Artificial Intelligence Healthcare Chatbot System

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ABSTRACT: An AI Chatbot may be a computer virus or a man-made Intelligence software which will simulate a true human conversation with real-time responses to users supported reinforced learning. AI Chatbots are slowly making their way into the healthcare industry, though most are still in the early stages of deployment. Nowadays, the healthcare sector has become a the marketplace for companies to develop Chatbots applications for patients and clinicians .The majority of current and emerging use cases appear to specialize in checking patient symptoms. Specifically, tongue processing is employed to assist diagnose a user supported the symptoms he or she provides. AI Chatbots probably uses the text messages, voice commands, or may be both. AI robots use to speak with AI features embedded in them.AI robots are often addressed as talk bots, artificial conversation entity, etc. That said it's a rarity to seek out a live intelligent chatbot, also called as AI chatbot. As the thought of a chatbot springs up, we all know it's not a true person needless to say . We all know that a chatbot adds a personal touch to a conversation.

Keywords: feature extraction, Tokenization, step word reomoval

I. INTRODUCTION

A chatbot is a computer programme that enables humans to communicate with it using speech, text, gesture, and touch input methods, 24 hours a day, 7 days a week. Chatbots were once mainly used in customer service environments, but they are now being used in a variety of other roles within companies to increase customer loyalty and business efficiencies, and they go by a number of different names. Conversational AI bots, AI chatbots, AI assistants, intelligent virtual assistants, virtual customer assistants, digital assistants, and conversational AI bots are all terms used to describe chatbots. But, just as chatbots go by a variety of names, they also have varying levels of intelligence. A simple chatbot may be nothing more than a front-end solution for popular FAQs. Chatbots designed with one of the current bot frameworks which have slightly more advanced features, such as slot filling or other basic transactional capabilities, such as taking pizza orders.However, only advanced conversational AI chatbots have the intellect and capabilities to offer the subtle chatbot experience that most businesses seek. All types of automated conversational interfaces are referred to as chatbots for the purposes of this guide. AI Chatbots have the intelligent, human-like experience that most people expect when they hear the terms artificial intelligence. The majority of chatbots on the market today aren't focused on artificial intelligence. They can use algorithms to determine the meaning of an issue and, as a result, the probability of the correct response, but if the chatbot script is destroyed, they are left stranded. Chatbots seem to have a slew of benefits.

Question-answering systems, such as Alexa, are welcomed into homes because they allow residents to quickly obtain crucial information or manage their errands. Textual chatbots, on the other hand, use automated messaging to help with a variety of tasks, including celebrity social media account management, e-commerce site support, food ordering, and time-consuming form filling (DoN). Even so, we shouldn't get too excited about the chatbot's capabilities — most people can tell when we're dealing with a chatbot rather than a real human. Chatbots, with their tongue interface, inspire humans and try to make their lives simpler in many situations. The most important point to emphasise is that chatbots do not only make decisions or perform acts for humans, but should also assist them. We chose to build a chatbot for internal vacation booking using machine learning in order to learn more about chatbots and how to effectively assist humans. We focused heavily on experience design (XD) and quality analysis (QA).

II. METHODOLOGY

1] Ai Healthcare Interactive Talking Agent using Nlp:

The importance of good nutrition in leading a healthy lifestyle cannot be overstated. The diet, when combined with physical activity, can help people manage their weight, reduce their risk of illness, and improve their overall health. A weight-maintenance self-help motivational tool may be a successful choice. This article, according to the author, introduces an interactive talking agent that is a chatbot. A chatbot is a piece of software that uses textual methods to conduct a conversation. By initiating a person's way conversation using the Language Understanding intelligence Sevice (LUIS) definition, the chatbot can begin contact with the user and help to unravel the priority. Natural language processing (NLP) is a computer programme that analyses human speech. It's a component of Artificial Intelligence (AI). Since each language has its own morphology, the chatbot must be able to break down words into individual morphemes. One of the activities that NLP should be able to manage is morphology.

2]A Novel Approach for Medical Assistance Using Trained Chatbot:

There are several therapies available for a variety of diseases. No human being can possibly be aware of all the drugs and, as a result, diseases. So, the issue is that there isn't somewhere where anyone can get information about diseases or medicines. What if there was a place where you could look up your symptoms or search an ECG to see if the medication you've been given is supposed to be used the way you've been told? It will then assist them in deducing the problem and verifying the solution. The proposed concept is to create an AI-based system that will satisfy the needs of the users. The AI will predict diseases based on symptoms and include a list of therapies that are available. The system will also provide information on the ingredients in the drugs as well as their intended uses. It enables them to receive the proper care. As a result, people will think about their wellbeing and get the proper protection.

