



CSE-360

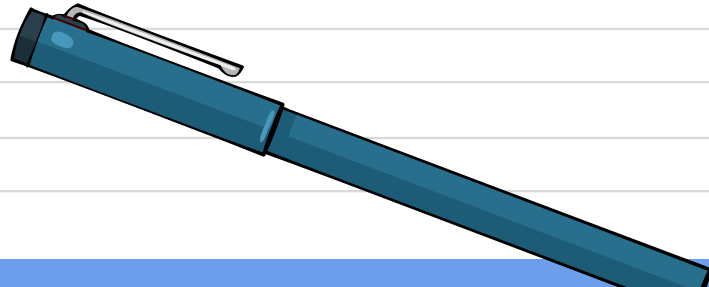
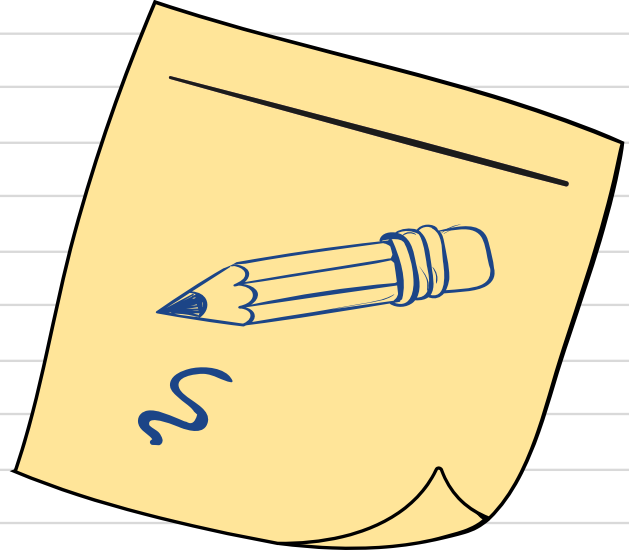
Integrated Design Project

Final presentation



Group-B3

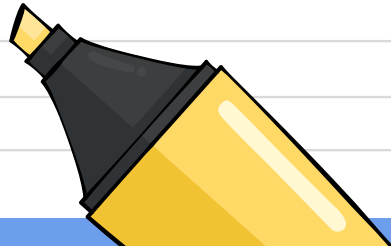
202014016-Jamal Uddin Tanvin
202014034-MD Rifat Islam
202014036-Md Tausiful Haque
202014040- Nurshat Fateh Ali





Health

A.I.



Problem Statement



1. Most of the time it is hard to find suitable doctor's contact information for a particular illness.
2. Sometimes it is hard to detect if a person is seriously ill or if it's just a casual illness.
3. Many times people neglect their medical situation and then suffer from major illnesses.
4. Some people don't like to visit doctors/medical checkups as they find it a waste of time and energy.
5. For many people, it is too costly to visit a doctor for a simple illness.

Objectives



- 1) To make a Personal Healthcare Companion Application System.
- 2) The application system will be able to detect common illness by talking with the patient about the symptoms.
- 3) The application system will be able to suggest available primary home treatments and general instructions based on the detected illness.
- 4) It will also suggest doctors based on the detected sickness and doctors' expertise field.
- 5) The application system will also have an emergency ambulance and contact feature.

Requirement Elicitation Study



1. From literature review we found that no app on the market which can talk with the patient to analyze the symptoms and give predictions on patient's health problems along with giving valuable suggestions. There is no app which takes real time diagnostic values for analysis purpose.
2. From Interview and survey we found that healthcare is still not easily accessible for people and it is hard to find out relevant doctor's info for a particular illness.

System Requirements



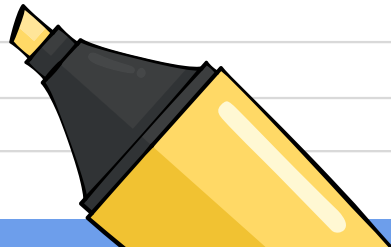
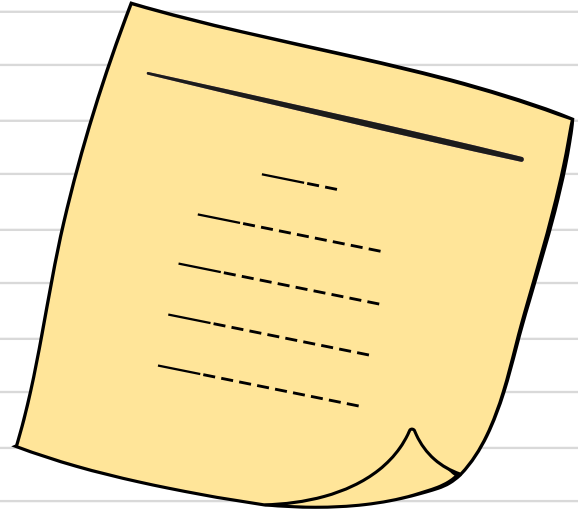
1. The system shall understand human language and various health metrics.
2. The system shall detect illness/disease.
3. The system shall suggest relevant general instructions for the cure.
4. The system shall suggest relevant doctors.
5. The system shall have an emergency ambulance/contact system.

Functional & Non-functional Requirements

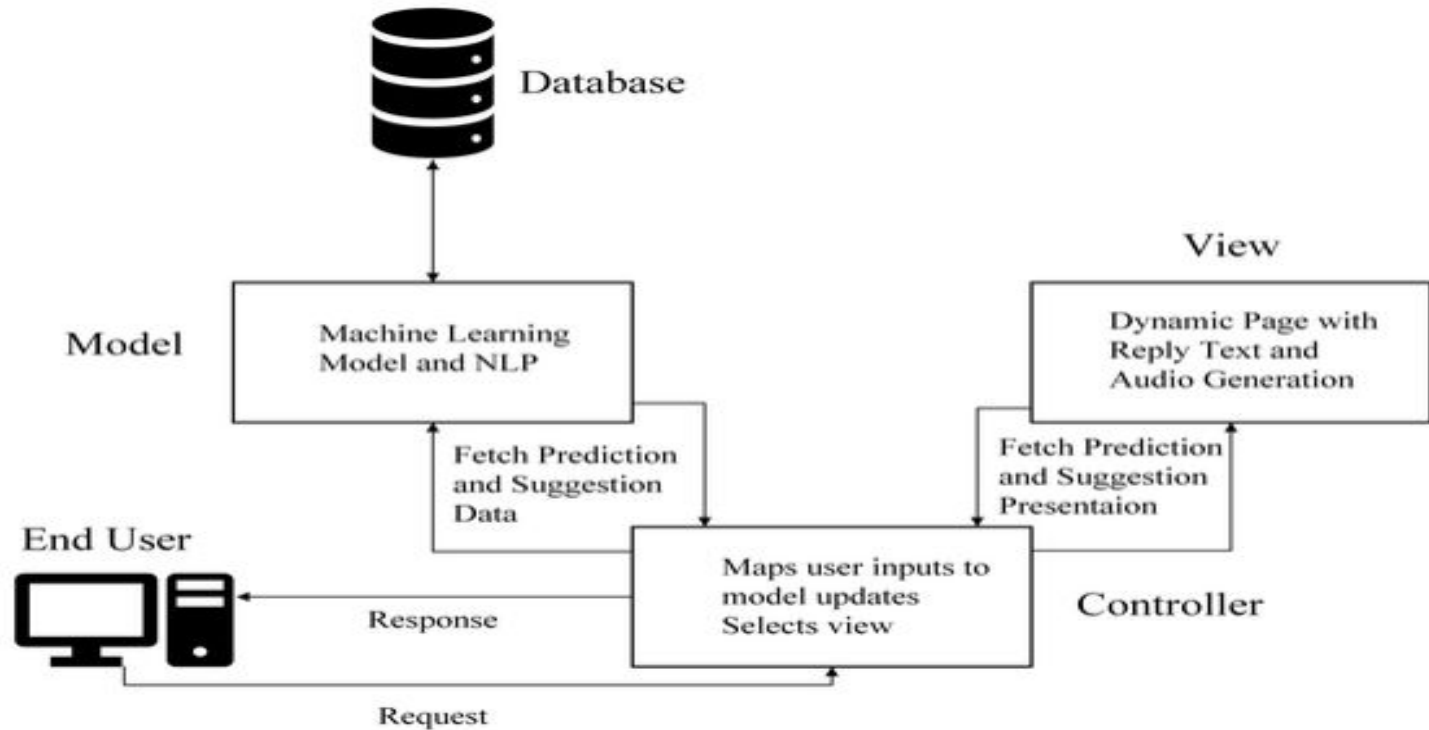
System Requirements	Functional	Non-Functional
Voice/text input	✓	✗
Real-time data collection	✓	✗
Accuracy of interpreting the significance of the received data	✗	✓
Processing data using ML	✓	✗
Prediction Accuracy	✗	✓
Text and Voice Output	✓	✗
Suggesting Cure	✓	✗
Suggesting Doctors	✓	✗
Emergency message	✓	✗
Emergency ambulance service	✓	✗



System Architecture

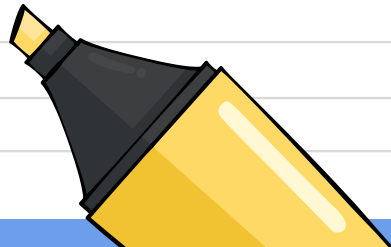
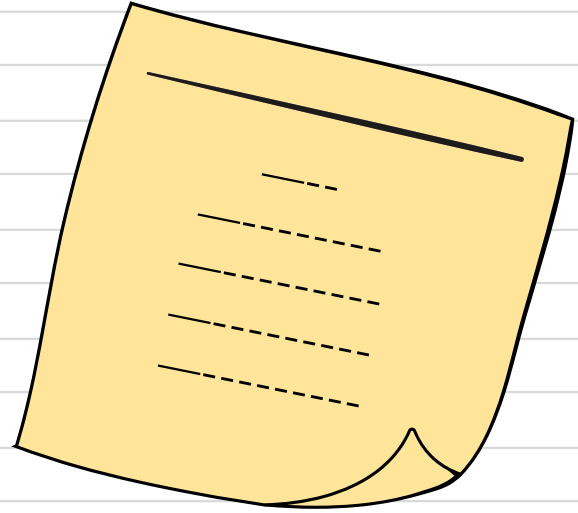


