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**DSC 680, Project 1 – Virtual Facility Service Chatbot**

**10 Questions an audience would ask me.**

1. How does the JSON file work?

    a. Basically, the JSON file contains tags, patterns, and responses. The tags are the different subjects the chatbot will answer from. Patterns are a few different ways of asking a question about the tag that the chatbot can learn from. Responses are the answers the chatbot will give when it predicts the tag from the user's question. If there is more than one response, the chatbot will randomly choose one to answer from.

2. Why do you need a Deep Neural Network?

    a. To understand what a user is asking; we need to understand the words. Using Natural Language Processing (NLP) and Machine Learning (ML) – all of which is encompassed in a Deep Neural Network – we can pull out the pertinent information to correctly predict a reasonable and correct response.

3. Can it do other things besides answer virtual facility service questions?

    a. For now, the chatbot is solely focused on virtual facility service. Maybe in the future, it will branch out to other hobbies.

4. Is there a way to change the probability percentage so it gives better responses?

    a. Yes, we can change the probability percentage to anything we want. The higher we raise the percentage; the more responses may come back as unknown which will in turn allow the user to update the initial data for the chatbot to learn from.

5. What are some of the questions the chatbot can answer?

a. The chatbot currently can answer basic questions about the process of the service. I hope in the future more people will add their knowledge to the model to make itbetter at answering more advanced questions.

6. Do the questions have to be very specific?

a. No, they can be general as you want as long as the question contains words that the chatbot can pick up to calculate the best probability of finding an answer. If your question comes back as unknown, we may need to update the training data to help it better understand the types of questions users may be asking.

7. Is this for only beginners?

a. Until the model has enough information to answer a very broad spectrum, I think it is only useful for beginners.  Once more people start using the chatbot and updating it I do think it will be good for all aspects of property service.

8. Can you add more information to the chatbot for better answers?

a. Yes, the user can go into the training bot to enter their own tags, classes, and responses to the chatbot, so it has more information to learn from

9. Can it display images as well as text?

a. Currently no. Eventually in the future, as upgrades are performed, I hope the chatbot will be able to display images

10. Can it show videos?

a. At the present time no but that is a good future upgrade to the application

11. Can you update the current tags and patterns?

a. At this time, you can only add to the intents.json file but I hope with future upgrades I can add the ability to add to the patterns and have better responses for a better learning model.