

# AI Voice Assistant Using Gemini and Flask

## What is this project?

- A browser-based voice assistant that listens to your voice, converts it to text, sends it to Gemini (Google AI), gets a response, and speaks it back.
- It also stores each question and answer in a local database and shows history on the page.
- No external STT or TTS services are used — everything runs inside the browser using built-in Web APIs.

## Tools & Technologies Used:

### Backend:

- **Flask** – Python web framework
- **Google Generative AI (Gemini Flash)** – For generating smart answers
- **SQLite** – To store question-answer history
- **python-dotenv** – To load the Gemini API key securely

### Frontend:

- **HTML + CSS** – Interface layout and design
- **JavaScript** – For speech recognition, TTS, and interacting with the backend
- **Web APIs:**
  - SpeechRecognition – Converts speech to text (STT)
  - SpeechSynthesis – Speaks the answer (TTS)
  - fetch() – Sends/receives data from Flask backend

## STATE DIAGRAM:

