

Conversational Survey Interview Generation with LLMs

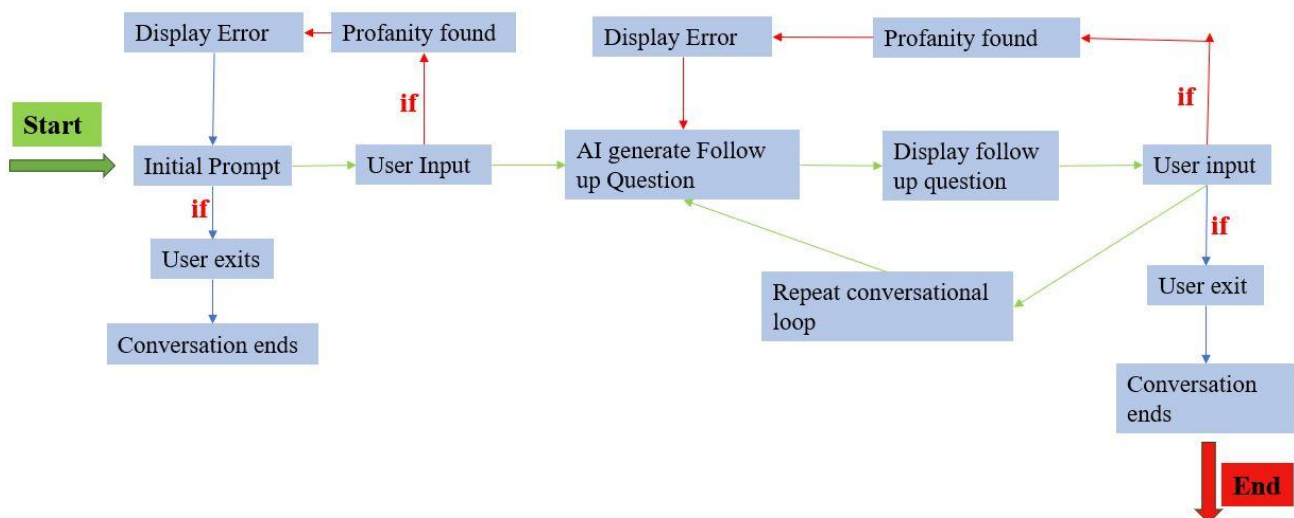
1. Introduction

1.1 Purpose

The purpose of this conversational survey is to collect user feedback to improve e-commerce websites. The survey is designed to engage users in a dynamic conversation with an AI language model (LLM).

1.2 Overview

The conversational survey employs OpenAI's **GPT-3.5-turbo** language model to generate survey questions and follow-up questions based on user input. The interaction is structured to simulate a natural conversation, enhancing user engagement.



2. Prompt Design

2.1 Introduction and Purpose

The conversation begins with a friendly introduction, explaining the purpose of the survey. Users are encouraged to share their recent experiences and thoughts on the e-commerce website.

2.2 Conversational Loop

- User Input Prompt: Users provide input about their experience.
- AI Generates Survey Question: The LLM generates a survey question based on the user input.
- Jailbreak Prevention: A profanity check is applied to filter out offensive content.
- Display Survey Question: If safe, the generated question is displayed to the user.
- User Responds: The loop continues with the user providing feedback.

2.3 Exiting the Loop

The loop can be terminated when the user inputs "exit," indicating the end of the survey.

3. LLM Integration Strategy

3.1 User Responses

User responses are captured and maintained in a list (user_responses) to provide context for generating follow-up questions.

3.2 Jailbreak Prevention

A profanity check is implemented to filter out offensive content from both generated survey questions and follow-up questions.

3.3 Conversational Flow

A dynamic conversational flow is established by maintaining a dialogue history between the user and the AI. Each turn of the conversation is used as input for the LLM, creating a context-aware interaction.

3.4 Dynamic Prompts

Prompts provided to the LLM are dynamically generated based on the user's input and the context of the conversation.

4. Final Prompt Being Used

prompt = f"User said: '{user_input}'. Generate a survey question."

This prompt informs the LLM of the user's input and instructs it to generate a survey question. The context of the conversation is maintained through the dialogue history.

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Hello! We're conducting a survey to improve our e-commerce website.Could you share your recent experiences with our website?
User: overall experience was bad
AI: We apologize for your poor experience. Could you tell us what made your experience unpleasant?
User: i was not able to find the product i was looking for
AI: I apologize for the difficulty you encountered. We are always looking for ways to improve our website to ensure a better user experience. Could you tell me what product you
User: i was searching for shirt, but shoes were coming
AI: Thank you for sharing your experience. We are sorry that you were not able to find the product you were looking for. We will use your feedback to work on ways to improve our
User: exit
AI: I'm sorry if I couldn't assist you further. If you have any other questions or need assistance in the future, feel free to ask. Have a great day!
```