Nexus AI - Mini Project Guide

A Voice-Controlled Virtual Assistant using JavaScript & Google APIs

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Overview

Nexus AI is a mini virtual assistant that responds to voice commands to open websites, tell time/date, and search online. It's ideal for students as a beginner-friendly JavaScript mini project.

Skills You'll Learn

- Voice recognition using Google Web Speech API

- Voice response using SpeechSynthesis

- DOM manipulation in JavaScript

- Event handling and conditional logic

Tech Stack

- HTML

- CSS (for styling)

- JavaScript

- Google Web APIs

How It Works

1. User clicks the microphone button.

2. SpeechRecognition API captures the voice input.

3. JavaScript interprets the text and performs actions like opening YouTube, speaking the time, etc.

4. SpeechSynthesis API gives voice feedback.

Features Implemented

- Voice command to open websites: Google, YouTube, Facebook, ChatGPT

- Tells current date and time

- Wikipedia search

- Personalized greetings (Good Morning/Afternoon/Evening)

- Default Google search for unknown queries

Setup Instructions

1. Download the 3 files: index.html, style.css, app.js

2. Open index.html in a Chrome browser

3. Click the mic icon and give a command (e.g., 'Open YouTube')

4. Nexus AI will perform the action and respond via voice

Why It's a Great Mini Project

- Easy to build, understand, and deploy

- Great for portfolios and hackathons

- Encourages creativity and API usage

- Completely browser-based - no installations required

Ideas for Extension

- Add browser extension support

- Launch local apps (with Electron)

- Add animations or voice UI feedback

- Support multiple languages