System Architecture

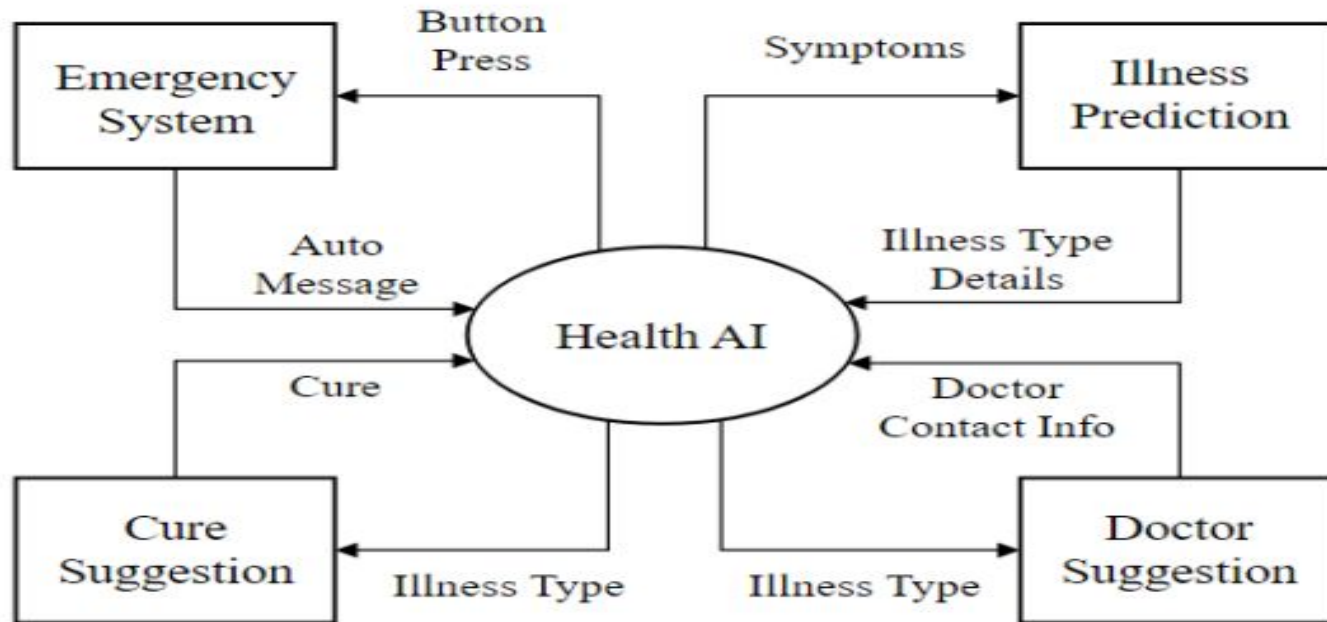




Context Diagram

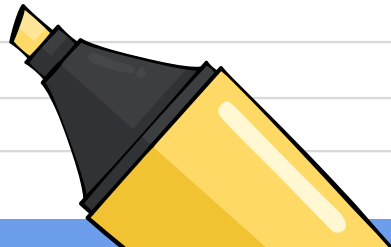
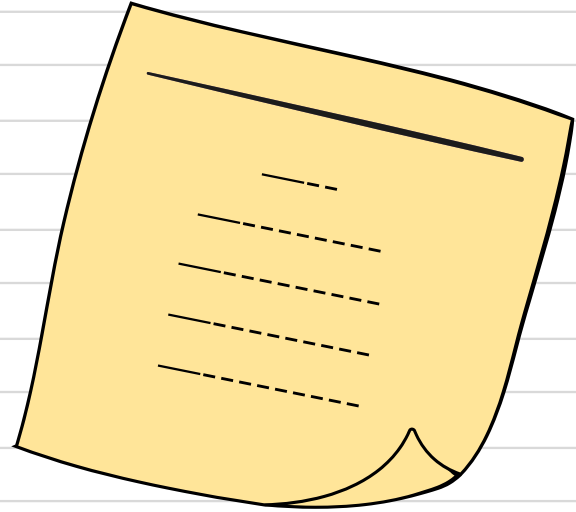


