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Chatbot Report

System Description

- In my chatbot program, I used the OpenAI API. OpenAI helped respond to the user inputs. I used NER to determine the names of the users when they had input their names. I used web scrape to scrape two websites (one about the origins of basketball and the other about the origin of ice hockey) and stored them into two text file to use them as the input for OpenAI later. I also used regex to clean up the text files. I utilized term frequency, though I could not get OpenAI to output it. The user model is in the text file but I was not able to get OpenAI to use it.

Instructions to use it

- I used an IDE (Pycharm) to execute my chatbot code. Then, it gives me a local url, which you can click and it takes you to a chatbot mockup.

Sample Dialogue Interactions

- Below are the two ways I interacted with OpenAI that uses the web scraped websites to answer questions on the origin of ice hockey and the origin of basketball.

Chatbot

Here is where you will put your inputs to chat with OpenAI

What is the origin of ice hockey from the texts I provided to you

ClearSubmit

Here is where the chatbot will reply

The origins of ice hockey are unclear, but stick-and-ball games played during the Middle Ages or even ancient Greece and Egypt may have influenced the development of the game. The modern sport's closest ancestor may be "chamieare" or "shinty," a stick-and-ball game played on ice in early 1600s Scotland, while in the mid-1700s, a game called bandy was played on ice on the eastern plains of England. In the winter, players competed with iron skates on ice that formed on the flooded meadows and elsewhere. However, Canada, beginning in the 19th century, is credited with modernizing and popularizing the game we know today, and the first organized ice hockey game was played on March 3, 1875, between two teams from Montreal's Victoria Skating Club.

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Chatbot

Here is where you will put your inputs to chat with OpenAI

What is the origin of basketball from the texts I provided to you

ClearSubmit

Here is where the chatbot will reply

Basketball was invented by James Naismith, a 31-year-old graduate student and instructor at Springfield College (then known as the International YMCA Training School), located in Springfield, Massachusetts in 1891. The game was invented as part of Naismith's work with the College when he was challenged by Luther Gulick, then the College's physical education superintendent, to come up with a new indoor activity that could be played by college students during the long New England winters. Naismith created a game that combined elements of American rugby (passing), English rugby (the jump ball), lacrosse (use of a goal), soccer (the shape and size of the ball), and something called duck on a rock, a game Naismith had played with his childhood friends in Bennie's Corners, Ontario. He approached the school janitor, hoping to find two 18-inch square boxes to use as goals, but the janitor came back with two peach baskets instead. Naismith then nailed them to the lower rail of the gymnasium balcony, one at each end, and the game of basketball was born. It became an instant success, and the rules Naismith wrote for the game have been tinkered with but, by and large, the game of basketball has not changed drastically since Naismith's original "Thirteen Rules" were tacked up on a bulletin board at Springfield College.

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Appendix of Links Used

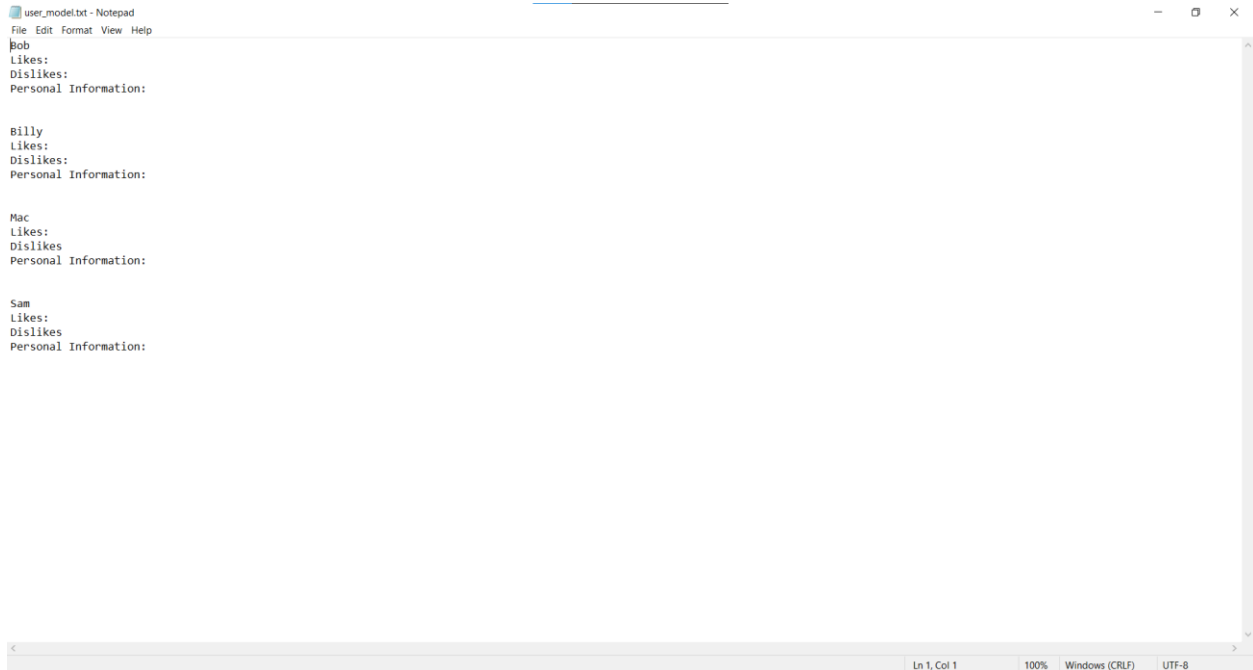
- There are two links that I hard coded into the program that we used to web scrape. Below is the MLA citation for it.

“Springfield College.” *Springfield College*, <https://springfield.edu/where-basketball-was-invented-the-birthplace-of-basketball>.

“Who Invented Hockey?” *History.com*, A&E Television Networks,
<https://www.history.com/news/who-invented-hockey-origins-canada>.

Appendix of Sample User Models

- These are the sample user models I created. I stored the user models in the text file. While I was able to create new profiles for every new user, I was not able to get their likes, dislikes, and personal information from the dialogue they chatted with the chatbot into the text file.



```
user_model.txt - Notepad
File Edit Format View Help
Bob
Likes:
Dislikes:
Personal Information:

Billy
Likes:
Dislikes:
Personal Information:

Mac
Likes:
Dislikes:
Personal Information:

Sam
Likes:
Dislikes:
Personal Information:
```

The screenshot shows a Notepad window titled "user_model.txt - Notepad". The window contains four sample user models, each consisting of a name followed by three fields: "Likes:", "Dislikes:", and "Personal Information:". The users listed are Bob, Billy, Mac, and Sam. The text is formatted with line breaks, and the window includes standard menu bars and a status bar at the bottom.

Strengths and Weaknesses

- One strength this chatbot has is that it replies to the user's input well. This is because of the utilization of the OpenAI API.
- There are some weaknesses in this chatbot program. First, it was not able to store likes, dislikes, and personal information of the user. Also, the chatbot was not able to use the term frequency and the user model.