VIRTUAL COOK

(Project Proposal)

➢ Project Code

<Project code assigned by the Project Office>

➢ Project Advisor

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➢ Project Manager

Mr.Fahad Maqbool

➢ Submission Date

September 23, 2019

➢ Project Team

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1. Abstract

The aim of introducing **Virtual Cook** is to get rid of more wastage of time that are consumed in cooking purposes as well as it overcomes the problem of slow delivery of food.

Mostly People face problems while cooking meal at home , when you have fewer ingredients available and want to cook , deliver , purchase and sell something great it's the app for you.

The **Virtual Cook** is a ride solution to solve the problems occurs in cooking and delivering purposes.Just like other cooking apps, it will advise the recipe of cooking food , but , not tell you the ingredients . In facts, This virtual cook app will first ask the users about the available ingredients and will come up with a dish that can be made with those ingredients on it's own ,by which you people can sell ,purchase and deliver that dish as well, so that the user won't have to rush for the other additives.

Beside this, **Virtual Cook** would be a great financial benefits for the industrial people,as well as house living ladies that she can cook and sell something great online by living at their homes for those people who doesn't have much time to prepare meal and also wish to eat home-made-meal**.**So for those candidate ease the **Virtual Cook** provide **Robot** that would provide the deliver functionality at their doorsteps.

People will simply have to install an application on their cell phones to get recipe information either to sell that cooked meal or to buy it by access the available delivery **Robot** at the nearest office. Robot would be placed at a specific office from where the seller may access their availability through application.Any seller who want to deliver something to the buyer just have to call the robot from the nearest office through application.Once the robot is allocated to that seller for a fixed period he has to return it within this time frame.He will use this service within Sargodha area only.

2. Background and Justification

- ## Background

Often ,People face problem while preparing recipes as they mostly have less ingredients available at that time for that specific dish they want to prepare,that's why people mostly delay their ideas of cooking this type of recipes and prefer to order something to eat.

- ## Justification

The introduction to these delivery **Robots[1]** within the sargodha would help people to face considerable convenience when it comes to time management.Currently, jobfull ladies have to spend a much of their time in cooking purposes.This is quite tiring.**Robot** sharing meal seems like the most feasible and environment-

friendly solution to this problem of the people by providing the delivey functionality of the homemade meal at their doorsteps through robot.Its working is pretty convenient, just the user have to register themselves on app and check whether my wishing dish would be made by someones or not?if the dish has been cooked and placed on app thus the buyer firstly check the rating of chef and after that he would contact to chef who has high rating, via massege .On other side the seller would use **Robot** until the dish would has been deliver to the buyer after use,she has to return it back to the office.

3. Project Methodology

The project entitled "**VIRTUAL COOK**" is a combination of **IoT** and **Android** base logic.
Two phases are involved to achieve this project objective:

- **Android-based development phase**

  In this project we make an android application that helps others in cooking purposes as well as the delivering purposes via **Robot.** Application would control the robot. People will simply have to install an application on their cell phones to access the available robot at the nearest office. **Robot** would be placed at a specific office from where the people may access their availability through application. We develop this application in **Java language** using a software **android studio**.

  Following step involved in this phase:-

  1) **Developed feature used within application e.g. GPS tracking functionality.**
  2) **Establish a connection between application and chips[2] used in the IOT phase.**
  3) **Graphical user interface for an application**

  When any candidate comes,he/she must have to register him/herself on app,**Virtual Cook** will serve them with all information including ingredients,their amount as well as the tutorial for making that recipe.But If he/she is needed to cook the specific recipe this virtual cook app will first ask the users about the available ingredients and will come up with a dish that can be made with those ingredients on it's own .In this way , you people can cook , deliver and puchase that dish.So that one can put their dish on app and other can purchase it, according to their will.Buyer has to search whether my

wishing recipe are availble on this app or not?If the dish is avaible user check location if the dish is avaiable in between the closer location places, he/she would check the rating of the chefs that would be close to that location and contact via massege to that chef who has high rating among all and thus sellers call the robot ,put their dish inside it.The Robot deliver the food to the correct destination and thus the seller has to return back the robot to the office

We develop this phase of application in **Java** language using software **Android Studio**

Following step involved in this phase :-

Home page activity having all recipes information along with tutorial.

Virtual Spinner activity including a spinner of ingredients by which the app'll first ask the users about the available ingredients , ask the available time in which the user can cook recipe easily and then there will come up with a dish that can be made with those ingredients within a specific time.

In **Recipe Box activity** ,It would be a box,where the user store their wish list and can use it later in future so that the user won't have to search same dish-type and ingredients again and again.

The another important feauture is **Shoping List** ,all the ingredients are mentioned overthere that would have been used in user's recipe ,If the user doesn't have all necessary ingredient as such that some are missing among them so in this way ,user can save those missing ingredients in their Shopping List and can purchase those ingredients from the shop as well.

The last one is **Setting** activtiy where the user can logout from app and can also change other functionality i.e, language functionality.

➢ IOT based development phase

In this project, we used:

- **Chips**, that are connected with our android application.
  For coding in chips, we will use Arduino IDE Software. Chips are placed on Robot which will perform some specific function.
- **Camera [3]** is to be applied in Robot which track the location of the buyer to the seller
- **Sensors [4]** are to be applied that control the gps system.

4. Project Scope

- The **Virtual Cook** is bascially a robot sharing system.When you have fewer ingredients available and want to cook ,deliver and sell something great.

