

Tutorax : Automation Engineer Weekly Task Report

Project : “ TutorBot : AI agent for content creation ”

Overview :

TutorBot is designed as a friendly, approachable AI tutor focused on helping elementary students learn in a fun and engaging manner. The aim is to create an enjoyable learning experience where concepts are simplified and made relatable. By using clear language and informal communication, TutorBot encourages students to feel comfortable and supported as they navigate their educational journey.

1. AI Model Development and Training:

- Training the Model of the AI Agent :
 - ✓ Trained the AI model to process educational queries and provide contextual responses.
 - ✓ Focused on ensuring the agent delivers accurate, empathetic, and student-friendly guidance.
- Enhance the System Prompt: Homework Help & Integration:
 - ✓ Developed a specialized system prompt to enhance the agent’s ability to assist with homework, ensuring clear, age-appropriate responses.
 - ✓ Tailored content to specific educational subjects and integrated real-world scenarios for better understanding.
- Empathy & Encouragement Enhancements:
 - ✓ Optimized the system to provide empathetic responses, fostering a supportive and encouraging learning environment for students.
- Data Visualization :
 - ✓ Visualize the results from the model, focusing on insights derived from training.

2. Functionality and Testing :

- Testing the System Prompt:
 - ✓ Conducted thorough testing of the system’s prompts to ensure smooth, accurate responses to a wide range of student queries.
 - ✓ Adjusted phrasing for better alignment with students' needs and comprehension levels.
- Splitting Documents into Text :
 - ✓ Break down large documents into manageable text sections for processing.
- Develop Python Search Function with Dynamic URL Construction:

- ✓ Created a dynamic search function to handle different search parameters, ensuring efficient retrieval of educational content from external sources..
- Handle API Response and Error Scenarios
 - ✓ Implemented robust handling of API responses, ensuring that the AI agent responds appropriately even in case of errors, ensuring a seamless user experience.
- Snippet Length Analysis and Optimization for Display:
 - ✓ Analyzed the length of text snippets generated by the AI to optimize them for display on various devices, ensuring readability and clarity.

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Date: September 12, 2024.