

Conversational Chatbot for Online Shopping

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Abstract: Chatbot can be described as software that can chat with people using artificial intelligence. These software are used to perform tasks such as quickly responding to users, informing them, helping to purchase products and providing better service to customers. In this project, we present the general working principle and the basic concepts of artificial intelligence based chatbot and related concepts as well as their applications in various sectors such as telecommunication, banking, health, customer call centers and e-commerce. Additionally, the results of an example chatbot for trees is been developed by using the proposed architecture. We are using it for educational purpose to solve the queries of users. Chatbot are programs that mimic human conversation using Artificial Intelligence (AI). It is designed to be the ultimate virtual assistant, entertainment purpose, helping one to complete tasks ranging from answering questions, getting the rates to the delivery of plants. Chatbot has become more popular in business groups right now as they can reduce customer service cost and handles multiple users at a time. But yet to accomplish many tasks there is need to make chatbots as efficient as possible. In this system we provide the design of a Chatbot, which provides an efficient and accurate answer for any query based on the dataset of FAQs using Artificial Intelligence Markup Language (AIML) and Latent Semantic Analysis (LSA). Template based and general questions like welcome/ greetings and general questions will be responded using AIML and other service based questions uses LSA to provide responses at any time that will serve user satisfaction.

Keywords: Chatbot, Text to Speech, Smart system, AI, AIML, LSA

Introduction -It was reported that 65% of the world's population live in countries where obesity and overweight kills more people than underweight. Obesity and overweight are the fifth leading risk for global deaths but obesity is preventable [1]. Obese people are at increased risk of many serious health conditions compared to normal or healthy people[2]. Obesity and overweight not only increase the risk of many chronic diseases, but exhibit some modest growth in US, UK, Canada, Italy, South Korea and Spain also[3, 4]. Eight out of the ten leading causes of death in Taiwan are associated with obesity [5]. Obesity appears to be associated with increased cardiovascular mortality and increased mortality from certain types of cancer[6], but weight loss shows the improvement in many mortality risk factors.

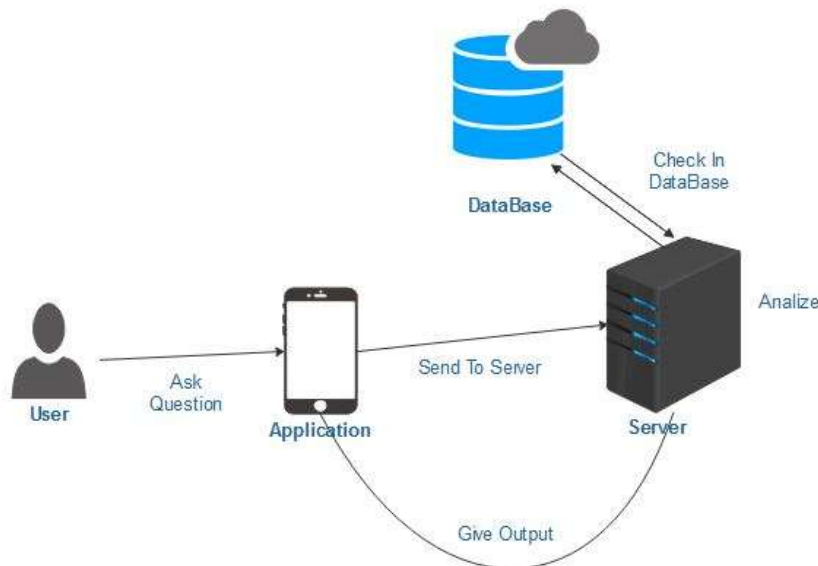
The study objective was to develop a solution called "Smart Wireless Interactive Healthcare System" (SWITCHes) to facilitate data reception and transmission in a real-time manner to web server protected by encryption for further analysis of data extraction. SWITCHes is made up of two main components: an interactive web-based dashboard and a smartphone app. An artificial intelligence (AI)-powered health chatbot lives inside SWITCHes app. The SWITCHes-based clinical trial is set to be carried out after obtaining Institutional Review Board (IRB) approval. This paper presents an overview of development and implementation of SWITCHes. which is set to attain the goals of reducing the health care spending, allow the early detection, diagnosis as well as treatment, and improve clinical outcome[8, 9]. mHealth app can be viewed as a wide reaching approach, which can reach out to many more users who need the medical consultation or treatment throughout the rural or remote areas, if appropriately designed.

