VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", BELAGAVI - 590 018

A MINI PROJECT REPORT

on

# "MENTOR-MENTEE APPLICATION"

*Submitted by*


| | |
|---|---|
| Ankush Ananth Bhat | 4SF20IS015 |
| Aryan Adhikari | 4SF20IS017 |


*In partial fulfillment of the requirements for the VI semester*

## MOBILE APPLICATION DEVELOPMENT

of

BACHELOR OF ENGINEERING

in

INFORMATION SCIENCE & ENGINEERING

*Under the Guidance of*

Mrs. Shwetha S Shetty

Assistant Professor, Department of ISE

at


## SAHYADRI

College of Engineering & Management

An Autonomous Institution

MANGALURU


2022 - 23

# SAHYADRI

## College of Engineering & Management

### An Autonomous Institution

### MANGALURU

### Department of Information Science & Engineering

# CERTIFICATE

This is to certify that the **Mini Project** entitled **"Mentor-Mentee Application"** has been carried out by **Ankush Ananth Bhat (4SF20IS015)** and **Aryan Adhikari (4SF20IS017)**, the bonafide students of Sahyadri College of Engineering & Management in partial fulfillment of the requirements for the VI semester **Mobile Application Development (18ISMP68)** of **Bachelor of Engineering in Information Science & Engineering** of Visvesvaraya Technological University, Belagavi during the year 2022 - 23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work.

| | |
|---|---|
| **Mrs. Shwetha S Shetty** | **Dr. Mustafa Basthikodi** |
| Assistant Professor | Professor & Head |
| Dept. of ISE, SCEM | Dept. of ISE & CSE(DS), SCEM |

### External Practical Examination:

| Examiner's Name | Signature with Date |
|---|---|
| 1. ..... | ..... |
| 2. ..... | ..... |

# SAHYADRI

## College of Engineering & Management

### An Autonomous Institution

### MANGALURU

### Department of Information Science & Engineering


# DECLARATION

We hereby declare that the entire work embodied in this Mini Project Report titled **"Mentor-Mentee Application"** has been carried out by us at Sahyadri College of Engineering and Management, Mangaluru under the supervision of **Mrs. Shwetha S Shetty** as the part of the VI semester **Mobile Application Development (18ISMP68)** of **Bachelor of Engineering** in **Information Science & Engineering**. This report has not been submitted to this or any other University.

**Ankush Ananth Bhat (4SF20IS015)**

**Aryan Adhikari (4SF20IS017)**

SCEM, Mangaluru

# Abstract

The Mentor-Mentee Application aims to create a centralized platform for managing mentor-mentee relationships in organizations. The Application will provide functionality for creating and managing mentor-mentee pairs, tracking progress, and generating reports. This Application will be designed to be user-friendly and easy to navigate, with a focus on data security and privacy. The Application will allow for the storage of information on both mentors and mentees, including contact information, skills, and experience. The system will also include a messaging feature to facilitate communication between mentors and mentees. This project will provide organizations with a powerful tool for managing and tracking the progress of mentor-mentee relationships, resulting in improved outcomes for both mentors and mentees.

# Acknowledgement

It is with great satisfaction and euphoria that we are submitting the Mini Project Report on **"Mentor-Mentee Application"**. We have completed it as a part of the VI semester **Mobile Application Development (18ISMP68)** of **Bachelor of Engineering** in **Information Science & Engineering** of Visvesvaraya Technological University, Belagavi.

We are profoundly indebted to our guide, **Mrs. Shwetha S Shetty**, Assistant Professor, Department of Information Science & Engineering for innumerable acts of timely advice, encouragement and We sincerely express our gratitude.

We express our sincere gratitude to **Dr. Mustafa Basthikodi**, Professor &Head, Department of Information Science & Engineering for his invaluable support and guidance.

We sincerely thank **Dr. Rajesha S**, Principal, Sahyadri College of Engineering & Management who have always been a great source of inspiration.

Finally, yet importantly, We express our heartfelt thanks to our family & friends for their wishes and encouragement throughout the work.

**Ankush Ananth Bhat**
4SF20IS015
VI Sem, B.E., ISE
SCEM, Mangaluru

**Aryan Adhikari**
4SF20IS017
VI Sem, B.E., ISE
SCEM, Mangaluru

# Table of Contents

# List of Figures

# Chapter 1

# Introduction

The Mentor-Mentee Application serves as a comprehensive platform designed to facilitate meaningful connections between mentors and mentees, fostering a nurturing environment for personal and professional growth. This application aims to bridge the gap between experienced individuals willing to share their expertise and knowledge, and ambitious individuals seeking guidance and support to navigate their respective fields.

The main purpose of a mini project is to provide a more efficient and effective way to manage the relationship between a mentor and mentee. By using a Application, it is easier to keep track of time schedules and student information, and it can also help to reduce paper waste and support a more environmentally-friendly approach. Additionally using a Application can make it easier for mentors and mentees to communicate and share information, which can improve the overall effectiveness of the mentorship program. plans.

## 1.1 Overview

The Mentor-Mentee Application is a comprehensive platform that connects mentors and mentees, fostering personal and professional growth. With intelligent matching, seamless communication, a resource library, and goal tracking features, it empowers individuals to establish impactful relationships, receive guidance, and access valuable resources for their development. Through secure messaging, video calls, and in-person meetings when possible, mentees can connect with mentors and engage in meaningful discussions. The application also provides a curated resource library and tools for tracking goals and progress. It promotes accountability, motivation, and continuous improvement through feedback mechanisms, creating an environment conducive to successful mentorship experiences.

## 1.2 Purpose

The Mentor-Mentee Application is to connect individuals seeking guidance and support with experienced mentors, fostering meaningful mentorship relationships for personal and professional development. By providing a platform for knowledge transfer, goal setting, and progress monitoring, the application aims to empower mentees to navigate challenges, acquire industry-specific insights, and expand their networks. Simultaneously, mentors have the opportunity to make a positive impact on the lives of mentees, contribute to their growth and success, and stay connected with emerging trends. Ultimately, the Mentor-Mentee Application aims to create a supportive environment that cultivates learning, collaboration, and mutual fulfillment for both mentors and mentees.

