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C951 Intro to AI

**A.  Explain the functionalities of the chatbot and how they will meet the needs described in the scenario.**

Careerbot is a custom chatbot created to meet the needs described in the scenario. Careerbot accomplishes this by interacting with BSCS students and providing them with 5 career path suggestions based on their responses.

**B.  Identify five computing job types that your chatbot can recommend based on student interaction with the chatbot.**

1. Front End Developer
2. Back End Developer
3. IT Project Manager
4. Data Analyst
5. Database Manager

**C.  Provide the generated chatbot code files to support the five identified job types from part B.**

\**Please refer to the attached/linked files*\*

**D.  Explain how the chatbot training cases were selected and how you used artificial intelligence markup language (AIML) to enhance the functionality of the chatbot. Provide examples of the chatbot’s functionality that represent the selected cases at the end of the training process in support of your explanation.**

Specific training cases for this chatbot were generated since no user data was available. Each case was designed to ensure that each career path outcome was reachable as the user interacted with the chatbot.

Careerbot maintains a simple interface by employing guided conversation along a decision tree throughout the AIML file, transversing the user toward a potential career path. For example, after the user confirms they are ready to begin with career path guidance, the next question determines whether the user enjoys programming. Each question that follows continues to guide the user towards the career path that is most associated with their responses. Users interact with Careerbot by using the mouse and clicking the desired response. There are up to 4 questions once the bot is initiated before an outcome is reached.

Examples:

User A is not really into writing code but is detail-oriented and gifted at analyzing data. Careerbot will recommend the role of Data Analyst to User A.

User B is a gifted programmer and enjoys coding. User B is a logical thinker, yet doesn’t enjoy the creative aspects of designing a GUI. Careerbot will recommend the role of Backend Developer to User B.

**E.  Create an installation manual for the chatbot that includes the web link to access the live chatbot in the Pandorabot platform.**

Installation instructions:

1. Download and unzip the attached Careerbot files in the desired location.
2. On your browser, go to <https://home.pandorabots.com/home.html> or click [here](https://home.pandorabots.com/home.html).
3. Here you may create a free account or log in to Pandorabots.
4. After logging in, on the left side of the screen, find and click on the “+” next to MY BOTS.
5. A popup dialog box will appear, requesting information for Name, Language, and Content. Fill out the Name section, make sure English is selected in the Language drop-down, and select Blank Bot for the Content dropdown. Click Create Bot when fields are completed.
6. On the left side of the screen, select your newly created bot name > Edit > Code Editor
7. On the left side of the main window pane, click File, then click Upload.
8. A dialog box will appear. Click Select Files and navigate to the directory where you saved the downloaded Careerbot files. Select the appropriate files and click Open. In the dialog box, click the purple button Upload. Once completed, click Done.
9. Click the orange chatbot icon located on the bottom right of the screen to open the chatbot dialog window.
10. Press any alphanumeric key and Enter to begin.

To access Careerbot live on the Pandorabot platform:

1. On your browser, go to <https://home.pandorabots.com/home.html> or click [here](https://home.pandorabots.com/home.html).
2. Here you may create a free account or log in to Pandorabots.
3. After logging in, navigate to the bot directory <https://home.pandorabots.com/dash/bot-directory> or click [here](https://home.pandorabots.com/dash/bot-directory).
4. In the Search bar, type “C951.1 Careerbot 003761827” and press Enter.
5. Select the bot titled “C951.1 Careerbot 003761827” and click the orange icon in the lower right corner of the screen.
6. Click the orange chatbot icon located on the bottom right of the screen to open the chatbot dialog window.
7. Press any alphanumeric key and Enter to begin.
8. Respond to the bot by clicking the desired response.

**F.  Assess the strengths and weaknesses of the chatbot development environment and explain how they supported or impeded the construction of the chatbot.**

Strengths:

1. Asdf
2. Asdf
3. Asdf

Weaknesses:

1. Asdf
2. Asdf
3. Asdf

SUMMARY

Strengths:

1. User-Friendly Platform– Pandorabots offers easy to follow tutorials and employs a user-friendly interface enabling new users to create with confidence.
2. Templates – The included prebuilt templates can decrease total development time.
3. Scalable – Cloud-based hosting enables optimized resource management and scalability as the bot evolves.

Weaknesses:

1. Platform dependency – If the Pandorabots platform fails to keep up with industry standards or fails to give needed support and updates, chatbot progress could be greatly hindered.
2. Limitations - While the Pandorabots platform is quite user-friendly and capable of handling simple projects, more advanced and complicated projects may find limited customizations a major obstacle.
3. Pay to play – Some features come with added costs on the Pandorabots platform. Incorporating those features must be factored into cost constraints.

The Pandorabots platform offers some strong advantages and provides a great entry point for new developers creating smaller projects. User-friendly and scalable, Pandorabots includes prebuilt templates making getting basic projects off the ground much faster. Cloud-based hosting allows a small project to better optimize resources, evolve, and scale.

While Pandorabots is great for new developers creating small projects, those advantages can turn into challenges and even become more costly for larger, more complicated projects requiring customization. While the GUI and prebuilt templates are simple and easy to use for beginners, they lack support for advanced users with complex projects. Many features are behind a paywall, creating additional expenses that must be factored into project costs and constraints. The overall success of long-term projects is very dependent on the Pandorabots platform itself staying current with updates, features, and support. Should the platform fail in these areas, project success could be greatly compromised.

**G.  Explain how the chatbot will be monitored and maintained to improve the final user experience.**

Careerbot usage and user feedback will be monitored throughout its life cycle. Features, links to outside resources, and additional career paths may be added as needed. Future endeavors could include integrating analytical tools to monitor conversation paths and feedback mechanisms. Incorporating regular updates will improve user experience by enabling the bot to stay current, provide more information, and be tailored to student trends and career trajectories.

**H.  Provide a Panopto video recording that includes a verbal summary of the capabilities of your chatbot and an example of human interaction with the chatbot in which it provides meaningful career advice.**

*Note: For instructions on how to access and use Panopto, use the "Panopto How-To Videos" web link provided below. To access Panopto's website, navigate to the web link titled "Panopto Access", and then choose to log in using the “WGU” option. If prompted, log in using your WGU student portal credentials, and then it will forward you to Panopto’s website.*

*To submit your recording, upload it to the Panopto drop box titled "Intro to Artificial Intelligence NIP2 | C951 (student creators) [assignments]." Once the recording has been uploaded and processed in Panopto's system, retrieve the URL of the recording from Panopto and copy and paste it into the Links option. Upload the remaining task requirements using the Attachments option.*

**I.  Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.**

No outside sources were quoted, paraphrased, or summarized.

**J.  Demonstrate professional communication in the content and presentation of your submission.**