

Task:

Develop a simple LLM-based agent that can assist in coding tasks for a specific programming language of your choice. The agent should be able to provide code suggestions, debugging tips, and documentation assistance based on user queries.

Instructions:

- Agent Development:
 - Choose a programming language for which the agent will provide assistance (e.g., Python).
 - Develop a basic LLM agent using a pre-trained model such as GPT-3 or a similar model that you have access to.
- Features Implementation:
 - Implement the following features in the LLM agent:
 - Code completion: Generate code snippets based on partial input.
 - Debugging assistance: Suggest fixes for common syntax or logical errors.
- Documentation retrieval: Provide explanations or documentation for specific functions or libraries when requested.
- Integration and Testing:
 - Integrate the LLM agent into a simple user interface (UI) where users can input their queries and receive responses.
 - Conduct basic tests to ensure the agent accurately understands queries and provides helpful responses.
- Evaluation and Optimization:
 - Evaluate the agent's performance based on accuracy, response time, and relevance of the output.
 - Suggest potential improvements or optimizations for the agent based on the testing results.

Deliverables:

Source code for the LLM agent and the user interface.

A brief report (around 300-500 words)