

Phase 2: Project Execution and Demonstration

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Project Title: Medical ChatBot using IBM Watson Assistant

1. Project Title

Medical ChatBot using IBM Watson Assistant

2. Objective Recap

The objective of this project is to create an AI-powered **medical chatbot** using IBM Watson Assistant. The chatbot is designed to assist patients and users with common medical inquiries, appointment guidance, and general health FAQs by understanding user intents and responding with appropriate dialog, thereby improving digital healthcare support and accessibility.

3. Technologies Used

- IBM Watson Assistant
 - Intents and Entities (for NLP-based interactions)
 - Dialog Nodes
 - Website Integration using JavaScript
 - IBM Cloud (for deployment and hosting)
 - HTML/CSS (for website frontend)
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4. Full Implementation Steps

Step 1: Create a New Assistant

Created a Watson Assistant instance named **Medical Support ChatBot**.

Step 2: Enable Dialog Functionality

Enabled dialog functionality to begin constructing meaningful healthcare conversations.

Step 3: Create Intents

Defined various user intents such as greetings, appointment inquiries, symptoms check, and general health advice to train the assistant.

Step 4: Define Entities

Added medical-related entities like @symptoms, @departments, and @appointment_time to capture key user inputs and health-related topics.

Step 5: Build the Dialog

Constructed dialog nodes that respond contextually to user queries based on detected intents and entities, ensuring relevant and personalized healthcare responses.

Step 6: Publish the Assistant

Published the assistant through the IBM Watson Assistant interface for integration.

Step 7: Generate Integration Script

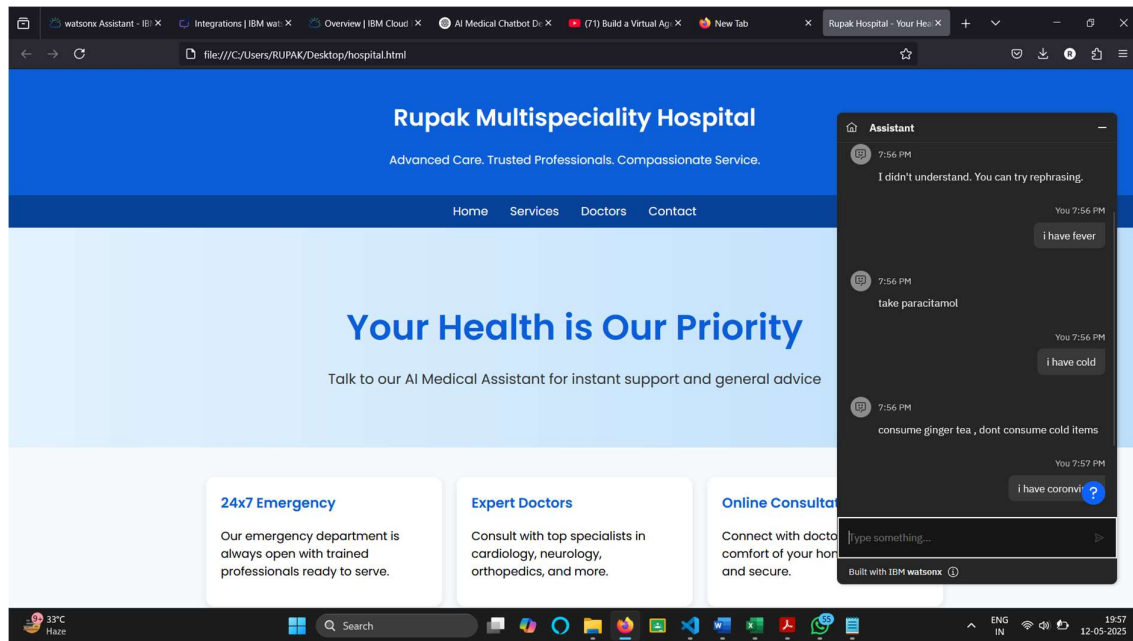
Generated the website embed script from the “Integrate with Website” section in Watson Assistant.

Step 8: Embed in Website

Inserted the script into the HTML of a hospital-themed sample website, enabling real-time chatbot interaction on the webpage.

5. Conclusion

This phase demonstrates the end-to-end implementation and deployment of an intelligent **medical chatbot** using IBM Watson Assistant. The chatbot enhances user interaction on a healthcare website by addressing common health-related queries, guiding patients toward appropriate departments, and simplifying appointment scheduling processes. Its integration into a website exemplifies practical usage for real-world healthcare solutions.



6. References

- IBM Watson Assistant Documentation
- IBM Cloud Deployment Guides
- HTML & JavaScript Chatbot Integration Resources