

TeachUP



Our app, Your education

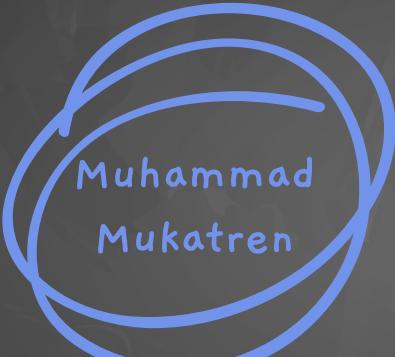


Project Members:



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Private chats and group
chats development



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Quiz creation and
answer mechanism



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Login/Signup,
Uploading material,
Course creation/Registration,
refactoring to MVVM



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Users profile view and
editing option



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01 Introduction

What Is our app?



So what is our app?

TeachUp was made for students and teacher alike and acts as an interface for course management.

- It's easy to use
- Everyone can create and join courses
- Helps communicate and enrich the course experience overall

Why our app?



Goals

- ✓ Improving communication between both students and the teacher.
- ✓ Make it easy to create and upload study materials.



The Problem

- ✓ Hard to communicate with students in a centralized manner.



Current State And Similar Systems

- ✓ Today we have "Moodle" which is widely adopted in higher education institutes. However, it requires a complicated setup for independent teachers.

02

Requirements

Functionalities And Non- Functionalities



Functionalities

; Features ;

o Signup & Signin

Users can create a personal account and choose their user type.

o Quizzes

Teachers can create quizzes; students can answer them and get a score.

o Study Materials

Teachers can upload study materials; students can download them.

o Chat

Students and teachers can communicate private and in a group.

o Profile

Users can edit and view other profiles.

o Realtime Update

Updates from the repository to the view-model happens in real-time.

Non Functionalities

o Reliability

Our Firebase database is 99.95% of the time available.

o Portability

Our app can run on over 96% of android devices (MIN SDK 24)