## 1.3 Scope

The Mentor-Mentee Application focuses specifically on connecting mentors and mentees, facilitating communication and collaboration, and providing resources for personal and professional growth. The application does not extend to providing formal certification or direct job placement services. Its primary goal is to foster mentorship relationships and empower individuals to achieve their goals and maximize their potential through the guidance and support of experienced mentors.

# Chapter 2

# Requirements Specification

## 2.1 Hardware Specification

- Processor : Intel(R) Core(TM) i5-1005G1 CPU @ 1.20GHz
- RAM : 16GB
- Hard Disk : 500GB
- Input Device : Standard keyboard and Mouse
- Output Device : Monitor

## 2.2 Software Specification

- Programming Language :Java and XML
- IDE :Android Studio
- Database: Google Firebase

# Chapter 3

# System Design

## 3.1 Architecture Diagram

The architecture diagram of the application is as shown in the below figure:

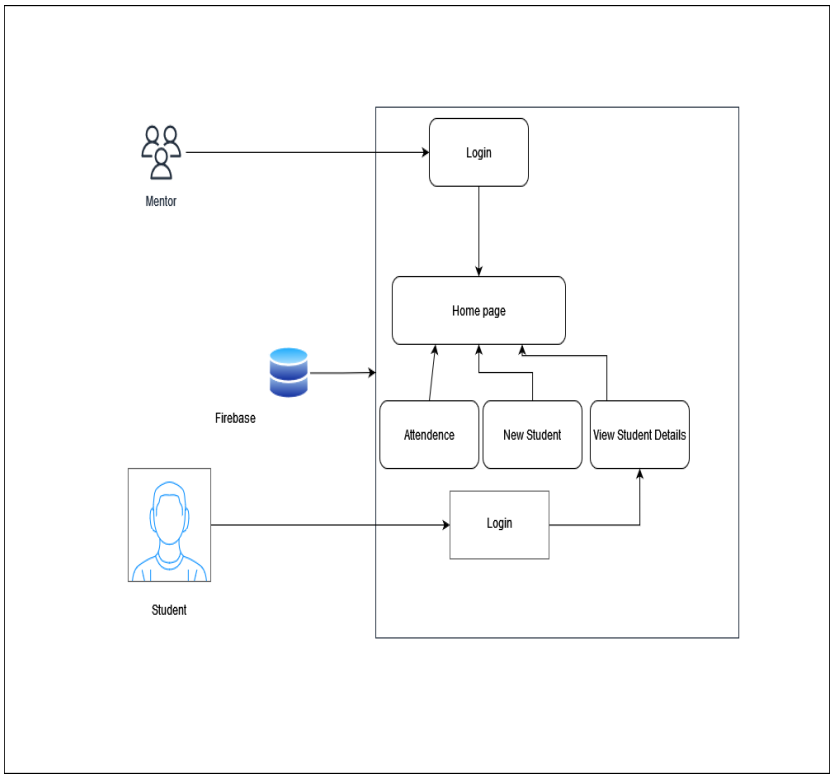


Figure 3.1: Architecture Diagram of Ration Distribution System

Customer will interact with the system through application server, will assign the job with deadline. Once job is assigned admin will request for the master slave for information about slave virtual machine details. Then calculate minimum requirement for execute job. After assign job to master, it will process the job and return the result. The main functionality, calculating minimum nodes, is done by admin.

## 3.2 Application Modules

- **User Registration and Authentication:** This module allows users to create new accounts, log in, and manage their account settings. It includes features like email verification, password reset, and profile creation.
- **User Profiles:** Each user, whether a mentor or a mentee, has a profile that displays their information, background, expertise, and preferences. This module enables users to create, update, and view their profiles.
- **Administration :** This module is accessible to administrators or platform managers. It allows them to manage user accounts, oversee the mentor-mentee matching process, handle disputes, monitor application usage, and perform administrative tasks.
- **Matching and Search:** This module facilitates the process of finding suitable mentor-mentee pairs. It includes a matching algorithm or search functionality that considers factors such as skills, interests, location, and availability to suggest or enable users to find potential matches.
- **Attendance Recording:** This component enables teachers to record attendance for their respective classes or sessions. It may include features like selecting a class, marking attendance for individual students, and saving the attendance records.
- **Class/Subject Management:** This feature allows teachers to manage classes, subjects, and related information. Teachers can create new classes, assign subjects, and set up schedules.

## 3.3 End Users

In schools and colleges, the Mentor-Mentee Application serves as a valuable resource for both students and educators. Students can connect with mentors who provide academic guidance, career advice, and personal development support. Mentors can be experienced professionals, alumni, or faculty members who can offer insights and mentorship specific to the students' fields of interest. The application enables students to gain valuable industry knowledge, explore career options, and receive guidance on academic challenges. It also allows educators to track and support student progress, identify areas of improvement, and foster a culture of mentorship within the educational institution. Overall, the application enhances the learning experience and prepares students for their future endeavors.

## 3.4 Limitations

While the Mentor-Mentee Application offers valuable features, it also has certain lmitations. First, the effectiveness of mentorship relies on the willingness and availability of mentors to actively engage with mentees. Limited mentor availability or lack of commitment can hinder the quality of the mentorship experience. Second, the application heavily relies on virtual communication, which may not always facilitate the same level of connection and engagement as face-to-face interactions. Additionally, the application's matching algorithm may not always perfectly align with the mentee's needs and preferences, leading to potential mismatches. Lastly, the application may not cover all industries or niche fields, limiting the availability of mentors with expertise in specific domains.

# Chapter 4

# Implementation

## 4.1 Overview

Android is an open-source mobile operating system developed by Google. It was initially released in September 2008 and has since become one of the most popular mobile operating systems worldwide. Android is based on the Linux kernel and designed primarily for touchscreen mobile devices such as smartphones and tablets.Android's popularity, flexibility, and extensive developer ecosystem have contributed to its widespread adoption in the mobile industry. It provides a platform for creating innovative and feature-rich applications that cater to a diverse range of user needs.Android provides a suite of developer tools, including Android Studio, the official integrated development environment (IDE) for Android development.

## 4.2 Language Used

### 4.2.1 Java

Java is a widely used, high-level programming language that was developed by Sun Microsystems (now owned by Oracle) in the mid-1990s. It is known for its simplicity, portability, and versatility, making it popular among developers for various types of applications, including desktop, web, and mobile.Java's versatility, robustness, and extensive ecosystem have made it a popular choice for a wide range of applications, from enterprise software to Android app development. Its object-oriented nature and platform independence make it suitable for large-scale projects and contribute to its enduring popularity in the software development community.

