**Jarvis - Desktop AI Assistant**

**Jarvis** is a voice-based AI assistant that operates in three distinct modes: **Chat Mode**, **Command Mode**, and **Code Mode**. Designed to help with both general and technical tasks, Jarvis can chat like other large language models (LLMs) and perform a wide range of desktop and internet-based functions.

**Features**

**Chat Mode**

In Chat Mode, Jarvis can answer queries and provide useful information like any other LLM, while also providing the following functional capabilities:

* **General Functionalities**:
  + get\_ip\_address: Retrieve the IP address of the device.
  + get\_time: Check the current time.
  + set\_reminder: Set a reminder.
  + get\_temp: Retrieve the current temperature.
  + exit: Exit Chat Mode.
  + get\_date: Check today’s date.

**Command Mode**

In Command Mode, Jarvis can perform various desktop and web-based operations. Command Mode functionalities are divided into commands that require arguments and those that don’t.

* **Commands Requiring Arguments**:
  + open\_app: Open a specified application.
  + close\_app: Close a specified application.
  + search\_on\_youtube: Search for a specified topic on YouTube.
  + search\_on\_internet: Perform an internet search for a specified query.
  + generate\_image: Generate an image based on a given prompt.
* **Commands Without Arguments**:
  + YouTube Controls:
    - open\_youtube: Open YouTube.
    - pause\_video: Pause the current YouTube video.
    - restart\_video: Restart the current video.
    - mute\_video: Mute the current video.
    - skip\_video: Skip to the next video.
    - back\_video: Go back to the previous video.
    - fullscreen\_video: Enter fullscreen mode for the video.
    - film\_mode: Enter film mode on YouTube.
    - close\_youtube: Close YouTube.
  + Browser Controls:
    - close\_tab: Close the current browser tab.
    - open\_browser: Open the default web browser.
    - open\_recently\_closed\_tab: Reopen the last closed tab.
    - open\_download: Open the downloads page in the browser.
    - open\_history: Open the browsing history.
    - open\_new\_window: Open a new browser window.
    - open\_new\_tab: Open a new tab in the browser.
  + System Controls:
    - take\_screenshot: Take a screenshot of the screen.
    - shutdown\_sys: Shut down the system.
    - restart\_sys: Restart the system.
  + Exit:
    - exit: Exit Command Mode.

**Code Mode**

In Code Mode, Jarvis can assist with basic programming tasks. Like Command Mode, the functionalities in Code Mode are categorized based on whether arguments are required. All the operations in code mode will take place in ‘vsCode’.

* **Commands Requiring Arguments**:
  + generate\_code: Generate code based on a specified prompt or requirement.
* **Commands Without Arguments**:
  + new\_file: Create a new code file.
  + new\_project: Start a new project.
  + save\_file: Save the current file.
  + close\_file: Close the current file.
  + run\_code: Execute the current code file.
  + exit: Exit Code Mode.