Context Diagram

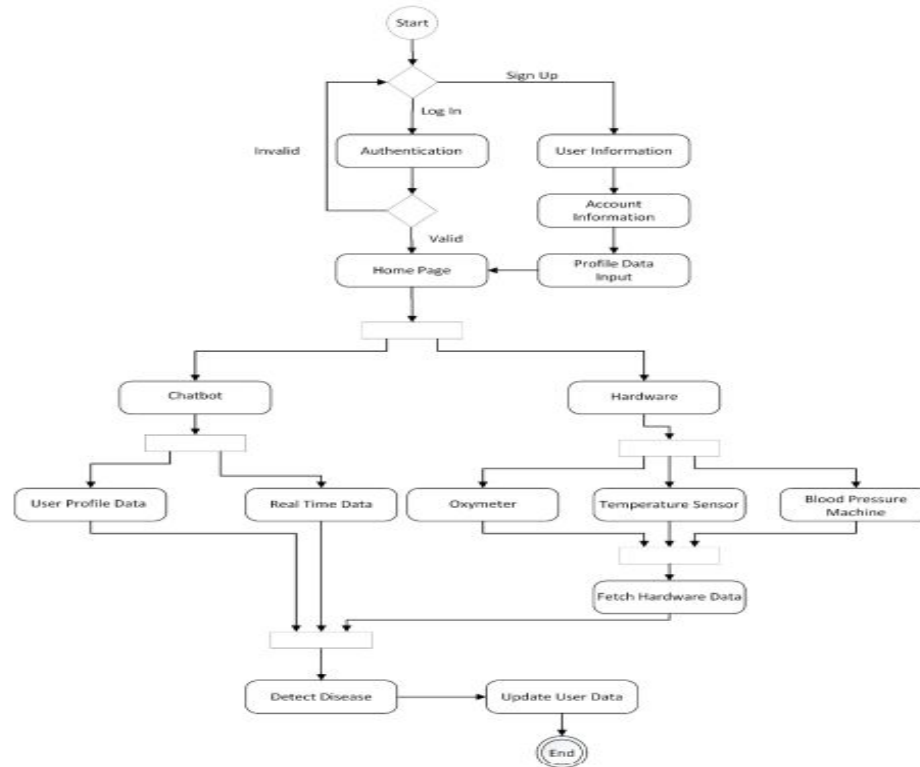




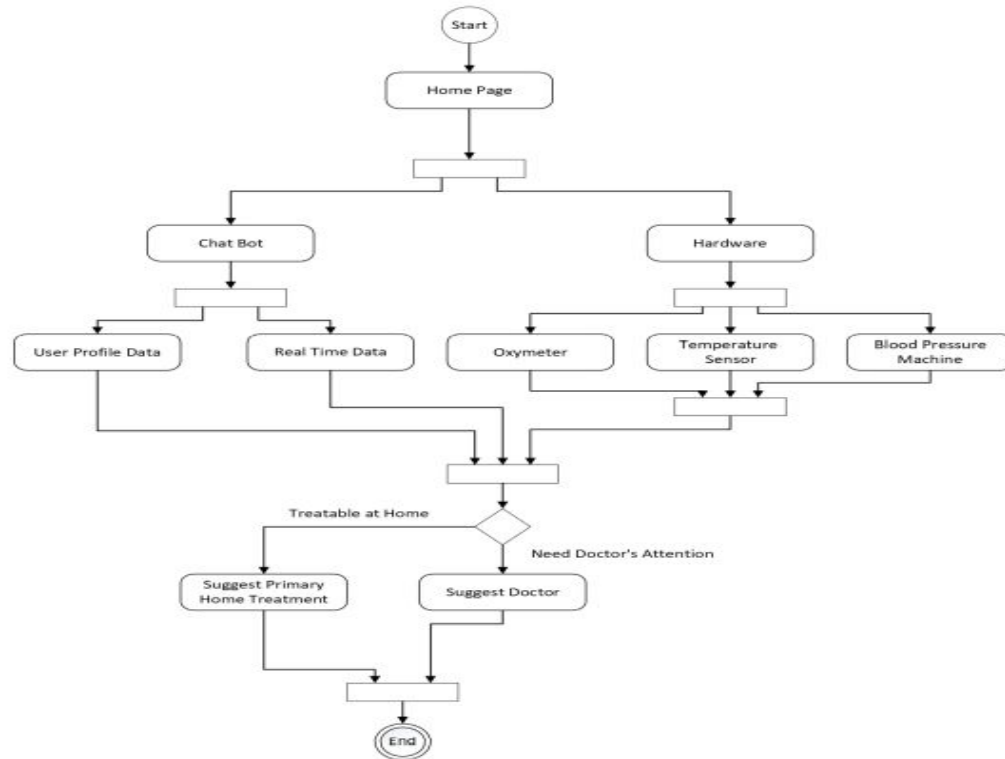
Activity Diagram



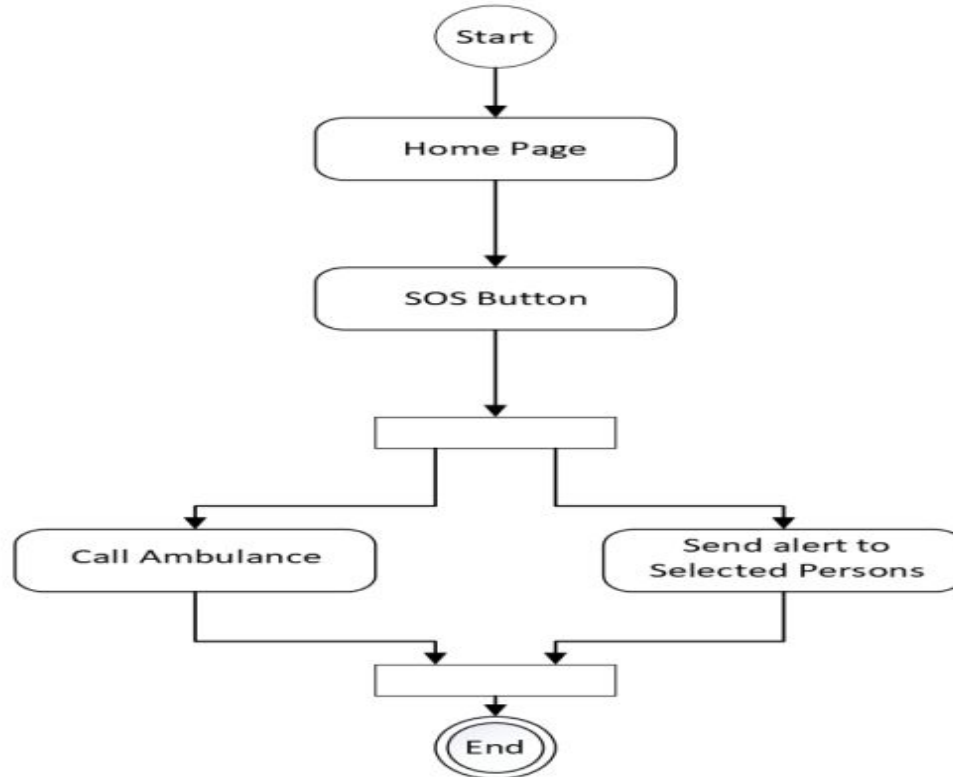
Activity Diagram: Disease Detection



Activity Diagram: Taken Action

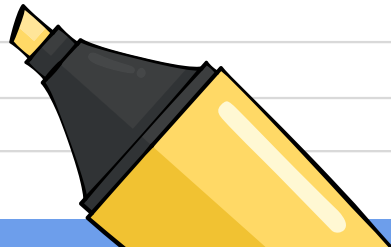
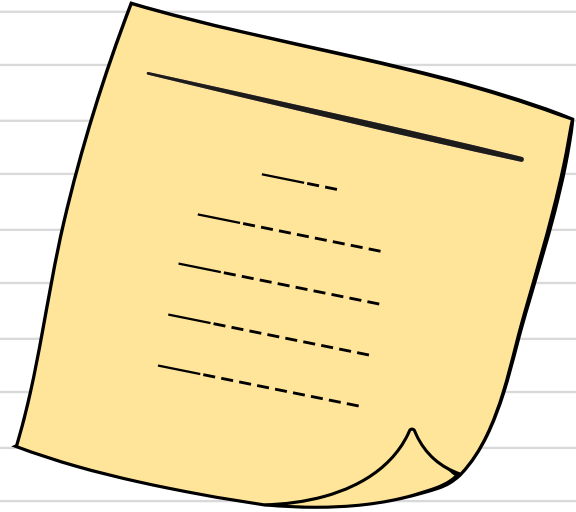