LITERATURE SURVEY

1. People who are overweight and obese have a greater risk of developing serious diseases and health conditions. A steadily increasing trend of obesity is not only limited to developed countries, but to developing nations as well. As smartphones have rapidly gained mainstream popularity, mobile applications (apps) are used in public health as intervention to keep track of diets, activity as well as weight, which is deemed more accurate than relying on user's self-report measure, for the sake of weight management. A solution called "Smart Wireless Interactive Healthcare System" (SWITCHes) is developed to facilitate objective data reception and transmission in a real-time manner. Based on the user data acquired from SWITCHes app and the auxiliary data from medical instruments, not only SWITCHes app can engage user with tailored feedback in an interactive way, in terms of artificial intelligence powered health chatbot, but the healthcare professional can provide the more accurate medical advice to user also. This paper presents an overview of development and implementation of SWITCHes.
2. Personalized health management requires public awareness about management strategies of self-monitoring, self-appraisal, and self-management, eventually paving a way to more timely interventions and higher quality patient-clinician interactions. A key enabler is patient generated health data, fueled in good part by the growth in wearable devices including smart watches and other Internet-ofThings (IoT) for health-tracking (<http://bit.ly/smart-wearables>). These tracking devices provide "low-level" monitoring signals indicating health conditions such as sleep apnea and heart rhythm disorder. However, to make more sense of IoT data, it is imperative that we develop cognitive approaches where they mine, interlink, and abstract diverse IoT data.

3. Medical services are basic needs for human life although they normally have limited resources. Modern technologies are utilized for increasing service capability and decreasing the operation cost. Auto-response system or chatbot, which is widely known in the field of online businesses, can be applied to the medical services. Therefore, the objective of this work is to implement the medical consultant system service by using chatbot Technology. It was implemented based on the information of the symptoms and treatment records gathered from the DoctorMe application. The test results show the capability of the proposed system. Moreover, it can be used as a guideline for future improvement and also a guideline for future study.
4. World Health Organization (WHO) reports that, the second major cause of death is cancer. Life of people who have cancer is daunting. Their heart is open to all negative emotions like anger, fear, depression, guilt, helplessness, etc. People around them are also finding it difficult to cope with it. They require constant support to discuss their problems with and to provide them with factual information. This paper introduces a potential solution to provide them with what they are seeking for- a chatbot. The proposed chatbot is a cancer chatbot designed only for people dealing with cancer. People can ask about anything and everything about cancer- symptoms, treatments, survival and so on. The bot is trained by information collected from various cancer forums which have a wide range of information about cancer. Sentiment analysis is used to identify the mood of the users so that the bot can give a human-like behavior and comfort them.
5. Presents case studies in the healthcare industry that focus on the use of Chatbots to improve patient monitoring and medical services. The transition towards personalized health management requires public awareness about management strategies of self-monitoring, self-appraisal, and self-management, eventually paving a way to more timely interventions and higher quality patient-clinician interactions. A key enabler is patient generated health data, fueled in good part by the growth in wearable devices including smart watches and other Internet-of-Things (IoT) for health-tracking. These tracking devices provide “low-level” monitoring signals indicating health conditions such as sleep apnea and heart rhythm disorder. However, to make more sense of IoT data, it is imperative that we develop cognitive approaches where they mine, interlink, and abstract diverse IoT data. These cognitive approaches often needs to keep the user closely engaged to acquire more information, to obtain feedback, to collect verbal health conditions, and to provide intervention and management actions. The chatbot technology was initially introduced as an artificial conversational agent to simulate conversations with a user using voice or text interactions.

SYSTEM ARCHITECTURE



We are making a system with the help of artificial intelligence and machine learning, our system is based on the ecommerce, Each user has to login to the system to use it, we are providing a chatbot for shopping assistance which will perform operation like a booking, product information, price etc. we making a smart system that will allows user to get overall information of product and get proper assistance in shopping .

Features:

- Centralized management system
- Online booking
- Easy to use
- Payements

Algorithm (Hashing and mapping Algo):

1. Start
2. Sign up /Sign In
3. **If** User asked the question
4. **Then** answer appropriate
5. **Else** take no action.
6. **If** user is not able to book product
7. **Then** He/she can get error msg.
8. **Else** successfully done msg should display
9. **End**

Design Concept:

Using planner or a like project management tool. System is made up of two major components, admin and user. So, to create these components, following activities must be undertaken:

Hardware Requirement for Development of Project:

- Ram 2 GB
- Processor Intel dual core
- HardDisk

Software Requirement for Development of Project:

- Android Studio
- Windows 7 or above
- Mobile operation system 5.1 or above

Advantages of this Project:

- Reliable
- Easy to understand
- Scalable
- Secure
- High Performance

Limitations/Constraints of Project:

- Internet connectivity.
- Un relevant question

Applications:

- Organiuzation
- Personal

Conclusion

It determined that the modern chatbots perform at a very high standard to provide a reliable response to users compared to the traditional chatbots. Unlike existing chatbots which focused on various domains of ecommerce. This is the best solution for people who are busy with their job schedules.

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