### 4.2.2 XML

XML(eXtensible Markup Language) is a markup language designed to store and transport data. It is a standard format for representing structured information, making it easy to share and exchange data between different systems.XML is commonly used in various domains, including web services, data storage, configuration files, and data exchange formats. It provides a flexible and standardized way to represent structured data, enabling interoperability and facilitating communication between different systems and platforms.

## 4.3 Android Studio

Android Studio is the official integrated development environment (IDE) for developing Android applications. It provides a comprehensive set of tools and features that aid in the development, testing, and debugging of Android apps. Android Studio is available for free and is widely used by developers around the world.is specifically designed to streamline the process of building Android apps and provides a comprehensive set of tools and features to assist developers throughout the development lifecycle.Android Studio is continually updated and improved by Google, incorporating the latest Android platform features and development tools. It serves as the primary IDE for Android app development, offering developers a comprehensive and efficient environment for building high-quality Android applications.

## 4.4 Google Firebase

Google Firebase is a cloud-based platform that provides developers with a comprehensive set of tools for building and managing web and mobile applications. It offers features like real-time database, authentication, hosting, storage, and push notifications, making it easy to develop robust and scalable apps. Firebase simplifies tasks like user authentication, data storage, and server-side logic, allowing developers to focus on the core functionality of their applications. With its intuitive interface, automatic scaling, and extensive integration options, Firebase is a popular choice for developers looking to streamline app development and improve user experiences.

## 4.5 Pseudo-Codes

### 4.5.1 Pseudocode for viewing Attendence

Viewing attendance in a mentor mentee application,refers to the feature that allows mentors and mentees to access and track attendance records. It provides a way to monitor and record the presence or absence of mentees during mentorship sessions or events. The attendance view typically displays relevant information such as date, time, and the mentee's status (present or absent). This feature helps mentors assess mentee engagement and commitment, identify patterns or trends in attendance, and take appropriate actions based on attendance records. It enables mentors to provide guidance and support to mentees more effectively while promoting accountability and progress tracking within the mentorship program.

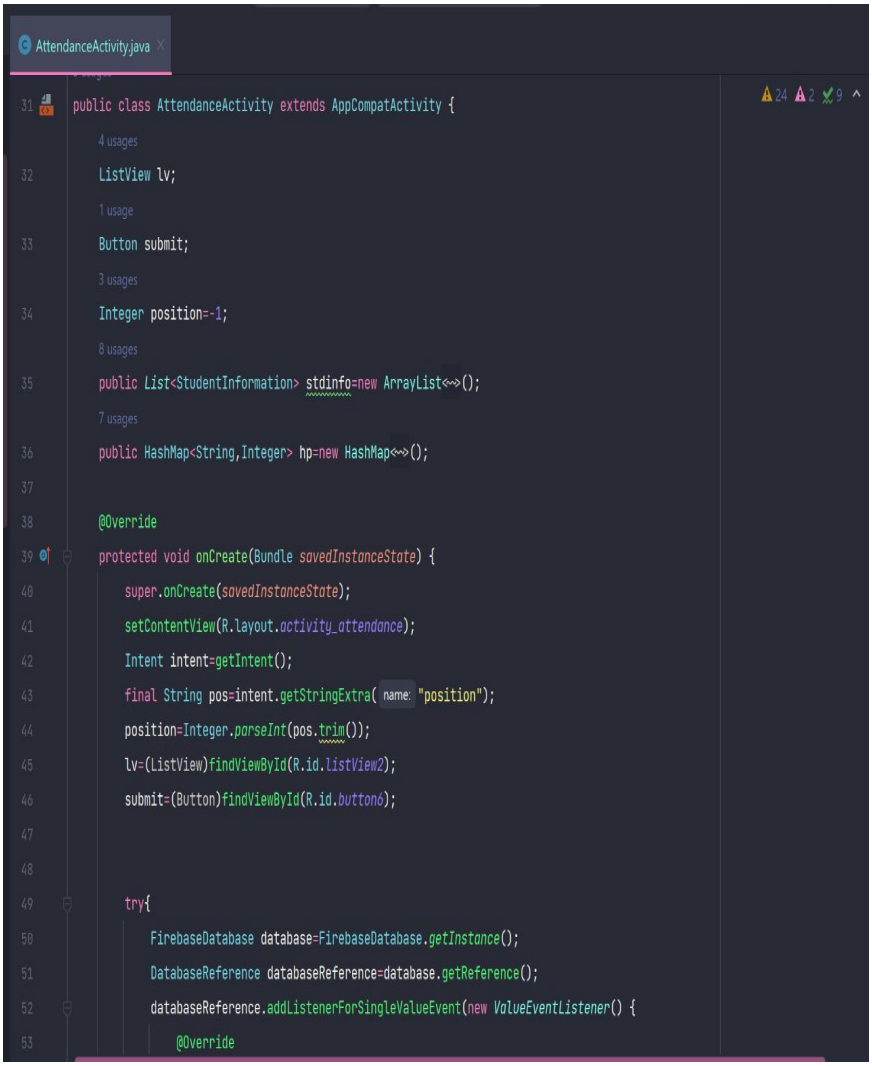


Figure 4.1: Pseudocode for viewing Attendence

### 4.5.2 Pseudocode for fetching Student Info

Fetching student information in a mentor mentee application involves retrieving and displaying relevant data about the mentees enrolled in the program. This feature allows mentors to access details such as student names, contact information, academic records, goals, and any other relevant information provided by the students or program administrators. By fetching student information, mentors can gain insights into the background, interests, and needs of their mentees. This helps mentors tailor their guidance and support to meet the individual requirements of each student. It also enables mentors to track mentee progress, identify areas for improvement, and make informed decisions to enhance the mentorship experience.

