A.U.R.A

(Assistant for User Response and Automation)
Your Personalized Assistant for Productivity and Information

Introduction:

Project PJ-214, named **Aura (Assistant for User Response and Automation),** is an AI assistant for a new era of personal computing. Understands Hindi/Hinglish, responds to voice commands, automates tasks. Searches the web, gets news, manages schedules, and more. Aura promises to do just that, offering a range of functionalities,designed to enhance your productivity, access information, and personalize your computing experience.

Project Goals and Objectives:

PJ-214 goes beyond information access. It can automate tedious tasks like opening and closing applications, setting alarms, and controlling your media playback. Imagine effortlessly launching your favorite app, scheduling appointments, or setting the perfect alarm, all through the power of your voice.

With its user-friendly interface and multi-modal interaction, PJ69 adapts to your needs. It even offers focus mode features, helping you create a distraction-free environment to maximize your productivity.

Functionalities:

- **Conversational AI:** Respond to user queries and hold natural conversations in Hindi and Hinglish.
- **Information Access:** Search the web, provide news updates, retrieve live scores, and answer user questions.
- **Task Automation**: Open/close apps, set alarms, schedule tasks, control Youtube playback, and manage other applications.
- **User Management:** Remember user preferences and settings, personalize responses, and provide feedback mechanisms.
- **Multi-modal Interaction:** Support voice commands for most functionalities and provide a user-friendly GUI for additional interaction.
- **Focus Mode:** Create a distraction-free environment by blocking websites and silencing notifications.

Technical Stack:

Programming Language: Python

Libraries and Frameworks:

- NLTK for NLP
- SpeechRecognition and pyttsx3 for speech
- BeautifulSoup or Scrapy for web scraping
- Selenium for web automation
- Calendar management libraries
- News and sports APIs
- GUI libraries like Tkinter or PyQt5
- Database libraries
- Machine learning libraries for specific functionalities
-

Packaging: PyInstaller

Development Roadmap:

Phase 1: Implement voice commands and text input for user interaction.
Phase 2: Develop core functionalities like conversation, information access, and task automation.
Phase 3: Add advanced features like focus mode, user management, and customization options.
Phase 4: Continuously improve the assistant's accuracy, understanding, and user experience based on user feedback.

Resources and References:

NLTK library: https://www.nltk.org/
SpeechRecognition library: https://pypi.org/project/SpeechRecognition/
pyttsx3 library: https://pypi.org/project/pyttsx3/
BeautifulSoup library: https://tedboy.github.io/bs4_doc/
Scrapy framework: https://scrapy.org/
Selenium framework: https://www.selenium.dev/documentation/
PyInstaller: https://www.pyinstaller.org/