

4.ARCHITECTURE

4.1 PROJECT ARCHITECTURE

This project architecture shows the procedure followed for classification, starting from input to final prediction.

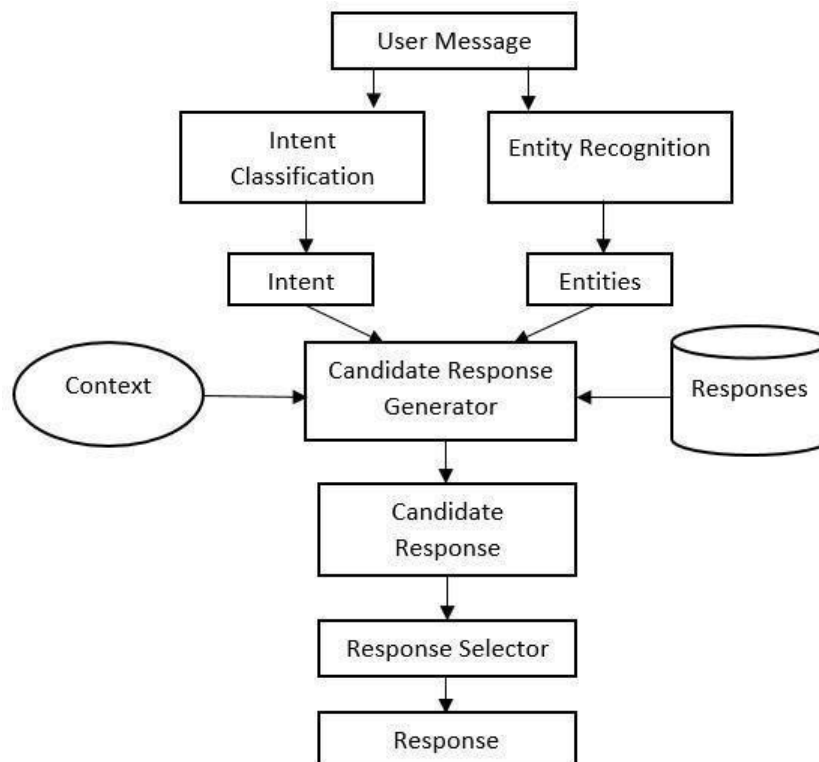


Figure 4.1 Architecture of Chatbot for pregnant women

4.2 DESCRIPTION

In this project we are designing CHATBOT application which helps pregnant women's to get answers for their queries or doubt. To build this project we used NLP (natural language processing toolkit) and Machine Learning Algorithm called LSTM (Long Short Term Memory). LSTM will be trained with all possible questions and answers and whenever user ask any question then LSTM will predict answer for that question and handover that answer to chatbot to display to user. To train LSTM we have used some questions and answers related to pregnancy as no public dataset available so we gather some questions and answers from internet and all this questions are saved in dataset.

4.3 USE CASE DIAGRAM

A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has. The use cases are represented by either circles or ellipses. The actors are often shown as stick figures.

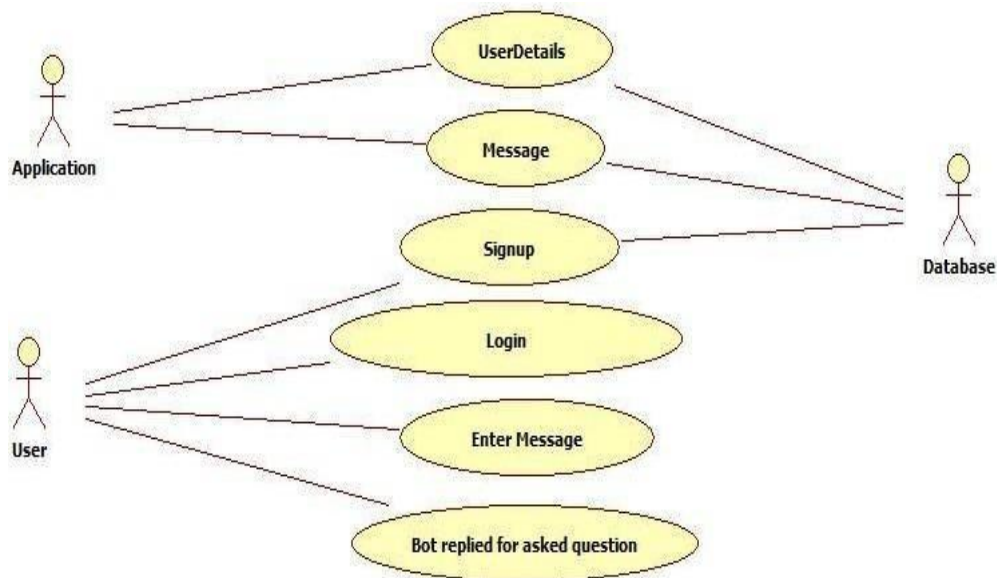


Figure 4.2 Use Case Diagram for Chatbot for pregnant women

4.4 CLASS DIAGRAM

Class diagram is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations(or methods), and the relationships among objects.