Activity Diagram: Emergency System

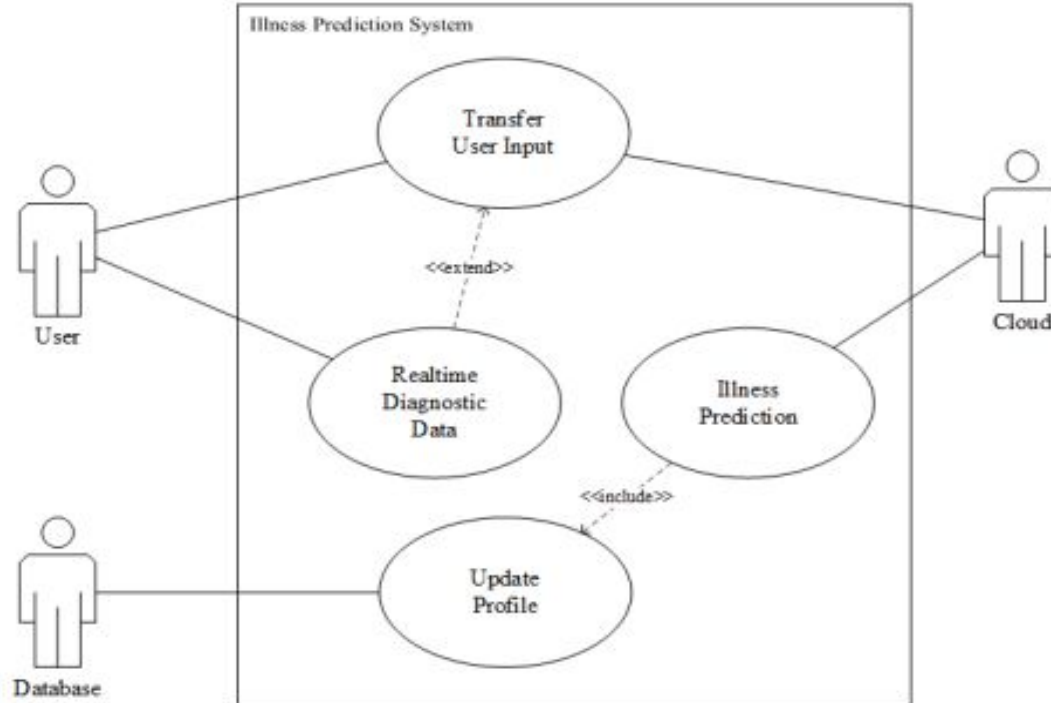




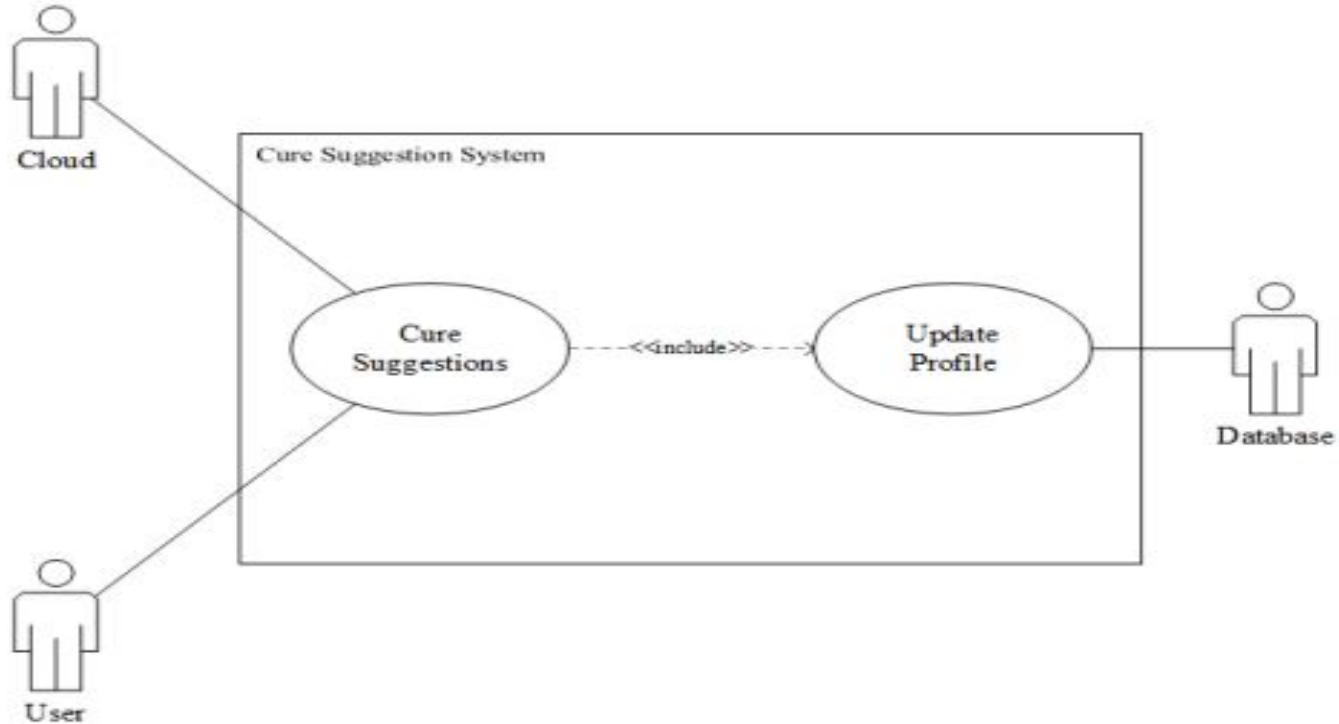
Use-case Diagram



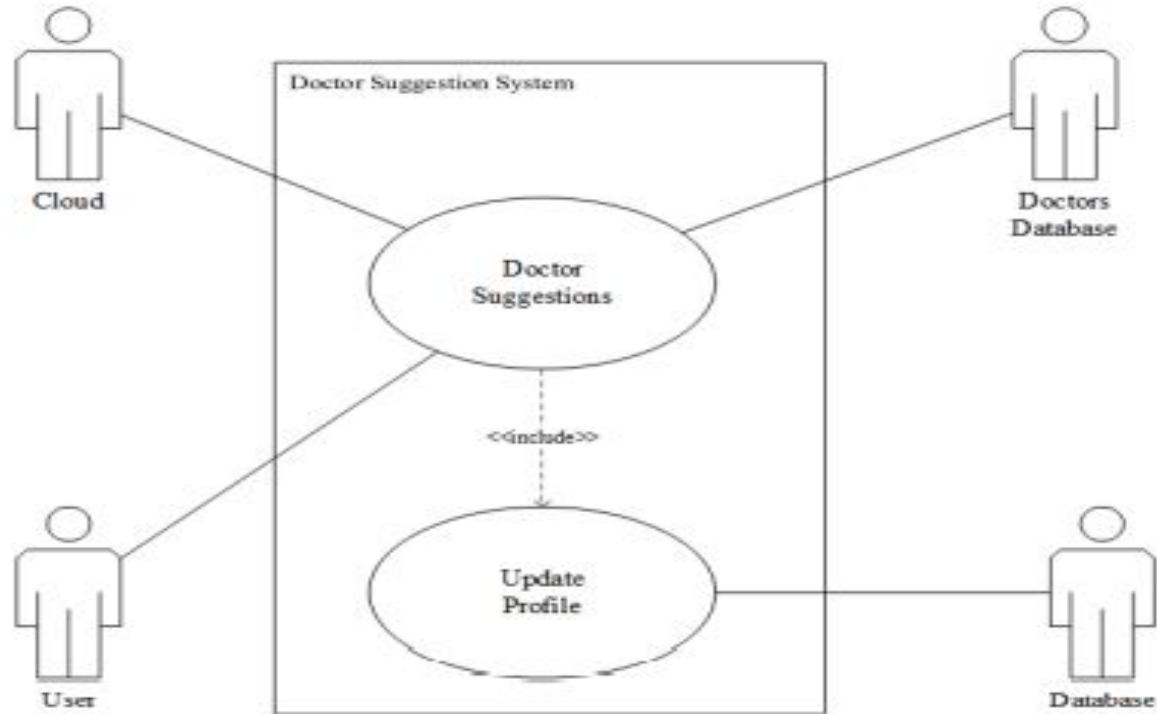
Use-case Diagram: Illness Prediction



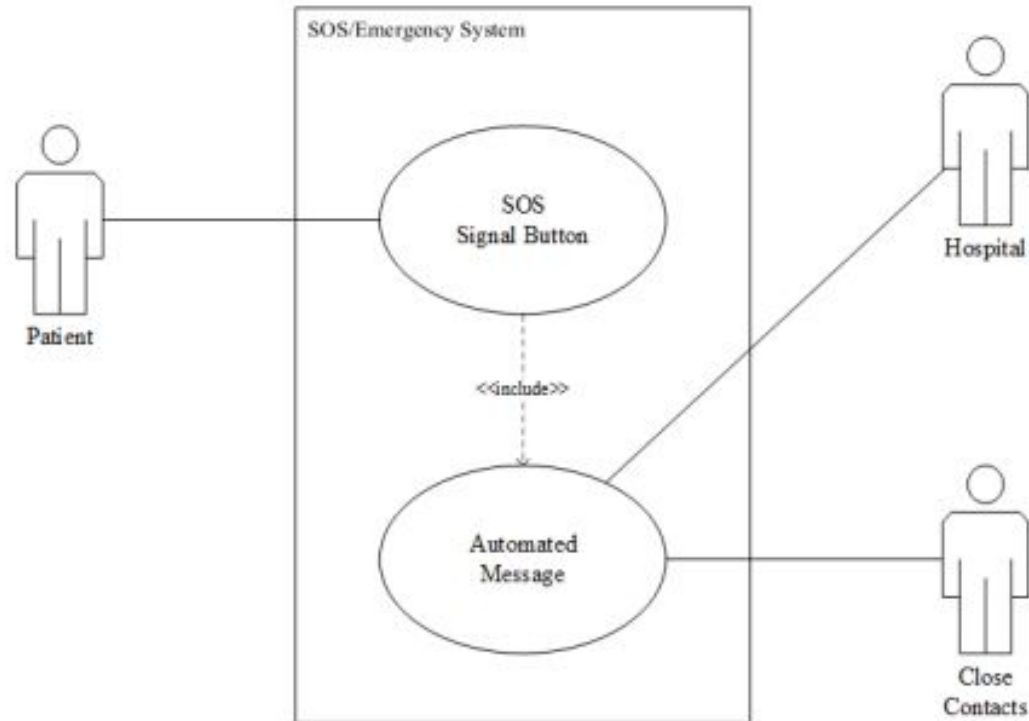
Use-case Diagram: Cure Suggestion



Use-case Diagram: Doctor Suggestion

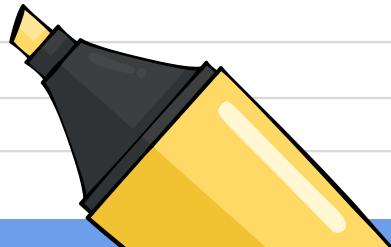
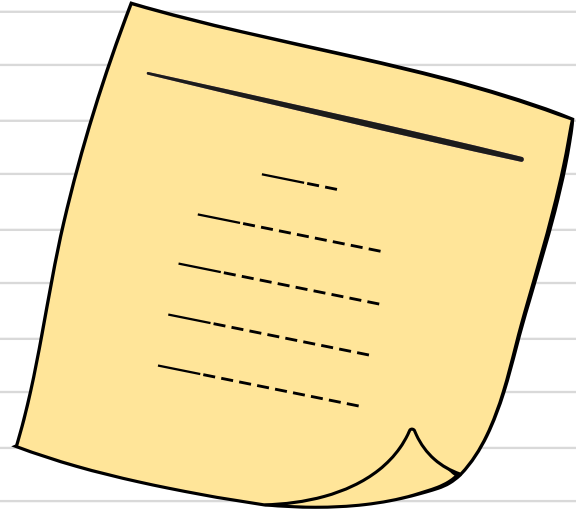