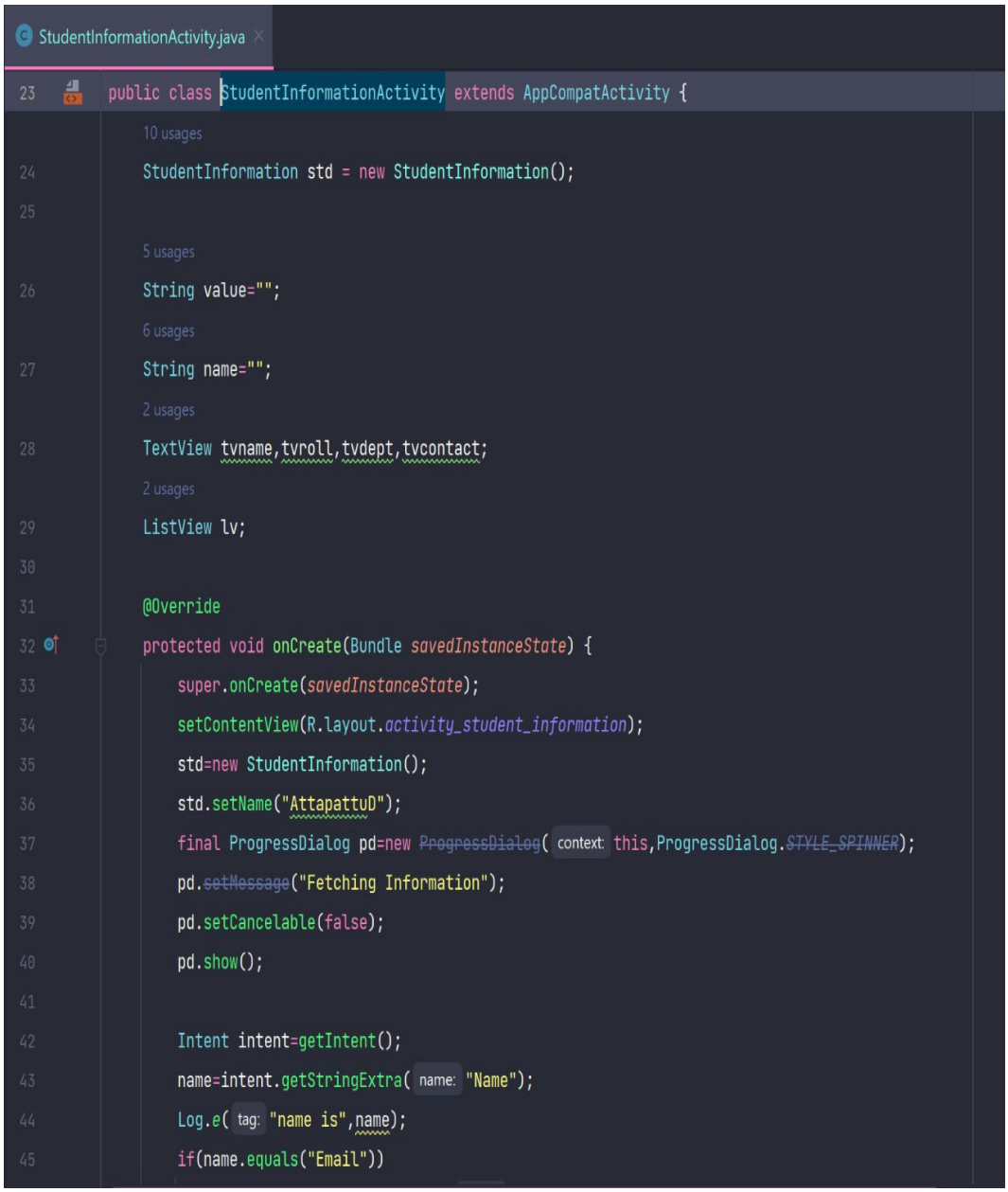


Figure 4.2: Pseudocode for fetching Student Info

### 4.5.3 Pseudocode for Attendance Update

Student attendance update by a mentor in a mentor mentee application refers to the capability of mentors to record and update the attendance of their mentees for mentorship sessions or events. This feature allows mentors to indicate whether their mentees were present or absent during scheduled activities. By updating student attendance, mentors can maintain accurate records of mentee participation and engagement. This information is valuable for tracking mentee progress, assessing their commitment to the program, and identifying any attendance patterns or trends. It enables mentors to provide appropriate guidance, support, and feedback based on the mentees' attendance records, fostering accountability and facilitating effective mentorship interactions within the application.

