



Function Call

The chatbot system is equipped with a function call agent that intelligently interprets user inputs from the UI chat. This agent dynamically identifies the appropriate functions needed to address the user's query, seamlessly integrating various system tools to generate a cohesive and relevant response. This design ensures efficient handling of diverse user needs by leveraging the full capabilities of the system, resulting in a highly responsive and adaptable user experience.

Ai Agent Llama3

The AI Agent in this system takes the output from the function call agent and transforms it into a user-friendly response. Leveraging relevant documentation and information returned by any function call, this agent ensures that the system's responses are clear, accurate, and tailored to the user's needs. This layer of the system enhances communication by translating technical outputs into well-structured, understandable responses, thereby improving overall user satisfaction and engagement.

Recommendation System

The item-based collaborative filtering subsystem is a modular Python class designed for easy integration with data structured as user ID, item ID, and relevance indicator. It analyzes user-item interactions to generate personalized recommendations. This template-based approach ensures scalability, flexibility, and ease of deployment across various datasets, making it a key component in the system architecture for delivering tailored user experiences.

Nearest Branch Tool

tool that identifies the nearest bank branch based on the user's location, enhancing convenience and customer engagement by providing quick access to essential services.

RAG System

Retrieval-Augmented Generation (RAG) techniques, supported by ChromaDB, to conduct advanced searches for the most relevant information from the available product and client question data. This system is designed to enhance response accuracy by retrieving and generating precise, contextually appropriate answers, making it a crucial component for delivering informed and personalized customer interactions.

