Project Report:

Restaurant Chatbot

**Problem:**

The problem of this report was to build an AI chatbot. The particular purpose of this chatbot is to talk about restaurants and help you find places around you. This chatbot should be able to handle chit-chat as well as specific questions related to restaurants.

**Related Work:**

Google Maps:

Google map is a general search for any place that exists in the real world. Therefore, this includes restaurants. If you type a category of food, the search will give you the places around you that sell pizza. It will also show the user the visual place where those places are located as well as all the convenient information about them. The AI of google also understand sentences.

ChatGPT:

Like google, ChatGPT is a general-purpose software but it is also knowledgeable with any restaurants since January 2022. The AI understands the user’s sentence and will give the name and addresses of restaurants asked for.

**Approach:**

The approach chosen is a rule-Based chatbot using Voiceflow. The chatbot expects to be asked questions about food. This system is not trainable either.

If it does receive a question about food, an AI will categories the user’s input. That is, if the user talks about ice cream, the AI understand that the user wants to see desserts, if the user talks about sushi, the AI will look for Japanese restaurants. Once the information is “Translated”, an API call is made to the Yelp API with the food category desired. Finally, an AI is used to create a response to the user with the top 5 restaurants found in the API.

If the user’s input is about restaurants in general, an AI translates the information to look for any restaurants. Then, an API call is made to look for restaurants. Finally, another AI is used to create a response to the user with the top 5 restaurants found in the API.

And, in the case the user simply wants to chit-chat, the first AI filter will tell the code to just talk to the user, with no API calls.

This system is not trainable either.

**Evaluation:**

Differences:

ChatGPT is flexible in its answers whereas my Chatbot cannot. You can ask ChatGPT for different options and/or more options. My chatbot will only give the user the same 5 options for a particular category of food.

Moreover, my chatbot does not have remembrance of previous prompts like ChatGPT does.