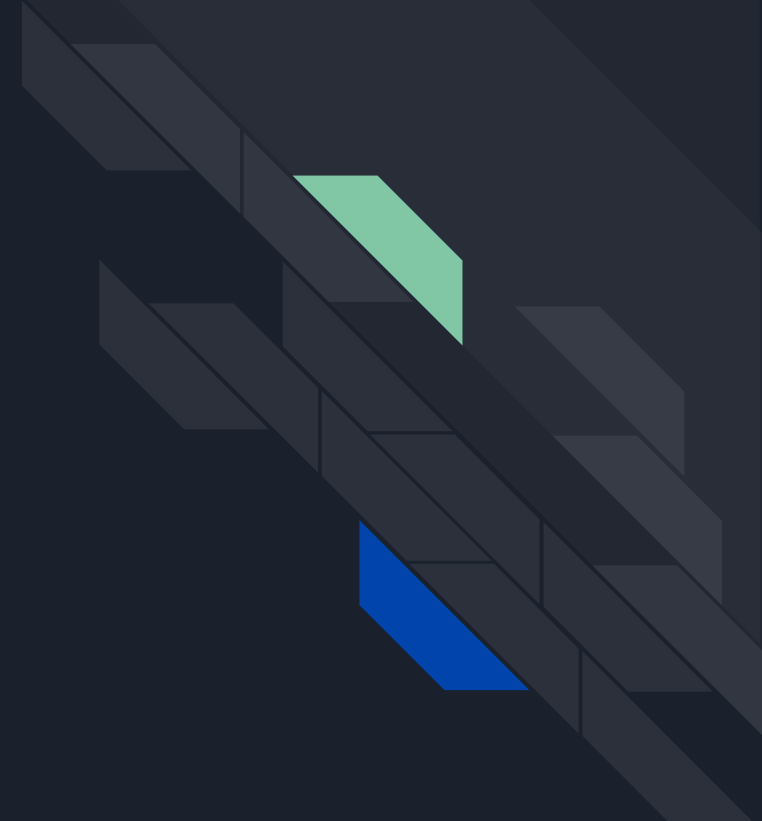
Project Objective

Target Audience

Tech Stack

System Design

Project Timeline





Overview

- This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually. This is an interesting concept set forth to automate the traditional attendance system by using authentication technique. The traditional system requires a register maintained for manually marking attendance for the students which is time consuming. Hence this proposed project eliminates the need of maintaining attendance sheet.



Introducing: IHA

The project is a system that takes down students' attendance using barcode. Every student is provided with a card containing a unique barcode. Each barcode represents a unique id of students. Students just have to scan their cards using barcode scanner and the system notes down their attendance as per dates. System then stores all the students' attendance records and generates defaulter list. It also generates an overall report in excel sheet for admin (that is warden).



Requirements Analysis

Software Requirements:

Android studio

Visual studio code

MySQL

Python 2.7 or above

Hardware Requirement:

Android or iOS Device

Barcode Reader

Local machine server



Features

01

Admin login: Admin is provided with a login from where he monitors and administers all the students' information and records.

02

Barcode Reading: Students have to scan their card through barcode reader and the id thus read by the system is stored for that particular day.

03

Defaulter list: The system generates defaulter list in excel sheet for specified period provided by admin.

04

Report generation: At the end of attendance process system automatically generates overall report for the class in excel sheet.

05

Search option: Admin can even search for particular student's attendance details using search option in the system



Project Objective

- To create a fully functional attendance system to manage hostel student data.
- Attendance Monitoring Helps To Manage And Allocate Rooms And Resources
- Attendance Monitoring Reduces The Manual Work Of The Administrative Staff
- In this hyper-competitive era, it is essential that this transformation not only meets all the needs but also exceeds the expectations of the parents.

Target Audience

Hostel Attendance Management System is powerful, flexible and easy to use. It will be helpful in knowing whether any student is missing in hostel. It will help us to have a record about attendance of each student

We can show this information to the respective Parent of the student during their visit to the hostel. This is one of the best methods for securing the students. Easily we can enter and maintain Attendance detail in this project.