3] Designing for Health Chatbots:

The development of conversational agents is fraught with technological, design, and linguistic difficulties. Using an emotionally intelligent conversational agent to build confidence with the individuals is another more complex aspect.They explain UX design concepts informed by a scientific literature analysis of related research works in this chapter, which introduces the character of conversational user interfaces (CUIs) for health. They then go through the literature on conversational interfaces and chatterbots, which includes a review of major studies as well as descriptions of UX design concepts and interaction patterns.

4] A Platform for Human-Chatbot Interaction Using Python:

We've seen a variety of customs for conversational agents through the years. The Chatbot is a traditional factor that can interact with operators using natural languages. There are already a plethora of chatbot platforms available, and there are still some challenges in developing data-driven systems due to the enormous amount of information needed. As a result, this paper describes a variety of agents that depend on Python-implemented natural expressions. Web access is used to provide a better platform, and offers evaluation for the chatbot on a web-based platform, and will aid in the analysis of Human-Chatbot interactions.
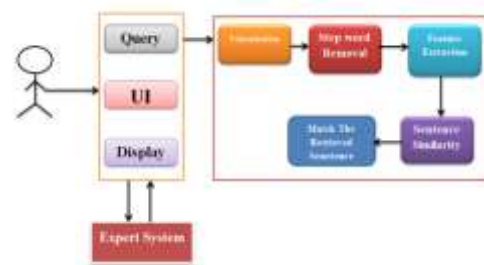
III. MODELING AND ANALYSIS
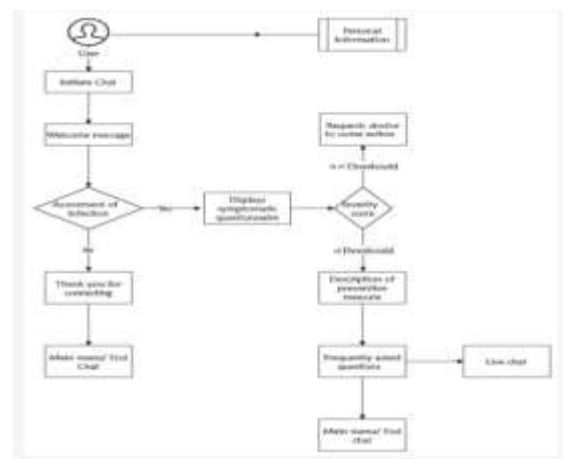

Figure 1: Modeling& Analysis

Figure 2: Description of how machine learning algorithm used in our proposed system

IV. RESULT AND DISCUSSION

The chatbot industry is still in its early stages, but it is rapidly expanding. Later on, several procedures, such as bibliometric assessment and long-term memory networks, were developed and presented as part of the chatbot's evolution. Bibliometrics is a comprehensive assessment of publications based on data. This type of analysis is also used in other areas, such as information science. There is also a subfield called scientometrics within it. We introduced human chatbot interaction using the Natural Language Processing (NLP) concept, which will help people maintain their health by solving their problems by recommending the best diet and exercises. Furthermore, these people would no longer be humiliated because they would seek guidance from a computer. One of the activities that NLP should be able to manage is morphology. Since each language has its own morphology, the chatbot must be able to distinguish between individual morphemes. Chatbots can also be used on various social networking sites to raise awareness, communicate with more people, and express large-scale concerns. Since there are already too many chatbots, building data-driven systems is difficult because it requires a large amount of data to expand. Natural expressions implemented in Python can be used to solve this problem. Python is a general-purpose, high-level programming language. The chatbot can help with health management by assessing and helping people who are coping with stress and anxiety as a counsellor or companion. We hope to create a chatbot that can solve all of these issues, taking into account all of these factors and the value of health in everyone's life. In HAI 2016, Lue Line, Luis Fernando D'Haro, and Rafael E. Banchs proposed the WebChat, a crowd-sourced effort to capture and annotate human chatbot interactions. Because of its scalability and lightweight design, the Python Tarnado framework was chosen.

V. CONCLUSION

These models work on the algorithms of directed flows, solving user queries in a way that it moves them gradually to a solution. Instead of intent, they follow a systematic approach and are based on pre-existing data. They are commonly used for goal-oriented tasks, keeping in mind user's expectations and possible set of queries in a given context.

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