1. **Persona Design:**

Chatbot Name: Sherlock

* Sherlock persona was inspired by qualities and traits portrait by the character Sherlock Holmes by Arthur Conan Doyle.
* Curiosity: Sherlock strives to eagerly learn and explore new domains. It is designed to be a friendly and helpful chatbot.
* Reliability: Users can trust Sherlock to provide accurate and dependable information.
* Adaptability: Sherlock is adaptable in its approach, recognizing that users have different needs and communication preferences. Sherlock is neither too formal nor too casual, striking a balance between professionalism and warmth.
* Communication: Sherlock maintains a positive attitude, even when faced with challenging questions. It is respectful of user opinions and provides accurate and relevant information.
* Performance: Sherlock is well-versed in technology and can assist users with technical inquiries, troubleshoot issues, and recommend digital solutions.
  + Commitment: Sherlock is committed to improve user experiences and provides friendly interactions. It respects users privacy and confidentiality.

1. **User Scenarios:**

Scenario: "Can you give me some advice on optimizing my LinkedIn profile?"

Sherlock: It suggests relevant connections based on a user's industry or interests.

Scenario: "Can you help me find connections in the marketing industry?"

Sherlock: It retrieves suitable connection network for the user.

Scenario: "Tell me more about [Company Name]."

Sherlock: It provides details listed in the company’s profile.

Scenario: "Remind me to call the dentist tomorrow."

Sherlock: Its set up a reminder to call the dentist.

FAQ:

Some common user scenarios and FAQs that Sherlock would be able to address are,

1. Information Retrieval:

Scenario: A user wants to know the capital of a specific country.

FAQ: "What is the capital of [country]?"

2. Technical Assistance:

Scenario: A user is experiencing issues with their computer.

FAQ: "How can I troubleshoot [specific technical issue] on my computer?"

3. Health and Wellness:

Scenario: A user asks about the benefits of regular exercise.

FAQ: "What are the health benefits of regular exercise?"

4. Product Recommendations:

Scenario: A user is looking for a smartphone within a certain budget.

FAQ: "Can you recommend a good smartphone under $500?"

5. Travel Information:

Scenario: A user plans a trip to Paris and needs information on tourist attractions.

FAQ: "What are the must-visit attractions in Paris?"

6. Language Translation:

Scenario: A user needs to translate a sentence from English to Spanish.

FAQ: "Translate 'Hello, how are you?' to Spanish."

7. Homework Help:

Scenario: A student needs help with a math problem.

FAQ: "Can you assist me with solving this algebra equation?"

8. Weather Forecast:

Scenario: A user wants to know the weather forecast for their location.

FAQ: "What's the weather forecast for [city] tomorrow?

1. **Conversation Flow**

Designing the conversation flow for Sherlock involves defining how it responds to user queries and prompts in a structured manner. Here's a general outline of how the conversation flow can work:

1. Greeting and Welcome
2. User Query Handling
3. Response Types:
4. Informational Response
5. Guidance Response
6. Recommendation Response
7. Engagement Response
8. Acknowledgment Response
9. Context Management:
10. Handling User Preferences
11. Handling Multiple Queries
12. Error Handling
13. Farewell
14. Persistent Context

Further it can be discussed broadly into two senarios such as,

* 1. When user is not logged in

1. Greeting and Welcome

2. User Query Handling

3. Response Types:

a. Informational Response

b. Guidance Response

c. Recommendation Response

d. Engagement Response

e. Acknowledgment Response

* 1. When user is logged in

1. Context Management

2. Handling User Preferences

3. Handling Queries

4. Error Handling

5. Farewell

6. Persistent Content

1. **Response Configuration:**

1. Create Intents:

Define user intents, which represent the different purposes or goals of user queries. For example, you can create intents like "Greeting," "FAQ," "Product Information," "Technical Support," etc.

