Stained Glass Chatbot

Topic

When you are first starting in stained glass, you have a lot of questions. This chatbot will help to answer those questions.

Business Problem

When you are first learning a hobby, you have a lot of questions. Some go to classes, some go to books, and some go online to find answers. The problem arises when a student goes home from a class or reads a book or blog, they still have questions. This chatbot is aimed to help consolidate a lot of questions the user may have into a learning environment where the chatbot can help answer those questions.

Datasets

Data will be gathered from stained-glass Facebook groups and stained-glass sites that I have accumulated over the years. I will be consolidating many of the topics and suggested answers from what I have gathered.

Methods

I plan to use Natural Language Processing (NLP) and Neural Networks to build my learning model.

I will train my model with the Keras Sequential model from an initial JSON file of tags, patterns, and responses. Once the model has been trained, I will use it during the user interaction with my chatbot to respond to their queries. The aim is to have a meaningful conversation and answer the user's questions correctly.

Ethical Considerations

As I will be taking questions and answer from users in Facebook groups, there are the ethical considerations of their privacy and not making responses personal of any sort. Also, since I will be creating the answers for this chatbot, it is my personal opinions and responses that will be generated.

Challenges/Issues

I face a lot of challenges in this project. Having enough data to properly answer the user's queries and making sure the tags and patterns represent the queries properly. I'd also like the user to input questions and answers they know that the chatbot may not have encountered so it can learn with more data it didn't previously have.

References

Create Chatbot with Python & Artificial Intelligence. (n.d.). Retrieved from TechVidvan:
https://techvidvan.com/tutorials/chatbot-project-python-ai/

Sidharth. (2022, May 31). *How to build a AI chatbot using NLTK and Deep Learning*. Retrieved from PyCodeMates: https://www.pycodemates.com/2021/11/build-a-AI-chatbot-using-python-and-deep-learning.html