



فُنْصَت

آذانٌ لك صاغية



# MONSET



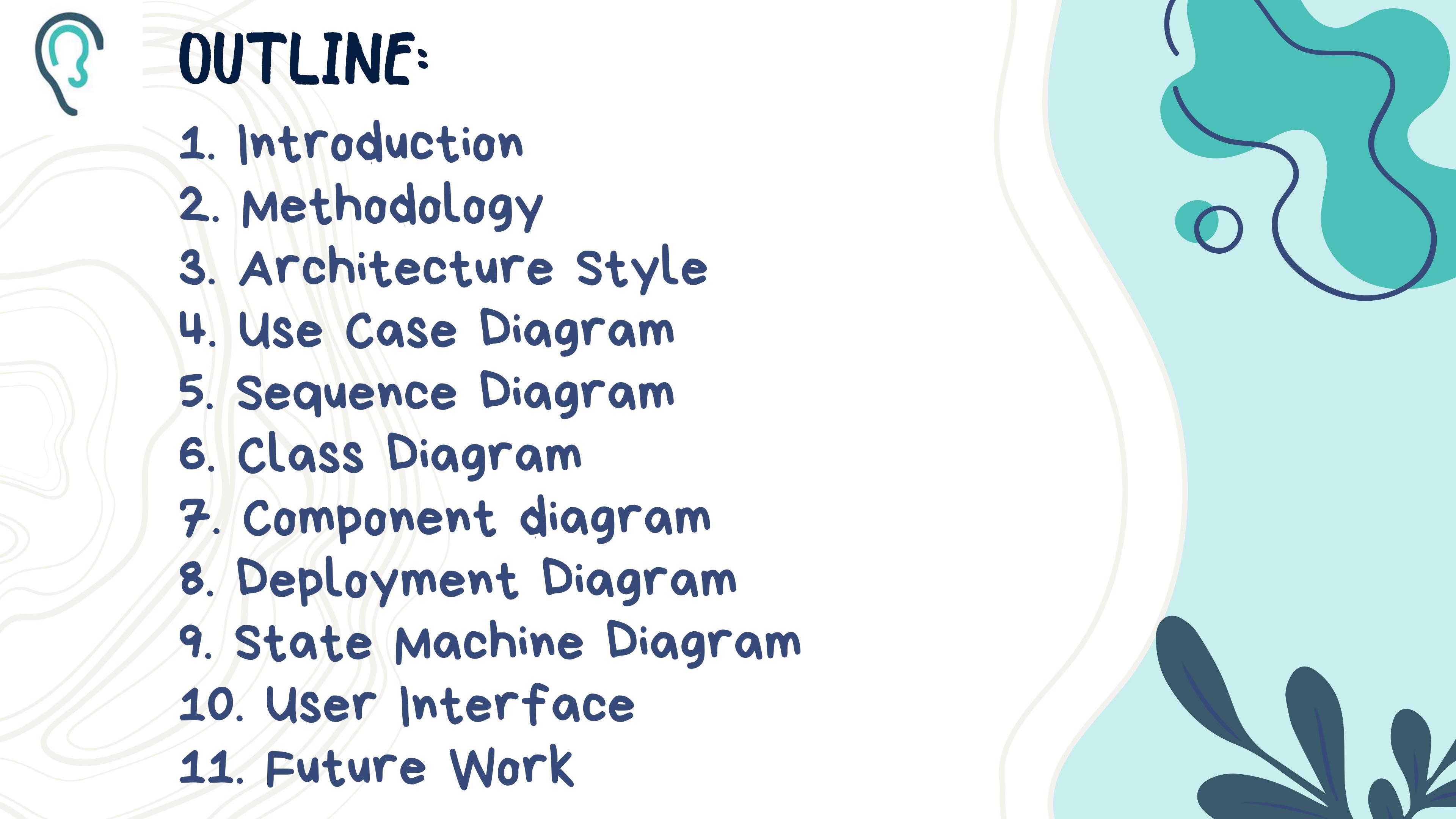
Prepared by:

GROUP#5 / 46475

Albatoul Alkahlan      Daniah Alkathiri

Ghala Alsugair      Omaima Rahhal

Suhad Aljuraysh



# OUTLINE:

1. Introduction
2. Methodology
3. Architecture Style
4. Use Case Diagram
5. Sequence Diagram
6. Class Diagram
7. Component diagram
8. Deployment Diagram
9. State Machine Diagram
10. User Interface
11. Future Work



# INTRODUCTION

**Driven by a shared desire to make a meaningful impact in the lives of deaf individuals and contribute to making their daily experiences easier and more inclusive, MONSET is an application that works by artificial intelligence to facilitate direct engagement with the deaf community, offering them holistic assistance. This app significantly bolsters the deaf community's involvement across various spheres of our society, including professional, academic, familial, and beyond.**





# METHODOLOGY

In the Monset App, we utilized the Agile methodology due to its valuable benefits, including:

- Flexibility,
- Customer satisfaction
- Enhanced collaboration.

These advantages empower the Monset team to deliver incremental value with each sprint. The iterative nature of Agile allows for swift feedback loops, enabling us to adapt and make necessary refinements throughout the development journey.

Iteration number	Module/subsystem	duration
1	Registration, Community, Sign language video translator	30 days
2	Text/audio translator, Avatar	17 days

Table 3: Monset iteration plan

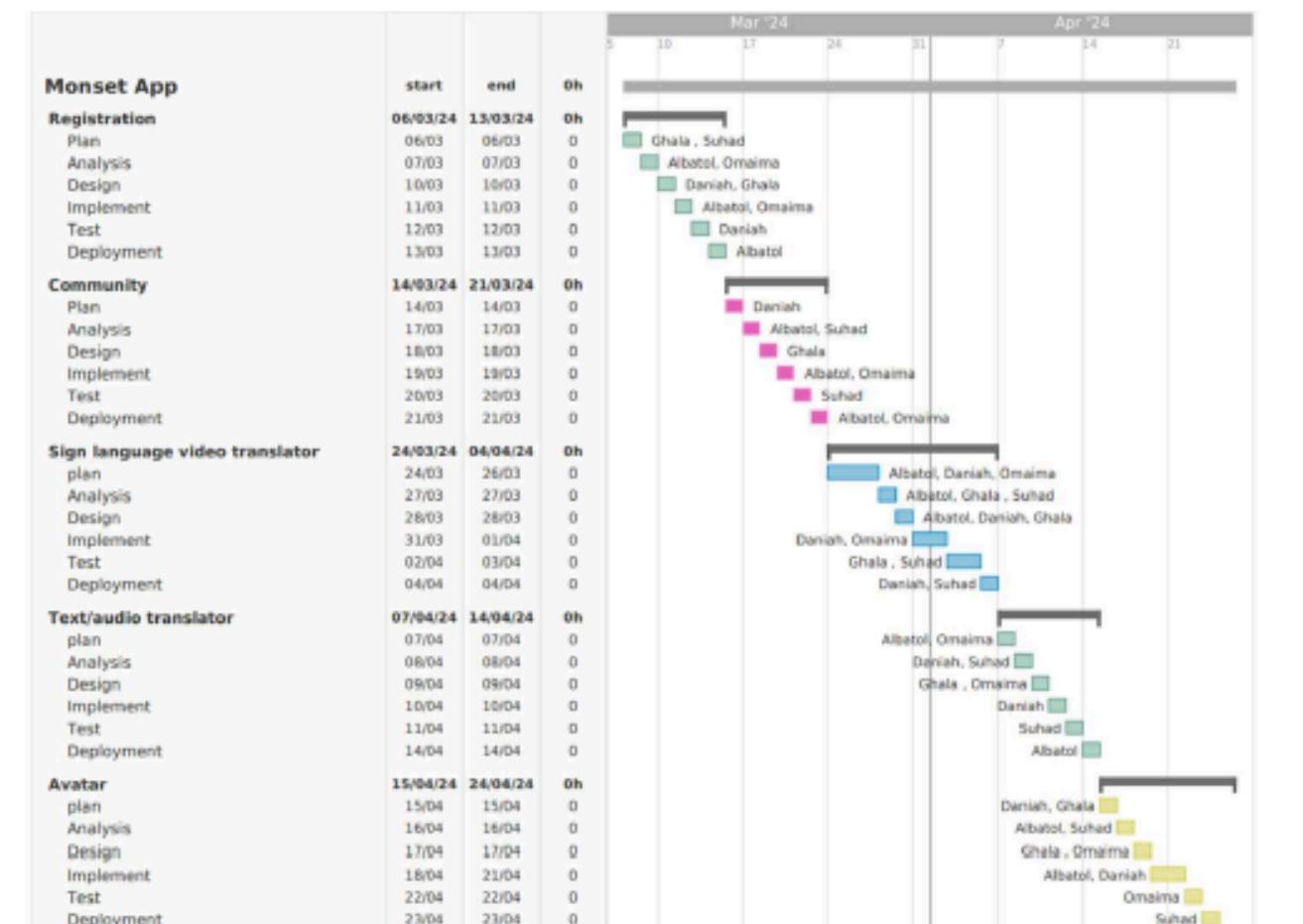


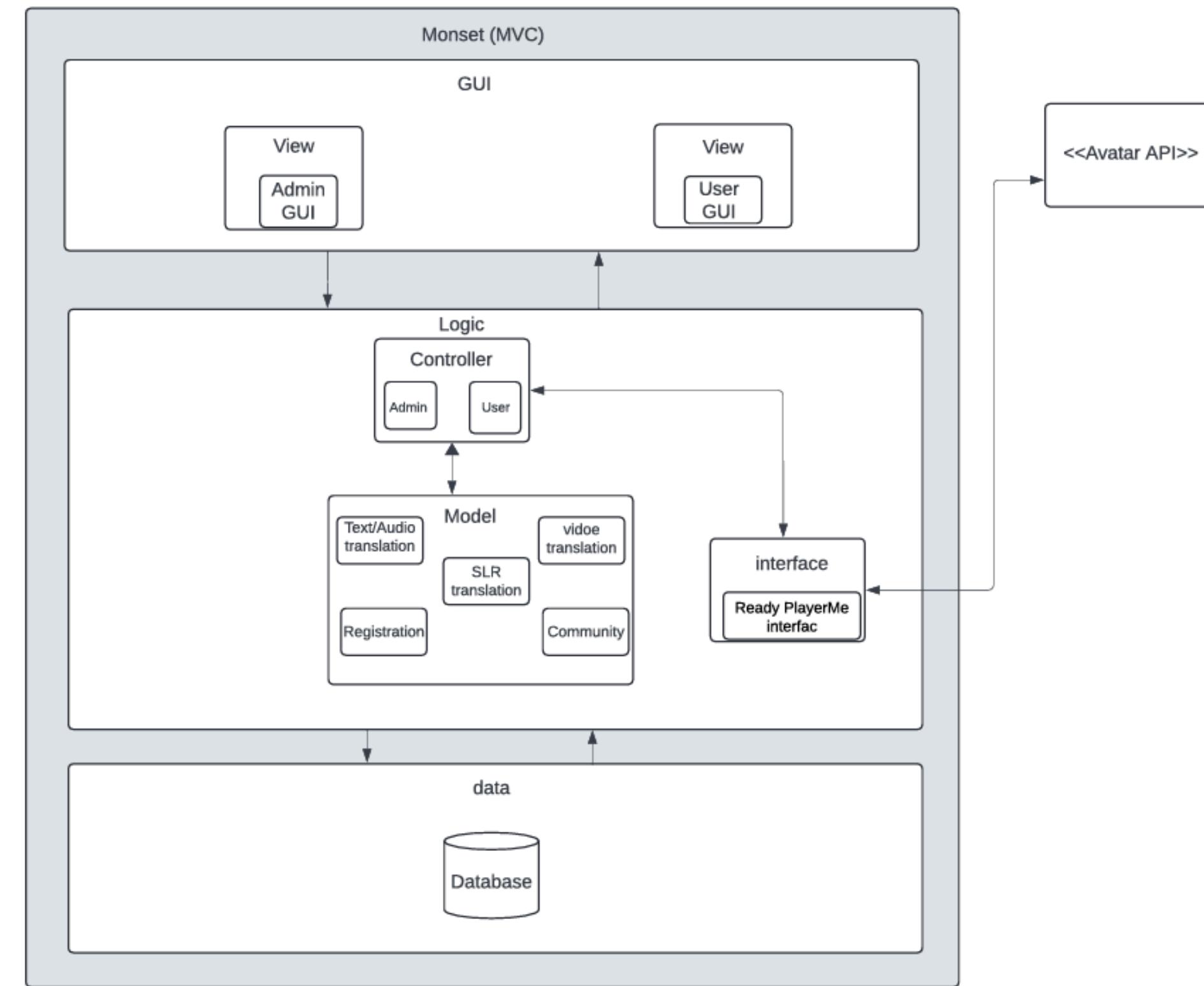
Figure 2: Gant chart applying Agile methodology plan for Monset app.



