Hello World Agent Project Report

Introduction

This report presents the development and evaluation of the "Hello World Agent" project. The objective of this project was to build a basic chatbot agent using the n8n automation platform, integrated with the GPT-3.5 Turbo model via the OpenRouter API. This project demonstrates a practical, cost-effective, and customizable workflow for conversational AI development.

Overview of Framework

This chatbot was built using n8n, a browser-based visual workflow builder. The nodes used were:

- Chat Trigger: Initiates the workflow when a chat begins.

- AI Agent: Executes AI responses via OpenRouter's GPT-3.5 Turbo.

Purpose of the Report

- To document the chatbot setup using OpenRouter.

- To assess its performance, usability, and integration within n8n.

- To evaluate conversational memory handling.

API Integration and Setup

- The OpenRouter API key was added to the AI Agent node.

- The chosen model was explicitly gpt-3.5-turbo.

Conversational Memory

Current Implementation: Simple Memory

- The chatbot uses simple memory implemented directly within n8n.

- This memory temporarily stores user and agent messages during an active session.

- It is useful for basic conversational context but does not persist data after the session ends.

Why Simple Memory Was Used

- It is quick to set up with built-in n8n nodes.

- Ideal for testing and demo workflows that do not require long-term user memory.

- Avoids the complexity of database connections during initial development.

Planned Enhancements

- Work is currently in progress to integrate MongoDB or Google Sheets.

- These solutions will allow the chatbot to save user interactions permanently.

- With persistent memory, the chatbot can recall information across multiple sessions and provide a more personalized experience.

Documentation and Code Support

- The workflow design was annotated within n8n.

- It was exported as JSON for backup and version control compatibility (e.g., GitHub).

Workflow Design Support

- n8n's GUI enabled intuitive drag-and-drop development.

- The design includes a linear path from Chat Trigger to the AI Agent using OpenRouter.

- Modular structure allows easy extensions like logging, conditional branches, and third-party AP

Reasoning and Output Quality

- The chatbot responses were logical and conversational.

- GPT-3.5 Turbo via OpenRouter maintained relevant context throughout the session.

- Output was consistent and reliable during all testing scenarios.

Conclusion

This project demonstrated that OpenRouter can be an effective alternative for implementing chatbots using n8n. It offers accessible model usage, simple API integration, and an overall developer-friendly experience.

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Project: Hello World Agent

Platform: n8n, OpenRouter