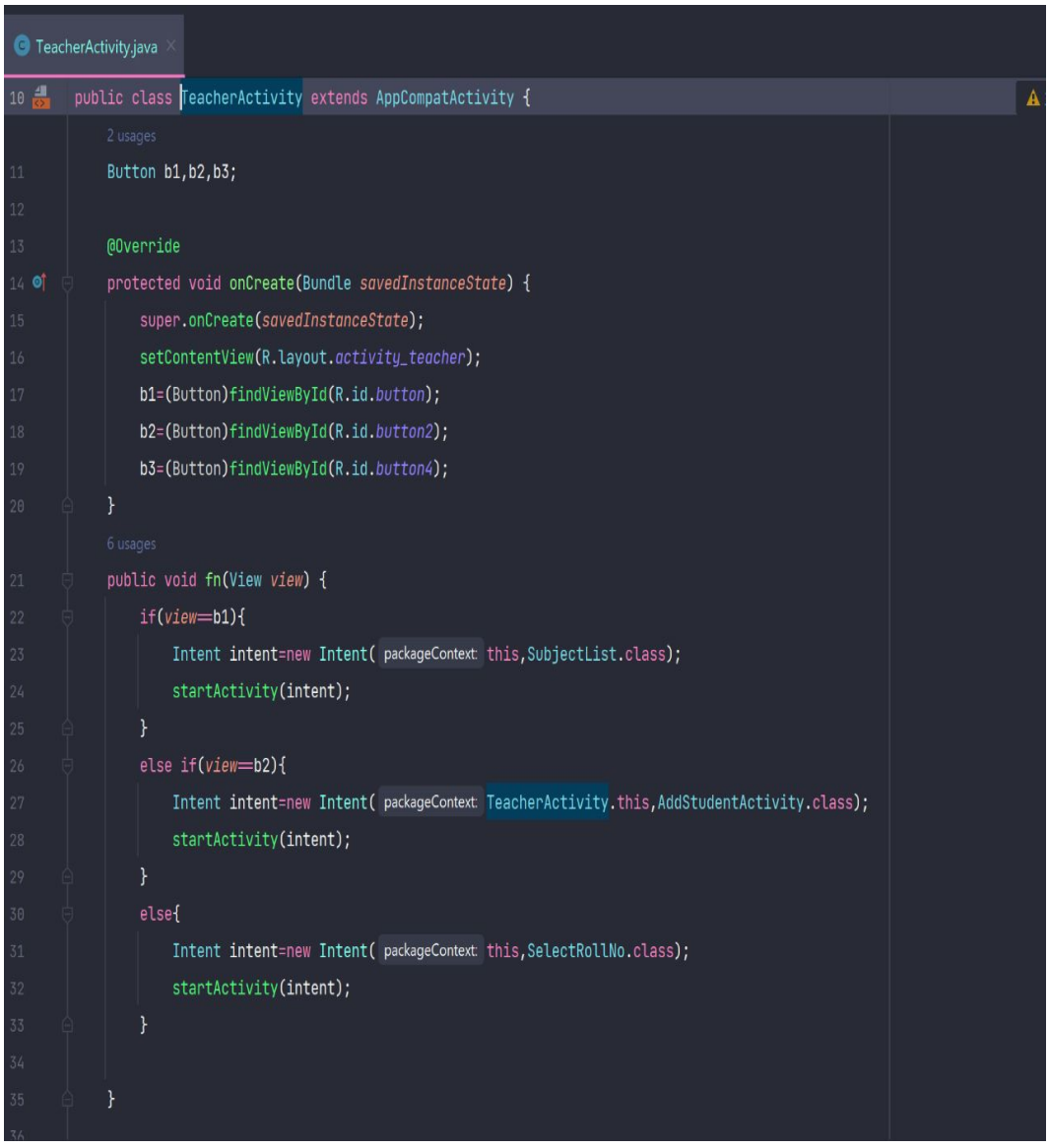


Figure 4.3: Pseudocode for Attendance Update

# Chapter 5

# Results and Disscussion

## 5.1 Home page

Figure 5.1 is a Home Screen where Student or Teacher moves to the respective login page.


Figure 5.1: Home page

## 5.2 Mentor Login

Figure 5.2 describes interface for mentor to login in.


Figure 5.2: Mentor Login

## 5.3 Student Login

Figure 5.3 describes interface for student to login in.

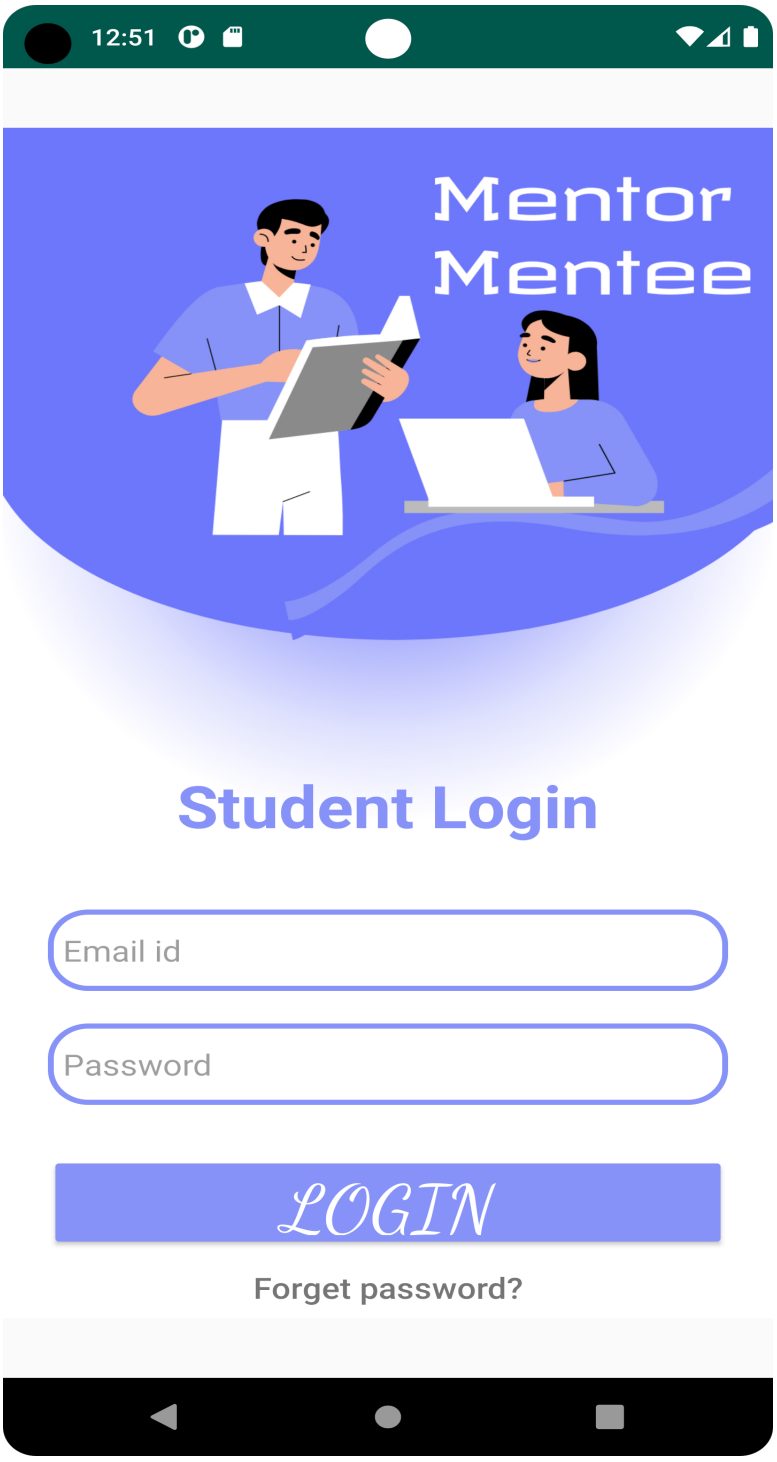


Figure 5.3: Student Login

## 5.4 Student Home Page

Figure 5.4 interface for Student Home page,where Student Details and Attendance are displayed.