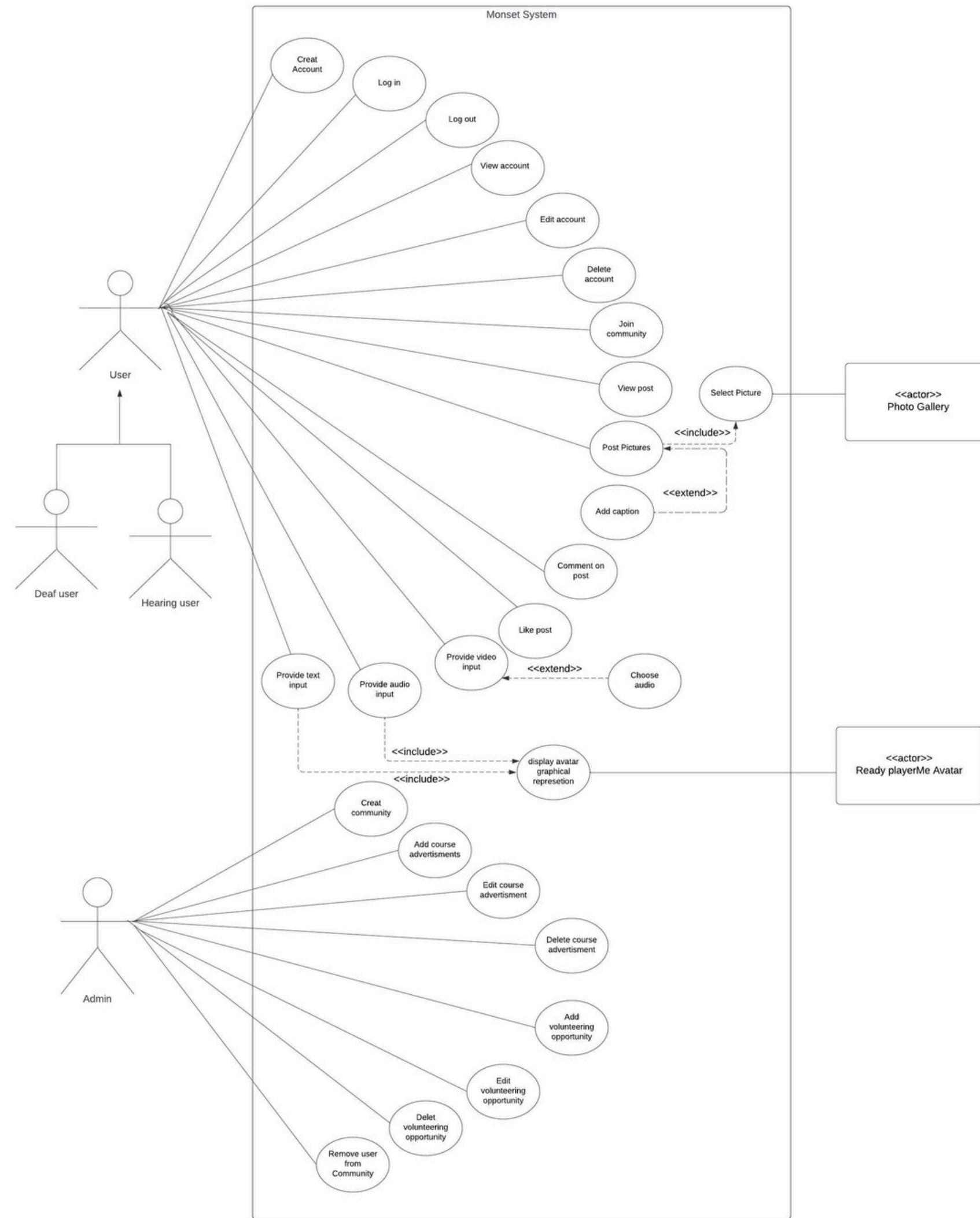
# Architecture Style

THE ARCHITECTURAL APPROACH FOR MONSET INTEGRATES THE MODEL-VIEW-CONTROLLER (MVC) STYLE WITH A 3-TIER DISTRIBUTED ARCHITECTURE. MVC DIVIDES THE APPLICATION INTO MODEL, VIEW, AND CONTROLLER COMPONENTS, ENSURING CLEAR SEPARATION OF CONCERNS AND ENHANCING MAINTAINABILITY AND SCALABILITY. THIS APPROACH OFFERS SEVERAL ADVANTAGES, INCLUDING SIMPLIFIED CODE ORGANIZATION, FLEXIBILITY FOR FUTURE ENHANCEMENTS, AND EFFICIENT RESOURCE UTILIZATION. THE 3-TIER DISTRIBUTED ARCHITECTURE FURTHER ENHANCES SCALABILITY AND RESILIENCE BY SEPARATING PRESENTATION, APPLICATION PROCESSING, AND DATA MANAGEMENT LAYERS. THIS HYBRID APPROACH ENSURES MONSET REMAINS MODULAR, SCALABLE, AND MAINTAINABLE WHILE PROVIDING A SEAMLESS USER EXPERIENCE ACROSS DIFFERENT PLATFORMS.

