1 Group Id

Mention Group ID

2 Project Title

Voice Controlled Personal Assistant and Connecting IOT Devices

3 Project Option

Internal Project

4 Internal Guide

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5 Technical Keywords (As per ACM Keywords)

Technical Key Words:

- Special-Purpose and Application-Based System

- Online Information Services

- Natural Language Processing

- Input/Output and Data Communication

- Artificial Intelligence

- Distributed System

- Personal Computing

6 Problem Statement

To develop a hardware system which takes the input through voice commands and perform the various actions and keeps learning the context of these commands to further improvise the responses in future and help humans with day-to-day workforce.

7 Abstract

In the Modern Era of fast moving Technology we can do things which we never thought we could do before. But to achieve the accomplish these thought theres a need for a platform which can automate all our task with easy and comfort.

So there is a need to develop a voice controlled personal AI having brilliant powers of deduction and the ability to interact with our surroundings just by one of the materialistic form of human interaction, our VOICE. The Hardware device captures the personals audio request through microphone and processes the request so that the device can respond to the individual using in-built speaker module.For Example, if you ask the device 'what's the weather?' or 'how's traffic?' using its built-in skills, it looks up the weather and returns the response to the customer through connected speaker.

The platform is open to all and connect all IOT devices in the vicinity to perform the assigned task on go. This feature makes it distinctive from already existing personal AIs and separates it from the flock. It uses open source software to process natural language, to determine the intent of the query and to perform the action. The platform features include : Turn on the lights, do the mathematics, play your favorite song or ask anything which comes to your mind. Just speak naturally and the platform is there to do your bidding.

The Platform also a extends an Android Application in which you can add To-Do-list or set a reminder or alarm through the app, push notifications and personalize according to your needs. The device has a lot of native skills and abilities baked in it and more can be added to extend its capabilities.

There is still a lot of ground to be covered up in the world of automation but the skills the device we are building posses, it can help to build a new generation of voice controlled devices and bring a new sustaining change in the field of automation.

8 Goals and Objectives

- The main objective of this device is to ease the burden of your work by providing any information you want and help you with daily work.

- To expedite you from the pressure of remembering things like meeting, play

music on go, solve your queries.

- To develop a platform which can interact seamlessly and can have a friendly conversation with you.

- To control IOT devices of the surroundings of the device using simple commands.

9   Relevant mathematics associated with the Project

System Description:

- Input:

- Output:

- Identify data structures, classes, divide and conquer strategies to exploit distributed/parallel/concurrent processing, constraints.

- Functions : Identify Objects, Morphisms, Overloading in functions, Functional relations

- Mathematical formulation if possible

- Success Conditions:

- Failure Conditions:

10   Names of Conferences / Journals where papers can be published

- IEEE/ACM Conference/Journal 1

- Conferences/workshops in IITs

- Central Universities or SPPU Conferences

- IEEE/ACM Conference/Journal 2

11 Review of Conference/Journal Papers supporting Project idea

Atleast 10 papers + White papers or web references
Brief literature survey [Description containing important description of at least 10 papers

12 Plan of Project Execution

Using planner or alike project management tool.