03 Diagrams

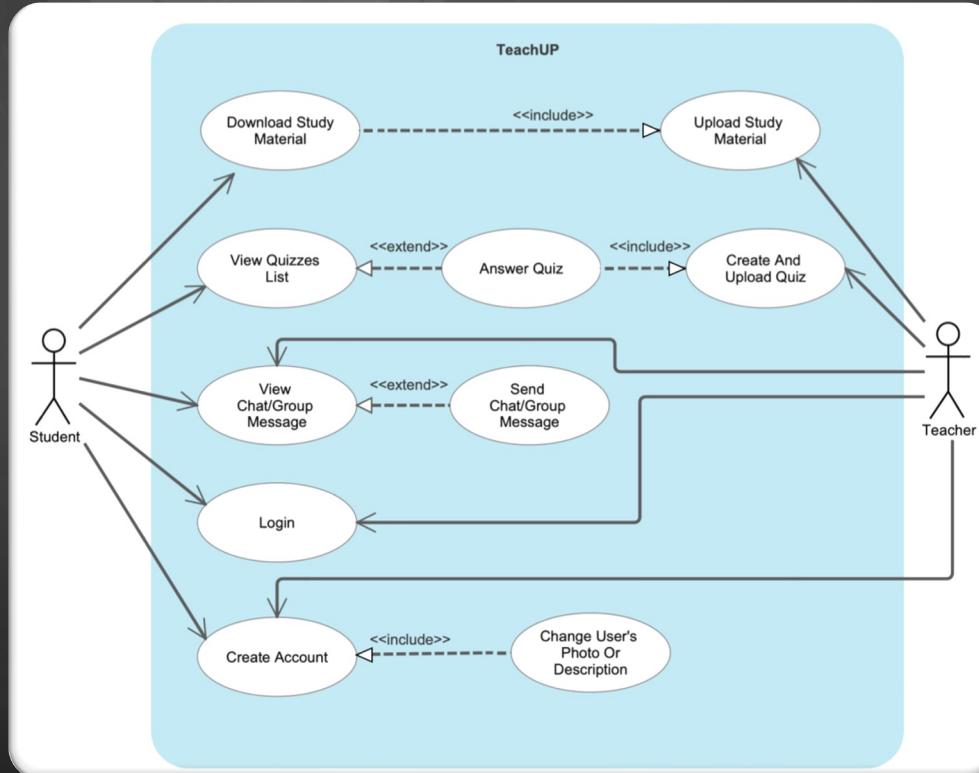


Our Main UML Diagrams



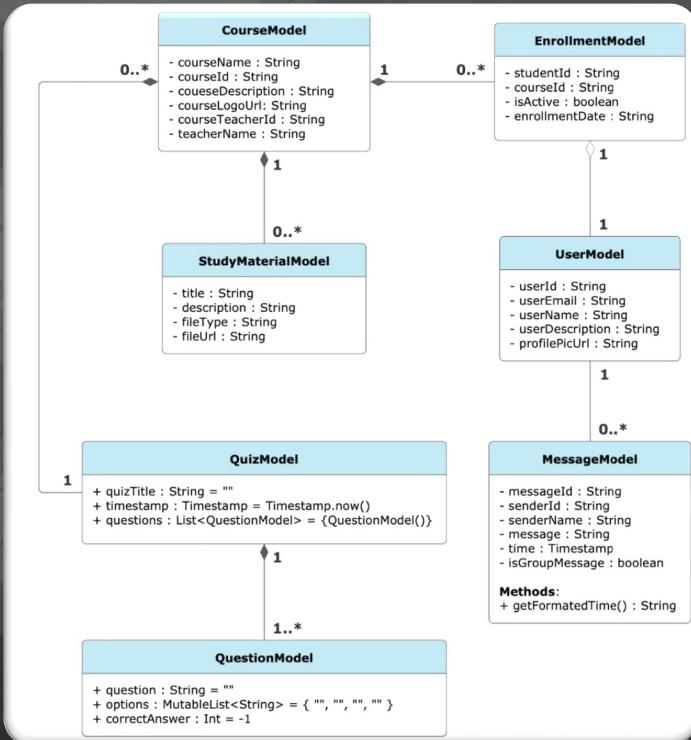
Use-Case Diagram

Describes the interactions with the system



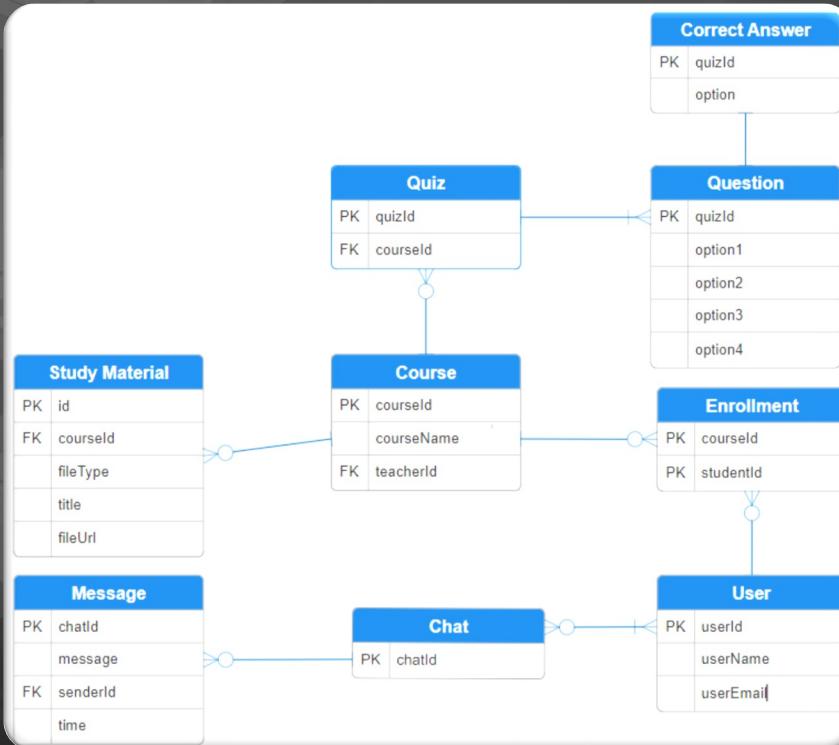
Class Diagram

The system models



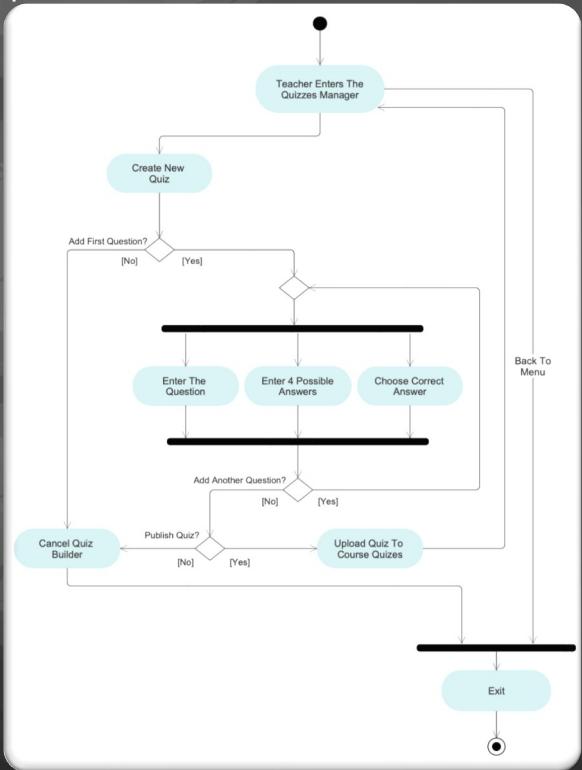
ERD

The structure of our data base



Activity Diagram

How the quiz creation works





04 System Structure

How is our app built?

The Structure

