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Smart Kitchen Inventory

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Abstract: It will help working individuals to decide the desired food dish what they want along with maintaining hygienic and nutritional statistics. From outside, anyone can check the availability of the ingredients of the desired food dishes from available internet kitchen database repository and if it is not available then notify the nearest shopkeeper to bring items before reaching home. It also meant for health awareness. It could be understood by two aspects one is nutrition and second is calorie or energy consumption. Most of the situations in which, it is revealed that the many food recipes will have high calories but very less nutrition. It leads to either malnutrition or obesity which really impact very bad on world society. After consuming the high calories food, need to go for exercises to burn the extra calories and if fail in that then several health issues might arose and it require some extra time also. It will save the working professionals time and help them to maintain the balanced regular diet such that they can lead a good & healthy life.

INTRODUCTION

Everyone knows that "Time is money", so wasting time is almost wasting money. This project is meant for working men & women or both. Here working means those who are bound for 8 to 10 hours daily for any type of work for earning livelihood, can't waste their time to check each box or shelves in kitchen, which is empty or how long it will go. Travelling to office and coming back to home generally consider 2 hours, for some people it may take less or for some it may take more . So, 50% of their time which is 12 hours is over, only 12 hours in which all other works need to do.

Cooking food is somewhat easy if all the ingredients are available on the same plate. But who has time to check through regularly basis which ingredients will go to how many days and available ingredients is expired or not. Before leaving office only if we have decided today we will go for some specific food menu then who will guarantee that it won't make any major change in daily routine. It will help individuals to decide the desired menu what they want along with maintaining hygienic and nutritional statistics from residing outside of the house itself, anyone can check the availability of the ingredients of the desired food menu from kitchen and if it is not available then notified the nearest shopkeeper to bring those items before reaching home.

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In the digital era so many online food vendors who will promise all types of food menu and within specific time and sometimes free delivery so for customers it seems to be economical but it won't stands on the measures of health awareness like nutrition and calories parameters.

LITERATURE SURVEY

A report says that cooking person lives 2 to 3 hours daily in kitchen on an average for 4 family members. In a year, we have 365 days and we won't consider 45 days because of having food outside or online food order or because of trip and some another reason. If we will consider 320 days then we can see the numbers of hours spend in kitchen [1]. If calculate for the 320 days then (320* 180 minutes = 57600 minutes = 40days) From above once again it can be observed that almost 40 days or about 12% of a year, have to stay in kitchen and if we want to reduce the time and that time can be used for the other good activities such that spending time with family members and other well-wishers. The biggest headache to keep pace of every food materials and ingredients that when it get short or how long it will go and when it get expired and before getting short and before getting expired, It has to be again maintained in the grocery item of the kitchen [2]. It will give an approach in which a person can keep track of all the items and which dish or food item, he or she or they want on their dinner or supper plate can be decided from residing outside.

Sometimes decided in the office but that wishes can't be fulfilled because some ingredients is not available or expired then suddenly, need to change plan. From office itself checking, all the ingredients which can be used for the desired dish for lunch in the afternoon and supper at night. It will give

the required notification such that you can go for that food recipe while checking the appropriate quantity and even quality also by checking expiry date. It will also reduce the boring time to check individual box and shelves and keep pace for all food ingredients. If we miss a single ingredient then we may suffer next day or coming day. Home cooked food is the best food, while cooking it is kept in mind that how much quantity and what amount of ingredients can be used so it will give better result to the eater and don't affect their health [3]. We can't expect this from outside such as hotels and restaurants food. There is not a single system available in kitchen which will state about consumed calories and if that system will predict to the user that you are going to consume this much of calories then as per his requirement he can go for that or can change his mood as per his physique requirement.

PROPOSED SYSTEM

Technically, it is designed through MVC (Model View Controller) design used Java and Jsp. It will be understood through the given diagram. It is based on Internet repository where internet connection is mandatory to work.
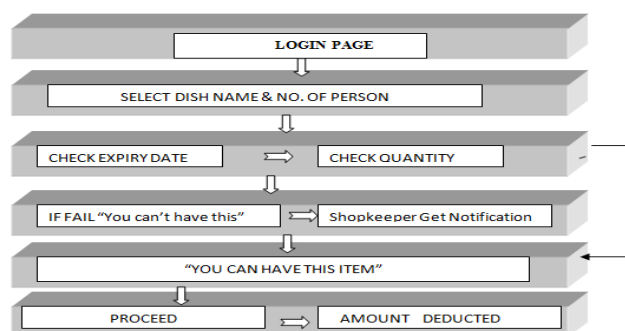

Figure 1: Flow Diagram

After opening the Internet repository which is synchronized with several devices such as Smart phones, tablets, phablets, Pda (Personal Digital Assitant) it shows the login page. After authentication it will show the available food dishes. Here, It has been observed that it will work only for enlisted dishes. Because if we took Bisibheli-bhath so in the system all the ingredients is listed which is used to make the bisibheli bhath such as rice, ghee, pulses, Cumin seeds, Coriander powder, Ginger garlic paste.

User can select the Dishes available and for how many persons, then after proceeding first it will check the expiry date of each ingredient which is going to be used to make the bisibheli bhath if any ingredient is expired then there itself display a message such as you can't have this dish because this ingredients is expired. At same moment it will send a message to the nearest registered software to bring those items. If all ingredients doesn't fall in expiry date then it will check the

quantity if quantity is available in the repository then it will again show you can have this item with calorie statistics otherwise again it will send a message to the shopkeeper to bring some specified amount of ingredients within stipulated time interval. After seeing the calories statistics any one can change his mind if it is fine for that much calories then proceed and that much of amount will be deducted from the repository.

Figure 1 it has been clearly stated that the provided platform is user friendly and it will guide the user very easily. It will allow the user to select the desired food dishes from staying outside and system will notify the user that you can have this item or not and in second condition if ingredient is not available then system itself notify the shopkeeper to bring those items. So, in this way user will save time by not visiting shop and then selecting and buying ingredient and then coming back to home. It will give a taste of the automation flavors where human interactions are very less but those system generated effort will help human to accomplish their work in better way.

CONCLUSION

The Smart Kitchen Inventory will improve the human life in better way. "Time is money" everyone knows but if anyone who will manage the time and use saved time for their other work, could be understood as managing the capital. This project will reduce the unnecessary time such as used for buying the food ingredients and travel time which is used for going to shop and returning back to home.

Another aspect of this project will give the analytical view about calories consumption. India is in the third place all over the world, after USA (United States of America) and Republic of China which is suffered from obesity and if any person suffered from obesity then the probability of Heart attack and low & high blood pressure will be more. If a person is aware about the calories which is going to be consume before having the desired recipe then mind can be changed or the extra workout can be performed for extra calories and make their physique and physiological system healthy.

FUTURE SCOPE

Further enhancement can be done such as, for each mapped account user will specify their specific taste such as the grand parents can use the dishes with less amount of spices and ghee whereas the youth can also optimize the quantity of ghee, spices and some other things.

In other words can be said as each person or certain group can specify their taste along with mapped dishes. It also provides the nutrients statistics data where a person can specified the amount of nutrients factor which will be increased and decreased as per user requirement.

A person who is suffering from obesity can control his habit of overeating and consuming more calories whereas at the same time a person who is suffering from malnutrition can adjust high calories food such that his physique can get the proper balanced diet.

REFERENCES AND NOTES

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