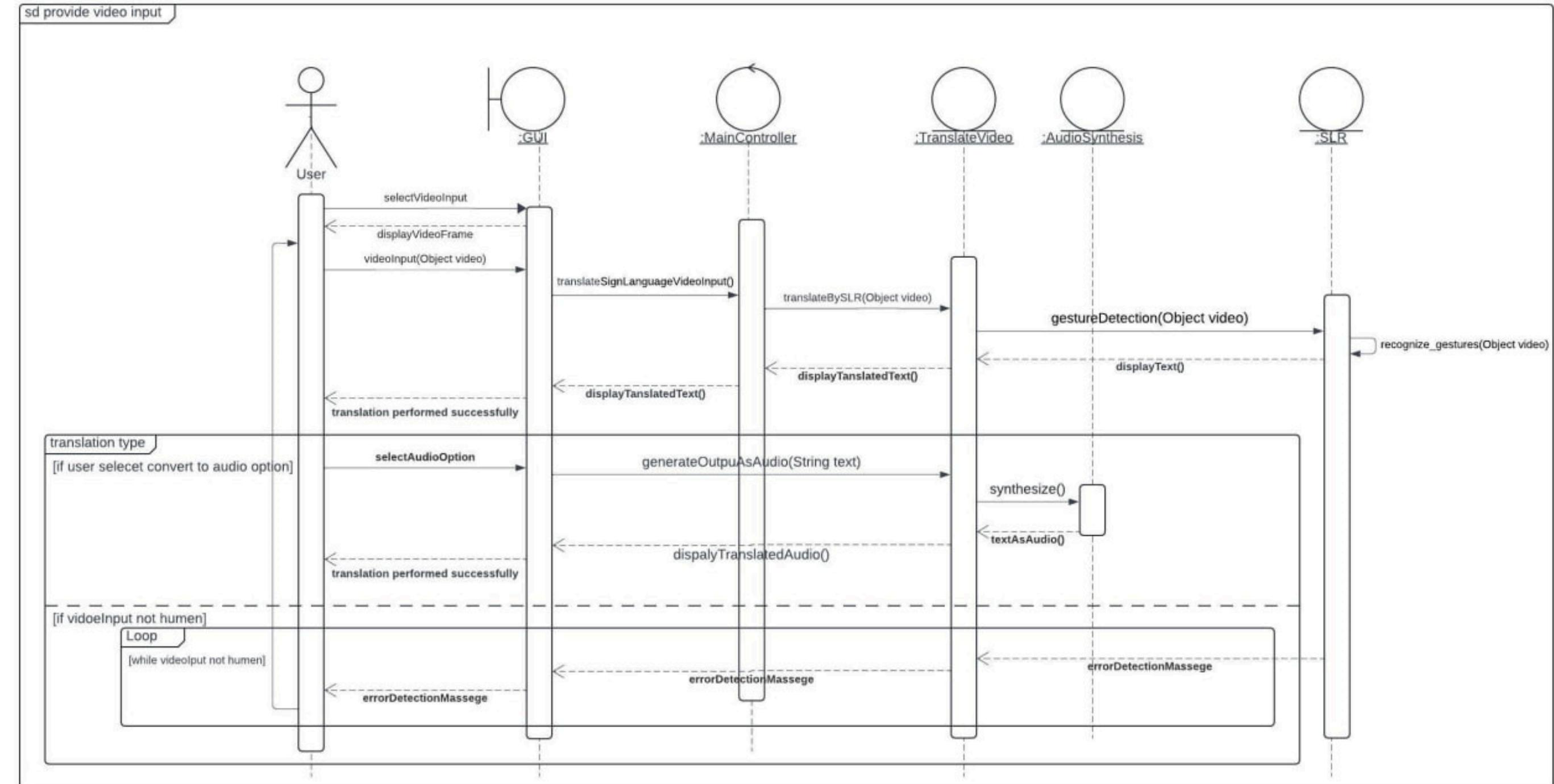
# HIGH LEVEL DIGRAM



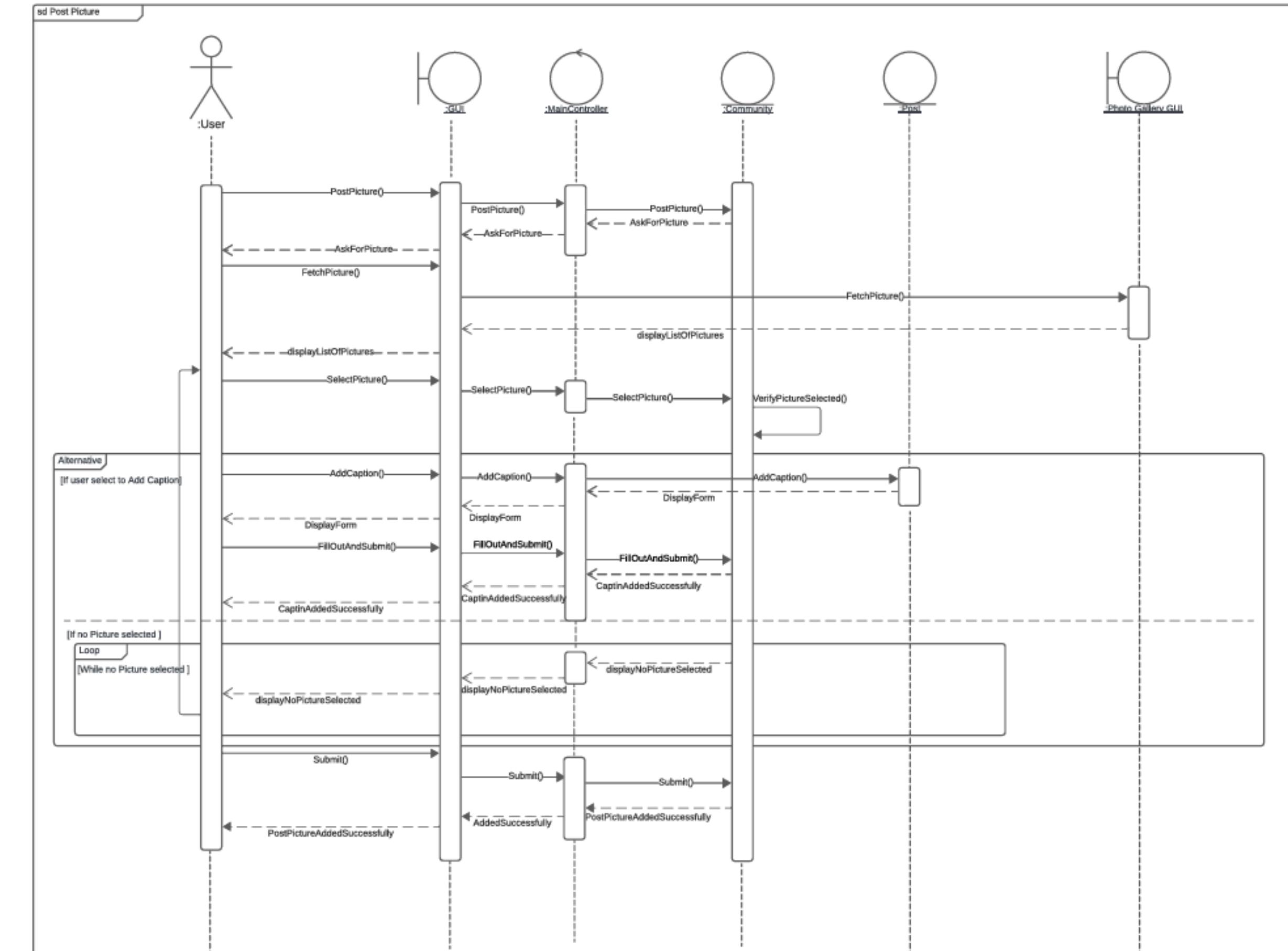
# Use Case Diagram



# Sequence Diagram#1

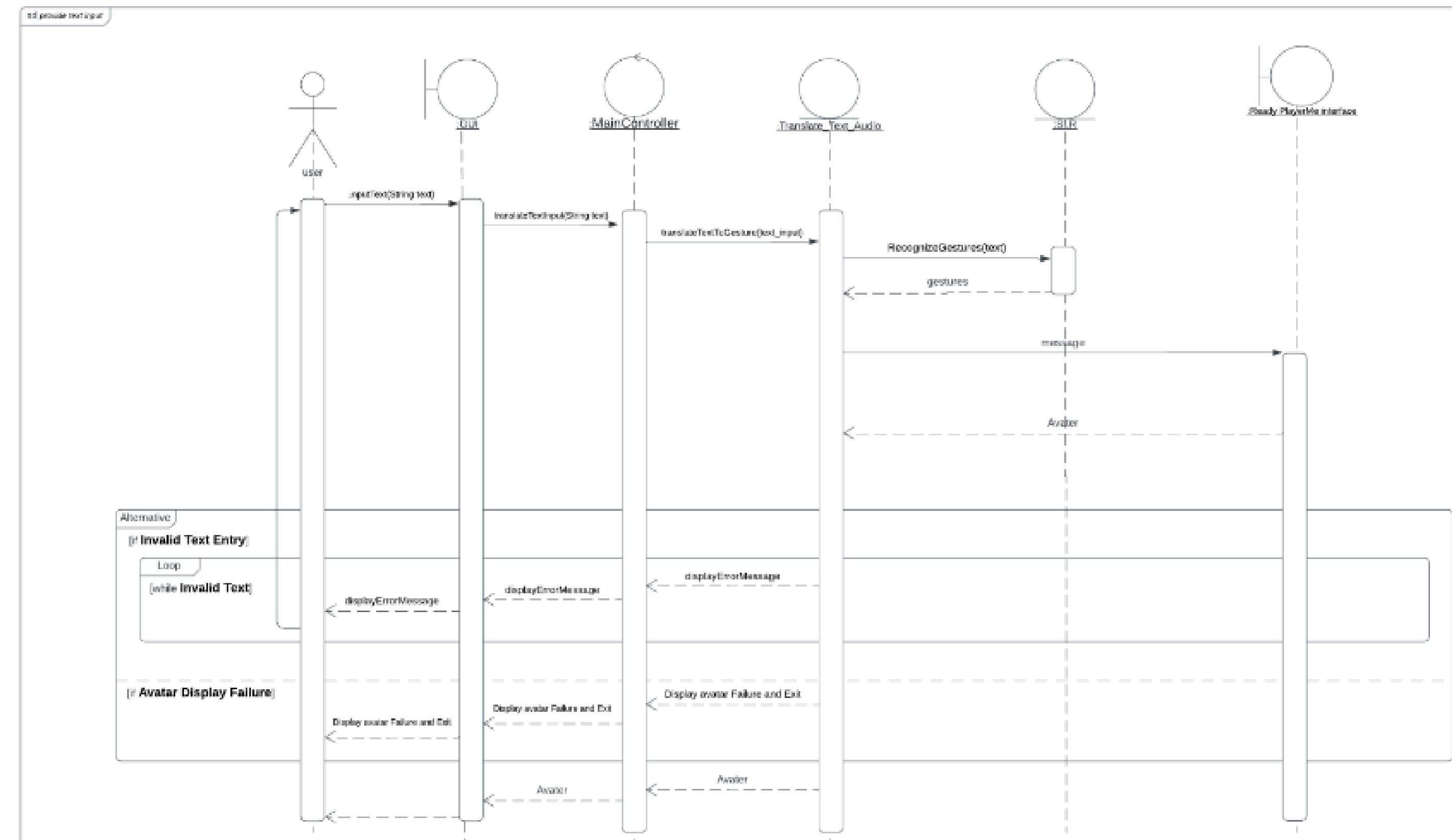


# Sequence Diagram#2

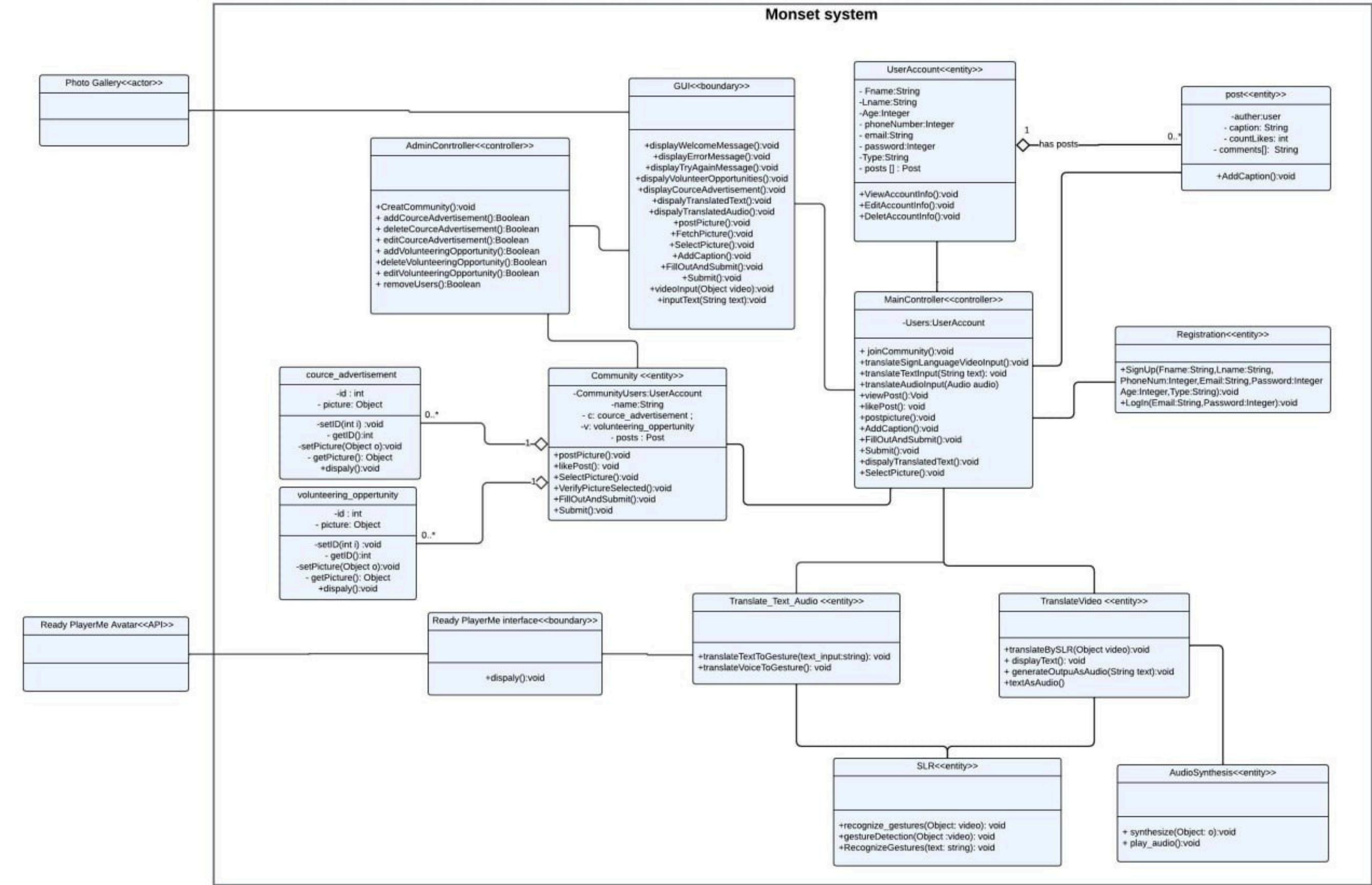