Repositories

A class implementing the repository pattern is used to abstract the data access layer for each collection, serving as a bridge between the business logic and data storage, ensuring separation of concerns and scalability.

View-Models

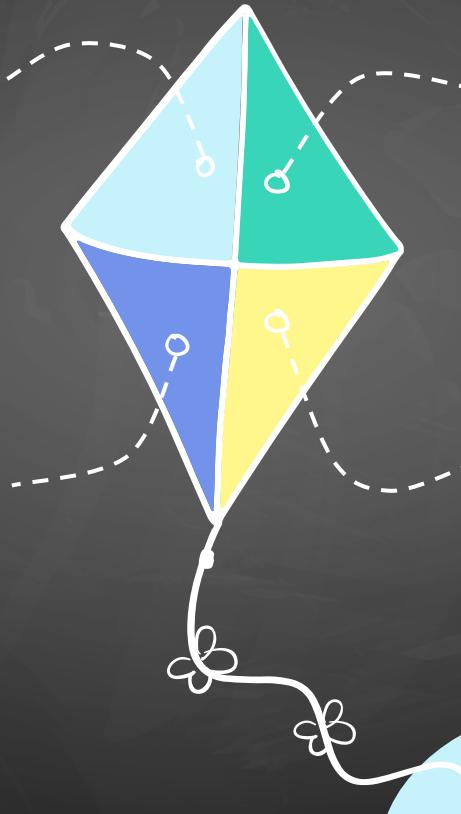
A View Model per model act as data containers presenting data on the UI, abstracting the UI logic from the business logic, enabling a separation of concerns.