Use-case Diagram: SOS System

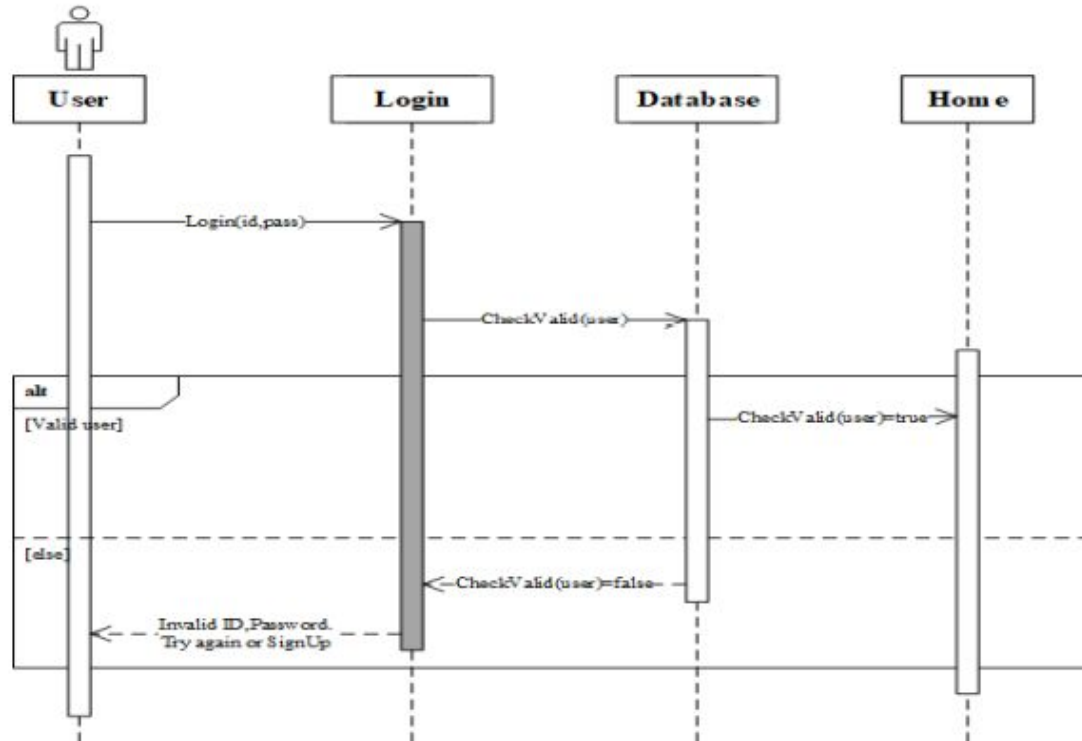




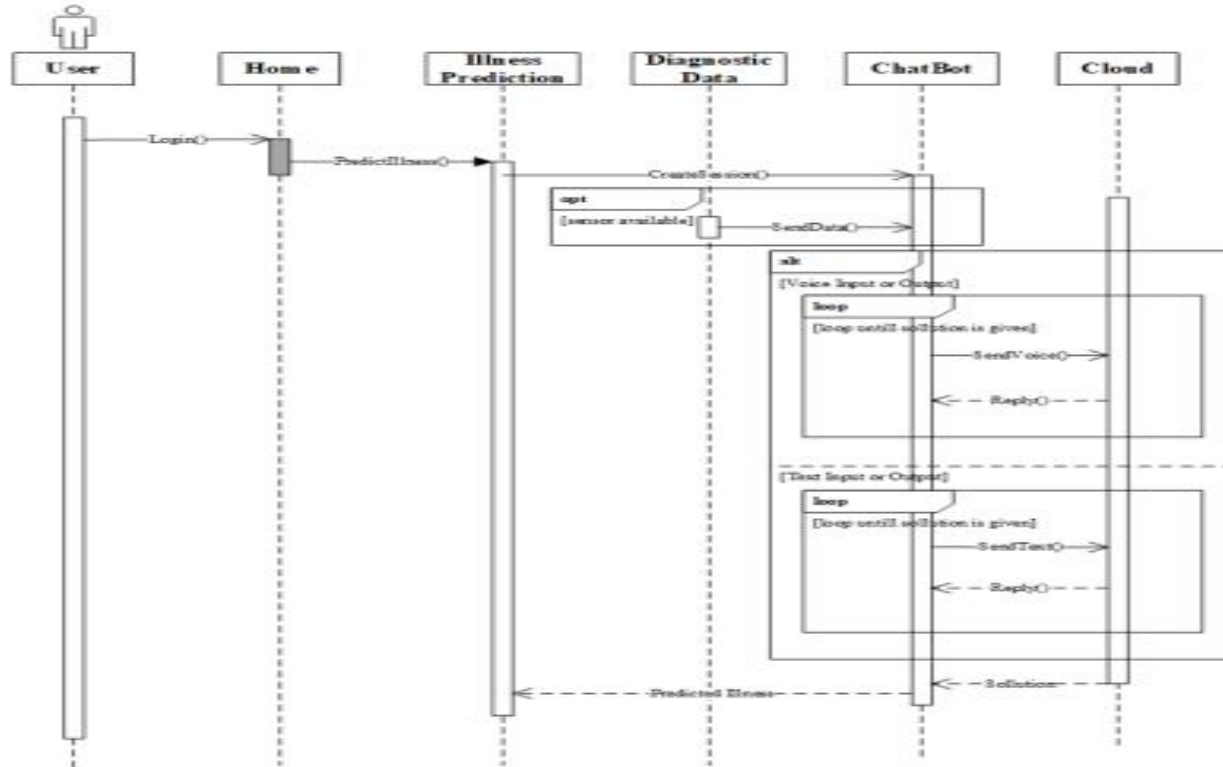
Sequence Diagram



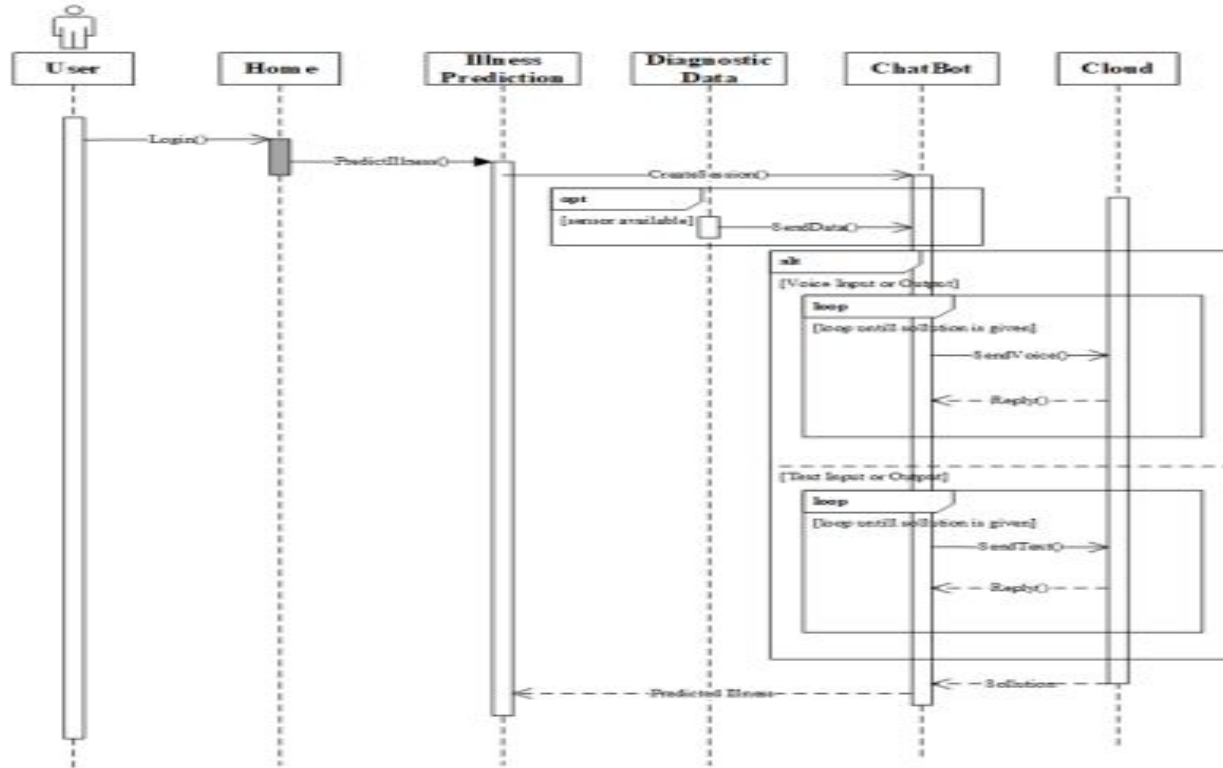
Sequence Diagram: Log In



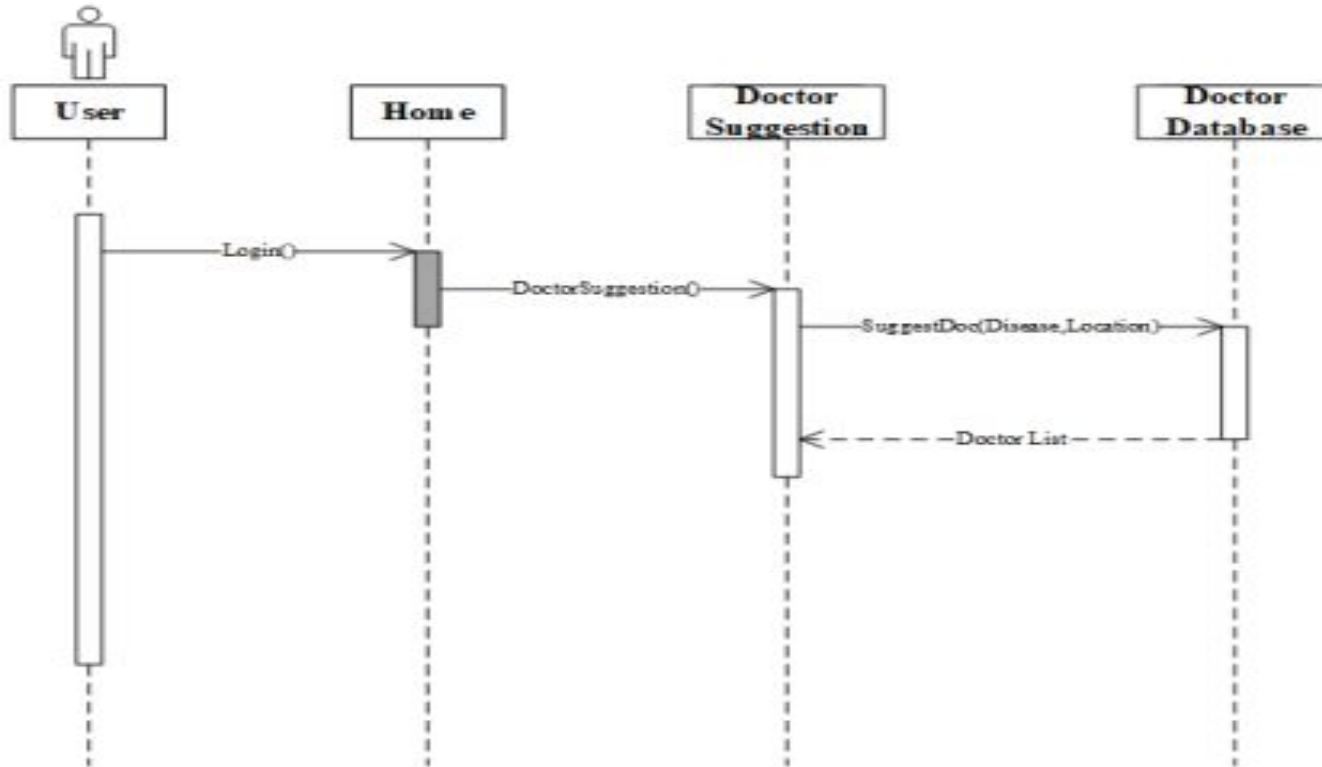
Sequence Diagram: Illness Prediction



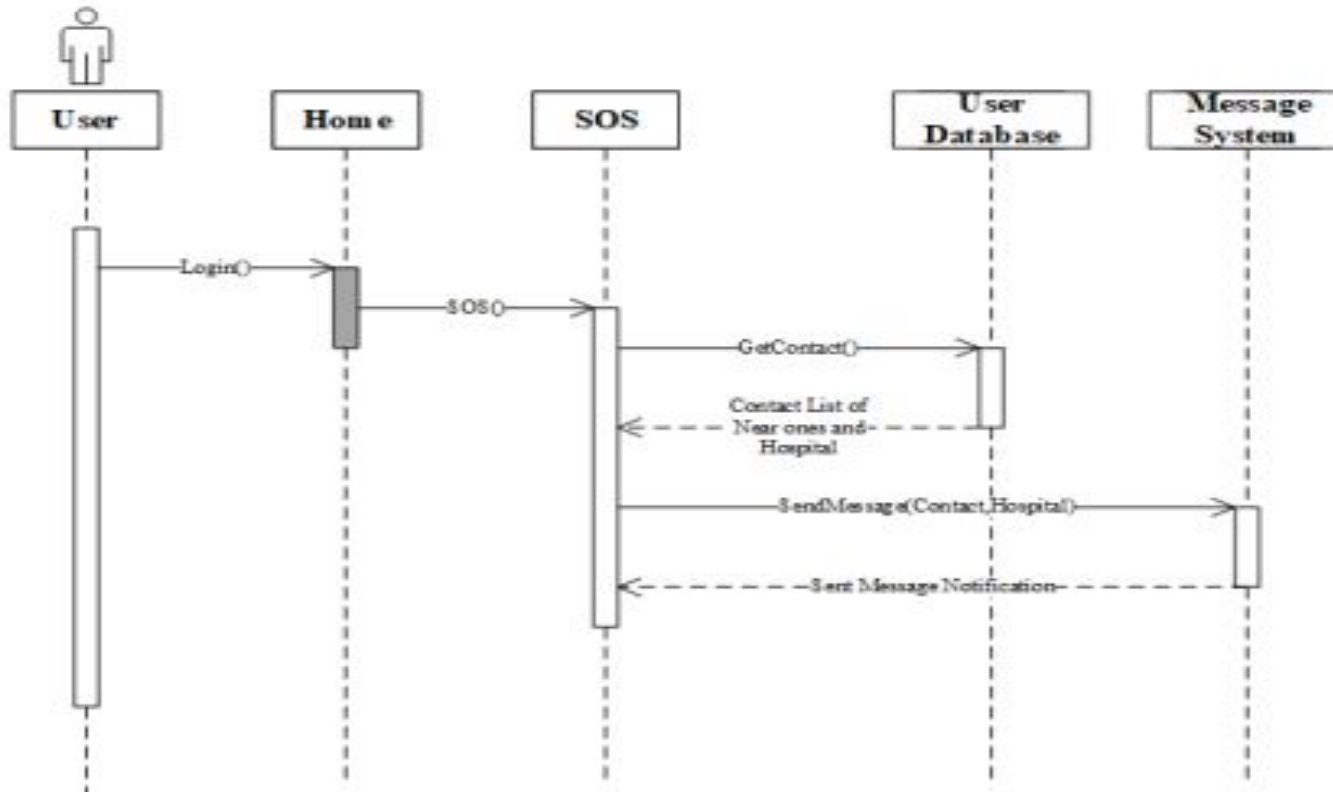
Sequence Diagram: Cure Suggestion



Sequence Diagram: Doctor Suggestion

