ONLINE FOOD INFORMATION SYSTEM

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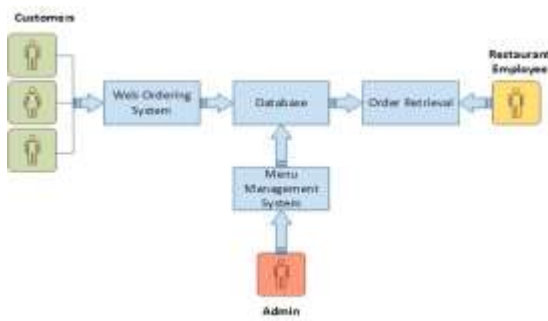
ABSTRACT

In a nutshell, food science is the scientific study of food from the period of harvesting, processing, storage and packaging. Human nutrition now is concerned with the utilization of this food in the human system. Because both cases are referring to food, it shows that both terms are inter-related. Actually, food science plays significant roles in human nutrition as it broadens our horizon on the foods we consume. Some of the roles of foods science in human nutrition includes: food processing as it as shown variable ways in which one food commodity can be processed into different forms; food fortification and enrichment in which nutrients that were not present or that were present but lost during processing are added to the food at even greater levels; and also food preservation and storage which show us how to keep our foods safe for future use. Consuming functional food is believed to avoid the risk of non-communicable and degenerative diseases. Functional food development has attracted the attention of many researchers, but not all food has been explored for its potential. This research aims to determine students' ability and response through food chemistry courses to carry out functional food projects.

INTRODUCTION

The labour rates are increasing steadily year on year thus making it difficult to find employees. The food industry is highly labour intensive and the biggest expense in the food industry is the cost of employing the right kind of people to do the work. One of the ways to reduce this expense is to use modern technology to replace some of the jobs done by human beings and make machines do the work. Here we propose an "Online Food Ordering System" that has been designed for Fast Food restaurant, Take-Out or College Cafeterias. The system can also be used in any food delivery industry. This simplifies the process of food ordering for both the customer and the restaurant, as the entire process of

taking   orders   is   automated.

It is known globally that, in today's market, it is extremely difficult to start a new small-scale business and live-through the competition from the well-established and settled owners. In fast paced time of today, when everyone is squeezed for time, the majority of people are finicky when it comes to placing a food order. The customers of today are not only attracted because placing an order online is very convenient but also because they have visibility into the items offered, price and extremely simplified navigation for the order. Online ordering system that I am proposing here, greatly simplifies the ordering process for both the customer and the restaurant. System presents an interactive and up-to-date menu with all available options in an easy to use manner.

EXISTING SYSTEM:

In the present scenario, people have to physically visit the hotels or restaurants for eating food and have to make payments through cash mode most of the time due to unawareness of advanced technologies at certain places. In this method time as well as physical work is required, among which time is something that no one has in ample amount.The traditional food ordering procedure is not efficient enough for hotels and restaurants, as they have to deal with the crowd, in their restaurant. The old methods can be classified into categories which are paper grounded and verbal grounded. For paper-based work, the waiter comes and pens down foods that customers order and pass the food list containing paper to the chefs or cooks in the kitchen for further process.

Also, from the owner's point of view maintaining data records and the accounts in the physical file are cumbersome and tedious work to do. And also, it is full of risk as anyone can access it and modify the data. In the modern world online food ordering system is a one of popular e-business tactics used all over the world. In those systems restaurant or cafeteria lists their products and other relevant information about the products. Buyers will browse the listed products through internet, and they order some Food , some of them has ordering facilities among those system few of them has facility to order online in other system customer have to give a phone call to order. Let's see a diagram on how online food ordering system works:

DISADVANTAGES OF EXISTING SYSTEM

In few systems customer can pay the money online but in other system customer have to pay money to person who delivers

food. Also they can browse and find any restaurant in the country as they wish and order in there. Except those facilities there is no facility to order online food with ability to book dine-in table. There is no system to get orders from customer without waiter in the restaurant. There is no tabletop and Android application for other systems. Our system support and we develop these applications for our system.

The main disadvantages of the existing system as follows:

1. Disguised increased expense:We surely get attracted by yummy-looking food pictures on the app and a small but highlighting banner of cashback offer.However, we forget that despite cashback, it is costing us higher than the food which we can cook with the groceries available using all our magical cooking skills and spend blindly ordering the food online.

2. Revenue conflicts between the restaurants and delivery providers:Not every restaurant owner can afford to employ ten delivery boys and bear all the transport and remuneration expenditure; so, they choose to contract with the delivery service providers through these apps. This brings the disadvantages of food delivery service.However, despite automation in place, one can't control everything through an automated system, and conflicts occur between the restaurant owner and delivery providers regarding the payments.