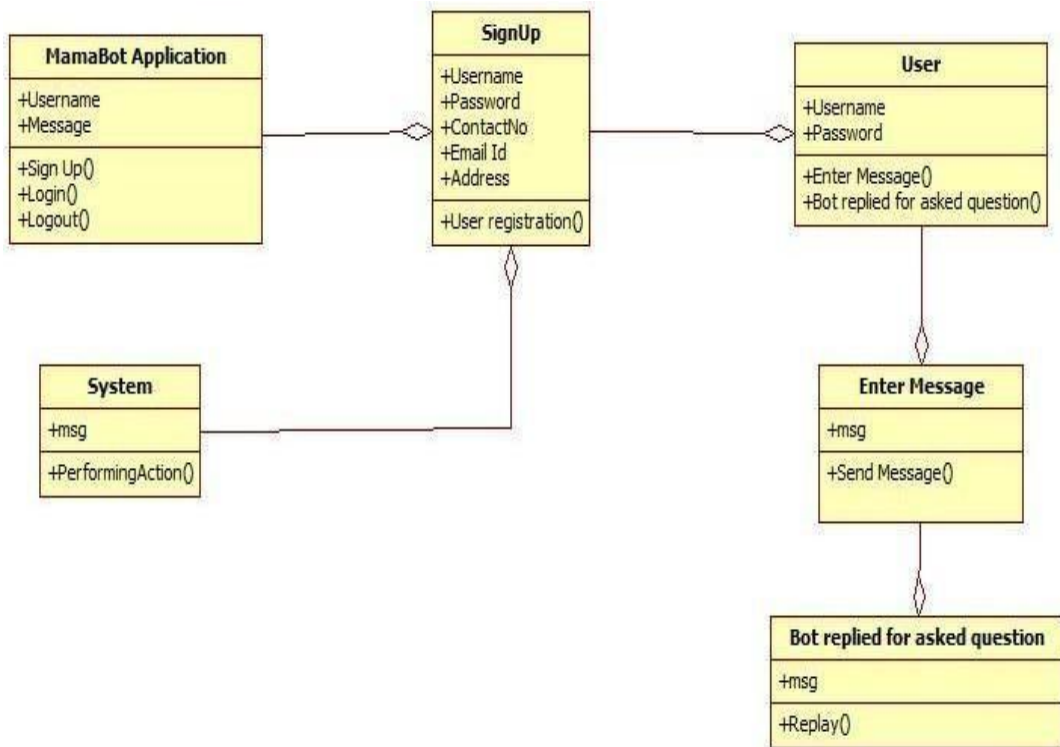


Figure 4.3 Class Diagram for Chatbot for pregnant women

4.5 SEQUENCE DIAGRAM

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development.