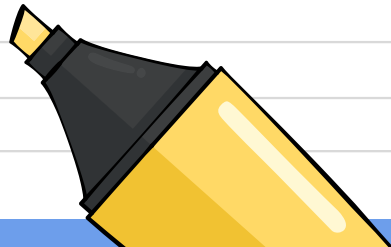
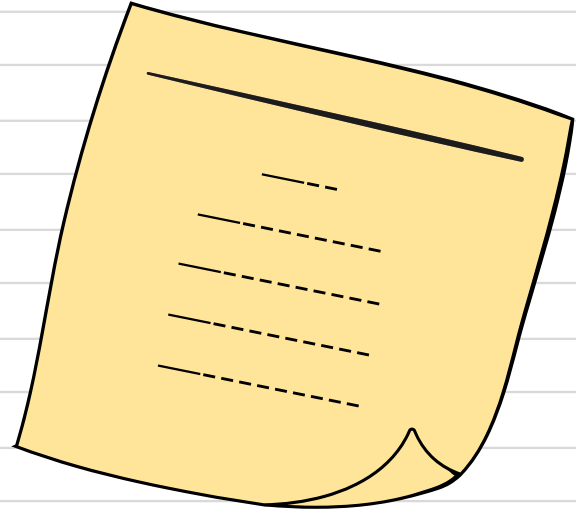


Sequence Diagram: Emergency System

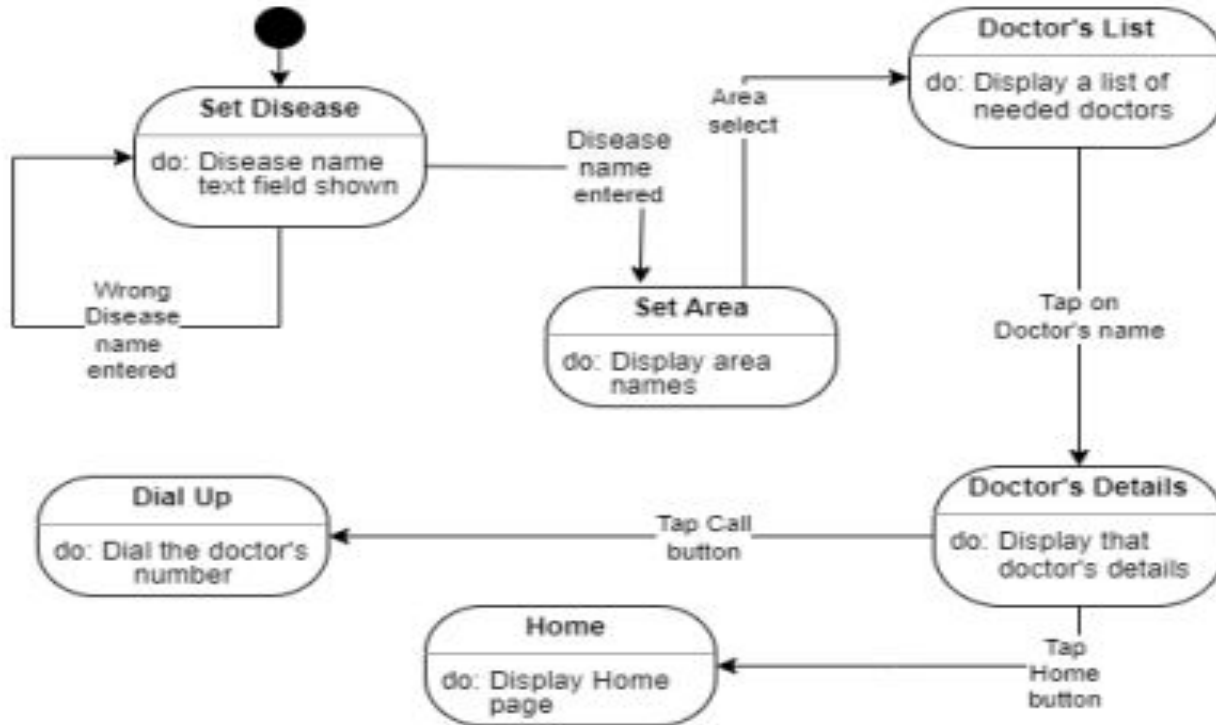




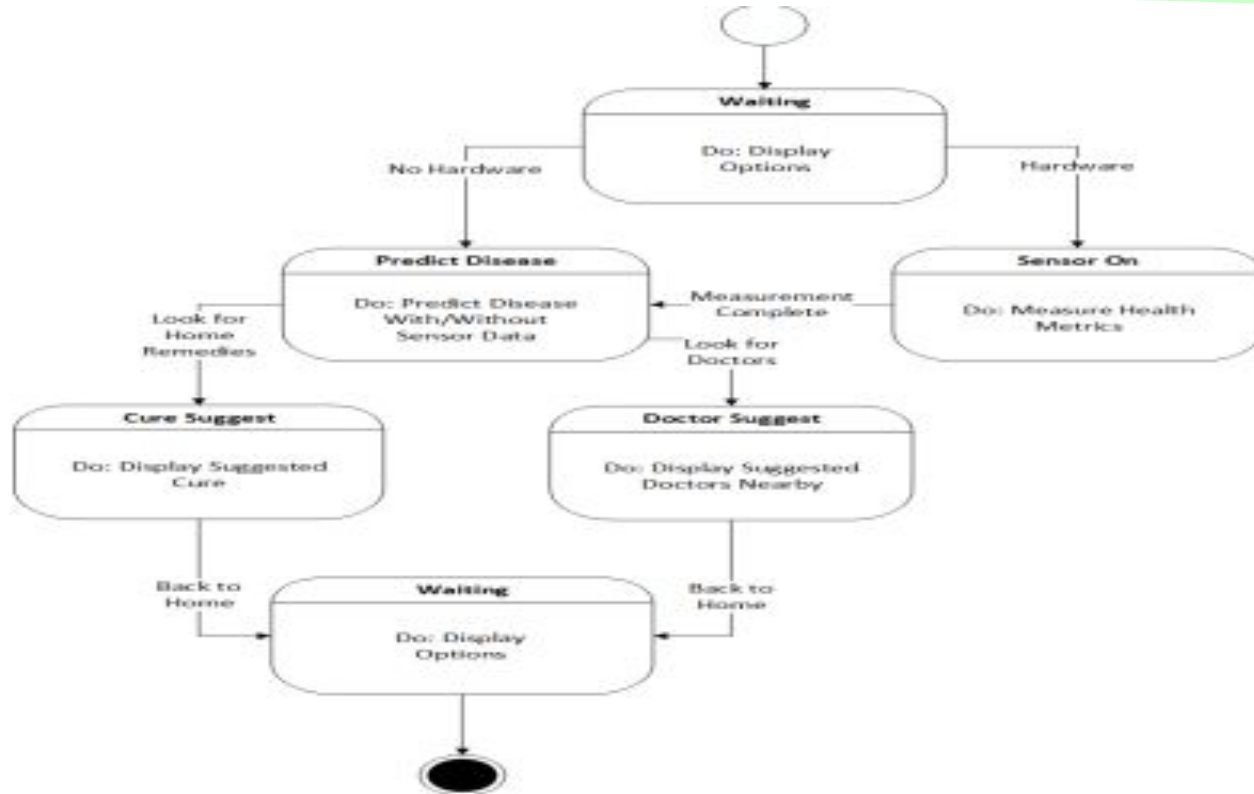
State Diagram



State Diagram: Doctor Suggestion



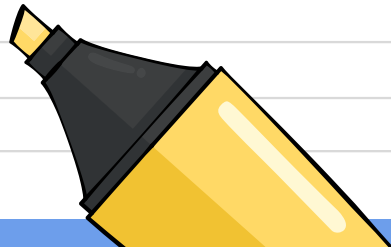
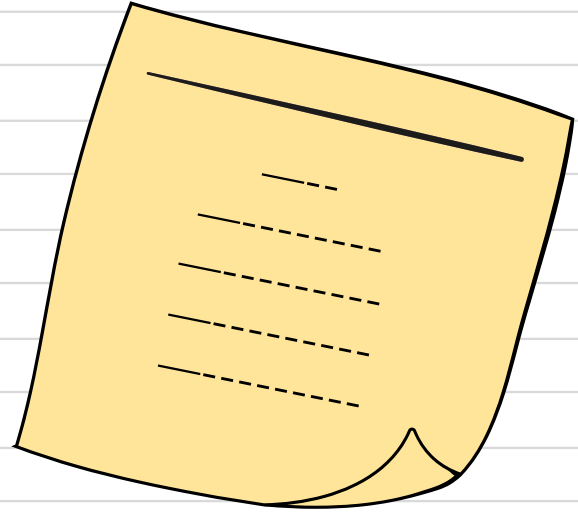
State Diagram: Illness Prediction



