Building a Conversational Agent

Objective

Develop a conversational agent using an LLM.

Task Description

You are required to build a conversational agent (chatbot) that can handle customer support queries for an e-commerce platform. The chatbot should be able to handle multi-turn conversations and provide accurate responses to customer inquiries about order status, return policies, and more. Test the chatbot with a set of predefined dialogues.

Instructions

Implementation

Develop the chatbot using the **OpenAI API**.

Functionalities

- 1. **Order Status**: When a user asks for the status of an order, the agent should ask for the order id and then respond with the order status.
- 2. **Request Human Representative**: Gather contact information for users who want to interact with a person. Contact information should include full name, email, and phone number. Save the information to a CSV file with a single row in the same folder as the execution file.
- 3. **Return Policies**: The agent should know information about the following return policies:
 - Q: What is the return policy for items purchased at our store?
 - A: You can return most items within 30 days of purchase for a full refund or exchange. Items must be in their original condition, with all tags and packaging intact. Please bring your receipt or proof of purchase when returning items.
 - Q: Are there any items that cannot be returned under this policy?
 - A: Yes, certain items such as clearance merchandise, perishable goods, and personal care items are non-returnable. Please check the product description or ask a store associate for more details.
 - Q: How will I receive my refund?
 - **A:** Refunds will be issued to the original form of payment. If you paid by credit card, the refund will be credited to your card. If you paid by cash or check, you will receive a cash refund.

Evaluation

Evaluate the chatbot's performance based on its accuracy, response relevance, and user satisfaction.

Deliverables

Source Code

Provide the source code for the agent, including deployment and conversation handling.

Documentation

- Include documentation on how to run and test the agent.
- Provide detailed instructions on setting up the environment and dependencies.

Evaluation Report

Submit a report that includes predefined dialogues and performance metrics (e.g., accuracy, relevance, user satisfaction).