

# Review Paper for Automated Medical Chat Bot

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**Abstract:** The goal of the project Intelligent Chatbot is to investigate the potential of AI agents in the modern environment. Artificial intelligence was created by Alan Turing, who is hailed as the founder of modern computers and lived from 1912 to 1954. He laid the groundwork for the creation of computer science by breaking the Enigma code, which the Germans deployed during World War II and was widely believed to be unbreakable. He also studied the potential of electronic computers and artificial intelligence. "Can machines think?" he poses in his 1950 article on Computing Machinery and Intelligence.

He developed a test, appropriately named the Turing test, that evaluates a machine's capacity to display intelligent behaviour comparable to or indistinguishable from that of a human. He explores this concept in further detail throughout the paper, and I came across an intriguing statement. According to Turing himself, it will be able to programme machines with a storage capacity of roughly 109 bytes in about fifty years. After five minutes of questioning, an average interrogator will not have more than a 70% chance of making the correct identification." Not too far off, he was. A computer programme named Eugene, which represented a 13-year-old Ukrainian child, was claimed to have passed the Turing test in June 2014 at a gathering held at Reading University's School of Systems Engineering. It is noteworthy to observe how close Turing's prediction was, even though some artificial intelligence scientists refuse to see this as a true triumph. 2014 BBC Technology The most popular application in the world right now is a messaging one, and some businesses are already utilising this fact by creating their own chatbots to supplement their social media presence. Businesses should take advantage of the fact that messaging apps occupy the majority of users' time. Soon, using a bot will be simpler than using a website or app because they are getting faster and smarter. According to a recent study on chatbots, \$24 billion has been invested in the creation of bot apps powered by AI by 180 associated companies, or 7. [Gatti, 2017 Venturebeat] "Bots are the new apps," Microsoft CEO Satya Nadella was reported as saying. [Cava, 2016 USA Today] As I delved deeper into Microsoft's newest platform, Microsoft Bot Framework, I found this project to be both interesting and exciting. Microsoft is committed to digging further into the realm of chat bots and driving the creativity and sophistication of chatbots. Since several businesses, including Ebay, Sky Scanner, StubHub, and Foursquare, have already built their own bots using the Bot Framework, I think that in a few years every major company will have a chatbot to answer common customer questions and perhaps even complete full orders. Customers may get their questions answered by just opening their preferred messaging app and speaking with a bot, which has the potential to replace call centres.

**Keywords:** Attributes, Classification, AI, Chatbot, Google Translate, NLTK Library

## I. INTRODUCTION

Modern technological advancements have led to a movement in the healthcare industry towards digital health, where clinical and administrative tasks can be aided by computer-generated analytics and with the use of electronic medical records. Although health professionals have spent years training to practice, obtaining data from a sizable database frequently necessitates specialised infrastructure and IT capabilities. Health practitioners' knowledge is hence frequently constrained by their own life experiences or by that of their coworkers in a shared practise. Therefore, a question-and-answer (QA) model information retrieval system can be very useful for health practitioners in locating similar patients, disease patterns, or effective treatments.