2. Define Entities:

Entities are used to identify specific pieces of information within user queries. For instance, you can define entities like "Product Name," "Location," "Date," etc., to extract relevant details.

3. Dialog Nodes:

Dialog nodes are used to structure the conversation and determine how the chatbot responds to user inputs based on intents and entities.

Dialog nodes contain responses that the chatbot will provide when a specific condition is met.

4. Responses:

Within dialog nodes, we configure responses such that the chatbot would give responses based on the user's input.

Example Configuration:

Suppose we use Sherlock Chatbot for a travel agency. Here's how we configure a response for a user who asks about flight availability:

Intent: Flight Availability

Entities: Departure City, Destination City, Travel Date

Dialog Node:

Condition: If intent is Flight Availability

Actions:

Extract entities for DepartureCity, DestinationCity, and TravelDate.

Check availability in the database or a connected system.

Generate a response like: "I found the following flights from [DepartureCity] to

1. **Platform Integration:**

Integrating a Sherlock chatbot with popular messaging platforms like Facebook Messenger and Slack typically involves using platform-specific APIs and tools. Below,

1. Integration with Facebook Messenger:

a. Set Up a Facebook Developer platform.

b. Configure the Messenger Platform.

c. Connect with the Sherlock Chatbot.

d. Test Your Chatbot.

2. Integration with Slack.

a. Create a Slack App using Slack API.

b. Configure OAuth & Permissions.

c. Connect with the Sherlock Chatbot.

d. Test Your Chatbot:

**6.User Experience:**

Sherlock offers simple design and user-friendly interface or interaction. Some of key components that describes the user experience of sherlock are,

1. Clear and Friendly Prompts.

2. Understandable Responses.

3. Natural Language Understanding.

4. Error Handling.

5. Context Maintenance.

6. Personalization.

7. User Assistance.

**TEMPLATE:-**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Deploying a virtual guide with IBM Cloud Watson Assistant involves creating an intelligent chatbot capable of assisting users on popular messaging platforms such as Facebook Messenger and Slack. This chatbot, once customized to align with your brand's identity, offers a user-friendly conversational experience by comprehensively addressing FAQs and providing valuable information. Integration with messaging platforms ensures seamless communication, while continuous monitoring and refinement guarantee optimal performance and user satisfaction. Through this deployment, users gain quick access to information, and your virtual guide becomes a valuable asset, forging meaningful connections while simplifying complex queries and tasks. |
| 2. | Idea / Solution description | The idea is to develop a branded AI virtual assistant using IBM Cloud Watson Assistant for Facebook Messenger and Slack. Customize its responses, integrate natural language understanding, and continually improve it based on user feedback. This solution ensures quick, accurate assistance, boosts customer engagement, and streamlines information delivery via popular messaging platforms. |
| 3. | Novelty / Uniqueness | The uniqueness lies in creating a customized AI virtual assistant with IBM Cloud Watson Assistant, tailoring it to your brand's voice, and integrating natural language understanding for precise responses. Continuous refinement based on user feedback ensures a dynamic, responsive tool that empowers users with rapid, on-brand assistance via familiar messaging platforms. |
| 4. | Social Impact / Customer Satisfaction | By deploying a personalized AI virtual assistant, we enhance customer satisfaction by offering quick, reliable support through familiar messaging platforms. This not only streamlines access to information but also fosters meaningful connections, making a positive social impact by simplifying tasks, resolving issues, and providing valuable assistance whenever and wherever users need it. |
| 5. | Business Model (Revenue Model) | The business model centers on delivering AI virtual assistant services with revenue streams including subscription plans and pay-per-use fees. Customization, integration, and consulting services provide additional revenue. Premium analytics packages and advertising collaborations offer value-added options. Data monetization through anonymized user data and partnerships with messaging platforms contribute to profitability. Catering to enterprise needs with specialized solutions further expands the market, ensuring sustainable revenue while providing tailored AI solutions to meet diverse business requirements. |