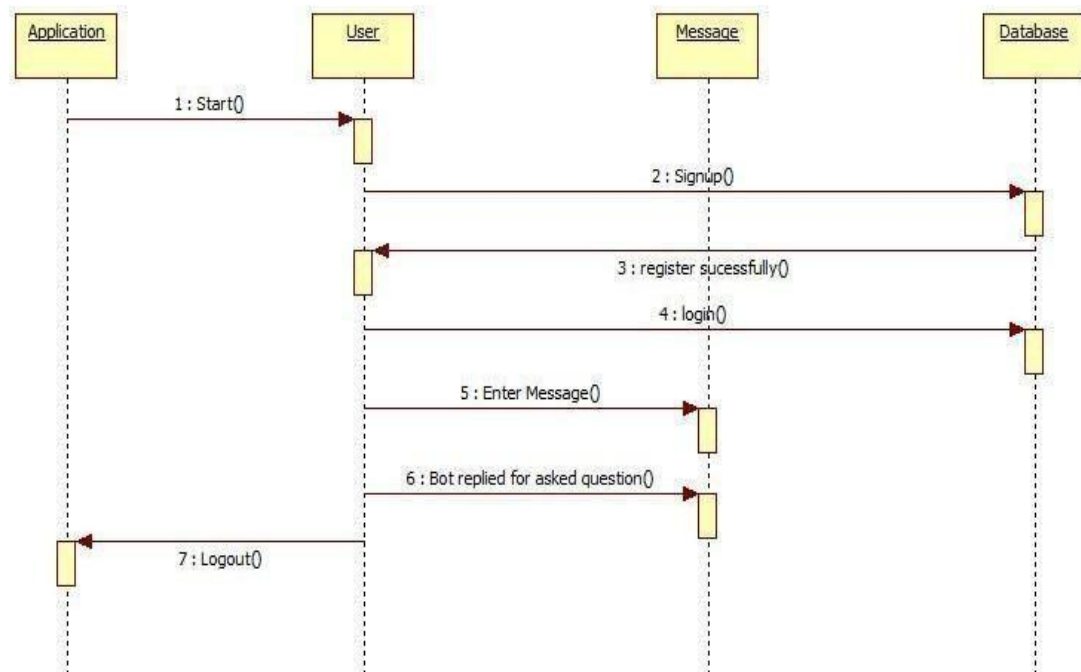


Figure 4.4 Sequence Diagram for Chatbot for pregnant women

4.6 ACTIVITY DIAGRAM

Activity diagrams are graphical representations of work flows of stepwise activities and actions with support for choice, iteration and concurrency. They can also include elements showing the flow of data between activities through one or more data stores.

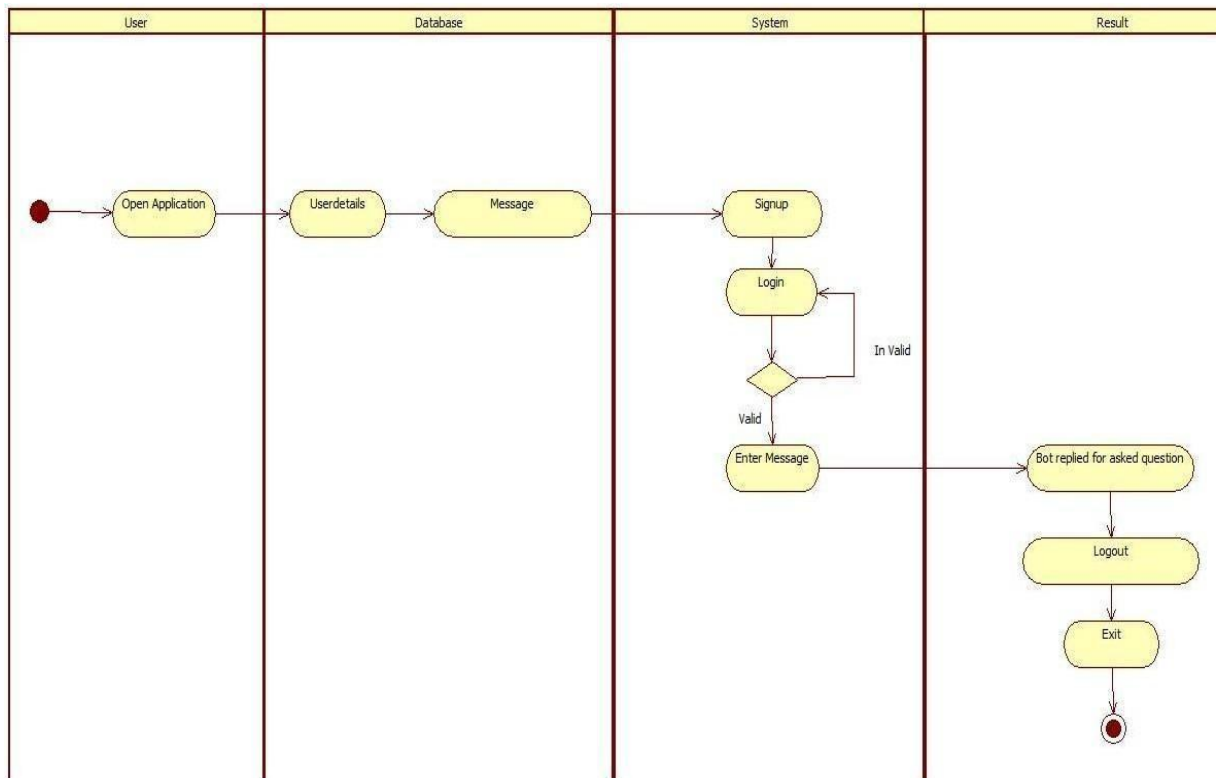


Figure 4.5 Activity Diagram for Chatbot for pregnant women