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Introduction to Artificial Intelligence – C951

TASK1

(-Chatbot-)

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

Functionality and Meeting Needs:

- The chatbot is designed to help users explore career options in computer science.
- It initiates conversations with users, greets them, and asks if they are ready to get started.
- It then guides users through a series of questions to understand their interests and preferences.
- Based on the user's responses, the chatbot provides recommendations for computing job types.

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

Five Computing Job Types:

1. Software Engineer
2. Data Scientist
3. Cybersecurity Analyst
4. Web Developer
5. IT Project Manager

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

Each job type corresponds to a category in the AIML code. The relevant categories include responses tailored to each job type based on the user's interaction with the chatbot.

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.***

- The training cases were selected to cover common user interactions, such as requesting career guidance or exploring top careers.
- AIML was used to structure the conversation flow and provide tailored responses based on user inputs. For example, AIML categories handled user greetings and career selection requests, while conditional logic within templates guided the conversation based on the user's preferences. Additionally, links to relevant Wikipedia pages were included in responses to provide additional information.
- Overall, AIML enhanced the chatbot's functionality by facilitating natural and informative interactions with users.

E. Installation Manual:

- To install the chatbot, you can create an account on the Pandorabot platform.
- Upload the AIML files containing your chatbot's logic.
- Access the live chatbot using the provided web link.

F. Strengths and Weaknesses of Development Environment:

- Strengths: Pandorabot provides a user-friendly interface for creating and deploying chatbots without requiring advanced programming knowledge.
- Weaknesses: Limited customization options compared to custom-built chatbot solutions. Limited support for complex conversational logic.

G. Monitoring and Maintenance:

- The chatbot can be monitored by reviewing user interactions, analyzing feedback, and tracking performance metrics.
- Maintenance involves updating AIML files, refining conversation flows, and addressing user feedback to improve the user experience continually.

H. Panopto Video Recording:

- See Panopto Video Recording.

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