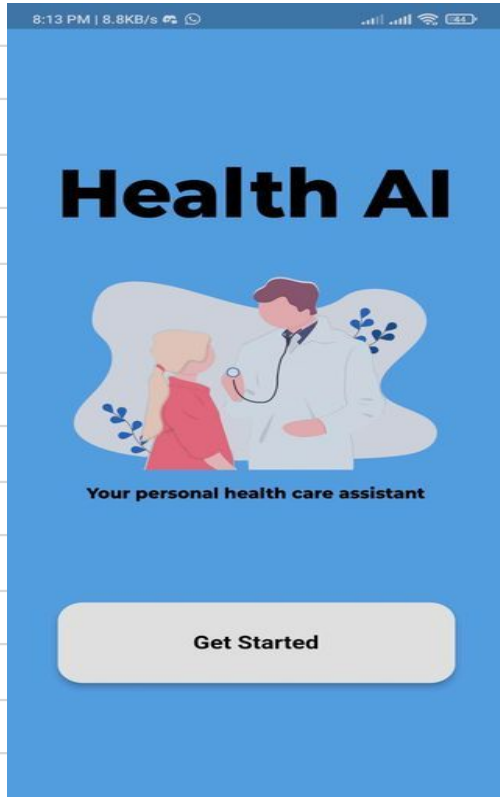


UI

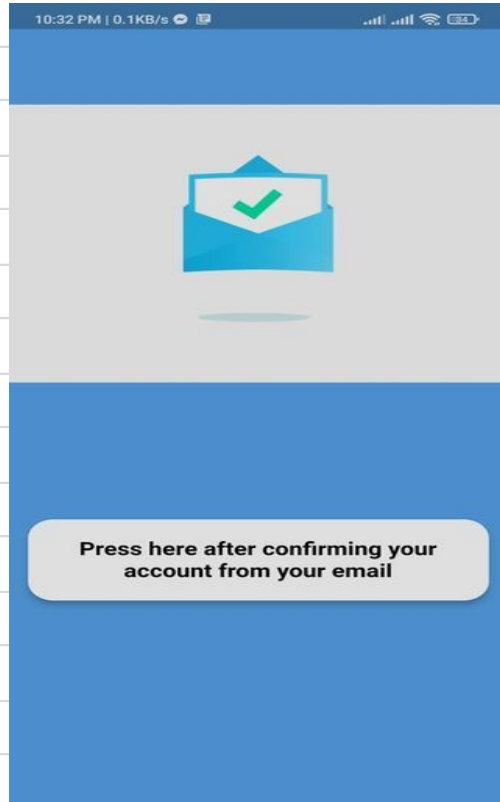
Prototype



UI Prototype



UI Prototype



UI Prototype


8:14 PM | 2.3KB/s

Sign Up

[Sign Up](#)

Already have an account? [Login](#)

8:14 PM | 2.0KB/s



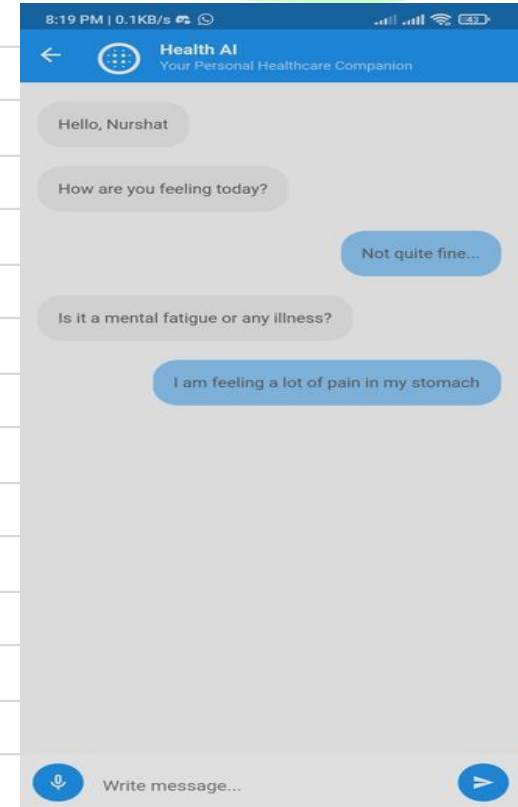
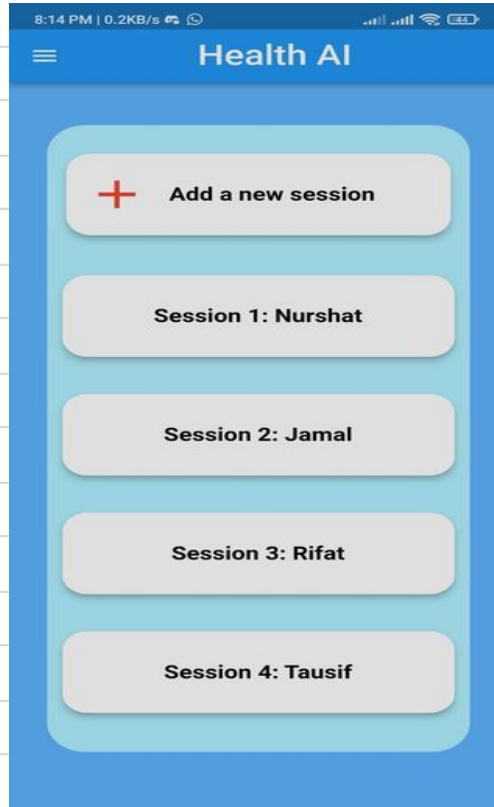
Press here after confirming your account from your email

8:14 PM | 1.6KB/s

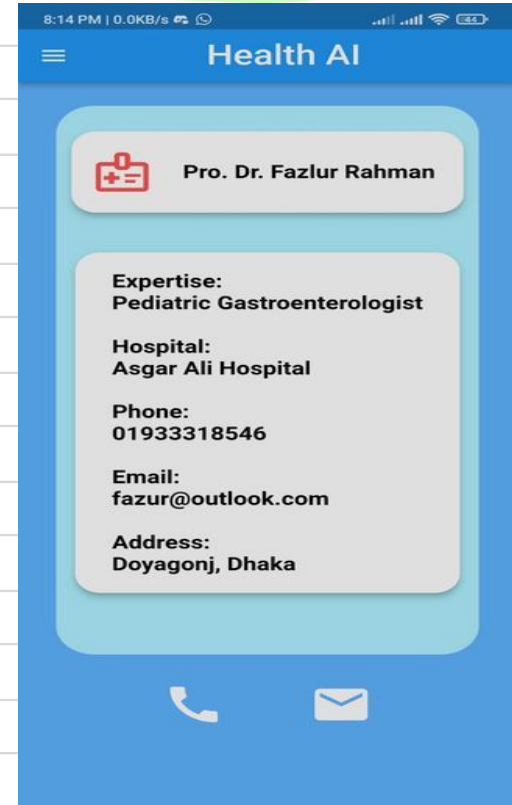
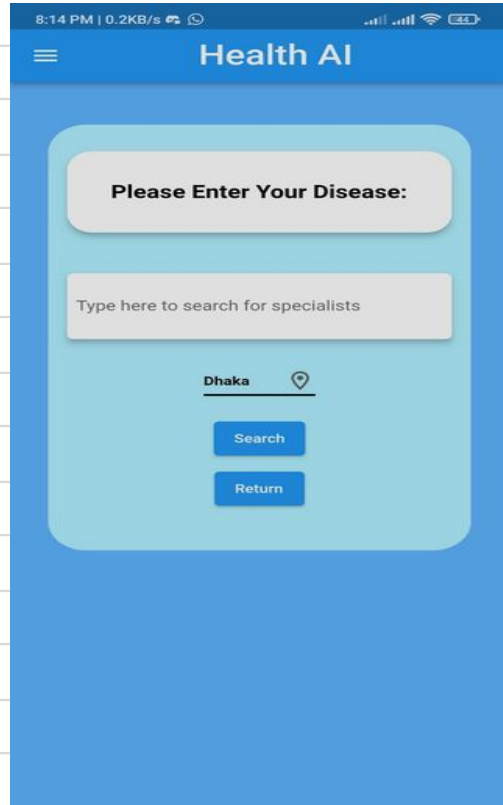
Register

[Save](#)

UI Prototype



UI Prototype



UI Prototype

8:15 PM | 0.1KB/s

Health AI

Please Enter Your Disease:


Type here to search for the cure

Search

Return

8:15 PM | 0.0KB/s

Health AI

 Disease: Diarrhea 

 Suggested Cure:

1. Drink more fluid to stay hydrated.
2. Avoid exercise.
3. Eat a BRAT Diet: bananas, rice, applesauce and toast.
4. Drinking tea might help.
5. Avoid foods that can aggravate diarrhea.

Go Home



8:14 PM | 0.1KB/s



Health AI


User Profile


 Nurshat Fateh Ali

 nurshatfateh@gmail.com

 5.5 Feet  60 KG

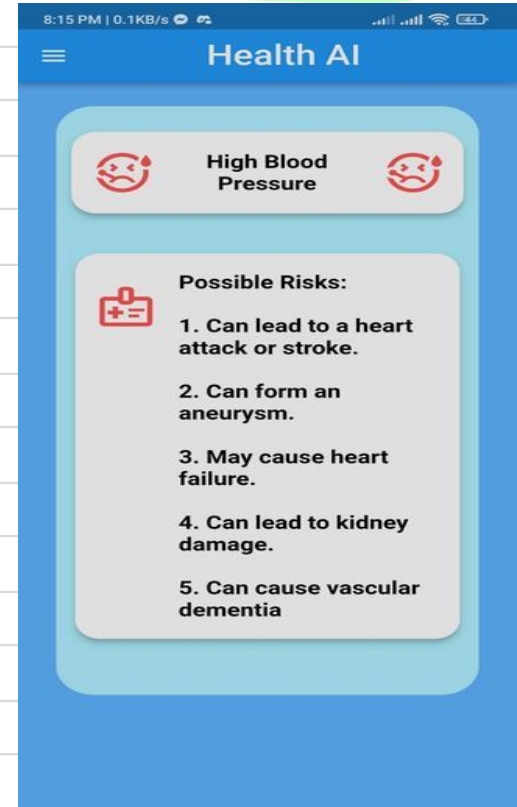
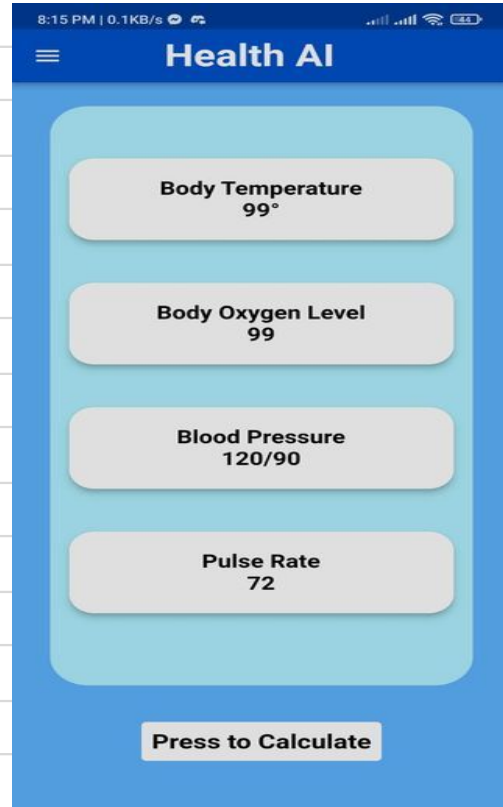
 14/02/01  Male