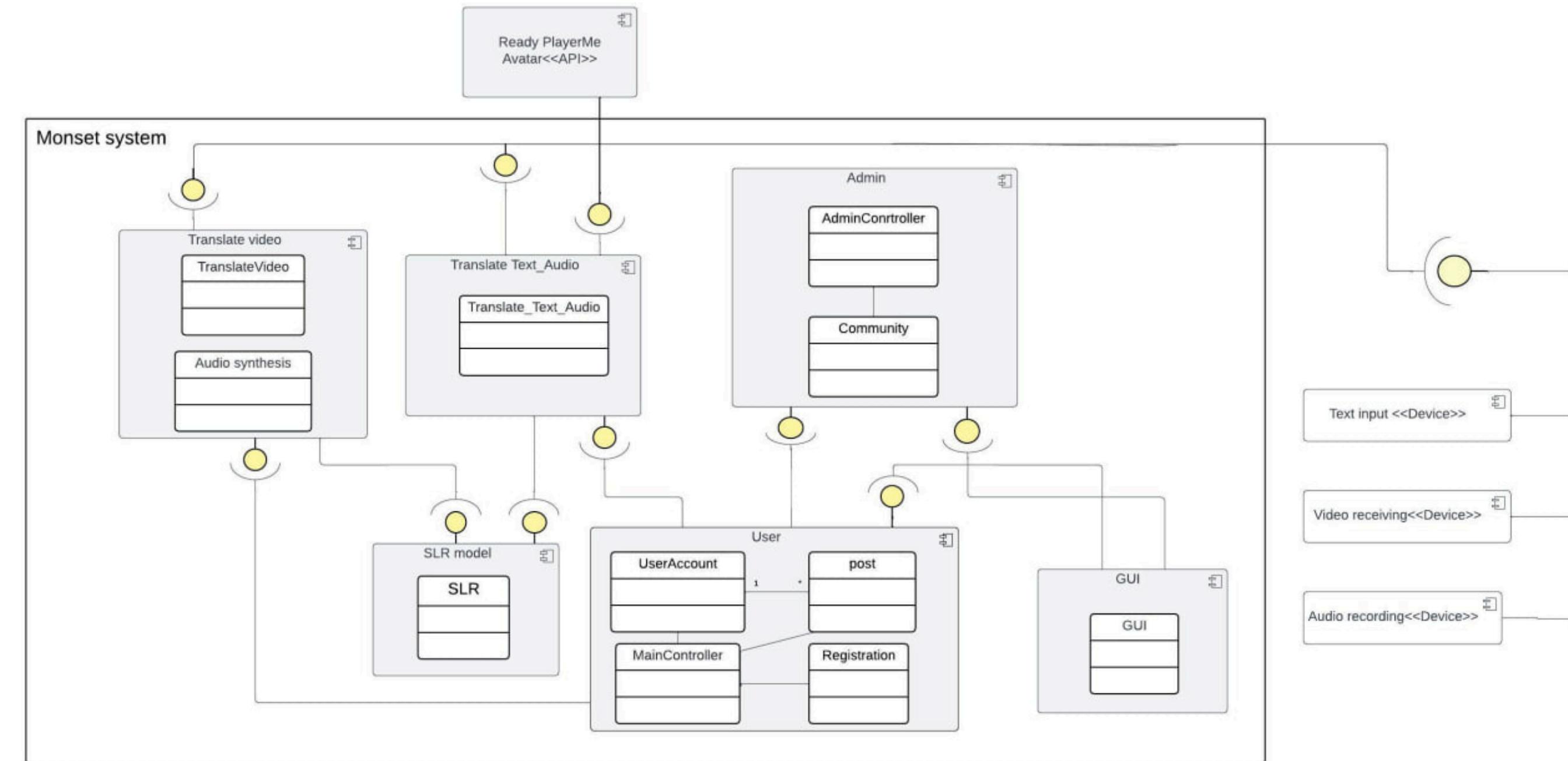
# Sequence Diagram#3



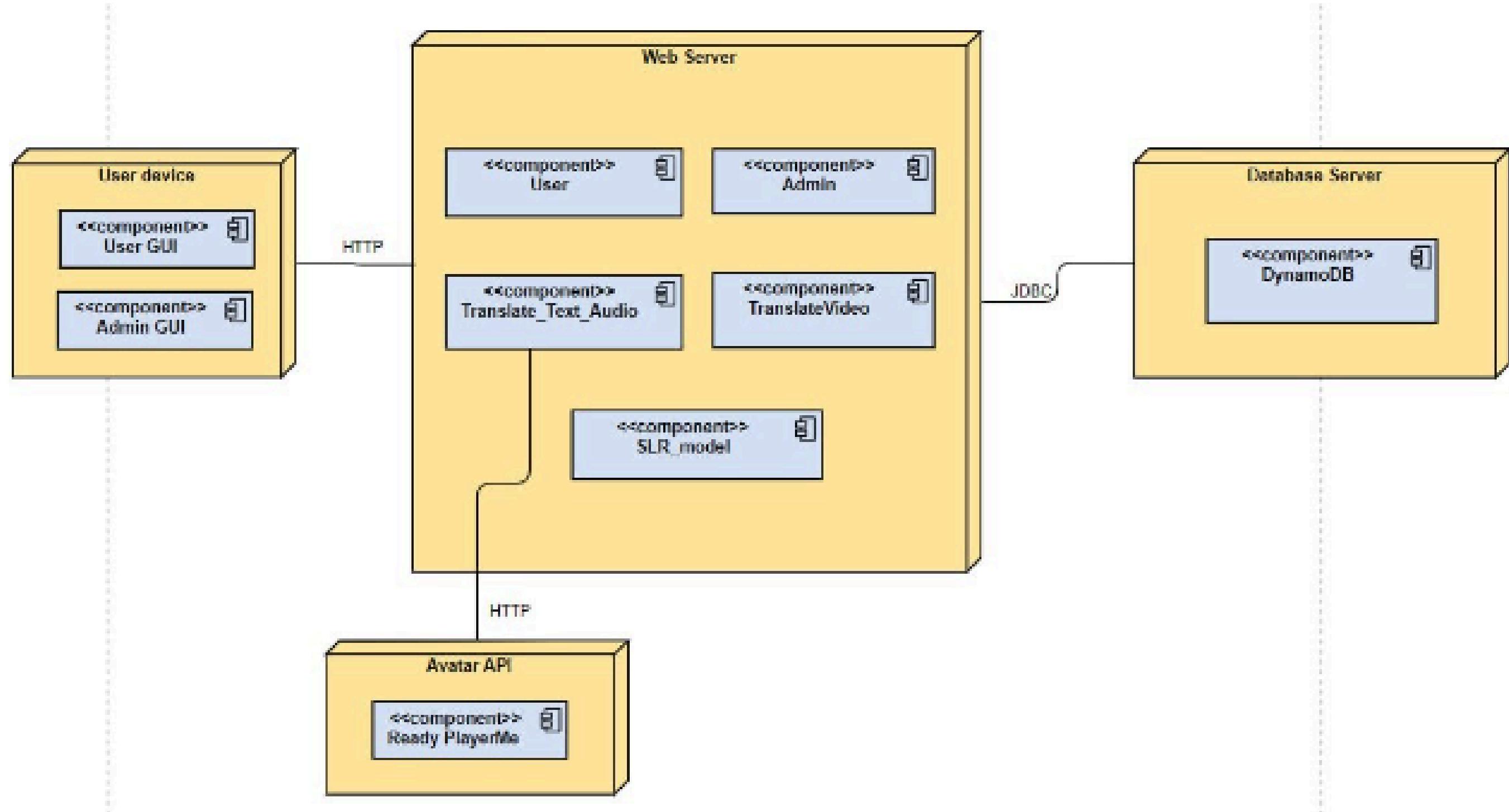
# Class Diagram



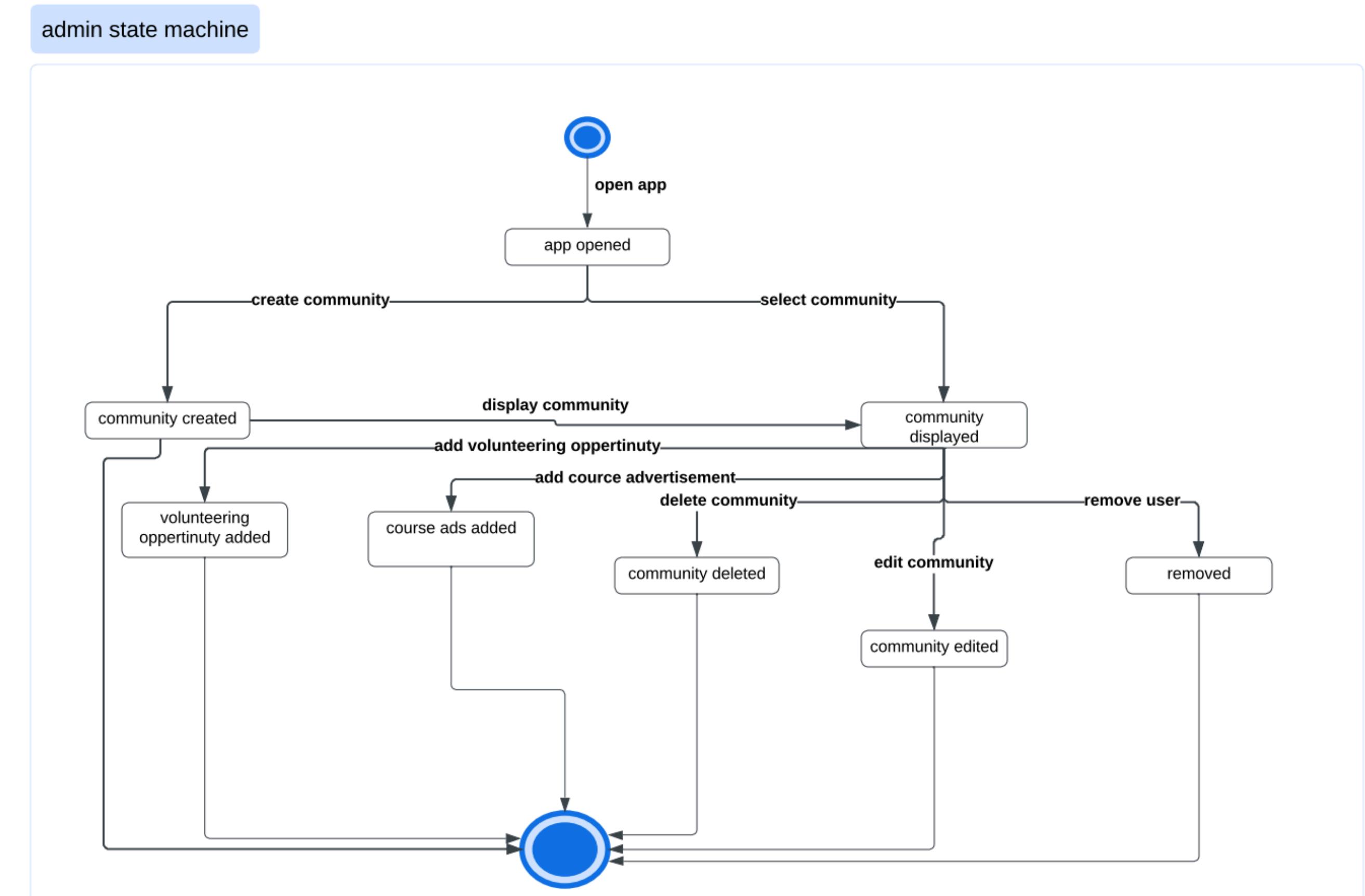
# Component Diagram



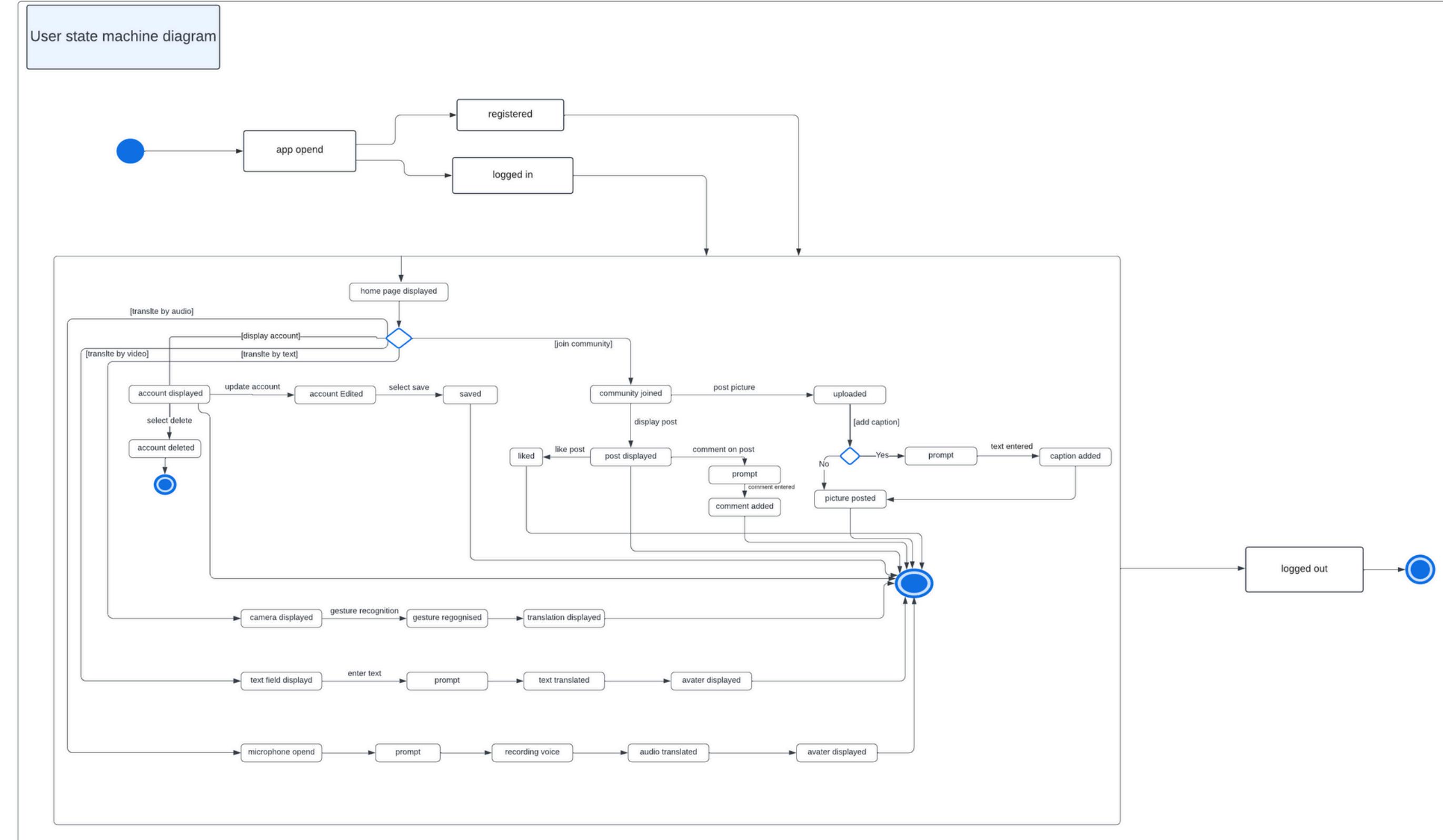
