TECHNOCOLABS DEEP LEARNING INTERNSHIP

PROJECT REPORT

Title: Med chat bot to provide medicine information.

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AIM:-

Building an AI Assistant Chabot in Chrome Extension that helps in learning about tablets like description, pros and cons for taking initial precautions before taking them. the Google Search Engine provides Updated and relevant data of the medicines in health care industry.

Abstract:-

Health care domain is very found domain all the forms. Having the knowledge of different models at every human's reach. In this project, we have created in a chat bot using dialogue which helps us find medicines and it description.

Introduction :-

Machine learning and deep learning have started playing great impact in different domains. Here, In this project we have used NLP and DL techniques to create a Chatbot with Intents and Small talk. Below is the workflow of our project.

WORKFLOW

1. *AI assistant*
2. *Speech to text commands*
3. *Text to speech commands*
4. *Intent recognition*
5. *Web scraping*
6. *Chrome extension*
7. *Deployment*

PROCEDURE

- We created normal assistant using dialog flow which will take input as an audio as well as text and assist the user in both audio and text formats
- We integrated various intents and responses to the assistant.
- We used natural language processing as a perception for an assistant for providing relevant information for the medicine names which were given by the user.
- Also we integrated a small talk to the model in that assistant can respond to the user depending on the conversation.
- Assistant is integrated with web scraping in order to get some real time data from the web.
- We also tried to deploy the assistant on the cloud and then use it as a chrome extension

Dataset :

The dataset we have considered, has information of a highly accomplished, uniquely experienced team of qualified executives in the fields of medicine, healthcare, Internet technology, and business to bring you the most comprehensive, sought-after healthcare information anywhere. Nationally recognized, doctor-produced by a network of more than 70 U.S. board-certified physicians, MedicineNet.com and onhealth.com are trusted sources for online health and medical information.

MedicineNet is an online, healthcare media publishing company. They provide easy-to-read, in-depth, authoritative medical information for consumers via its robust, user-friendly, interactive website.

We have extracted the main information such as description, pros and cons of every tablet which is available in the site using web scraping. We have added the web scraping part to the dialog flow with the tablet informational csv files. So when a user enters any tablet name it will respond with the pros and cons of that tablet. We have also

provided the links for the further information regarding the tablet in the response.

Dialogue Flow :

According to Wikipedia DialogFlow is a Google-owned developer of human–computer interaction technologies based on natural language conversations. The company is best known for creating the Assistant, a virtual buddy for Android, iOS, and Windows Phone smartphones that performs tasks and answers users' question in a natural language. DialogFlow also have natural language processing engine that incorporates conversation context like dialogue history, location and user preferences.

DialogFlow provides one-click integrations to most popular messaging Apps like Facebook Messenger, Slack, Twitter, Kik, Line, Skype, Telegram, Twilio and Viber. Even to some voice assistants like Google Assistant, Amazon Alexa and Microsoft Cortana.

Natural Language Processing(NLP) :

Compared to some platforms which works on predefined questions like Chatfuel, Dialogflow can offer better user experience with NLP. DialogFlow Agents are pretty good at NLP.

Here in this project of med_Chatbot we have used the default feature "small talk" by adding the responses to the basic/usual interaction between user and the Chatbot.

We also have trained the bot with few *intents* to recognise the name of the user and to respond/reply to user using their name.

Using the fulfilment, we added the web scraping code which will extract the relevant information from the website

RESULTS

We as a team were successfully able to create an AI assistant which can assist us real time using dialog flow in the place of natural language processing and web scraping.

CONCLUSION

AI assistance is part of the future AI technology and the AI assistants are evolving every day which is also helping the humanity by many ways and is already been the part of almost every person, further improvisations can create mind boggling results. Natural language processing is the branch of AI which is helping in communication to the world breaking the language barriers.

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