



Intelligent Virtual Personal Assist

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July 5, 2021

INTELLIGENT VIRTUAL PERSONAL ASSISTANT

Abstract---People say 'The age of Electricity', 'The stone Age' and so on while referring to the olden days, which means they are no longer living in those days in the present world. In olden days people used posts to send information from one to other but now-a-days we use technology to send the messages. People also travelled long distances by walking, next by inventing a bullock cart but at present we use technology to manufacture a car. From this we can understand that emerging of new technologies are the catalyst for changing the world. The era at present is Digital Era but the world is rapidly moving towards the post digital era. Everything already is, or is becoming digital. Because the new technologies deliver extraordinary new capabilities, and one of them is Intelligent VPA.

Keywords—*Intelligent assistant, virtual personal assistant, Digital assistant*

I. INTRODUCTION

A. Introduction

Intelligent VPA (Virtual Personal Assistant) is a computer program that performs tasks or services for an individual. Basically, the term chatbot can be used to represent these VPA's. It does so by auditory or textual methods, and is used in Dialog Systems for various practical purposes like customer service, information acquisition. It is designed to simulate how a human would behave as a conversational partner or in simple terms it basically helps us to understand how a human would interact with Artificial Intelligence. Some VPA's use sophisticated NLP (natural language processing) but many simpler systems can work with giving input and pull

a reply by most matching keywords or the most similar wording pattern from database and then returns as output. Few existing Virtual Personal Assistants include Apple's Siri, Amazon's Alexa, Google assistant, Facebook's M and so on.

This uses machine learning and artificial intelligence to provide the best response. It:

- Understands inputs and commands
- Will benefit from user experiences endlessly to help forecast their needs.
- Will talk with an individual in the same manner.
- The details received from each contact can be stored and categorized.
- It will evaluate information to distinguish the information that is worthless and not.
- Know where to save this stuff, so that it will be able to use it again.

II. RELATED WORK:

The proposed work will have a more profound spotlight on human to VA connection and a client's data need, prompting questions, for example, 'how do clients assess data by a VA and how is data seen by means of a VA?'. The examination thinks about the convenience of assorted VAs, in regards to language preparing procedures, yet VA's presentation and its insight from a client viewpoint. It will give initial experiences into human to VA cooperation and its impact in client data conduct. The principal results presented in this paper focus on the apparent nature of the framework and saw nature of the substance.

III. METHODOLOGY

A. Implementation

Initially, the system is in idle mode. As it receives any wakeup call it begins execution. The received command is identified whether it is a questionnaire or a task to be performed. Specific action is taken accordingly. After the Question is being answered or the task is being performed, the system waits for another command. This loop continues unless it receives quit command. At that moment, it goes back to sleep.

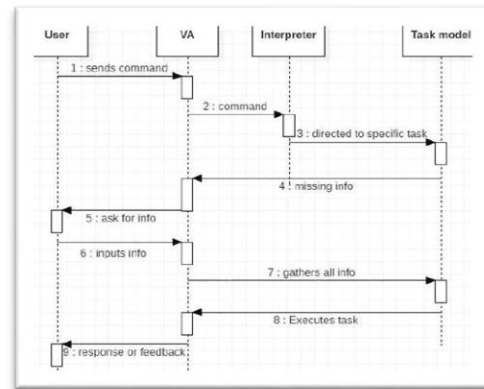
B. Installation

Firstly, install python version of 2.7 or later, secondly install any python editor, for example, PyCharm.

The initial installation instructions are:

```
pip install SpeechRecognition
pip install pyttsx3
pip install pipwin
pip install audio
pip install psutil
pip install pyjokes
pip install pyautogui
pip install os
pip install wikipedia
pip install DateTime
pip install json
pip install ecapture
pip install wolframalpha
pip install requests
pip install pyperclip
```

C. IVPA working



1. User sends command: Words and tone of your request are analyzed by the algorithm.

2. Processing of command: Match with a command already programmed, that thinks you asked. Simultaneously, it is trying to figure out if it can handle the request, if the request you sent as command is true then the request is processed if not it gives you an error.

3. Interpretation: If the given command is true then it interprets the command, if needed it asks for inputs and gathers information and executes the command to give the output or response.

IV. Requirements:

A. Hardware Requirements:

Pentium pro-processor: Intel produced and manufactured Pentium Pro, the sixth generation x86 microprocessor was launched on November 1st, 1995. The P6 microarchitecture has been implemented and was initially designed in a whole variety of applications to replace the existing Pentium.

RAM 512MB or more: the minimum size of random-access memory is 512 MB and maximum can be anything above that.

B. Software Requirements:

Language: python

OS: Windows/Linux.