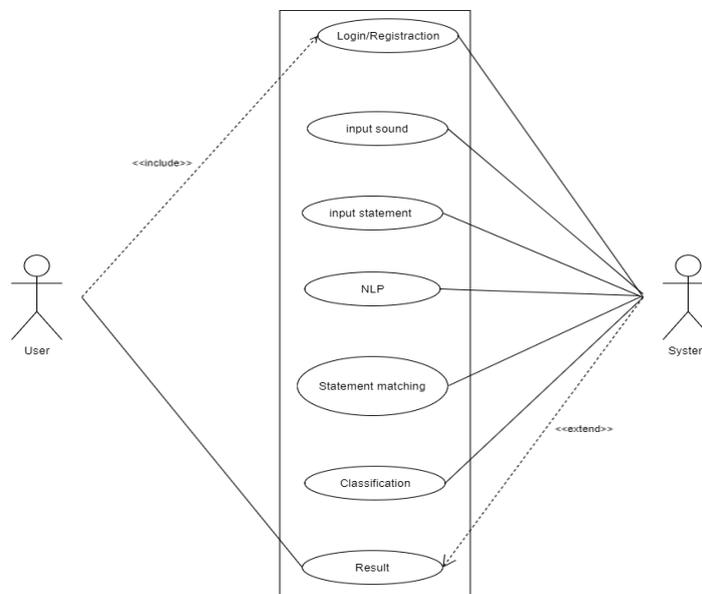
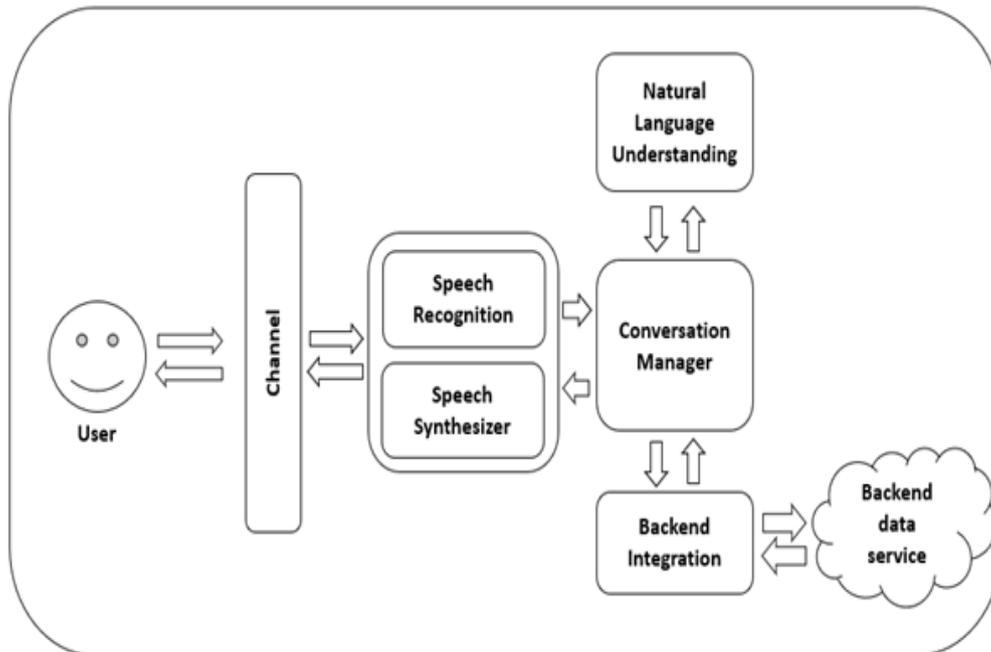
## II. PROBLEM STATEMENT

It is challenging to regularly have access to a hospital and a doctor. The process of contacting hospitals for routine consulting is time- and money-consuming. Localized individuals must be able to easily connect with medical professionals, which is made possible by a machine learning technique. It might be challenging for regular people to obtain timely advice from health specialists at a reasonable price. This can be decreased using technology present. giving isolated residents a means to access the newest medical care and facilities.

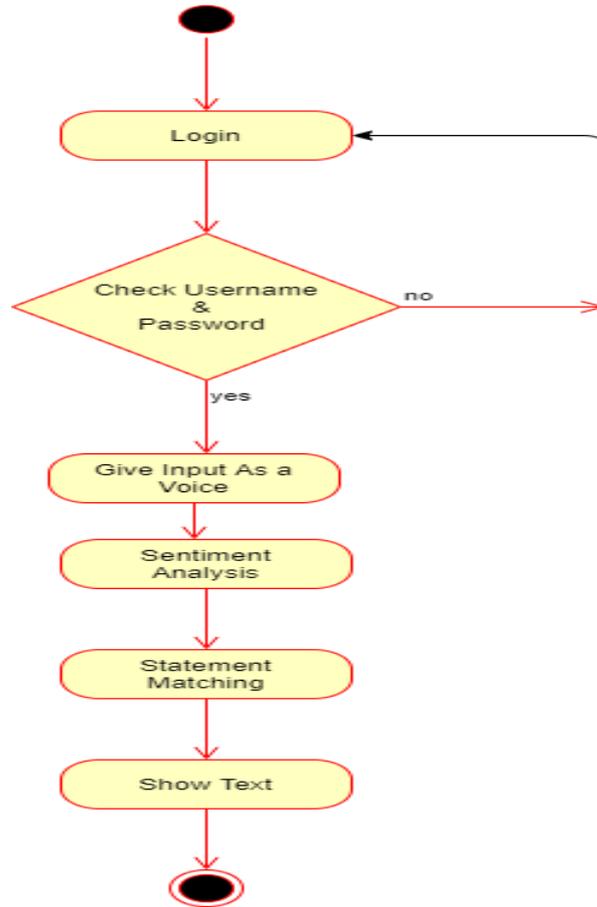
### III. SCOPE AND OBJECTIVES

Customers can be engaged with chatbots. They can also improve customer-brand relationships and provide a more tailored experience. Customers receive information from bots regarding new product launches and timely updates. Timely: Our first and primary goal is to organise and complete tasks in accordance with the hierarchy of demands' base line and order of importance. Achievable: Achievable given the time, technology, and resources at hand, while maintaining the requisite level of quality.

