Jarvis Feature Documentation with Prompts

Voice-Controlled Commands

Prompt Example: Jarvis, open YouTube

Allows the user to control apps using voice commands. The assistant uses fuzzy matching to detect and execute commands such as opening websites or apps. Integrated with `pyautogui`, `pynput`, and `pywin32` for controlling system-level operations.

Web Search Integration

Prompt Example: Jarvis, search weather in Lahore

Performs real-time DuckDuckGo web searches and provides summarized information. Uses `duckduckgo-search` and `readability-lxml` to retrieve and clean results.

Text-to-Speech and Speech Recognition

Prompt Example: Jarvis, what time is it?

The assistant listens to the voice command using Silero STT and responds using the built-in voice using PyTTSx3 or gTTS. Voice input/output is fully natural and conversational.

Custom Assistant Personality

Prompt Example: Hey Jarvis, introduce yourself

Jarvis responds with a predefined personality, greeting the user, and referencing their name. This can be expanded with LangChain prompts and memory modules.

Face UI with Animation

Prompt Example: Jarvis (on startup)

Launches a face UI using Pygame, displays animated visual effects or videos, and mimics speech using waveform bars. Uses `pygame`, `tkvideo`, and `opencv-python` optionally.

Download Manager

Prompt Example: Jarvis, download this PDF

Controls file downloads (PDFs, etc.) through voice instructions. The file path is handled and saved using automation. Integrates well in an educational or Urdu novel app environment.

Smart Keyboard & Mouse Automation

Prompt Example: Jarvis, click on the search bar

Through voice command, moves cursor, types, or clicks on UI elements using `pyautogui`. Great for hands-free operations or for disabled users.

Noise Cancellation & Background Filtering

Prompt Example: (Automatically enabled)

Enhances voice recognition accuracy by filtering out background noise. Done using the `livekit-plugins-noise-cancellation` plugin.

PDF and Image Reading

Prompt Example: Jarvis, read this image/PDF

Extracts text from PDFs using `PyPDF2` or images using `pytesseract` and reads them aloud. Useful for blind users or academic tasks.