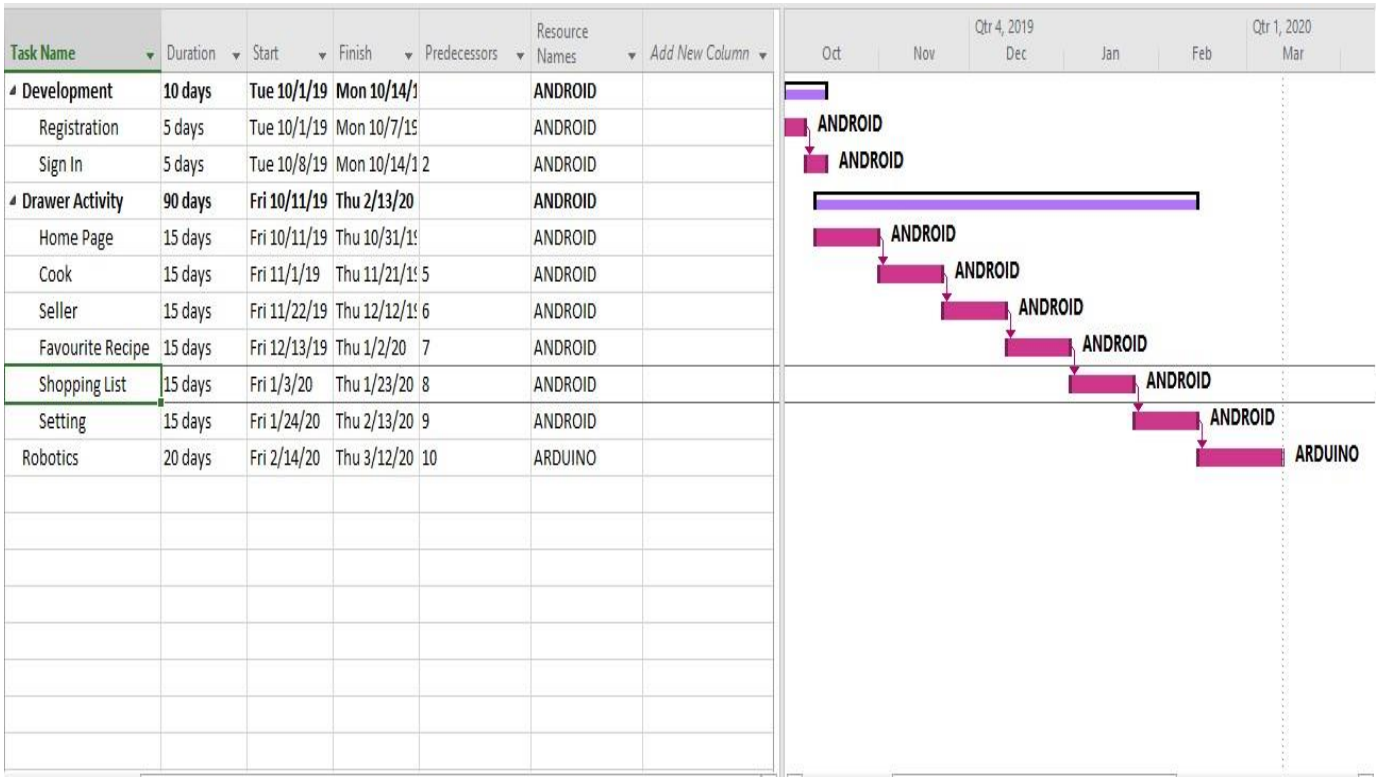
- The objective of presenting this **Robot** is to ease for the people who want to cook and deliver something great so App will first ask the users about the available ingredients and will come up with a dish that can be made with those ingredients.In addition to this ,also for those who wishes to eat home made meal but can't cook due to less time So **Robot** will deliver them meal at their doorstep.

- He is allowed to use the Robot only inside the Sargodha area.The Robot consists of enabled GPS and with camera functionality for security purposes.

- Limitations of this app is that:

    - The system consists of enabled GPS that would deliver the recipe at closer location ,far places delivery won't be under consideration. App allowed deliver functionality only inside the closer location area.
    - My system will perform the functionality of delivering process within a day.
    - Payment would be taken through account,cash payment won't allowed.

5. High level Project Plan



Task Name	Duration	Start	Finish	Predecessors	Resource Names	Add New Column
Development	10 days	Tue 10/1/19	Mon 10/14/1		ANDROID	
Registration	5 days	Tue 10/1/19	Mon 10/7/19		ANDROID	
Sign In	5 days	Tue 10/8/19	Mon 10/14/1	2	ANDROID	
Drawer Activity	90 days	Fri 10/11/19	Thu 2/13/20		ANDROID	
Home Page	15 days	Fri 10/11/19	Thu 10/31/19		ANDROID	
Cook	15 days	Fri 11/1/19	Thu 11/21/19	5	ANDROID	
Seller	15 days	Fri 11/22/19	Thu 12/12/19	6	ANDROID	
Favourite Recipe	15 days	Fri 12/13/19	Thu 1/2/20	7	ANDROID	
Shopping List	15 days	Fri 1/3/20	Thu 1/23/20	8	ANDROID	
Setting	15 days	Fri 1/24/20	Thu 2/13/20	9	ANDROID	
Robotics	20 days	Fri 2/14/20	Thu 3/12/20	10	ARDUINO	

6. References

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3. https://www.theverge.com/2019/2/27/18242834/delivery-robot-fedex-sameday-bot-autonomous-trials
4. https://www.researchgate.net/publication/283650680_Simple_delivery_robot_system_based_on_line_mapping_method