KGISL INSTITUTE OF TECHNOLOGY

(AFFILIATED TO ANNA UNIVERSITY)

Saravanampatti, Coimbatore – 641035

Chatbot Deployment with IBM Cloud Watson Assistant

Submitted by,

Deivapandeeswaran B	(711721106024)
Harikaran.K	(711721106037)
Harish.M	(711721106041)
Mohammed Mahboob Basha	(711721106064)
Thaswin.P	(711721106311)

Phase 5: Project Documentation & Submission

project's goals

Our project aims to implement an efficient and user-friendly chatbot using IBM Cloud Watson Assistant. The main goals are:

Enhanced Customer Support:
Provides users with quick and effective solutions to their queries and problems.

Streamline processes:
Automate repetitive tasks and processes to improve operational efficiency.

Engaging chat experience:
Create a chatbot that engages users in a natural and informative conversation, delivering a positive user experience.

Design thinking process

Our project follows a structured design thinking process to solve the identified problem and achieve our goals. This process includes the following steps:

Phase 1: Problem identification and design thinking

Problem definition:
We identified the need to deploy chatbots to improve and streamline customer support processes.

Understand the problem:
We understand the requirements to develop and deploy chatbots using IBM Cloud Watson Assistant.

Phase 2: Innovation

Innovation:

We've implemented advanced features including natural language understanding (NLU), improved conversation design, optimized back-end integration, and user feedback collection.

Phase 3: Development - part 1

Development steps:

We started developing the chatbot, defining the chatbot's personality, designing the conversation flow, configuring intents, entities, and dialog buttons.

Phase 4: Development - part 2
Development:

We continue to develop the chatbot by integrating it with messaging platforms, including Facebook Messenger and Slack. We ensure that the chatbot's responses are informative and accurate while maintaining a natural conversation flow.

Chatbot Personality

Chatbots are designed to be friendly and easy to chat with. It aims to provide an accessible and informative experience for users. Its tone is warm and inviting, making users feel comfortable during the interaction.

Chat stream

The chatbot's conversation flow has been meticulously planned to effectively guide users through various interactions. The conversation structure is designed to handle general user intent, such as product inquiries, account support, and general information requests. This flow is logical and user-centric, ensuring that users can easily navigate and get the information they are looking for.

Technical implementation using Watson Assistant

We used IBM Cloud Watson Assistant as the core technology to develop the chatbot. This platform allows us to create and manage intents, entities, and dialog buttons.

Intent: We have set a variety of purposes to pinpoint user queries, including product questions, customer support, and general questions. Entities: Specific entities are created to extract relevant information from user queries, such as product name, account details, and location.

Dialog Buttons: Dialog buttons are created to respond to user input and guide the conversation. The chatbot's responses have been carefully designed into these dialog buttons to ensure a transparent and informative conversation.

Example of user query and chatbot response

To illustrate chatbot functionality, here are some examples of user queries and chatbot responses:

User request: "Tell me about your product."
Chatbot Response: "We offer a variety of products, including [Product A], [Product B], and [Product C]. How can I help you further? "

User request: "I need help with my account."
Chatbot response: "Of course! To help you with your account, I'll need some specifics. Can you please provide your account number or username? "

User query: "What are your opening hours? "
Chatbot Response: "Our support team is available Monday to Friday, 9am to 6pm. How can I help you during these hours? "