**Phase – 5**

* Outline the project's objective, design thinking process, and development phases.
* Describe the chatbot's persona, conversation flow, and technical implementation using Watson Assistant.
* Provide examples of user queries and the chatbot's responses.

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***Project Title: Chatbot Deployment for Customer Support***

**Objective**:

The objective of this project is to develop and deploy a chatbot for customer support. The chatbot is designed to assist users in resolving common customer inquiries and issues, providing a seamless and efficient way for customers to get answers to their questions and resolve problems.

***1. Design Thinking Process:***

**1. Define the Problem:** The project began with an analysis of common customer inquiries and support issues faced by the organization. The aim was to identify areas where a chatbot could provide value by automating responses and reducing the workload on human customer support agents.

**2. Ideation**: Brainstorming sessions were conducted to generate ideas for the chatbot's persona and conversation flow. It was essential to create a chatbot that is friendly, helpful, and able to handle a variety of customer queries.

**3. Prototyping:** A basic conversation flow and script for the chatbot were developed and tested internally. Feedback was collected from team members to refine the chatbot's design and functionality.

**4. Development:** The chatbot was implemented using IBM Watson Assistant, a natural language processing platform. The development phase involved creating intents, entities, and dialog nodes, as well as training the chatbot to understand and respond to user queries.

**5. Testing:** Extensive testing was performed to ensure that the chatbot could accurately and effectively handle a wide range of user queries. User testing was conducted to gather feedback and make necessary improvements.

**6. Deployment:** The chatbot was deployed on the organization's website and integrated with the existing customer support systems to provide a seamless customer support experience.

***2. Chatbot Persona:***

The chatbot is designed to have a friendly and professional persona. It uses a conversational and approachable tone to engage with users and provide support. The persona is consistent with the organization's brand image and values.

***2.1.Conversation Flow:***

The conversation flow of the chatbot is designed to handle various types of user inquiries, including product information, troubleshooting, account-related queries, and general information. It follows a structured flow with predefined dialog nodes, allowing users to easily navigate through the conversation and get the information they need.

**Technical Implementation using Watson Assistant:**

The chatbot is implemented using IBM Watson Assistant, a powerful NLP platform. Here is an overview of the technical aspects:

**- Intents:** Intents are defined to capture the user's intent when they send a message to the chatbot. For example, "Order Status," "Product Information," "Billing Inquiry," etc.

**- Entities:** Entities are used to extract specific information from user queries. For instance, extracting a product name or order number.

**- Dialog Nodes:** Dialog nodes are used to define the conversation flow. They contain responses to user queries and conditions to guide the conversation based on user input.

**-** **System Entities:** System entities like @sys-date are used to capture date information and provide context-aware responses.

***3.Examples of User Queries and Chatbot Responses:***

**1. User Query**: "What is the return policy for your products?"

**Chatbot Response:** "Our return policy allows you to return products within 30 days of purchase. You can initiate a return through your account or contact our customer support for assistance."

**2. User Query:** "I have an issue with my recent order."

**Chatbot Response**: "I'm sorry to hear that. Could you please provide me with your order number so that I can assist you further?"

**3. User Query:** "When will my subscription expire?"

**Chatbot Response:** "To find out when your subscription expires, please provide me with your account username or email address, and I'll check it for you."

**4. User Query:** "Tell me more about your premium membership benefits."

**Chatbot Response**: "Our premium membership offers a range of benefits, including faster shipping, exclusive discounts, and early access to promotions. Would you like more details on a specific benefit?"

This documentation provides an overview of the chatbot deployment project, its objective, design thinking process, and technical implementation using Watson Assistant. Additionally, it includes examples of user queries and chatbot responses to showcase its functionality.