# Deployment Diagram

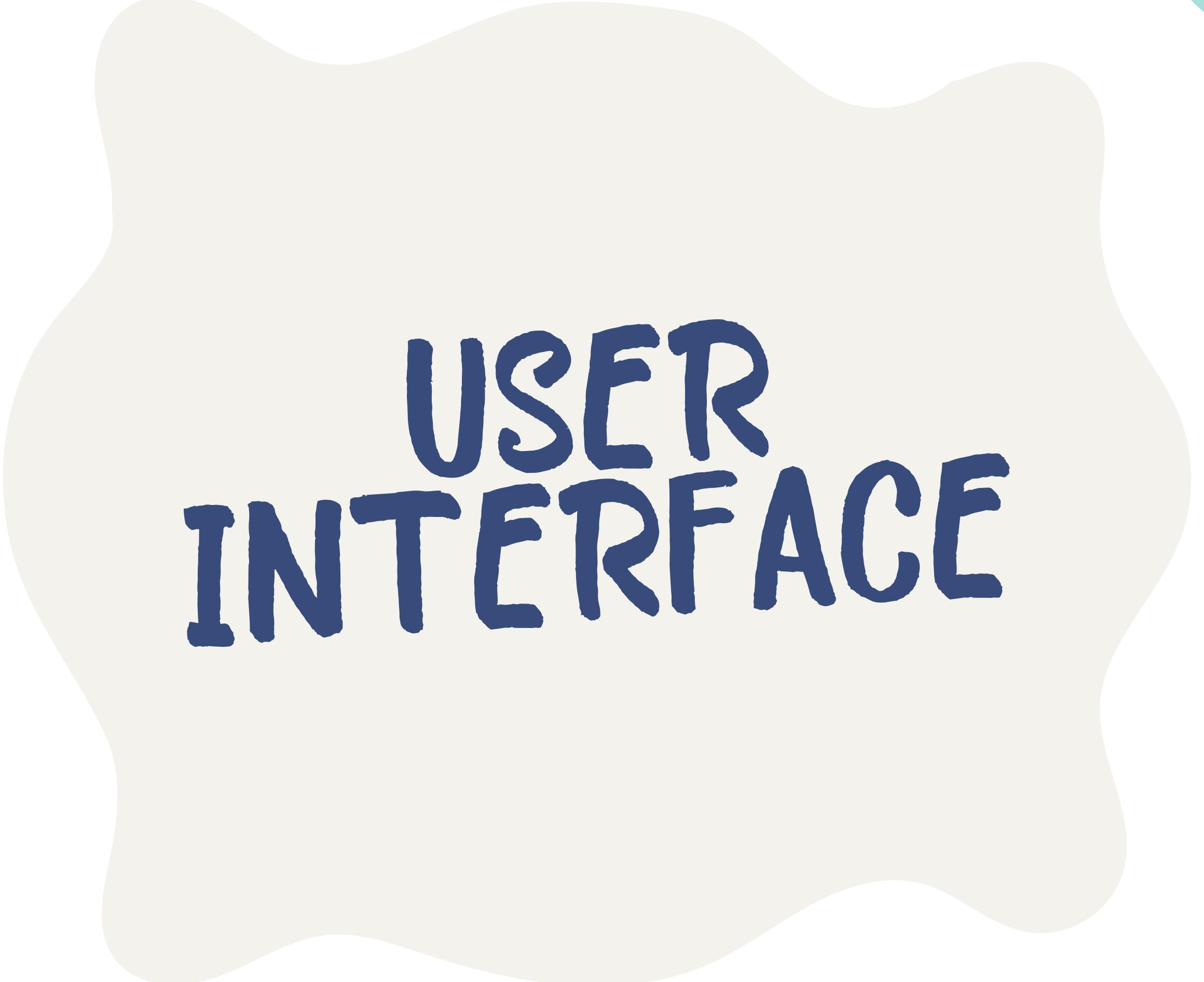


# State Machine Diagram (ADMIN)



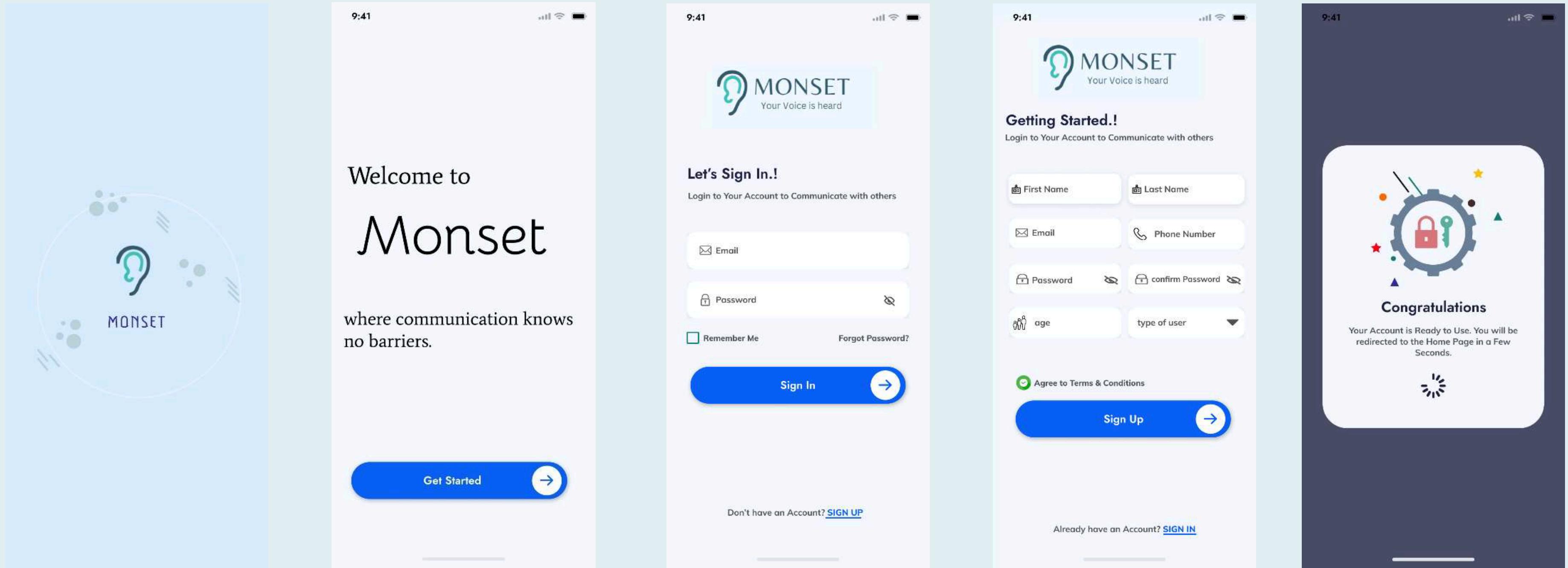
# State Machine Diagram (USER)



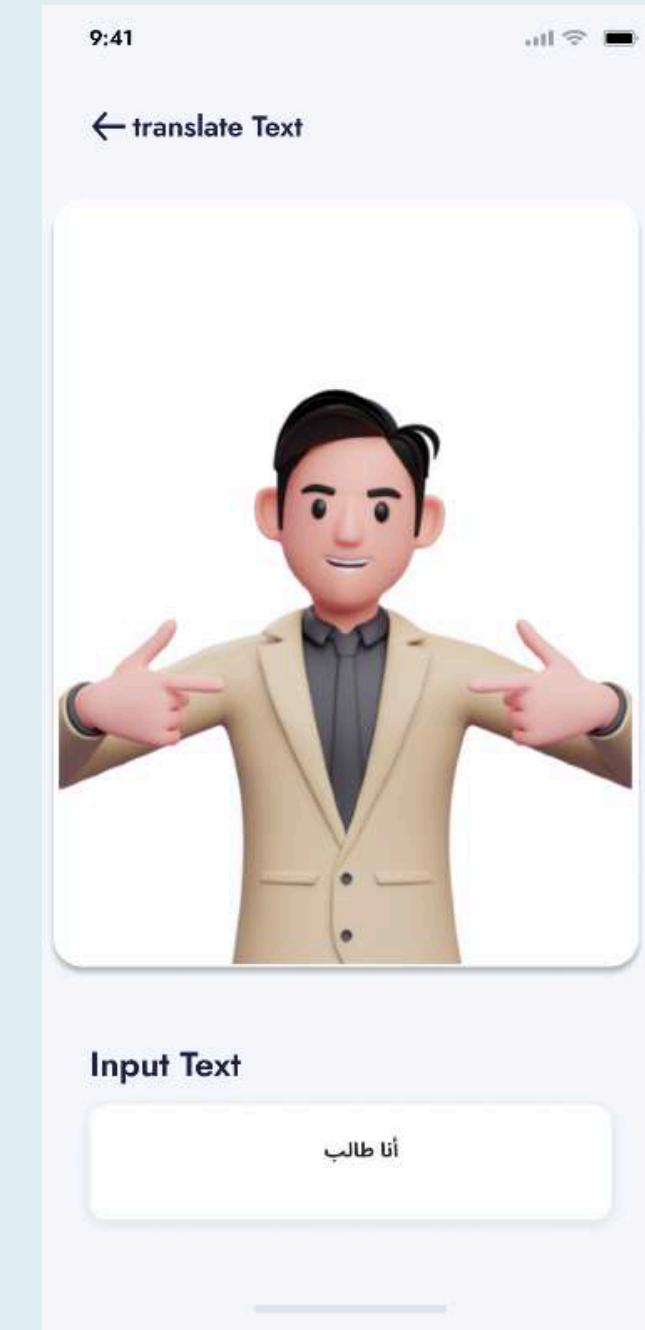
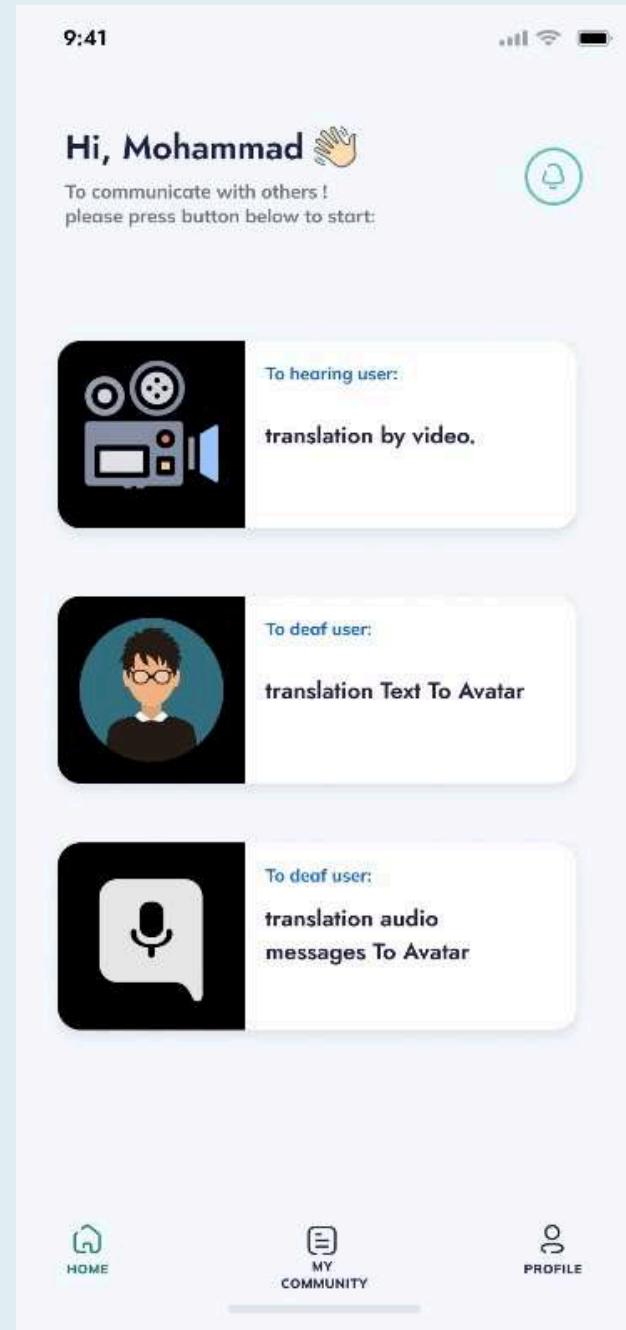