Models

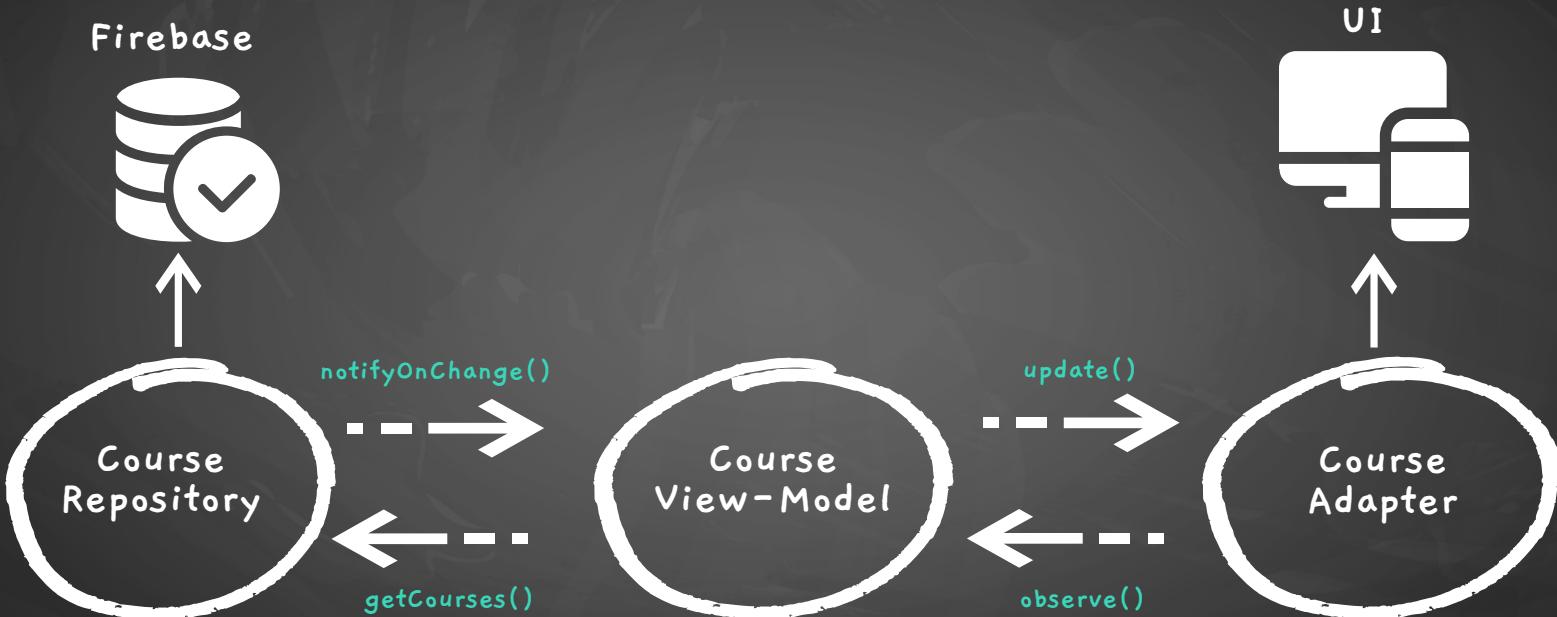
Models define the core data structures and relationships.

Adapters

Adapters facilitate the flow of data from repositories to view models, transforming and preparing it for presentation.