3. Juggling with your health:Another disadvantage of an online ordering system for restaurants is even though when you go to a restaurant you won't be seeing the material they use in that mouth-watering Pasta dish that they bring to your table, still, you can get it replaced if you find any faults.

4. More amount of taxes:Online food delivery service companies are facing the heat from restaurants after the goods and services tax (GST) on eating outlets was cut to five per cent, from 18 per cent in November, and input tax credit provision was withdrawn.Some restaurants have started charging higher prices on online food delivery platforms. Others are negotiating a commission cut with online food delivery partners to make up for the 3.5 per cent additional cost due to unavailability of the input tax credit (ITC) facility.

5.Late Deliveries:With food ordered online some time it takes a lot of time to deliver to the required place as it depends upon the distance from which it is ordered, as a matter of fact this technological ease has made the current generation a bit complaisant, while ordering something online it should be kept in mind that the food should be ordered from the nearest possible outlet so it may reach you in few minutes or else you got to wait long for the delivery. So, it's better to be smart enough to order properly by deciding the area rather than reaching unknowingly and then keep on waiting.

PROPOSED SYSTEM

To overcome the limitations of above system, an Online Food Ordering System based on Internet of Things is proposed. It is a wireless food ordering system using android devices. Android devices have gained immense popularity and have revolutionized the use of mobile technology in the automation of routine task in wireless environment. Android is a Linux based operating system for mobile devices such as smartphones and tablets.

To develop a reliable, convenient and accurate Food Ordering System is considered as a general Objective of the study. To develop a system that will surely satisfied the customer service will be considered as an objective. One of the Objective is to design a system that is able to accommodate huge amount of orders at a time and automatically compute the bill. To evaluate its performance and acceptability in terms of security, user-friendliness, accuracy and reliability is an important objective. To improve the communication between the client and customers is one of the objective.

This system is a bunch of benefits from various point of views. As this online application enables the end users to register to the system online, select the food items of their choice from the menu list, and order food online.Also the payment can be made through online mode or at the time of home delivery depending upon the customer's choice and convenience. The selection made by the customers will be available to the hotel reception or to the person handling work assignment.

Now this same person will assign the orders to the specialist chef to be completed within a fixed duration of time.As soon as the chef prepares the food, the later person forwards the parcels to the delivery persons assigned with the location and customer identity of the customer along with the bill status.

Step 1: User enters your website/mobile app

Whenever user feels hungry, instead of going out and searching for food, simply he/she can

enter your website or ordering platform in his/her laptop or mobile phone.

Step 2: Selects favourite dish

All the available food items with the respective prices will be displayed online in the food ordering system (website) itself. There is nothing like someone will come and explain the menu. So without any hurry, user can easily go through your online menu and can choose his/her favourite dish. To increase users convenience, some websites also provide the delivery time option from where an user can select the exact delivery time as per his/her availability.

Step 3: Add items to cart

After selecting the dishes, the next step is to add those particular food items to cart. In this cart page it clearly displays the total price of food items that the user has selected along with the individual item price. Here user can easily add/remove items or can increase the item quantity as per the requirement. This mainly helps the user to order exactly within the available budget.

Step 4: Pay and order online

So after this, the next step is to provide the delivery address and pay for the food that the user is going to order. User can directly pay the amount online through the integrated payment gateways from where the amount gets credited into your account. Once the user makes payment, the order gets confirmed and you will be notified about the new order instantly along with the user. Certain food companies even provide the cash on delivery (COD) method, where the user makes payment after food delivery.

Step 5: Food preparation and delivery

As soon as the order gets placed, you will be notified about the new order, delivery time etc., through sms or an email. This makes you easy to prepare food on a priority basis without any difficulty. And lastly after preparing food, you can safely deliver it to the user through an online food delivery system. Also user can easily track his/her food orders at anytime with this food delivery system.

Advantages of proposed system:

With almost the whole web is filled with online services but explicitly talking about food delivery services the most ordered thing all around the globe are the Fast food items and oriental dishes as according to a survey I found on google.com it states that these items take them less time to get prepared and delivered. There are numerous advantages of having these things at your doorsteps rather than going by yourself. The food delivery market is changing at an accelerated pace. And as a restaurant owner, being online is

the way to go when it comes down to expanding your current customer base & boosting your stream of revenue.

The following are the advantages of proposed system

1. Ease of Access:With online deliverable, there is a big advantage of variety for choosing the channel for ordering for example, almost all food chains in NYC offers online delivery options with so much in their menus which includes Veggie Delights, Fast food, cakes, lushes& more and you can just make your order by tapping and selecting from your mobile screen and wait for your order to arrive.

2. A Good Business:For instance, you are running an online food delivery service where you have to collect food from different places, if your business is good, i.e. your delivery system is efficient then it could be a profitable business for you because more people will consider you to deliver food at their place.it can be more useful during the peak office lunch hours and also during the weekends where people are staying at home laying on their couch enjoying Netflix and chilling' there craving will become reason to your opportunity.