# USER INTERFACE

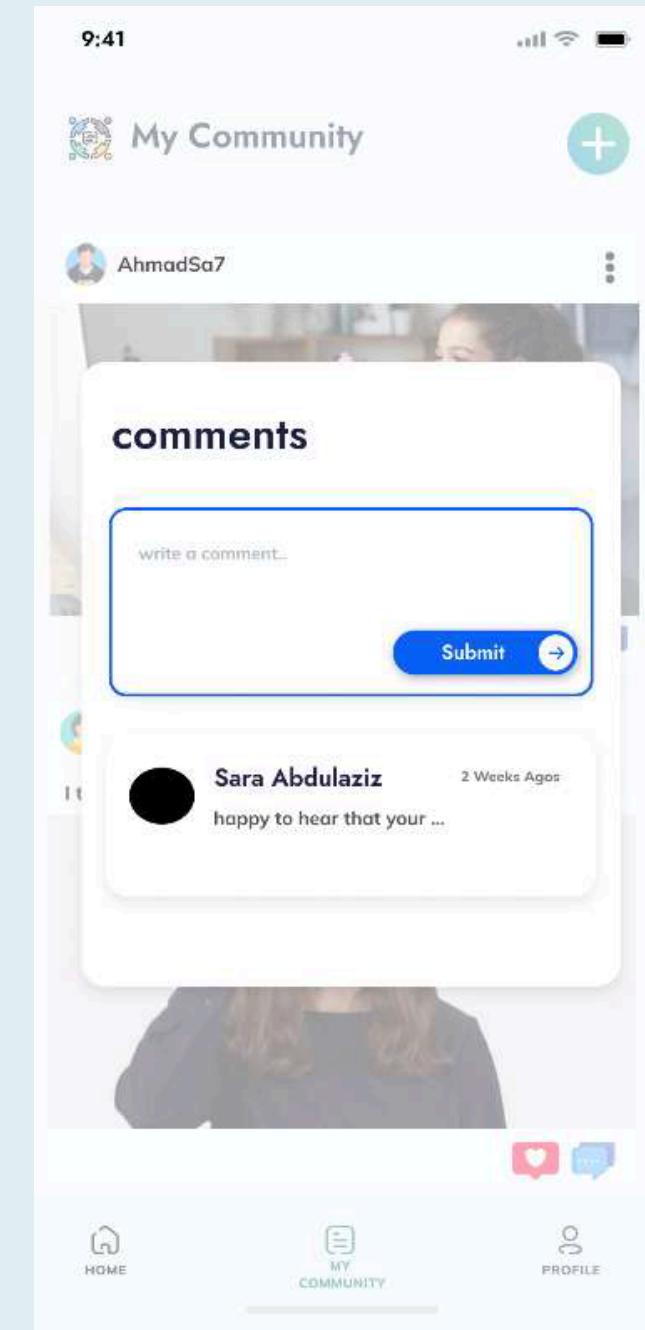
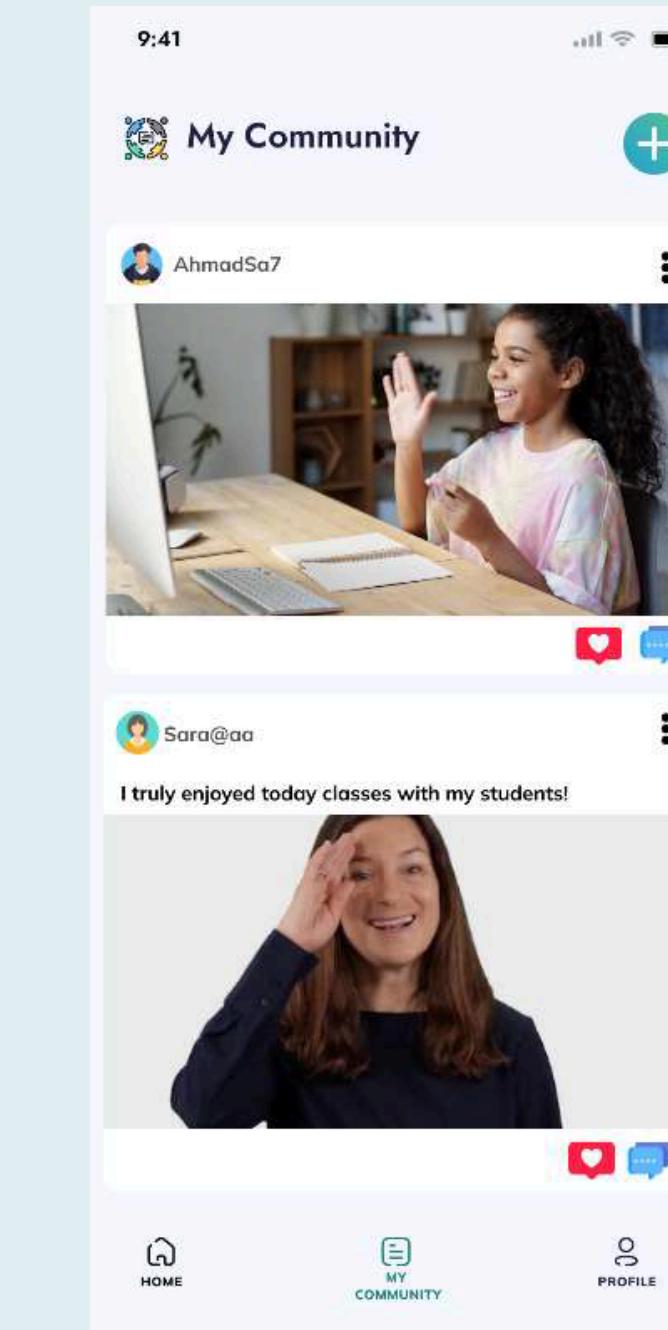
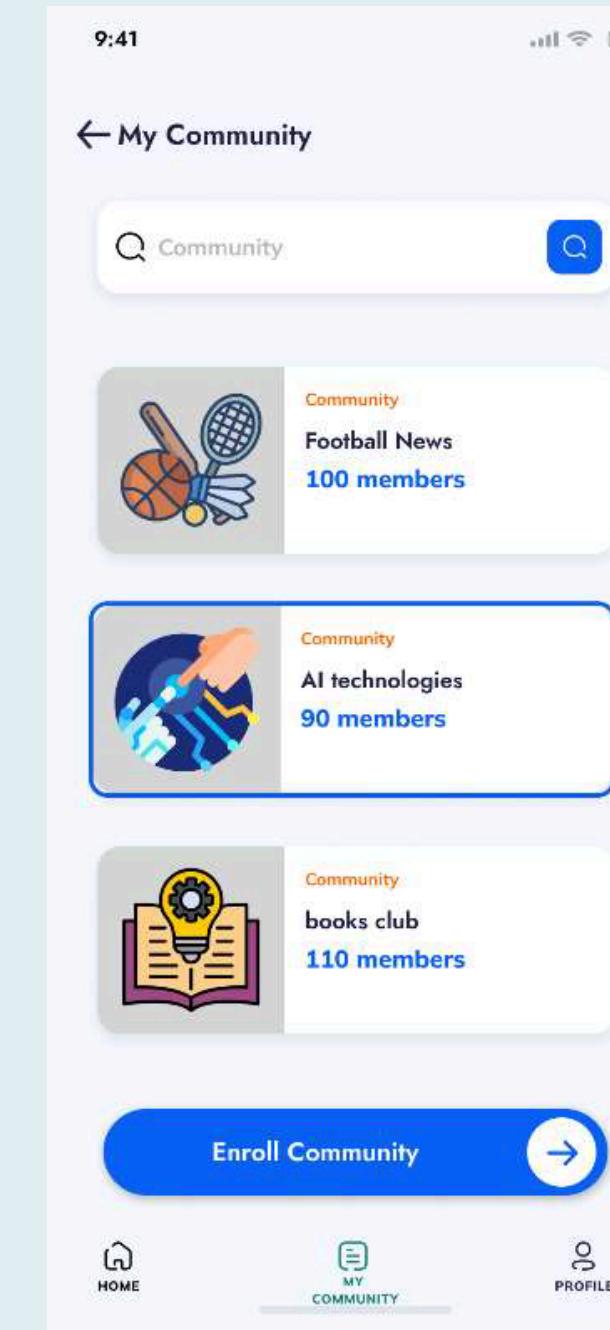
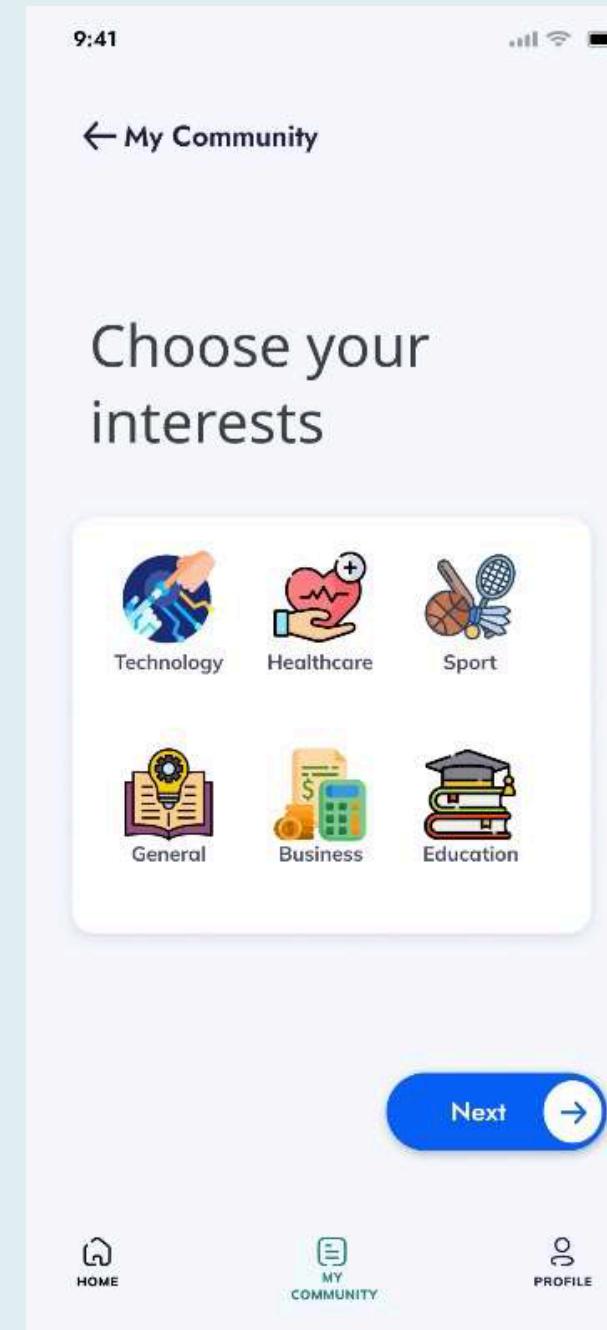
# REGISTRATION & LOG IN