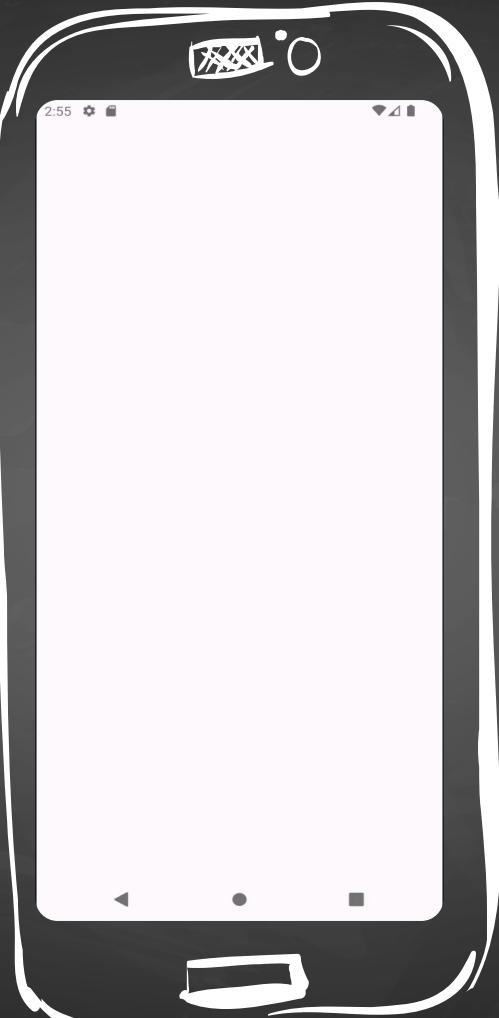
Example Of A MVVM Architecture



05 System Use

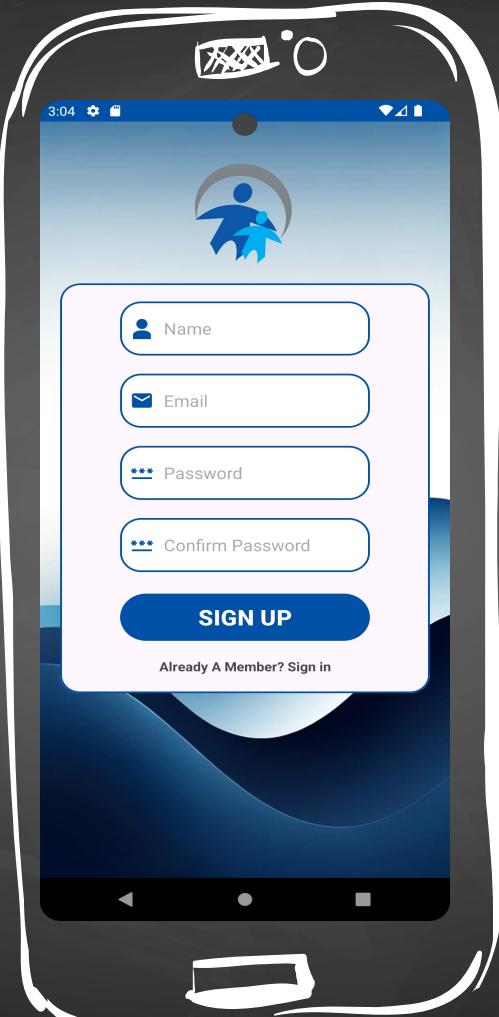
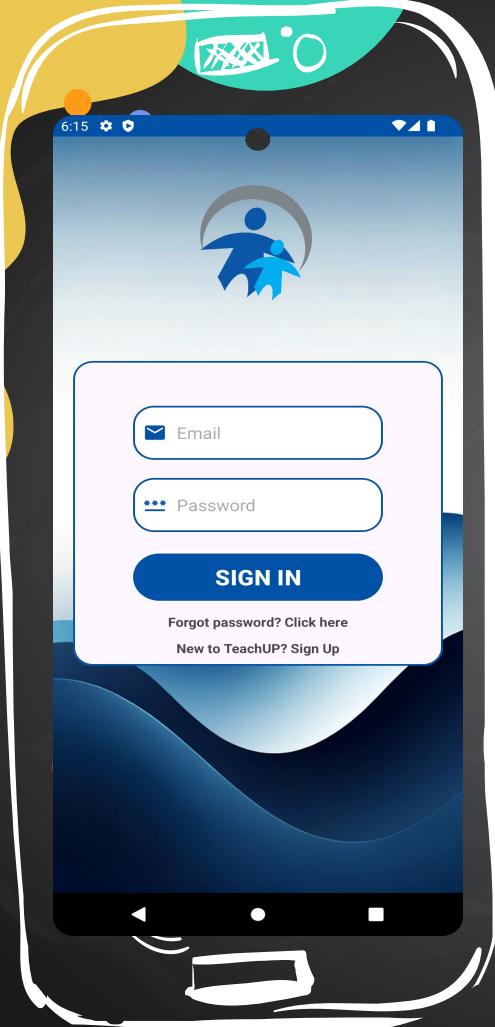
How to use the app?





