Recommendation System in Discourse

Project Description:

The "Recommendation System in Discourse" project is a cutting-edge initiative aimed at developing an advanced recommendation system using the Langchain and Langgraph framework to analyze and enhance communication in discourse settings. By leveraging the power of LLM, the project seeks to evaluate discourse patterns and provide actionable recommendations for improving communication effectiveness.

Framework Used: Langgraph, Langchain

Tools: Visual Studio Code

Language: Python 3.12

Python 3.12 is selected as the programming language for its versatility, extensive libraries, and tools that facilitate data processing, analysis, and implementation of complex algorithms required for the recommendation system.

Large Language Model: Anthropic Claude

The project harnesses the power of the Anthropic Claude model, a state-of-the-art large language model known for its advanced natural language processing capabilities. By utilizing this model, the project aims to conduct in-depth analysis of discourse and provide valuable insights for enhancing communication strategies.

Project Objectives:

The principal aim of the project is to assess the relevance of communication in discourse by evaluating two pivotal factors: Reasonableness and Prominence. The Reasonableness factor is scrutinized based on key components including Logical Structure, Evidence and Support, Counter Arguments, Coherence, Consistency, Clarity of Thought, and Context within discourse. Similarly, the Prominence factor is evaluated based on factors such as Frequency, Length of Contribution, Impact, Engagement, Authority, Response and Interaction, and Context within discourse. This comprehensive evaluation methodology seeks to deliver a holistic assessment of communication quality within discourse environments.

Technical Approach:

In this demo project phase, Prompt Engineering is responsible for handling the scoring, reasoning, and recommendation tasks by integrating agent logic with the Large Language Model (LLM). This approach ensures that the system can effectively analyze discourse patterns and provide actionable recommendations for improvement. Moving forward, the team plans to train custom models tailored to score, reason, and recommend enhancements for each identified factor in discourse analysis.
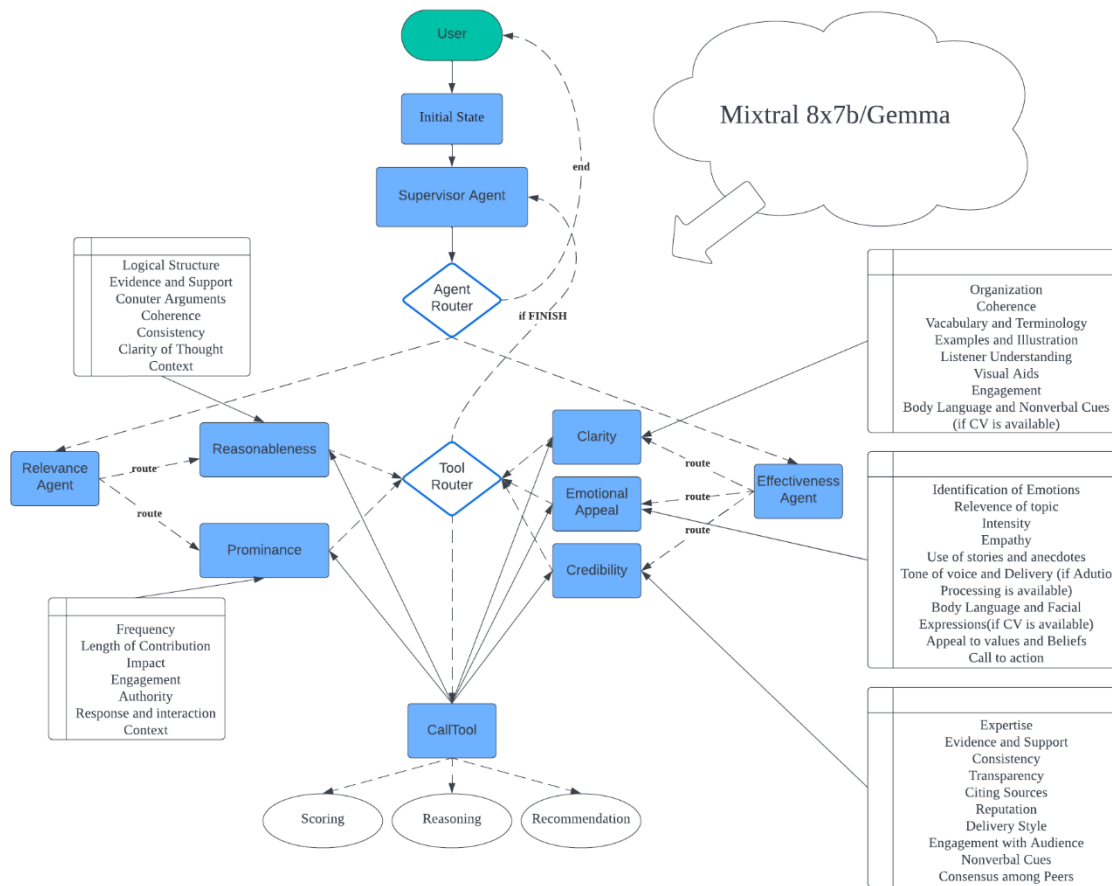
Timeline:

Design Prompt For Scoring: 3 days
Design Prompt For Reasoning: 3 days
Design Prompt For Recommendaion: 4days

Agent Colloboration: 3 days

Tesing: 3days

Total: 16 days * 8hr/day = 128hrs

Conclusion:

This project represents a significant step towards leveraging advanced natural language processing techniques to optimize communication strategies in discourse settings. By leveraging Langgraph, Anthropic Claude, and Python 3.12, the team aims to develop a robust recommendation system that can provide valuable insights for enhancing communication effectiveness across various discourse scenarios.

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