**Voice Based Intelligent Virtual Assitance for windows**

ENDTERM REPORT

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**Student Declaration**

**This is to declare that this report has been written by me/us. No part of the report is copied from other sources. All information included from other sources have been duly acknowledged. I/We aver that if any part of the report is found to be copied, I/we are shall take full responsibility for it.**

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BONAFIDE CERTIFICATE

**Certified that this project report “Voice Based Intelligent Virtual Assistant.” is the bonafide work of “Abhinav Bhardwaj and Abhiraj”, who carried out the project work under my supervision.**

Jasleen Kaur

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**INTRODUCTION**

A voice assistant is a software agent that performs tasks or services assigned to it by the user through various commands. Voice assistants of the same domain are able to interpret human speech and respond to it. On the other hand, data storage is major issue in day-to-day life. Every smart device has a limited data storage capacity. After the storage is full, managing data is a tedious job. For this given issue, we make use of multiple hard drives which also have a limited capacity. Moving data from different storage devices becomes difficult and is time consuming. Once the surface of the disk is damaged by regular crashes, it leads to the loss of the data stored in the disk.

. **MOTIVATION**

In our everyday life we are using voice assistant at our home for various purposes like playing music to scheduling our work. These devices can also stream music or video on our Televisions but they do not provide storage to the user for storing data. For storing excess data, user depends upon various devices like PC’s and hard disks, which is not that much of convenience.

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**GOAL**

The goal of the project is to create a system which serve the purpose of voice personal assistant. Voice-controlled intelligent personal assistant is a software agent that can perform tasks or services for an individual. The system has no other advantages for the user using the agent. The integration of file storage system which can be accessed by heterogeneous client devices with voice-controlled intelligent personal assistant bot leads to a smart memory assistant device with processing capacities for the memory, this processing power for the memory adds up to the operations like user interactions, streaming, personal cloud storage.

**Technology used in this project**

* Natural Language processing
* virtual agents
* AI optimized hardware
* Decision Management
* .net framework
* python programming language
* speech recognition

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**SWOT ANALYSIS**

A SWOT analysis basically involves specifying the objective of a project or goal and identifying the internal and external factors that are favourable and unfavourable so you can overcome any obstacles that are in the way of reaching it.

It can be carried out for pretty much anything but I’m going to give you some examples further down so you can apply the analysis to different VA challenges you may encounter.

**SWOT stands for:**

* **S**trengths
* **W**eaknesses
* **O**pportunities
* **T**hreats

**STRENGTH**

Reliability- it is one of the most important ones because sadly it seems to be the most common. A huge number of clients told me they’d been let down by flaky Vas who messed them about, didn’t report back on their progress, or simply didn’t deliver it at all

Conversational-More natural conversation creates surprise and curiosity for a cutting-edge product.

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**WEAKNESS**

 Understand the question and provide the relevant answers is sometimes it is difficult

 Hard to adopt all skills. For this assistant it is hard to adopt the skills but very limited algorithms are integrated in this voice assistant so it can perform only limited tasks.

 No clear direction

**Opportunities**

Users can talk freely and ask questions

**Threats**

The domain can be unclear, users could ask the wrong questions