Splash Screen && Welcome Screen

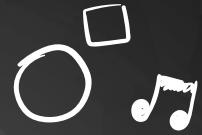
A splash screen is utilized to determine whether a user is already logged in, routing them either to the main application interface or the login screen based on their authentication status.

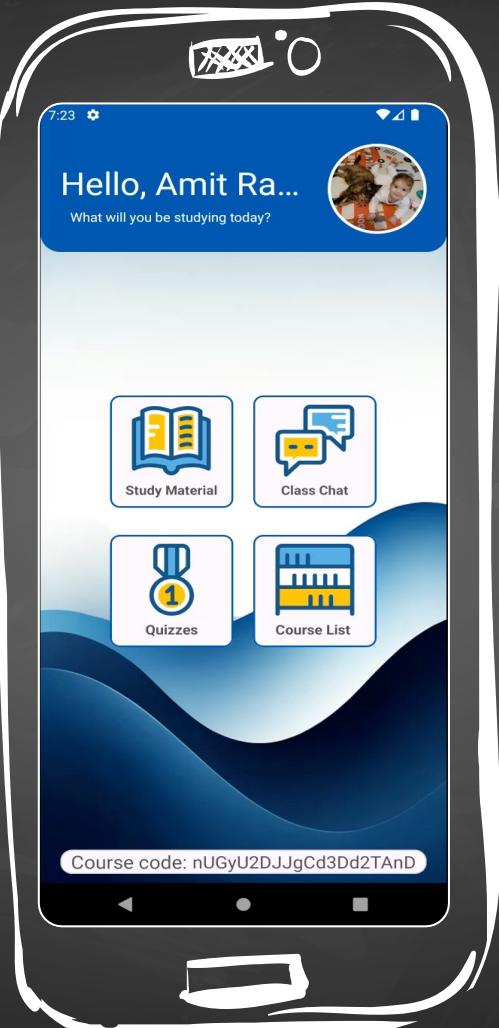


Signup
&&
Signin



Course
Creation,
Registration
&&
Course List

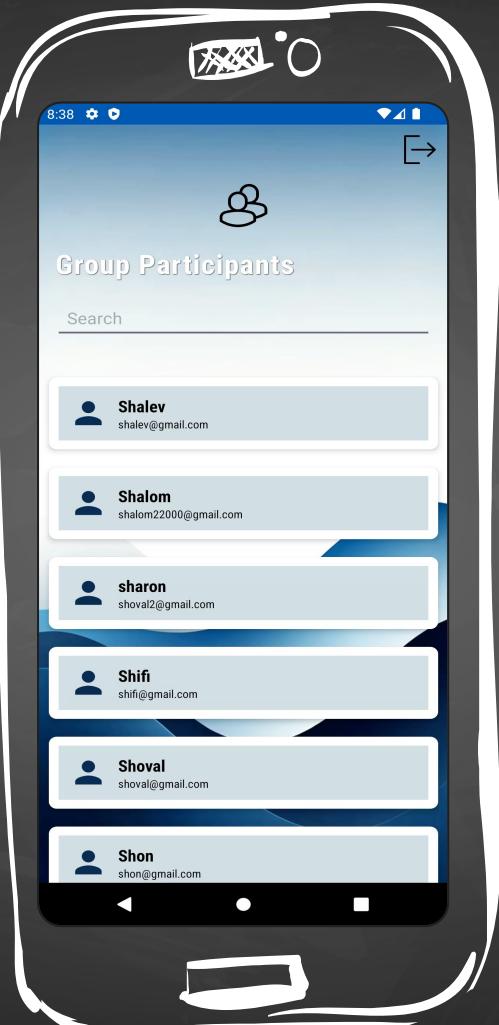




Profile

Users can access and edit their own profiles through the course main activity.