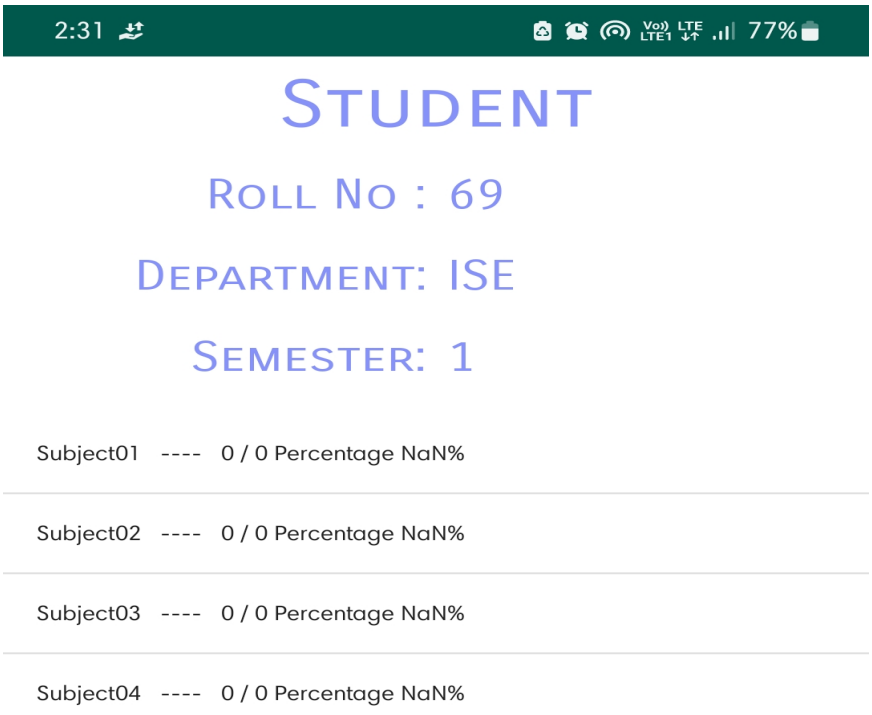


Figure 5.4: Student Home Page

## 5.5 Mentor Home page

Figure 5.5 interface for Mentor Home page,where Mentor to update Attendance,Add new Student Information.

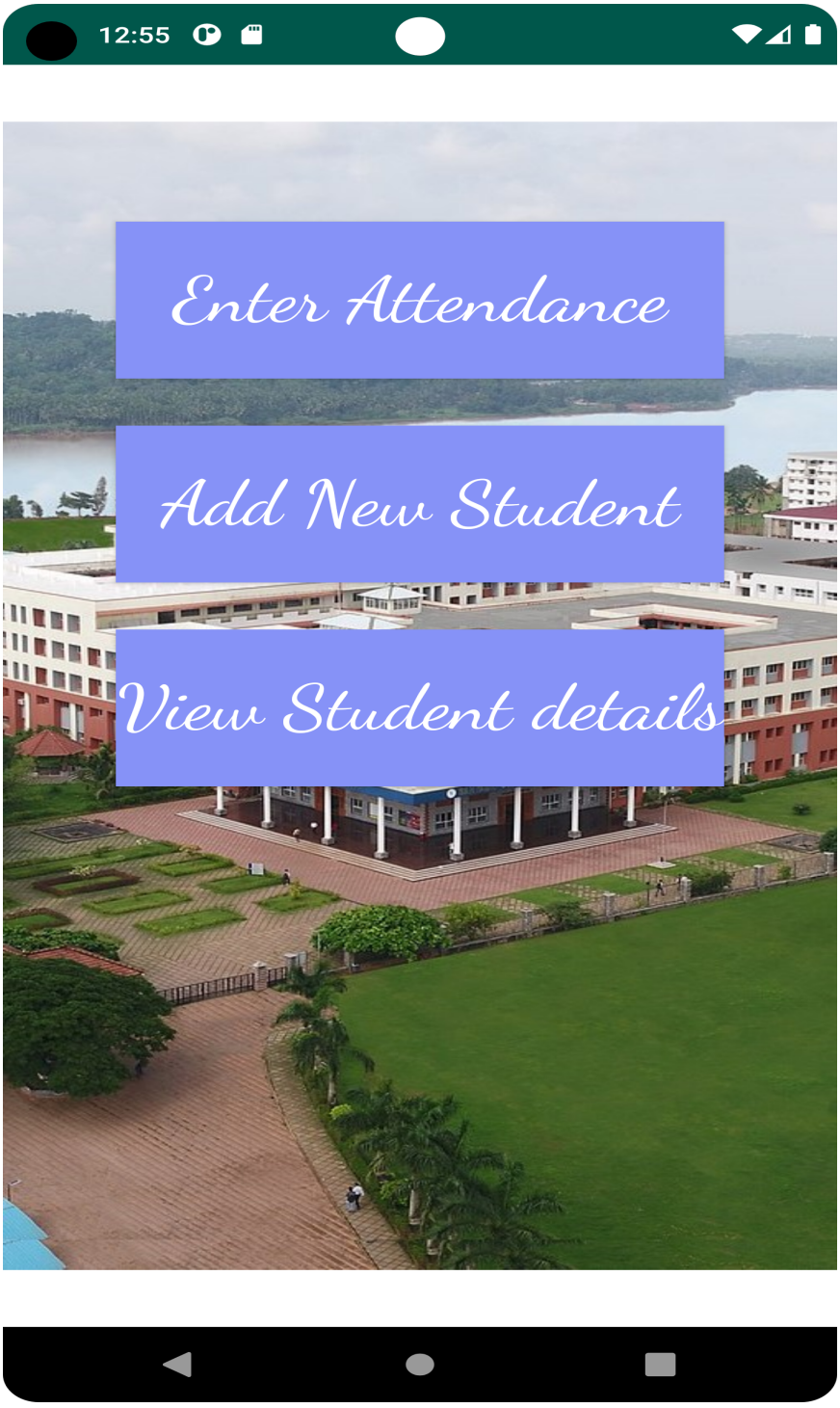


Figure 5.5: Mentor Home page

## 5.6 Attendance Entry

Figure 5.6 interface for Mentors to update Student Attendance.

