"SAI'RA" A VIRTUAL ASSISTANT

PROJECT SYNOPSIS

A project synopsis is submitted to

Devi Ahilya Vishwavidhyalaya, Indore

in partial fulfillment for the award of

Masters of Computer Applications

UNDER GUIDANCE OF   **SUBMMITED BY**

PROF. JUGENDRA DONGRE   ANUBHAV SINGH(IC 2K16 54)

INTERNATIONAL INSTITUTE OF PROFESSIONAL STUDIES, INDORE

2020-2021

Table of Contents:-

1. **Domain**

    A virtual assistant also called **SAI**'RA is an AI assistant or digital assistant is an application program that understands natural language voice commands and completes tasks for the user.

    Why AI?

    Artificial Intelligence enhances the speed, precision and effectiveness of human efforts. In financial institutions, **AI** techniques can be used to identify which transactions are likely to be fraudulent, adopt fast and accurate credit scoring, as well as automate manually intense data management tasks.

    Our virtual assistant will able to do the followings things-
    Weather forecasting, Launch Games, Launch Windows Applications, Open Websites, tells you about almost everything you ask, tells you date and time, greetings, news, etc. You can interact with your laptop's microphone/console. The response generated by the assistant will display on the console or as a speech via the speaker.

2. **Introduction to the Project**

    This project is basically based on an AI personal assistant. It is a piece of software that understands verbal or written commands and completes task assigned by the client. It is an example of weak AI that is it can only execute and perform quest designed by the user. Overall this project will be developed to help the user to do simple day-to-day online task in best way possible to reduce the wastage of time in searching different sites. The implemented voice assistant can perform the following task it can open YouTube, Gmail, and Google chrome and stack overflow. Predict current time, take a photo, search Wikipedia to abstract required data, predict weather in different cities, get top headline news from Times of India and can answer computational and geographical questions too.

3. Existing System

In existing system, most of people use AI assistants proposed by Google (Google assistant), Amazon (Alexa), Microsoft (Cortana) etc. These assistances are Hi-tech yet you won't be able to perform your system based tasks.

4. Problem Statement

The current system will fulfill all the limitations of existing system and also perform most of the functions of existing system too. Since, this AI assistant is in its starting phase, so it will perform limited tasks but with time it will get improved and will do as many as task you want to perform.

5. Packages required:

- Speech Recognition
- Wikipedia
- Pyttsx3
- Wolframalpha
- Ecapture
- Datetime
- OS
- Json

6. Scope of project

Everyone needs a assistant to perform some of simple but important tasks. By hiring a **virtual assistant**, you're able to delegate tasks that'll help you get rid of time-wasting tasks. For example, this may include sending emails, answering calls, give date and time, open websites, and search everything on Wikipedia etc. This project will be dynamic, user friendly and error free.

7. Limitations

There are a lot of tasks a virtual assistant can perform, but they require a large number of facts to be associated. It requires very big team to enhance its area of scope. System which handles all virtual assistant operations are basically super computers, which we don't have for our project. Internet connection is must to run this process as it uses all internet based properties to make its process fast. So, if we don't have proper internet connection then we will not be able to perform most of its tasks.

8. Technologies to be used

The project will be having the following technology requirement as listed below. With the help of the following software the project will be implemented and thereafter will prove to be helpful to the needed.

SOFTWARE REQUIREMENTS

- Operating System   :   Windows 10 pro
- Programming Language   :   Python
- IDE/Workbench   :   PyCharm
- Language distribution   :   Anaconda
- Libraries   :   pyttsx3
                                                    SpeechRecognition
                                                    Ecapture
                                                    Wolframalpha

HARDWARE REQUIREMENTS

- Processor   :   Pentium i3
- Hard Disk   :   40 GB or more
- RAM   :   4 GB or more
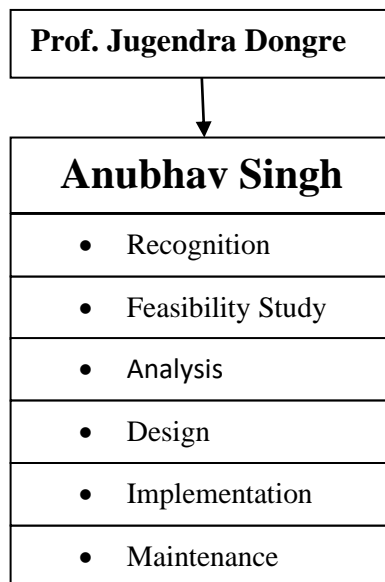- System Type   :   32 Bit OS

9. Team Structure

This project will be made under the supervision of **Prof. Jugendra Dongre Sir**, who will be guiding us regarding the successful implementation of this project.

The following are the students working under this project with their respective roles:

Anubhav Singh

- Recognition: Gather and validate the system.
- Feasibility Study: Define the problem and scope of existing system. Overview the new system and determine its objective and produce the project schedule.
- Analysis: System study and organizational knowledge. Problem identification, problem analysis and problem solving.
- Design: Includes the design of application, network, databases, user interfaces and system interfaces. Prepare a design document which will be used during next phases.
- Implementation: Implement the design into source code through coding and combine all the modules together.
- Maintenance: Implement the changes that software might undergo over a period of time and implement the new requirements.

Prof. Jugendra Dongre

Anubhav Singh
• Recognition
• Feasibility Study
• Analysis
• Design
• Implementation
• Maintenance

(fig. 1 Team Structure)

10. Gantt Chart

Given proposed system will be deployed within given range of time.

Planning	**20 Nov**				
Analysis		**30 Nov**			
Design			**10 Dec**		
Implementation				**20 Dec**	
Report Making					**30 Dec**

(fig. 2 Gantt Chart)

11. Future Enhancement

With time and with increase of processing speed of system we can enhance capacity of **SAI**'RA. Since, this is a window's based AI so; I will try to in co-operate **SAI**'RA with Linux operating system. Since, we have virtual assistant in all other operating system but not for Linux operating system. It will be a difficult task to do but I will try my best to do such thing.

12. Bibliography

- Automate the Boring Stuff with Python : By Al Sweigar
- Python Courses : Google Python classes
- The Python Standard Library : By Doug Hellmann
- Online Resources : Geeks for Geeks
  Python.org
  Python community
  Python libraries
  youtube.com
  google.com
  towardsdatascience.com