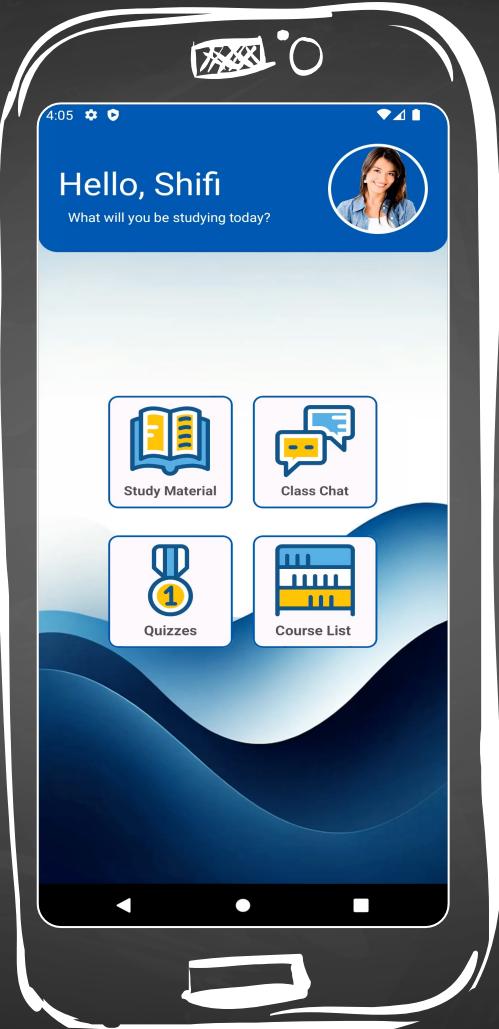
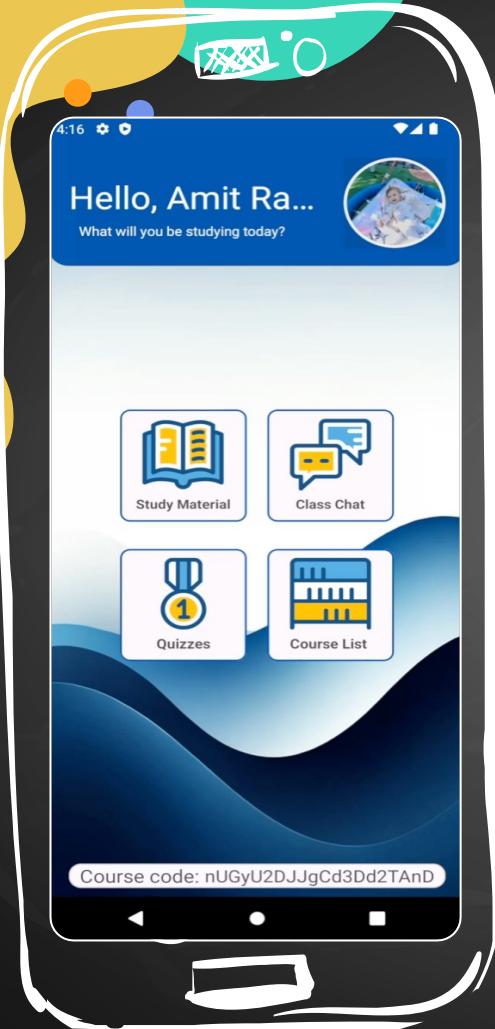
Users can access others' profile through the chat student list.



Chats

Users can search for their course-mates via a search bar and start chatting with them.

They can also chat using a group chat.



Quiz

Teachers can create quizzes and publish them to students.

Students can answer quizzes and receive a score.



Study Material

Teachers can upload
study materials.

Students can
download the files.



06

Changes & Gaps

What have we missed?



Authentication Using Third Party apps



Thank You!

Thank you for listening to us.