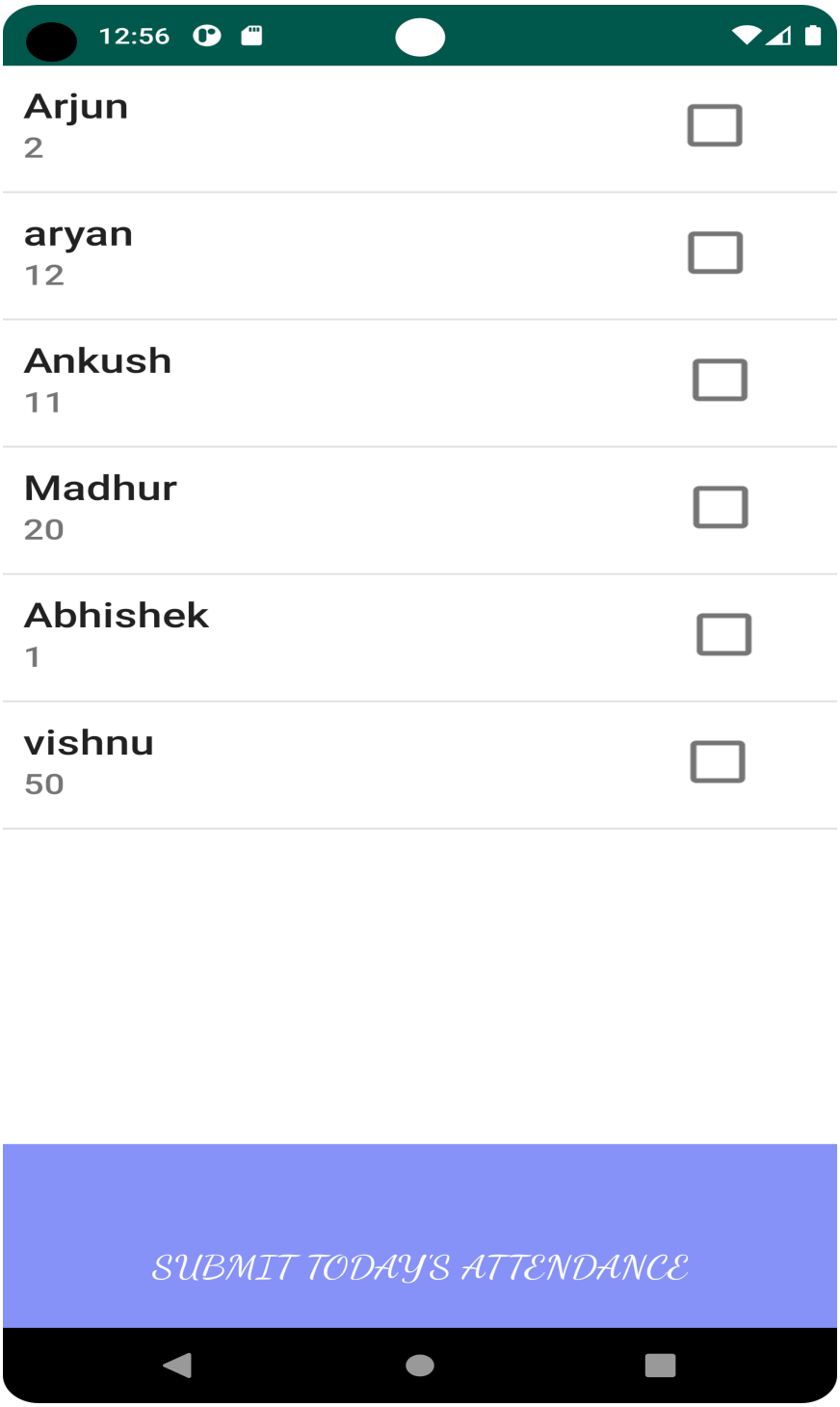


Figure 5.6: Attendance Entry

## 5.7 Student Registration

Figure 5.7 interface for Students to Register their Details.

