Mr. Chef

Extended Title

Mr. Chef - Your Kitchen Assistant

Brief Description

Mr. Chef will be implemented as an application of IoT with an aim to automate daily kitchen work at home as much as possible. The system shall be an assistant to the human and shall copy human tasks. The Project shall consist of two main systems.

1: A Robot

2: An Andorid Application

Robot will be responsible for carrying out the commands while commands will be conveyed through Android Application by the user.

Scope of Work

The scope of work of this project includes working on robotics, development of an Android application and finally making the communcation possible between the hardware and software i.e. the robot and the android app to carry out tasks as given by the user.

Academic Objective

Academic Objective of the project includes;

- Learning and implementation of concepts of Internet of Things
- Learning and implementation of Python Language.
- Learning to work on Raspberry Pi
- Learning and implementation of Android Development
- Learning to work with different sensors, motors and other hardware components.
- Learning concepts of Robotics.

Application/ End Goal Object

The Goal of the system is to realize implementation of robot/robotic arms that shall carry out activities related to cooking in kitchen same as a human would do with task initiation done by the user.

Previous work done on the subject

Certain articles, research papers have been published on the subject but as far as the real implementation is concerned only two main prototypes have been displayed amongst which one company intends to deliver consumer product by 2018.

- Source 1: http://www.bbc.com/news/science-environment-32282131
- Source 2: http://www.moley.com/

Material Resources Required

- Raspberry Pi
- Servo Motors and Controllers
- Arduino
- Robotic Arms
- Sensors and related hardware components.

No. of Students Required

Minimum: 3

Special Skills Required:

- Basic Knowledge of Robotics
- Hardware Knowledge.
- Hardware Assembly and Interfacing with Raspberry Pi or Arduino
- Working with different sensors

Approved Status

Supervisor Name & Signature:_____

Assigned to: NC Muhammad Mohsin Zafar

NC Muhammad Sufyan

NC Muhammad Awab

HoD Signature_____

R&D SC Record Status

File #_____Coordinator Signature_____