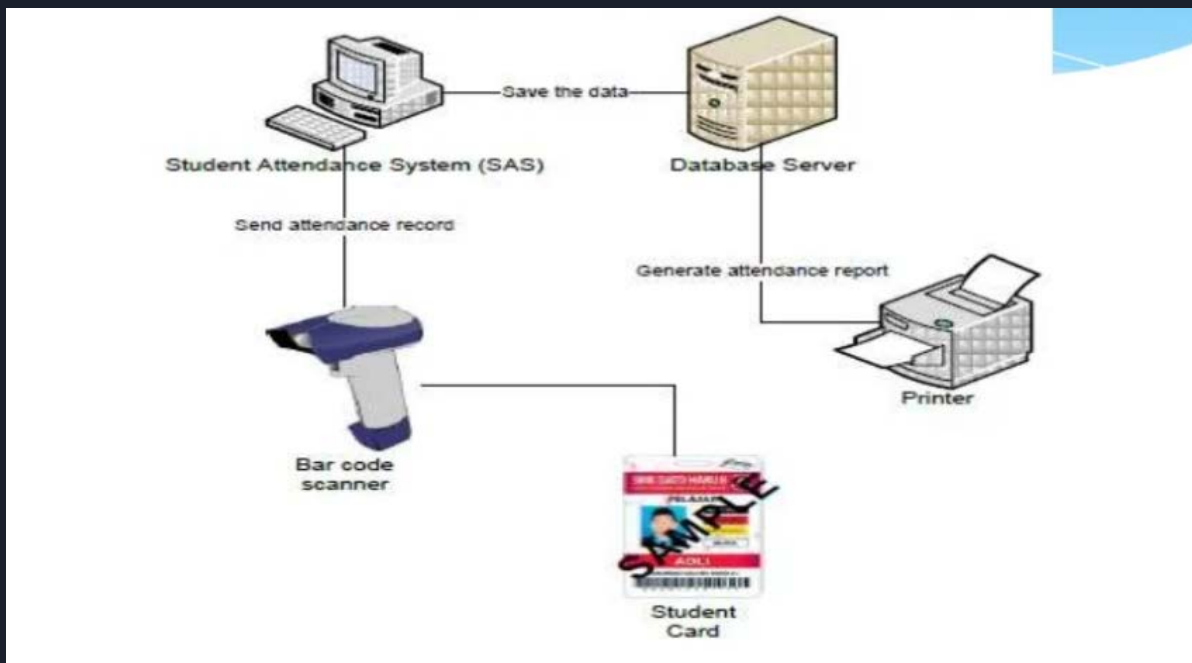




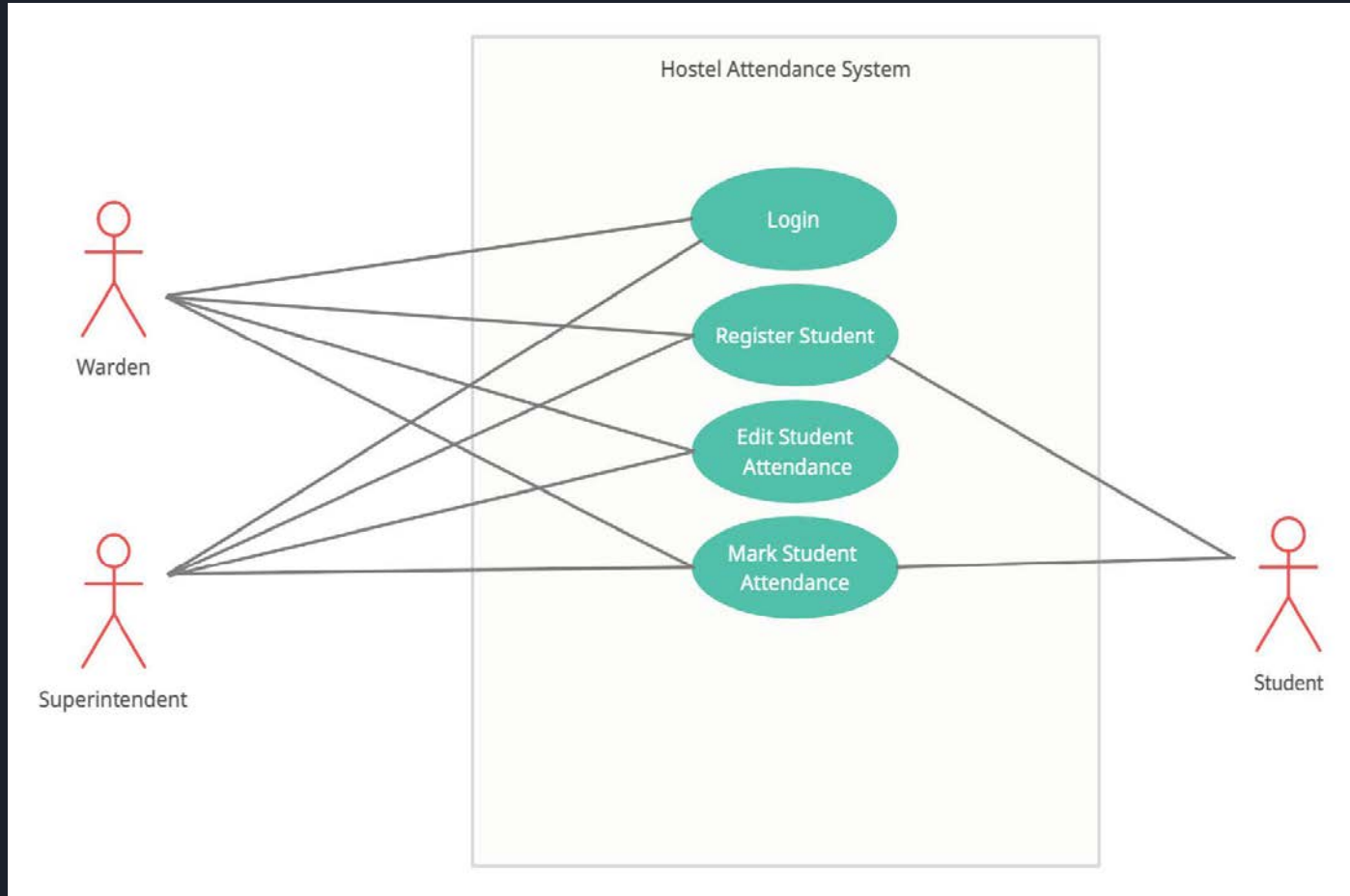
Tech Stack

- Flutter
- SQL
- Python
