Meet Zoe

The HealthAssist



Introduction

A medical hospital bot that can be accessed via a hospital website or mobile app is increasingly becoming a reality, leveraging advanced technologies to enhance patient engagement and streamline healthcare processes.

Functionalities

- User Onboarding
- Symptom Assessment and Guidance
 - Symptom Checker
 - First aid advice
- Doctor Recommendations
- Appointment Scheduling
 - Appointment Management
 - Booking process
- Payment and Notification
 - Payment integration
 - Reminders
- Data Management and Security
 - Record Maintenance
 - Privacy

User Onboarding

The bot would initiate the session by collecting essential user details such as name, age, address, and telephone number. This information would be securely stored for future interactions, ensuring personalized service and to easily update database and electronic health records just by accessing their QR code.

Symptom Assessment and Guidance

Symptom Checker

 Users can input symptoms like high fever, knee pain, or rashes, and the bot would analyze these symptoms. If the model has multi modal capability it should be able to take in images of wounds, scans etc. Based on the input, it could provide preliminary advice.

First Aid Advice

 The bot would be equipped to answer common first aid questions, offering immediate guidance on how to handle minor medical issues.

Doctor Recommendation

 Specialty Database: After assessing the symptoms, the bot would consult a database of various types of doctors(ie.neurologist,dermatologist) and their specialties to recommend the appropriate doctor they need to consult (ie. neurologist, dermatologist, etc)

Appointment Scheduling

- Appointment Management: If the user expresses the need to book an appointment, the bot would access a real-time database of available time slots and doctors. It would check for availability over the next two days and present a list of doctors along with their appointment times.
- Booking Process: Once the user selects a preferred appointment, the bot would facilitate the booking process, integrating with the hospital's management system to confirm the appointment and prevent scheduling conflicts.

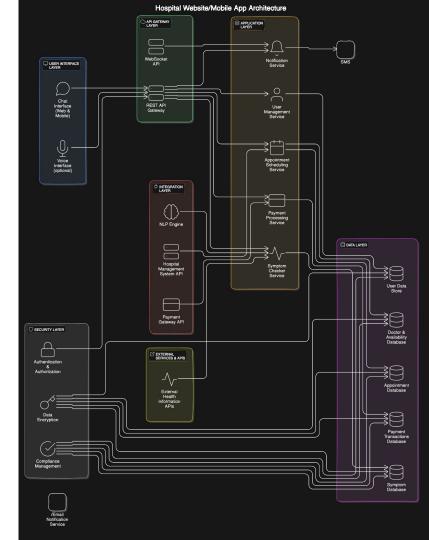
Payment and Notification

- Payment Integration: The bot would support a payment gateway, allowing users to complete transactions for their appointments directly through the chat interface.
- Reminders: To enhance user experience, the bot would send reminders via text messages, emails, or app notifications about upcoming appointments, ensuring patients do not miss their scheduled visits.

Data Management and Security

- Record Maintenance: The bot would maintain a history of user interactions and appointments, enabling efficient follow-ups and personalized care in future sessions. Also, the essential information will be stored in a QR code which can be accessed in the app and can be scanned to update Health records at hospital which would save time of administrative personnels.
- Privacy Considerations: Given the sensitive nature of health information, the bot must comply
 with data protection regulations to ensure user privacy and data security.

Architecture Diagram



Future functionalities

Maintaining Electronic Health Records

Fills any kind of medical insurance forms etc

Multimodal capability - user should be able to upload scan images and ask bot for general advice and will suggest consulting doctor based on the symptoms(text) and image

Have real-time database of appointment details