

Project Title: AI-Powered Healthcare Receptionist and Appointment Booking System

Overview: This project is a smart AI-based Healthcare Receptionist Bot designed to streamline patient interaction, answer queries, provide basic medical advice for minor issues, and seamlessly book appointments with healthcare professionals for serious concerns. The bot is built using conversational AI and integrated with external tools such as a calendar database and email systems to automate appointment booking and recordkeeping.

Main Features:

1. Smart Query Handling:

2. AI Agent responds to general health queries.
3. Capable of differentiating between minor and serious conditions.

4. Conditional Workflow:

5. For **minor diseases**, the bot continues assisting the client within chat using simple recommendations and follow-up questions.
6. For **serious issues** or **appointment requests**, the bot triggers the appointment workflow.

7. Appointment Booking Tool:

8. Asks for required patient details:
 - Full Name
 - Age
 - Phone Number
 - Email
 - Disease Name
 - Short Description of the Issue
9. Validates and stores this information in a database (e.g., Google Sheets, Supabase, etc.).
10. Sends confirmation via:
 - Chat message with appointment details.
 - Automated email confirmation.

11. Calendar Integration:

12. Google Calendar integration for slot management.
13. Appointments are automatically created in the calendar.

14. Data Handling:

15. Patient records securely stored for future reference.
 16. Structured data exportable to external systems for analysis or report generation.
 17. **Technology Stack:**
 18. Langchain / Langflow (for workflow design)
 19. OpenAI GPT / LLM API
 20. Supabase (database)
 21. Google Calendar API
 22. SMTP (email sending)
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Workflow Summary:

1. User chats with the bot.
 2. Bot analyzes if issue is minor or serious.
 3. If serious / user wants to book:
 4. Bot collects and validates personal + medical info.
 5. Bot books appointment via Google Calendar.
 6. Data is saved to database.
 7. Confirmation message + email is sent.
 8. If minor:
 9. Chatbot continues to provide assistance.
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Key Benefits:

- Reduces human receptionist workload.
 - Provides 24x7 assistance to patients.
 - Ensures appointment bookings are reliable and automated.
 - Facilitates data collection for hospitals.
 - Boosts patient experience with minimal wait time.
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Use Cases:

- Clinics, hospitals, telemedicine platforms.
 - Online healthcare consultation services.
 - AI assistants for elder care.
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Future Scope:

- Integration with EHR (Electronic Health Records)
- Payment gateway integration for paid appointments.
- Video call consultation system integration.
- Real-time doctor availability checking.

GitHub Repo / Project Files: <https://github.com/shriom-19/Healthcare-AI-Agent-/tree/main>

Team Members:

- Shriom Patil (Workflow Architect)
- Piyush Lavhale (Javascript implementation in workflow)
- Anshul Salunkhe (Team leader)
- Aryan Shinde (Handling API Endpoints)
- Tanay shinde (AI expert)

Project Duration:

- 2 weeks (Initial prototype)

Tools Used:

- Google Gemini AI API
- Langflow
- Supabase
- Google Calendar
- SMTP Email Service
- N8N
- Twilio
- Excel

Thank You! Presentation Ready Document Healthcare AI Receptionist Bot