3. Discounted Deals:It's a common practice now that if you want to increase your business in a good competitive market, you must find a unique strategy to counter your opponents? Specially serving in a food industry it is a very difficult task to create good gauge with your trusted costumers the best way to do this is by offering good discounted deals or we should say packaged deals, people always love to see their money being saved without any hustle moreover they are being served with a mouth watering meal this has been one of the critical reasons for the success of online delivery services that there is always some discount on food items which people love the most.

4. Reduction of taxes:Basically the taxes are increased to 18%, if we order food online. So, this proposed system can reduce those tax to 6% and the delivery fee also get reduced in this proposed system. So, with this facility there is no change in the cost of item. But there will be change in the tax.
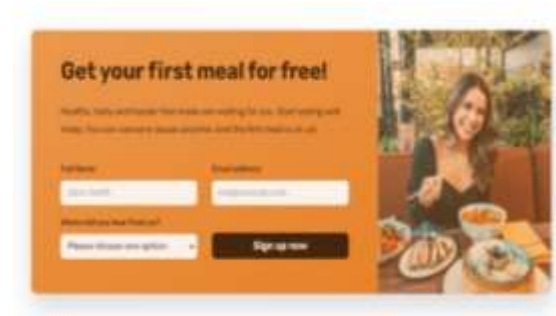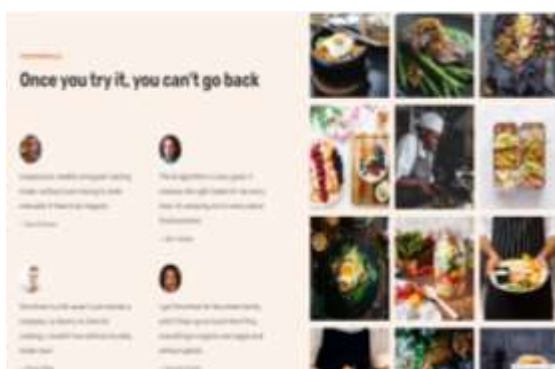
5. Low cost, High quality:As compared to other existing systems, the taxes will be reduced to 6% and

there will be no change in the cost and quality of the item. So, the customer can get good quality food and the owner can get the profit. Even the health of the customer can be in safe hand.

1.5 Hardware and Software requirements:

The testing to be performed will require no special hardware, but some specially designed software may be used, particularly when performing stress testing. I plan on writing and utilizing a multi-threaded Java program to bombard the system with an increasing number of HTTP requests and then measure response times and see at what point things begin to break down. I also will be using the Firefox plug-in Firebug to monitor the JSON requests and responses.

SAMPLE SCREENS

CONCLUSION

An online food ordering system is developed where the customers can make an order for the food and avoid the hassles of waiting for the order to be taken by the waiter. Using the application, the end users register online, read the E-menu card and select the food from the e-menu card to order food online. Once the customer selects the required food item the chef will be able to see the results on the screen and start processing the food. This application nullifies the need of a waiter or reduces the workload of the waiter. The advantage is that in a crowded restaurant there will be chances that the waiters are overloaded with orders and they are unable to meet the requirements of the customer in a satisfactory manner.

FUTURE SCOPE FOR FURTHER DEVELOPMENT

Based on the encouraging results from online food information system using HTML and CSS project and its benefits to the users in saving their time, we have created an user-friendly interface. We gathered lot of information regarding the flaws, difficulties that the users are facing, using the conventional methods.This project is useful to many people as it minimizes the unnecessary orders, so that the user could save money and time. The user may check the quality of food to occur through our project and undergo the orders accordingly. The user may be able to enter any number of orders and check for the food which have the scope to occur.

REFERENCES

[1].https://www.ijrte.org/wpcontent/uploads/papers/v8i2S3/B11560782S319.pdf

[2].https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1222&context=cistechlib

[3].https://www.researchgate.net/publication/338505951_Functional_food_project_A_new_and_enjoyable_topic_in_a_food_chemistry_course

[4].Food Production and Culinary Art (English, Paperback, Verma Maheshwari Prasad)

[5].A Textbook of Food Production Foundation (English, Paperback, Dr. Abhinav K. Shandilya)

[6].Food Product DevelopmentBy Mary Earle, Richard Earle and Allan AndersonISBN No: 9781855734685 (hardback)392 pages

[7].New Food Product DevelopmentFrom Concept to Marketplace, Third EditionBy Gordon W. FullerCopyright Year 2011

[8].Food Product Development: Based onExperienceCatherine Side (Editor)ISBN: 978-0-813-82029-3 October 2002 Wiley-Blackwell 216 Pages

[9].Hydrocolloids in Food Product Development*By* Clàudia Cortés, Núria Cubero, Laura Gómez, Albert MonferrerCopyright Year 2020