 01933318385

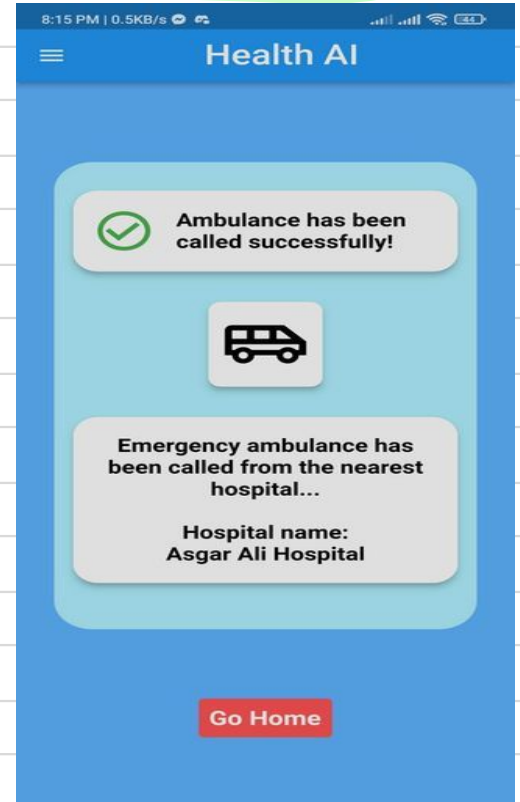
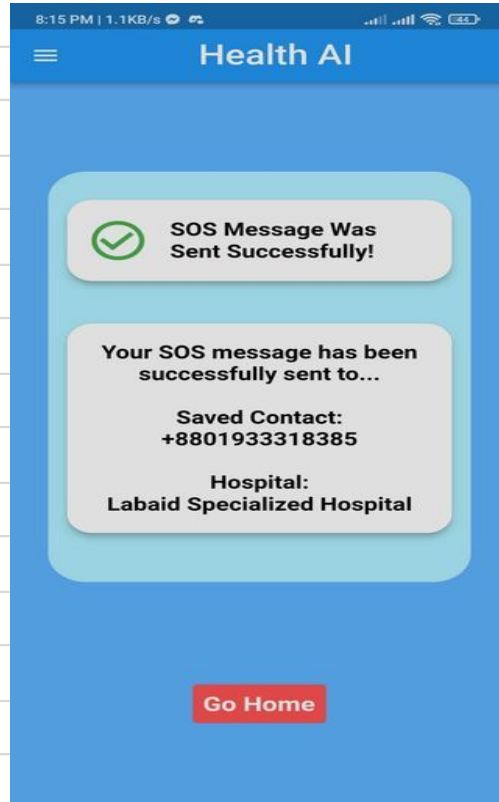
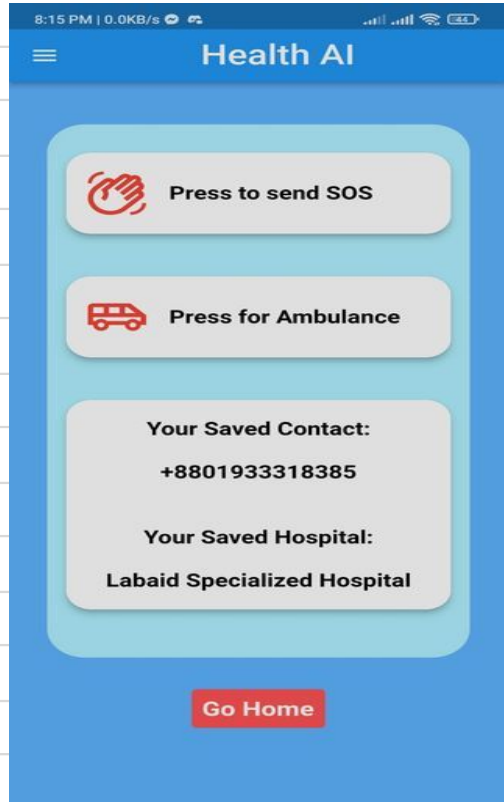
 LABAID Specialized Hospital

Update

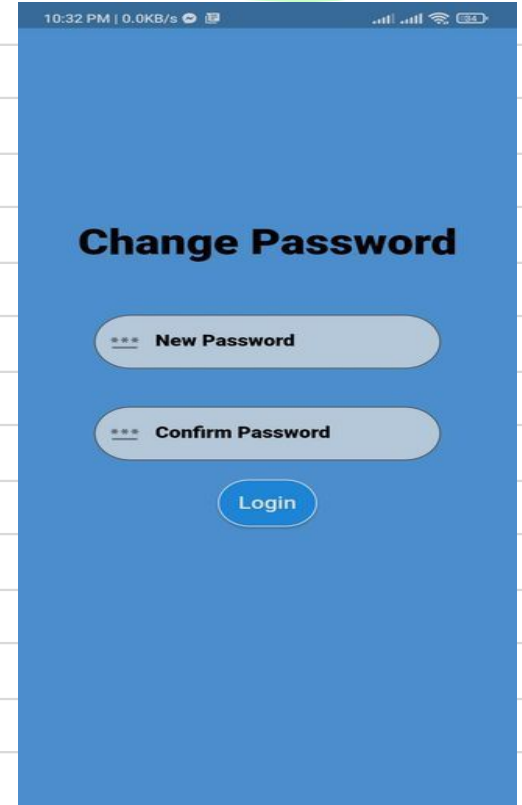
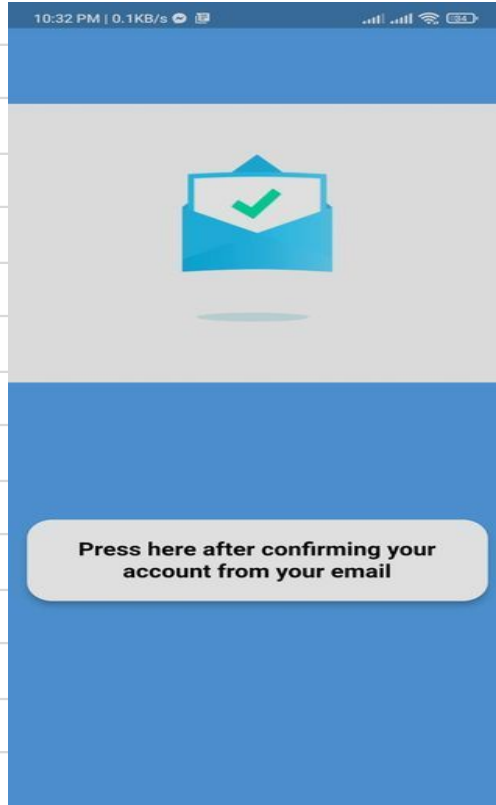
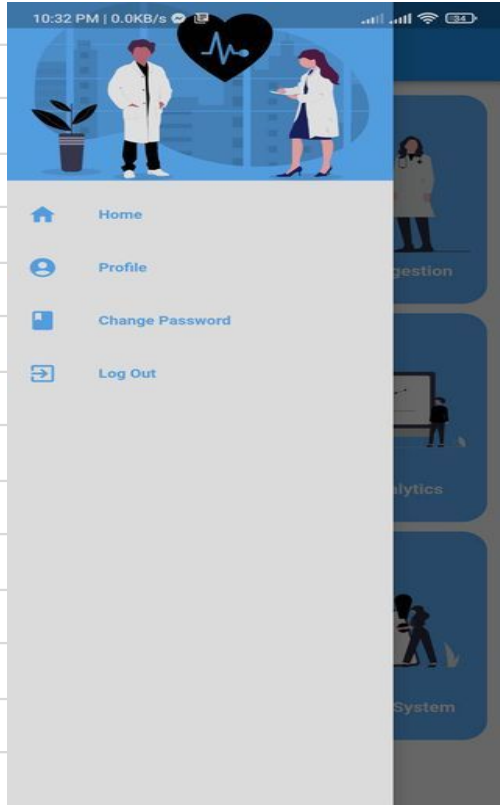
UI Prototype



UI Prototype

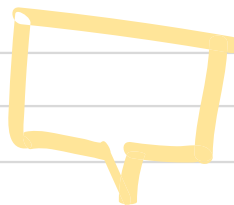


UI Prototype





Video Demonstration





The image features a central spiral-bound notebook with a white cover. The words "Thank You" are written in a bold, dark blue font, centered on the page. The text is framed by four horizontal green brush strokes. The notebook is surrounded by various school supplies: a blue pen, a yellow pencil, a blue ruler, a protractor, a pencil sharpener, and several paper clips. The background is a solid light blue color. There are also some decorative elements, including a blue swirl on the left and a blue swirl on the right.

**Thank
You**