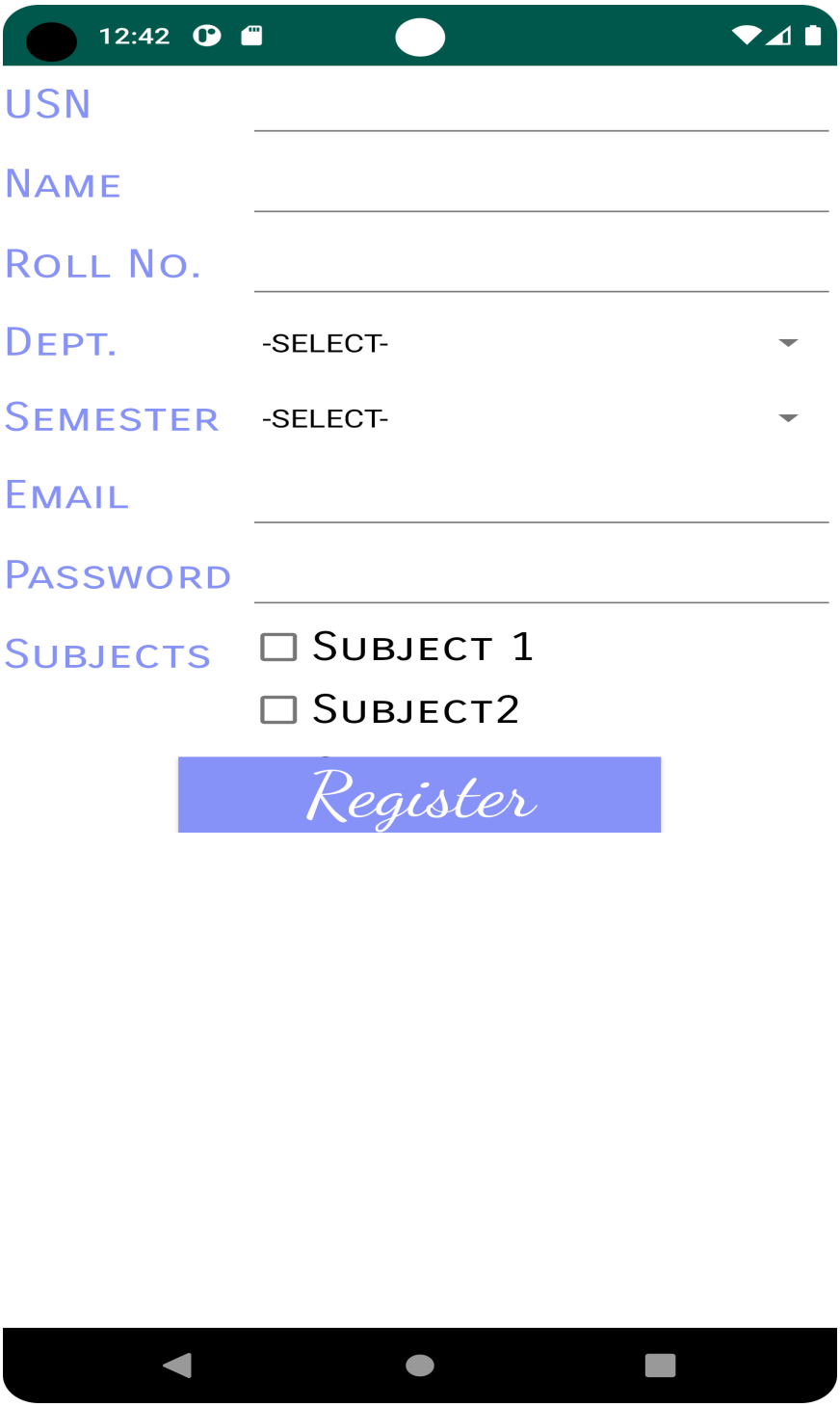


Figure 5.7: Student Registration

## 5.8 Student Information

Figure 5.5 interface to Fetch Information to fetch the Information using Roll no.

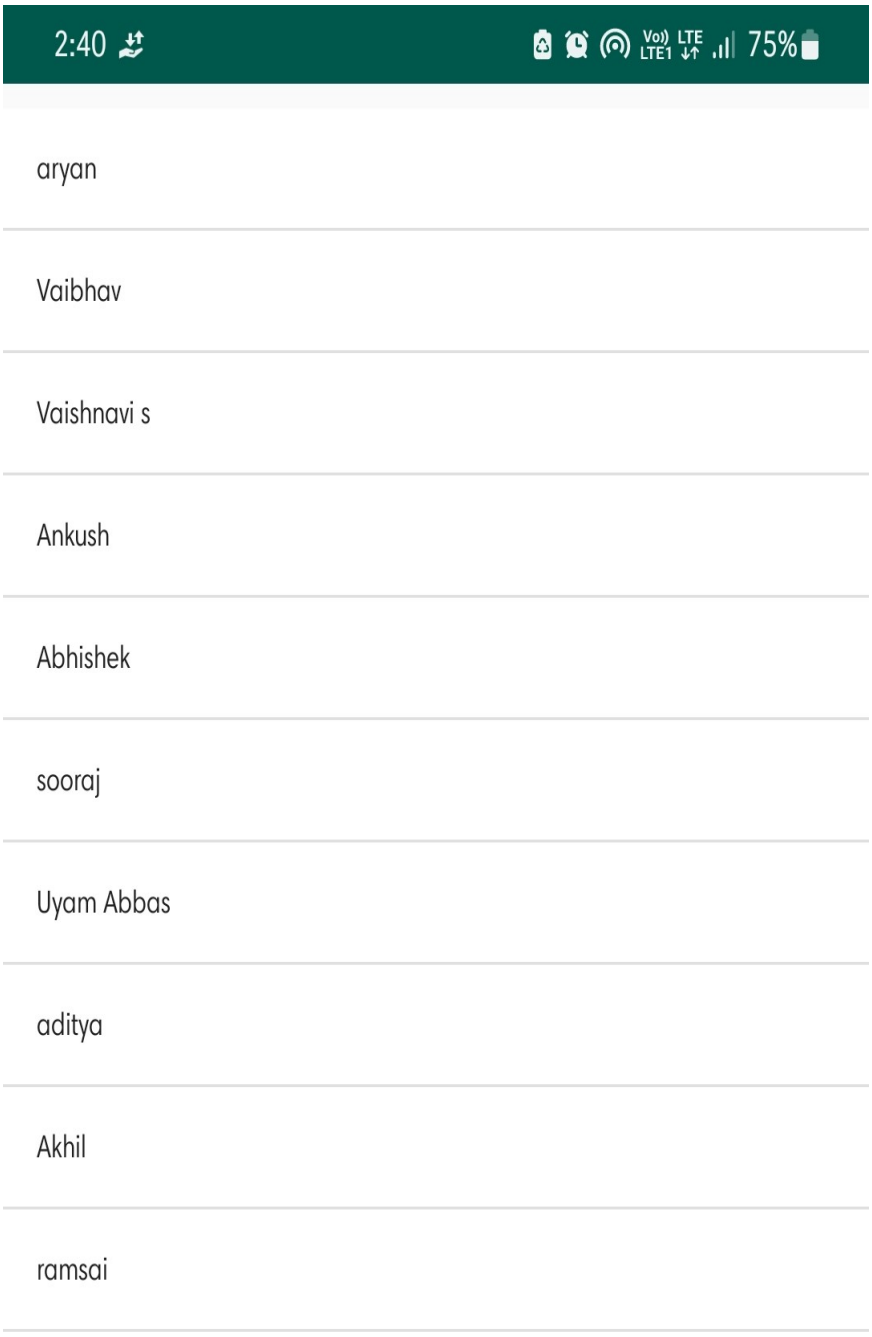


Figure 5.8: Student Information

# Chapter 6

# Conclusion and Future work

The "Mentor-Mentee Application" have been developed to reduce the paper work. a Application can be used to store and manage information about the mentor-mentee pairs, their characteristics, and their interactions.We can store all the information of student in a file.In this project a mentor or a mentee can login to their page using their userid and password,where mentor can update student's marks,Attendance .A mentee can retriew his/her Attendance find percentage. Having this information stored in a application would allow for efficient retrieval and analysis of the data, and it could provide valuable insights into the mentor-mentee relationships and the effectiveness of the mentorship program.

The future work is to add feature to conduct online meetings with mentors.Adding the marks details of the student where they can access the marks of a semester which will be uploaded by the mentors.

# References


[1] Google Developer Training, "Android Developer Fundamentals Course-Concept Reference", Google Developer Training Team, 2017. https://www.gitbook.com/book/googledeveloper-training/android-developer-fundamentals-course-concepts/details.

[2] Erik Hellman, "Android Programming-Pushing the limits", 1st Edition, Wiley India Pvt Ltd, 2014. ISBN-13: 978-8126547197.

[3] Dawn Griffiths and David Griffiths, "Head First Android Development", 1st SPD Publishers, 2015. ISBN-13: 978-9352131341.

[4] Bill Phillips, Chris Stewart and Kristin Marsicano, "Android Programming: The Big Berd Ranch Guide", 3rd Edition, Big Nerd Ranch Guides, 2017. ISBN-13: 978-0134706054.