- Flask

System Design

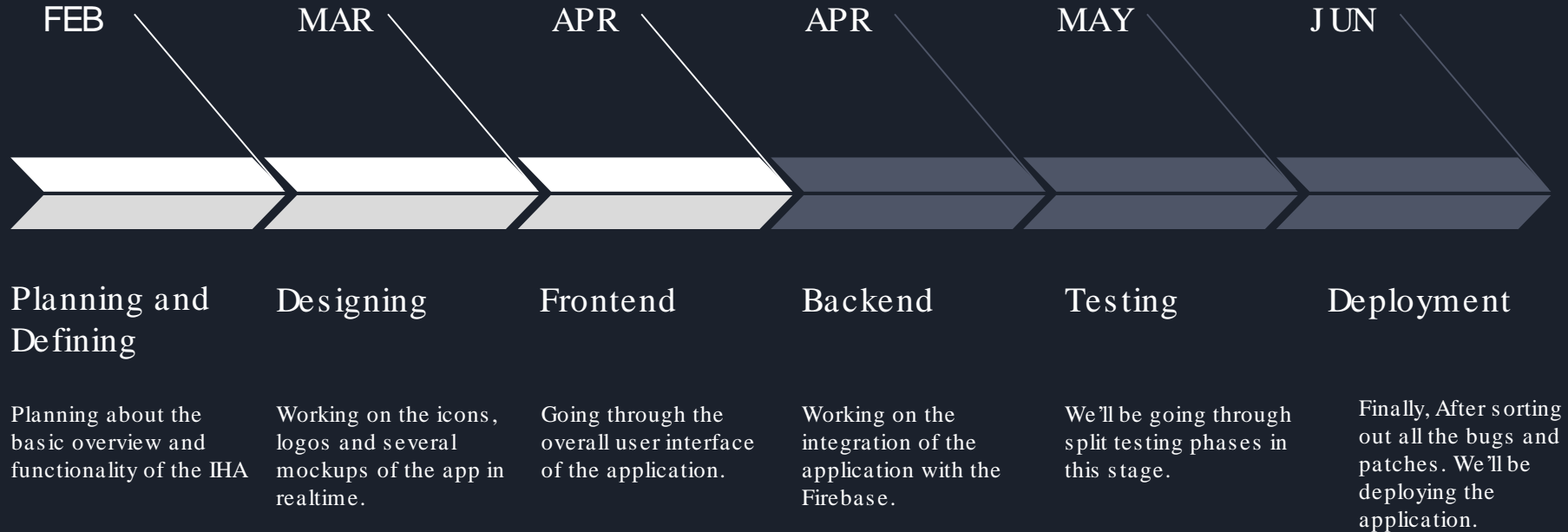


Use Case Diagram





Project Timeline



Thank You!

