**ABOUT THE PROJECT**

* The purpose of this project is to illustrate the implementation of a Voice Command System as an Intelligent Personal Assistant (IPA) that can perform numerous tasks or services for an individual. These tasks or services are based on user input, location awareness, and the ability to access information from a variety of online sources (such as weather or traffic conditions, news, stock prices, user schedules etc.
* Using Raspberry Pi as a main hardware to implement this model which works on the primary input of a user’s voice. Using voice as an input to convert into text using a speech to text engine. The text hence produced was used for query processing and fetching relevant information
* When the information was fetched, it then be converted to speech using text to speech conversion and the relevant output to the user was given. Additionally, some extra modules were also implemented which worked on the concept of keyword matching
* A Voice Command System essentially means a system that processes voice as an input, decodes or understands the meaning of that input processes it and generates an appropriate voice output. Any voice command system need three basic components which are speech to text converter, query processor and a text to speech converter. Voice has been a very integral part of communication nowadays. Since, it is faster to process sound and voices than to process written text, hence voice command systems are omnipresent in computer devices.
* Speech Recognition is the ability of machine for instance a computer to understand words and sentences spoken in any language. These words or sentences are then converted to a format that could be understood by the machine. Speech recognition is basically implemented using vocabulary systems. A speech recognition system may be a Small Vocabulary-many user system or a Large Vocabulary- small user system