

Hospital Appointment System: Conversational AI for Appointment Scheduling

In today's fast-paced world, accessing healthcare services can be a daunting task. To bridge this gap, Amrita Institute, Faridabad, India, is introducing a conversational AI-powered appointment scheduling system. This innovative solution enables patients to effortlessly schedule appointments with specialist doctors, ensuring timely and efficient healthcare services.

The Concept: Making Patient Appointments Simple and Seamless

The conversational AI system is designed to simulate a natural conversation with patients, gathering essential information to facilitate appointment scheduling



Figure 1: Conversational AI Flowchart

The flowchart illustrates the conversational AI's step-by-step process, from greeting the patient to confirming appointment details.

With the help of machine learning and natural language processing, our Large Language Model can:

- **Extract symptoms** described by the patient.
- **Identify relevant specialists** based on the symptoms.
- **Collect patient details** such as full name, phone number, and appointment preferences.
- **Confirm and schedule appointments** accurately, ensuring the patient's experience is as smooth as possible.

Key Features

- Symptom Collection: The AI system politely inquires about the patient's symptoms, asking follow-up questions to gather necessary information.
- Specialist Recommendation: Based on the symptoms provided, the AI recommends a specialist doctor from Amrita Institute of Medical Sciences.
- Patient Information Collection: The system collects the patient's name, phone number, and preferred appointment date and time.
- Confirmation and Scheduling: After gathering all details, the AI summarizes the appointment details and seeks confirmation from the patient.

Information	Description
Name	Patient's full name
Phone Number	Patient's 10-digit phone number
Appointment Date and Time	Patient's preferred appointment date and time in "Year-Month-Date Hour:Minute AM/PM" format

Table 1: Patient Information Collection

Benefits

The conversational AI-powered appointment scheduling system offers numerous benefits, including:

Streamlined appointment scheduling process reduces wait times and increases patient satisfaction. The AI system provides a personalized experience, addressing patients' specific needs and concerns. The conversational AI system is bilingual (Hindi and English), making it accessible to a broader patient base.

- **Efficiency:** The AI significantly reduces wait times and minimizes human errors in appointment scheduling.
- **Accuracy:** By extracting and interpreting key information, the AI ensures precise and correct appointment details.
- **Accessibility:** Bilingual support ensures that both Hindi and English-speaking patients can use the system with ease.
- **Convenience:** Patients can book appointments at any time, from anywhere, without the need to wait on hold or navigate complex systems.

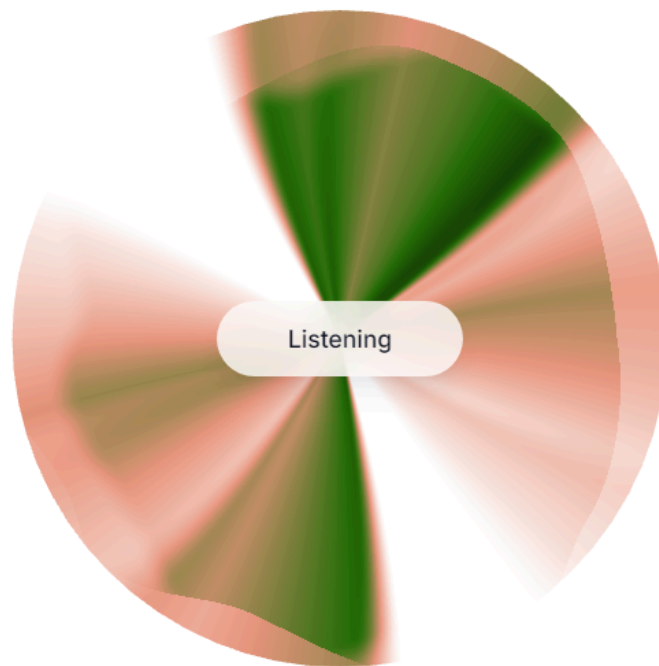


Figure 2: Conversational AI Interface

Simplifying Healthcare Appointments with AI

Amrita Institute of Medical Sciences' conversational AI-powered appointment scheduling system is a groundbreaking innovation in healthcare. By providing an efficient, personalized, and accessible experience, this system is poised to revolutionize the way patients interact with healthcare services.