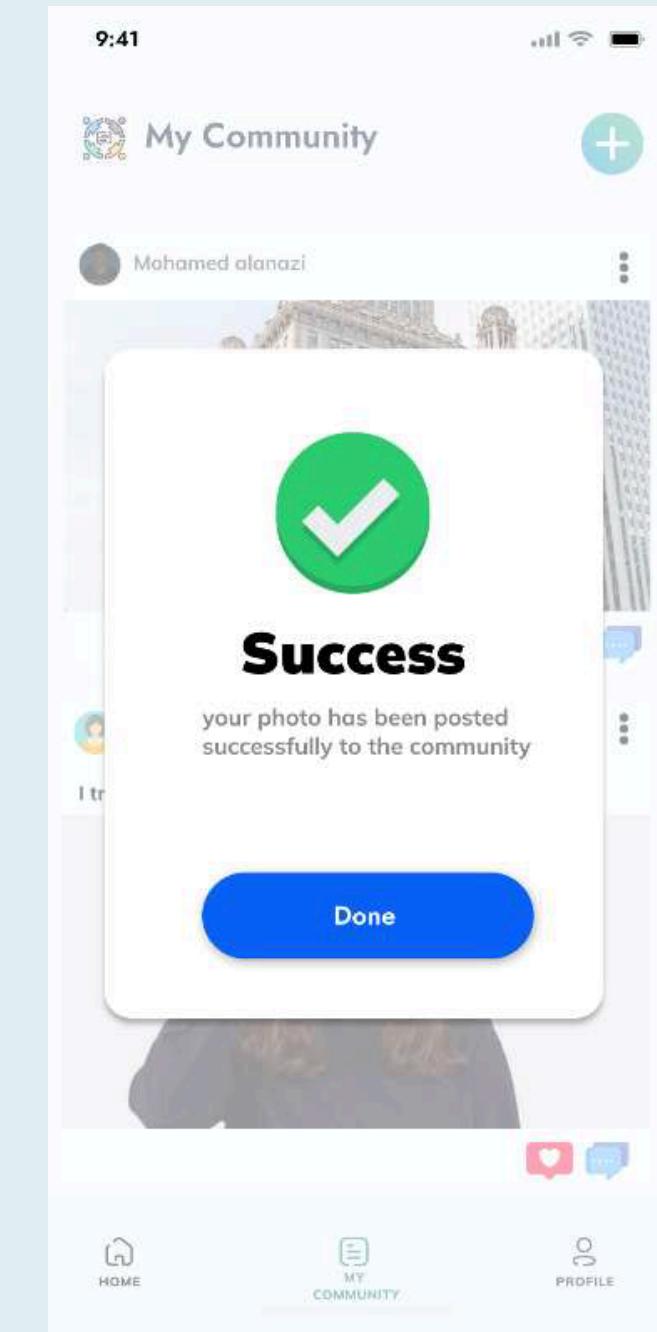
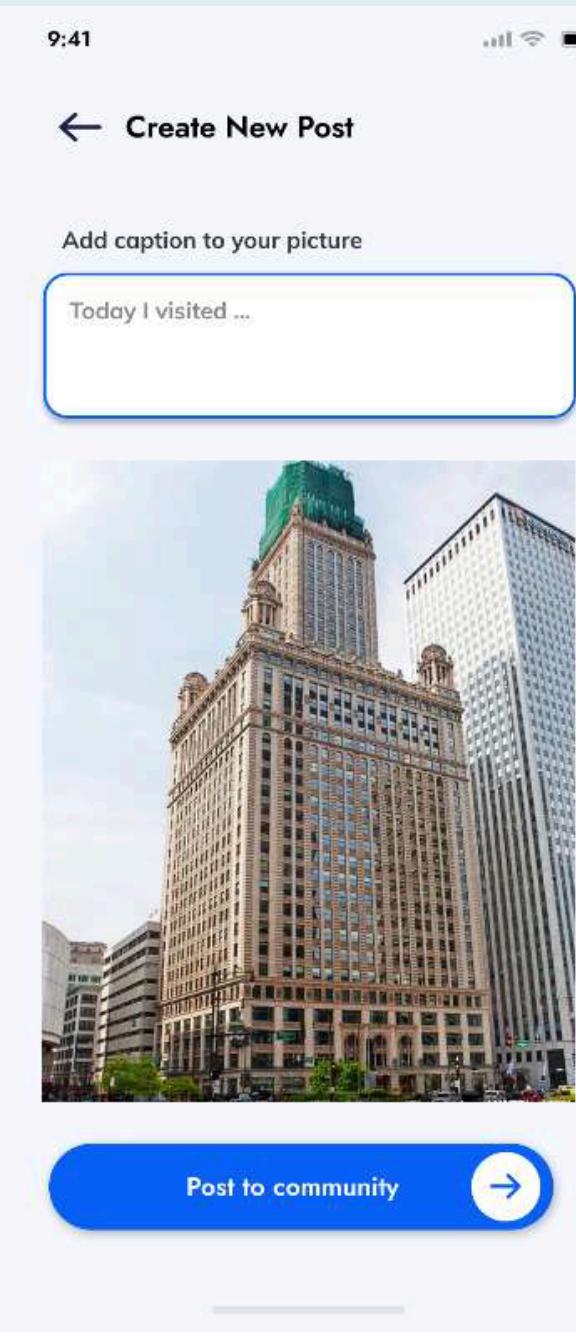
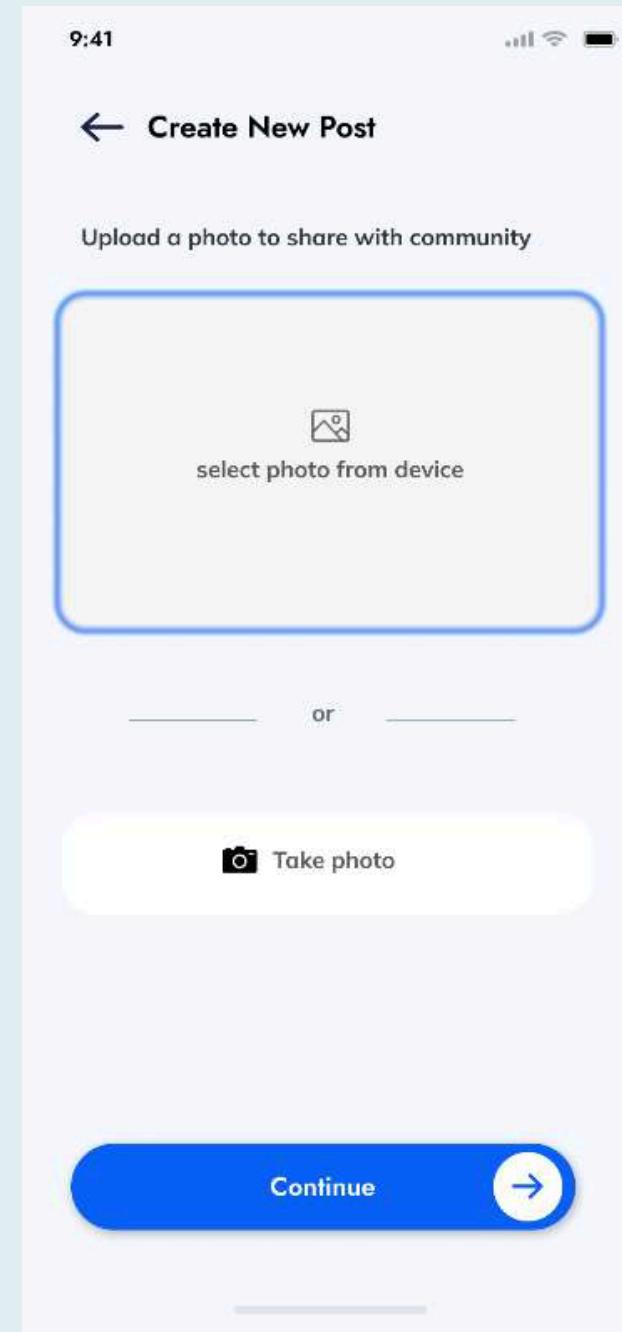
# TRANSLATION PROCESSING



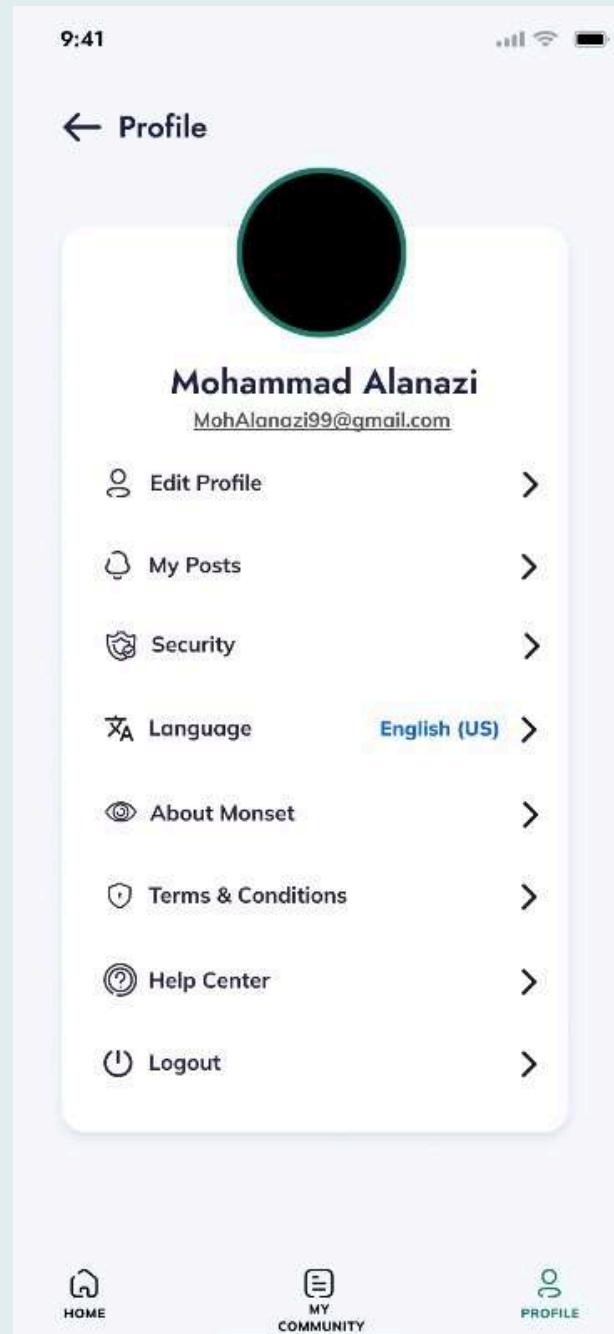
# COMMUNITIES



# COMMUNITIES



# PROFILE SETTINGS



This screen shows the "Edit Profile" page. It includes a placeholder for a profile picture and fields for personal information:

- First Name: Mohammad
- Last Name: Alanazi
- Email: MohAlanazi99@gmail.com
- password: (redacted)
- Phone Number: (+966) 59-784-1225
- Age: 25
- Type of user: hearing

At the bottom, there are two buttons: "Delete account" (red) and "Update" (blue).

This screen shows a confirmation dialog for deleting the account. It includes a placeholder for a profile picture and the following text:

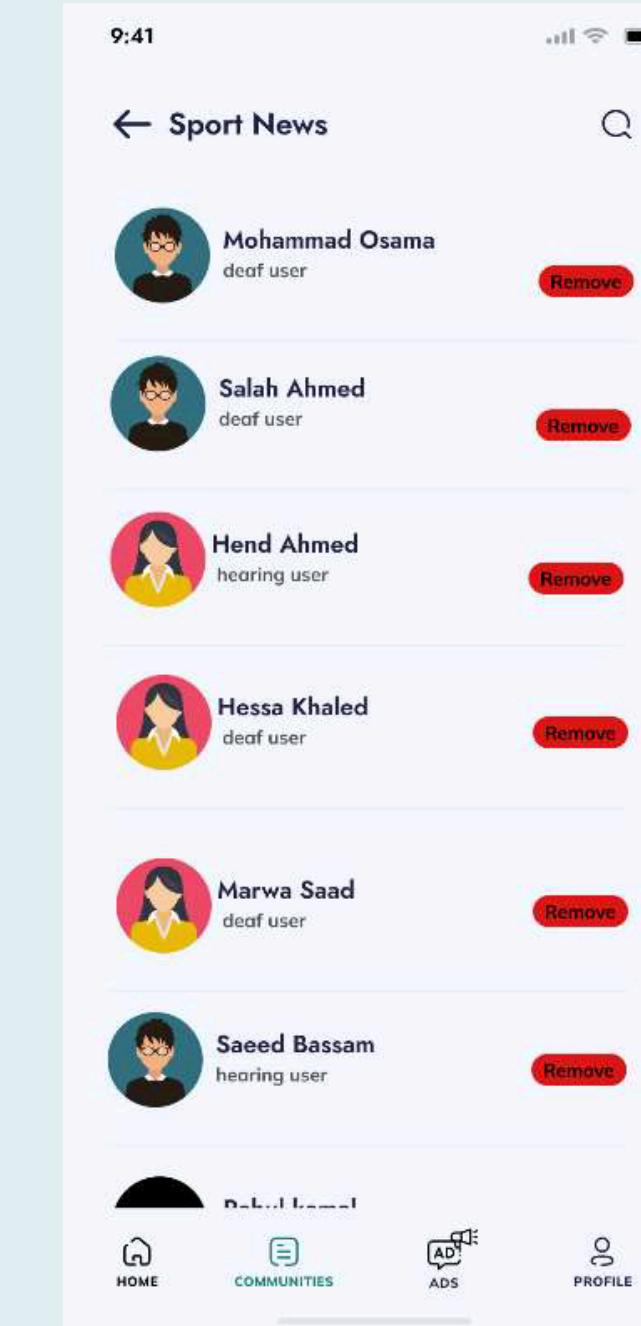
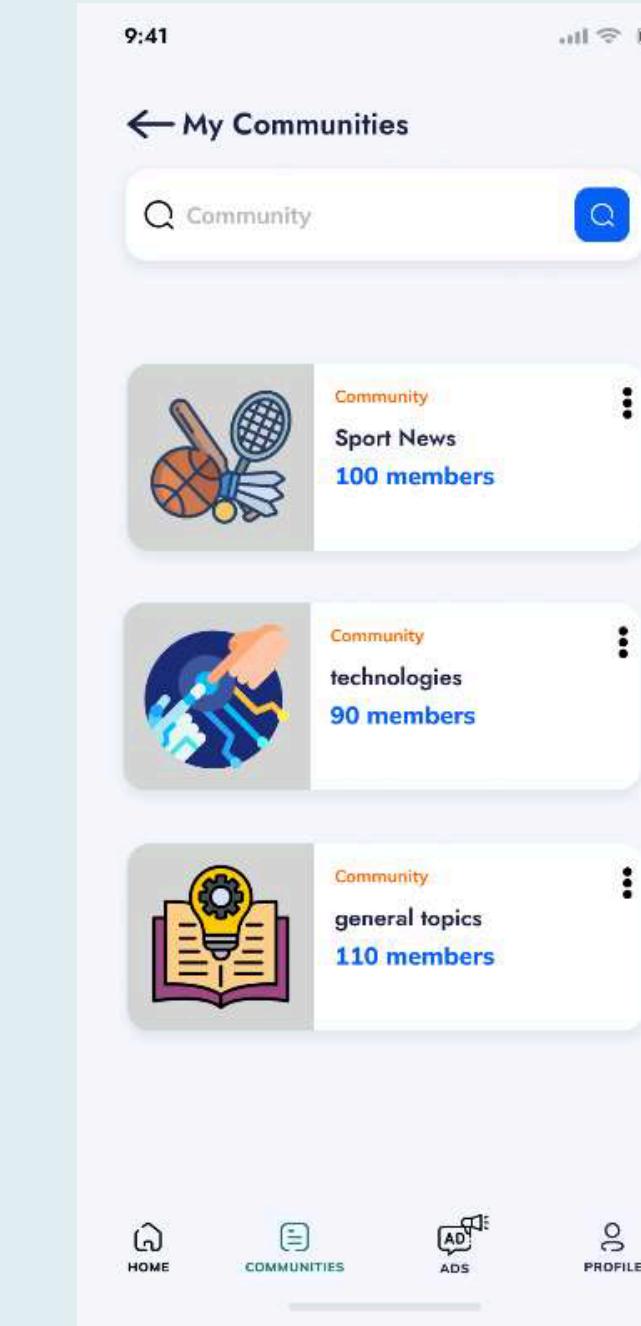
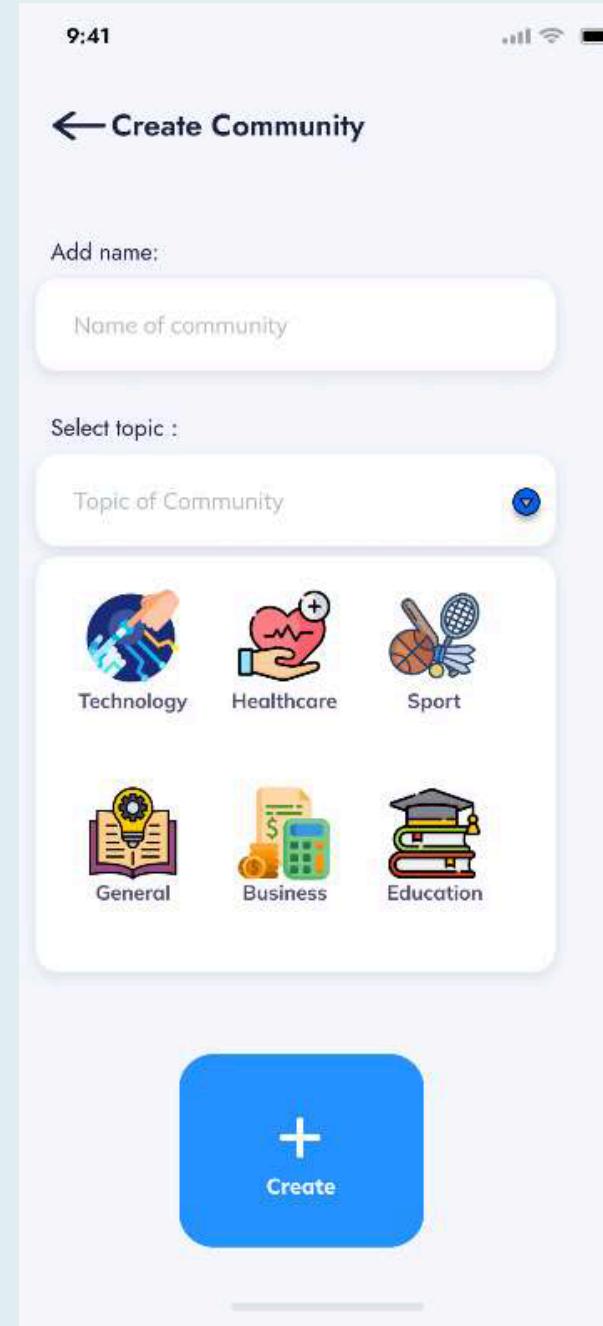
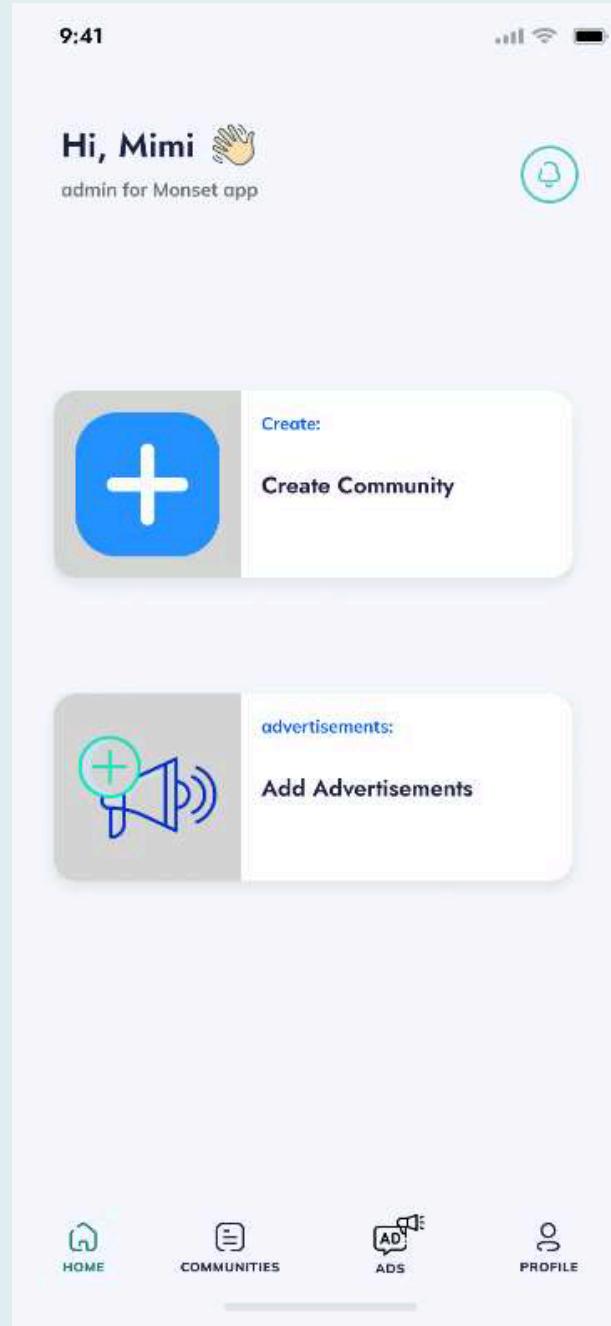
**Delete Account**  
deleting your account will remove all of your information from our database

password: (redacted)

At the bottom, there are three buttons: "Cancel" (light blue), "Delete" (red), and "Delete" (blue).

# Admin INTERFACE

# COMMUNITY SETTINGS



# ADVERTISEMENTS & COURSES

The screenshots illustrate the user interface for managing advertisements and courses on a mobile application.

**Screenshot 1: Add Advertisement**

- Add name: Name of Advertisements
- Add topic: Topic of Advertisements
- Type of Advertisements:
  - Select Type of Advertisements
    - Course Advertisements (Icon: video camera)
    - volunteering Advertisements (Icon: hands)
- Add Link: Link of Advertisements
- Add type Of Users: Type of Users
- Add** button

**Screenshot 2: My ADS**

- Search ADS
- Course (selected) and Volunteering tabs
- List of advertisements:
  - Course: sign language course, hearing user, Link: <https://signLanguageCourse.com>
  - Course: digital skills course, deaf user, Link: <https://defaction.org/courses/digital-skills-training>
  - Course: English course, deaf user, Link: <https://def.org.in/courses/>
- Bottom navigation: HOME, COMMUNITIES, ADS (selected), PROFILE

**Screenshot 3: My ADS**

- Search ADS
- Course and Volunteering tabs
- List of advertisements:
  - Volunteering: teaching sign language, hearing&deaf users, Link: <https://signLanguage.com>
  - Volunteering: Serving deaf patients, hearing&deaf users, Link: <https://serving.com>
- Bottom navigation: HOME, COMMUNITIES, ADS (selected), PROFILE

**Screenshot 4: Sign Language course**

- Add name: Sign Language course
- Add topic: Education
- Type of Advertisements:
  - Select Type of Advertisements
    - Course Advertisements (Icon: video camera)
    - volunteering Advertisements (Icon: hands)
- Add Link: <https://signLanguageCourse.com>
- Add type Of Users: hearing user
- Save** and **Delete** buttons

**Screenshot 5: Serving deaf patients**

- Add name: Serving deaf patients
- Add topic: Helping (Healthcare)
- Type of Advertisements:
  - Select Type of Advertisements
    - Course Advertisements (Icon: video camera)
    - volunteering Advertisements (Icon: hands)
- Add Link: <https://serving.com>
- Add type Of Users: hearing & deaf users
- Save** and **Delete** buttons



**FUTURE  
WORK**

## 1. ENHANCING THE ACCURACY OF SIGN LANGUAGE TRANSLATIONS:

- CONTINUOUS REFINEMENT OF SLR MODELS
- EXPANDING TRAINING DATASETS
- INTEGRATING ERROR CORRECTION MECHANISMS

## 2. BROADENING LANGUAGE SUPPORT:

- COLLABORATION WITH EXPERTS AND COMMUNITIES IN SIGN LANGUAGE LINGUISTICS
- EXPANDING LINGUISTIC COVERAGE BEYOND CURRENT OFFERINGS
- PROMOTING INCLUSIVENESS FOR USERS FROM VARIOUS REGIONS AND CULTURAL BACKGROUNDS

## 3. IMPLEMENTATION OF REAL-TIME FEEDBACK MECHANISMS:

- OFFERING IMMEDIATE GUIDANCE AND ASSISTANCE DURING SIGN LANGUAGE TRANSLATION
- FEATURES LIKE INSTANT CORRECTIONS, ALTERNATIVE SIGN SUGGESTIONS, AND INTERACTIVE LEARNING TOOLS

Thank You  
For  
Listening

