C951 Task 1

Section A – Functionalities/Description

This custom chatbot was designed to help spread the traffic of students seeking career advisors at the university and get help directly from the bot. For functionality, the chatbot provides career advice to students by allowing them to browse through different subcategories of computer science and provide them with a career option based on their selections. If the user has any trouble, they will be prompted to then proceed to the career counselor for more advice. The needs from the scenario are met in this case because the chatbot can reduce the workload of the career advisors while interacting with students to help them identify up to five different job types that they would qualify for.

Section B – Five Computing Job Types

The five job types selected to be provided to students are as follows:

- Information security analyst (cybersecurity)
- Data scientist/analyst (Data management)
- Database administration (Data management)
- Front-end/Web developer (Software development)
- Back-end/Server-side programming (Software development)

The students are given three primary categories to choose from at the beginning (cybersecurity, software development, and data management). Depending on this selection, the student will then be asked more specific questions to recommend the best job.

Section C – Code Files

Code files are provided in the .zip folder

Section D – Training Cases

The training cases observed in this application were based on the users' unique preferences along with their different skills and traits which were used to tailor the chatbot to these attributes. AIML was used to enhance the functionality of the chatbot

by implementing the use of images and buttons to get user input while removing the possibility of any user errors such as typos. The use of buttons also helps keep the conversation focused and gives users an accurate idea of what the chatbot will provide.

The first training case is about Joe. He is a highly motivated computer science major who values reliability and accountability. As he gets closer to his graduation, he realizes data management would be a career he would want to pursue. After receiving these inputs into the chatbot, it will recommend that he look into a job as a database administrator. If he would like to look at other options in the data management category, he will have the opportunity to look into data analytics as well.

Brad was the student in the second training case. Brad enjoys programming in nearly every kind of environment. In our training case he decides he likes the idea of front-end web development with HTML/CSS. When using the chatbot, it successfully gives him more information on becoming a web developer based on his interests and the interactive prompts.

A third case observed is the training case with Jacob. In this case, Jacob is a business major who used the chatbot. The chatbot has the added functionality to determine if a student isn't a computer science major to prevent them from receiving any misleading information about their actual major. In this scenario, he was prompted to contact his program mentor to get more information about business majors.

Section E – Installation Manual

The following are instructions on how to successfully install the chatbot on another device.

- On a desktop computer, open www.pandorabots.com in a preferred web browser.
- Log in and go to your dashboard. On the left-hand side, find the "My Bots," tab and click the plus icon to create a new bot.
- you can name the chatbot and ensure "Blank Bot" is selected under context.
- Select the bot's name on the left-hand column and click on the Edit dropdown to navigate to Code Editor.
- Locate the file dropdown in the editor and select the upload option.

- Proceed to upload the downloaded files in the .Zip folder.
- From here, you can select the chat icon on the bottom right-hand side of the screen and begin interacting with the bot.

Section F – Strengths and Weaknesses

Some strengths of the chatbot development environment are as follows:

- User-friendly and intuitive
- Language is easy to learn and implement on

The process of developing this program was fun and very intuitive when compared to other applications that have been designed.

Some weaknesses of the chatbot development environment are as follows:

- Bit of a lack of structuring capabilities
- Missed the use of styling similar to CSS

While the environment was adaptive and easy to use overall, the lack of formatting and styling for the chatbot menu made the user experience feel a bit blander. This, along with a lack of a better way to structure the prompts and responses made developing the program felt more tedious.

Section G – Monitoring and Maintaining

This type of application will be cloud-based and daily usage will be closely monitored. User data will be collected and analyzed to determine if and when improvements need to be made to satisfy user needs and provide a better overall experience. These improvements from monitoring can be anything from a larger library of job options to more refined questions to offer more relevant jobs to students.

Section H – Panopto Recording

The link has been provided in the submission, however if there are any issues it is here as well.

https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=bef8e9c2-52d4-4f8d-a765-af72000d1060

Section I – Sources

No outside sources have been quoted, paraphrased, or summarized