### IV. PROPOSED SYSTEM ARCHITECTURE



Use-Case Diagram



Activity Diagram

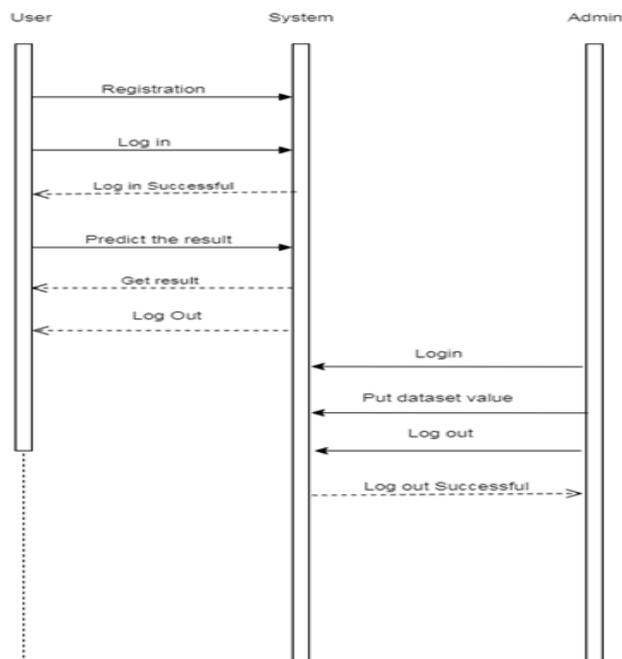
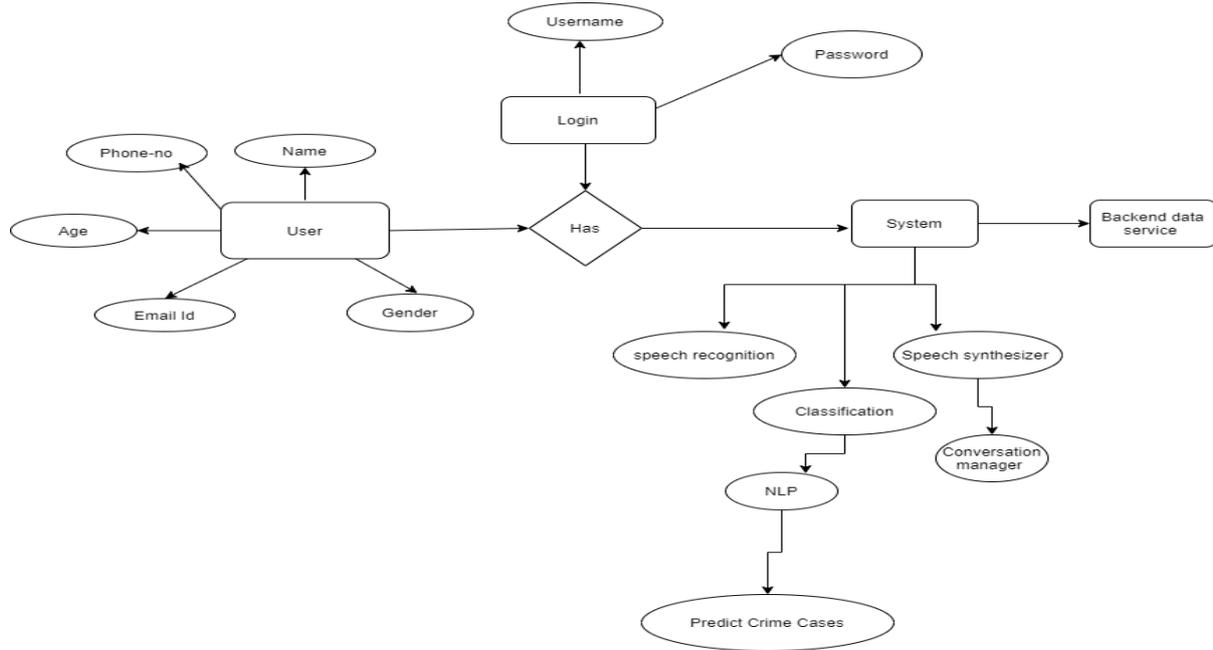


Fig: Sequence Diagram



ER Diagram

**v. CONCLUSIONS**

The structure we develop to make client benefits straightforward. We are attempting to make the framework easy to link at that point. There will be no compelling motivation to hang on for the answer or press the catch to select a choice. A chatbot service provider serves as customer support for numerous businesses, institutions, industries, etc., or it might serve as a personal assistant for everyone on the planet. Bots created on our website can also aid with memory retention. For many businesses, it might also aid in luring clients from across the country. When people are bored, they can use it to give them jokes, statistics, quotes, and other forms of entertainment. Performance was our first priority when creating our project, as we wanted it to be able to serve millions of clients at once. The proposed strategy was found to be successful after the best testing outcomes and answers from the built system. After this point, our chatbot would continue to receive text from the user and respond to it in text form.

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