

# AI-Powered Chatbot with Voice and Smart Responses

## Project Overview:

This project is an AI-powered chatbot built with Flask and OpenRouter. It allows users to interact through text or voice, supporting:

- Natural language conversations
- Mathematical query solving
- Date & time lookup
- Voice input (speech-to-text)
- Voice output (text-to-speech)

Designed for customer support, FAQs, or general-purpose AI assistants.

## Key Features:

- Conversational AI using OpenRouter API.
- Math Evaluation using SymPy
- Date & Time Awareness
- Voice Input via Web Speech API.
- Text-to-Speech responses
- Animated Button Feedback
- Responsive UI for desktop & mobile

## Technologies Used:

Layer	Technology
Backend	Python, Flask
Frontend	HTML, CSS, JavaScript
AI API	OpenRouter
Voice Input	Web Speech API
Voice Output	Web Speech Synthesis
Math Engine	SymPy
Environment	python-dotenv

### **How to Run the Project:**

- `cd chatbot`
- `python app.py`

### **Feature Enhancements (Suggestions):**

1. Chat History Persistence with SQLite
2. User Authentication (Login/Signup)
3. Multilingual Support
4. Admin Dashboard to view logs
5. Deploy to Cloud
6. Dark Mode UI Toggle

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**Github link:** [https://github.com/subha123-ux/Internship\\_Project/tree/master/chatbot](https://github.com/subha123-ux/Internship_Project/tree/master/chatbot)