CHATBOT DEPLOYMENT WITH CLOUD WATSON ASSISTANT

Phase 1:
Problem Definition and Design Thinking

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem. Please think on a design and present in form of a document.

Problem Definition :

The project involves creating a chatbot using IBM Cloud Watson Assistant. The goal is to develop a virtual guide that assists users on messaging platforms like Facebook Messenger and Slack. The chatbot should provide helpful information, answer frequently asked questions (FAQs), and offer a friendly conversational experience. The project includes designing the chatbot's persona, configuring responses, integrating with messaging platforms, and ensuring a seamless user experience..

Design Thinking:

1. *Persona Design: Define the chatbot's persona, including its name, tone, and style of communication.*
2. *User Scenarios: Identify common user scenarios and FAQs that the chatbot should be able to address.*
3. *Conversation Flow: Design the conversation flow, outlining how the chatbot responds to user queries and prompts.*
4. *Response Configuration: Configure the chatbot's responses using Watson Assistant's intents, entities, and dialog nodes*
5. *Platform Integration: Integrate the chatbot with popular messaging platforms like Facebook Messenger and Slack.*
6. *User Experience: Ensure a seamless and user-friendly experience, with clear prompts and informative responses.*

Note:

File Naming Convention: **CAD_Phase1.pdf**

https://github.com/users/8270653310/emails/280617384/confirm-verification/85743623?via-launch-code-email=true

ABSTRACT :

Chatbot is widely popular now-a-days and catching speed as an application of computer communication. Some programs respond intelligently like human. This type of program is called a Chatbot. This paper addresses the design and

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implementation of a Chatbot system. We will also study another application where Chatbots could be useful and techniques used while designing a Chatbot.

INTRODUCTION:

In today's world computers play an important role in our society? Computers give us information; they entertain us and help us in lots of manners. A chatbot is a program designed to counterfeit a smart communication on a text or spoken ground. But this paper is based on the text only chatbot. Chatbot recognize the user input as well as by using pattern matching, access information to provide a predefined acknowledgment. For example, if the user is providing the bot a sentence like "What is your name?" The chatbot is most likely to reply something like "My name is Chatbot." or the chatbot replies as "You can call me Chatbot." based on the sentence given by the user. When the input is bringing into being in the database, a response from a predefined pattern is given to the user. A Chatbot is implemented using pattern comparing, in which the order of the sentence is recognized and a saved response pattern is acclimatize to the exclusive variables of the sentence. They cannot register and respond to complex questions, and are unable to perform compound activities . Chatbot is relatively a new technology. The application of a Chatbot can be seen in various fields in the future. This paper covers the techniques used to design and implement a Chatbot. Comparisons are made, findings are discussed and conclusion is drawn at the end.

COMPARISION:

This Chatbot is very simple and user friendly. It is not very complicated like other Chatbots. The working of the Chatbot is simple and can be easily understood by any person. In other Chatbots, the working is very complicated. Many classes are used which is difficult to understand. In this program, only one class is used to make it simple and obtain the expected output. This Chatbot uses simple pattern matching to represent the input and output whereas other Chatbots uses input rules, keyword patterns and output rules to generate a response. If the input is not found in the database, a default response is generated. The input and output can be customized according to the user. Based on the developer or the user, the required requests and responses can be stored in the database. Since own database can be created, it allows the user to understand how the response is generated. This Chatbot can be used for the entertainment purpose. Whenever a person is bored, he can chat with the bot for entertainment. It can also be used to provide information by modifying the program as needed by the user.

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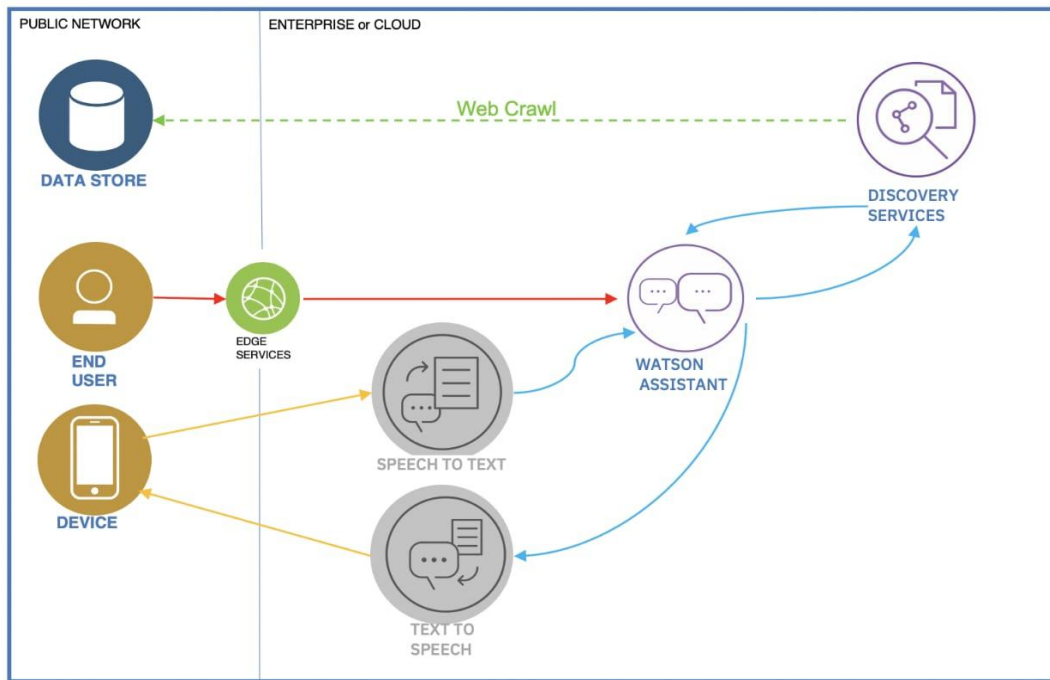
CONCLUSION :

A chatbot is one of the simple ways to transport data from a computer without having to think for proper keywords to look up in a search or browse several web pages to collect information; users can easily type their query in natural language and retrieve information. In this paper, information about the design, implementation of the chatbot has been presented. From the survey above, it can be said that the development and improvement of chatbot design grow at an unpredictable rate due to variety of methods and approaches used to design a chatbot. Chatbot is a great tool for quick interaction with the user. They help us by providing entertainment, saving time and answering the questions that are hard to find. The Chatbot must be simple and conversational. Since there are many designs and approaches for creating a chatbot, it can be at odds with commercial considerations. Researchers need to interact and must agree on a common approach for designing a Chatbot. In this project, we looked into how Chatbots are developed and the applications of Chatbots in various fields. In addition comparison has been made with other Chatbots. General purpose Chatbot must be simple, user friendly, must be easily understood and the knowledge base must be compact. Although some of the commercial products have recently emerged, improvements must be made to find a common approach for designing a Chatbot.