SIN CAMAREROS: Touch Screen based Ordering Systems without Waiters

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Abstract: This paper is designed to reduce the work load and to improve the efficiency of restaurants. This system works on android tablet. The webpage application access database and download real time menu list. Customer can browse and choice the items and order it. The order given by customer displayed in the kitchen section. Customer tablet, kitchen display and cash counter connects to each other through Web.

Keywords: Restaurant, webpage, menu list, customer.

I. INTRODUCTION

The E-restaurant management system is a rapidly growing technology. The main aim of our system is to provide speed of operation, large storage capacity, large operating range and less time consuming. In recent days IoT is popular technology which hits the market to exchange the information through internet. In recent days web enables computer system to control traffic flow of order, to create proper billing, reduce waiting time, reduce human mistake. Usually waiters are required to take orders, making reservations, to serve meal. After finishing, customers have to pay the bill at the counter. In this operation the workload on waiters increases and it also degrades the quality of work. Nowadays by using advance technology we can improve service quality. Pertaining to a current time wireless devices such as touch screen menu display has been taken by choicely to restore old way of taking orders using pen and paper. By using computer system multiple tasks can be done more perfectly without invoking any human error. The advancement of graphical-touchable interactive menu allows customer to view order on top of the table, customer places an order on their fingertips and order will be transmitted directly to server in real-time. The common system have beleaguer with various problems. The most common blooper is waiters making mistake with customer's orders. At times, a waiter can forget to add a particular item and sometimes adds dishes according to them. Customers have to wait for the waiters to take their order. They must rely on the waiters to remember their order and specific details. They may also give the wrong bill. Restless and intolerant of delays, customers frequently call out to find the status of their order. Waiters need to frequently check whether the order is done or is in process. Chef needs to make sure that waiters know that food is ready. In case waiters don't know about the status of order sometimes the food gets cold and it is needed to hot the meal again. In restaurant waiters keep the record of customers, orders and then order goes to kitchen for preparation. When number of customer's increases then the workload on waiters increases and due to this order misplace can take place. Hence overall service quality may degrade know about the status of order sometimes the food gets cold and it is needed to hot the meal again. In restaurant waiters keep the record of customers, orders and then order goes to kitchen for preparation. When number of customer's increases then the workload on waiters increases and due to this order misplace can take place. Hence overall service quality may degrade. Therefore, by using enhance technology we can replace the older way of taking order by pen and paper. Advance technology like touch screen menu display and IoT has been adopted in our system. The tendency of this system is to lift up dining table service. This system has on table touchable menu list and using fingers customer gives order to restaurant server. The objectives of this project are: To order food rapidly, to make it convenient for people who have limited time and for better service.

II. LITRATURE SURVEY

Intelligent restaurant is created to reduce the work load of waiters and to improve the efficiency. This system works on android tablet. The android application access database and download real time menu list. Customer can browse and choice the items and order it. Waiters came to confirm order and count bill. The order given by customer displayed in the kitchen section. When food item ready it informs to the waiters as well as cashier by mark them as done [1]. Intelligent e-restaurant for customer–centric service provides an online menu ordering and reservation process. This system uses RFID –based membership card, this provides easy identification of customers according to their consumption record. Through PDA waiters take order and though WLAN order is provide to kitchen. According to order chefs prepare menu and waiter convey it to customer. RFID-based PDA is used to diagnose the membership ID to calculate the bill [2].

Self–service ordering information system uses Zig-bee based wireless technology. It uses full function device (FFD) and reduced function device (RFD). FFD and RFD communicate with each other [3]. In order to improve quality of service and business of the hospitality industry by consolidate technology. This system fetches all information from a centralized database. The tablet on the customer table contain android application with all restaurant details. Customer tablet, kitchen display and cashier counter connects to each other through wi-fi [4].
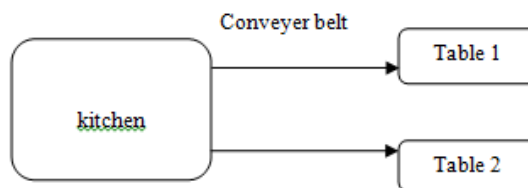
III.   PROPOSED WORK
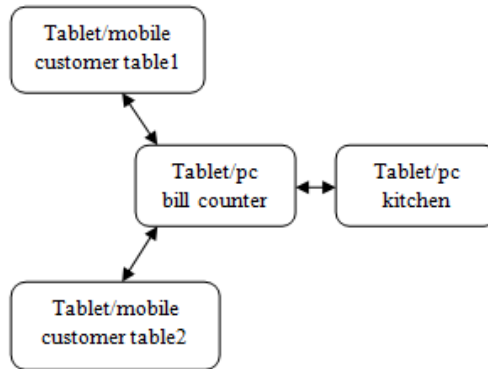
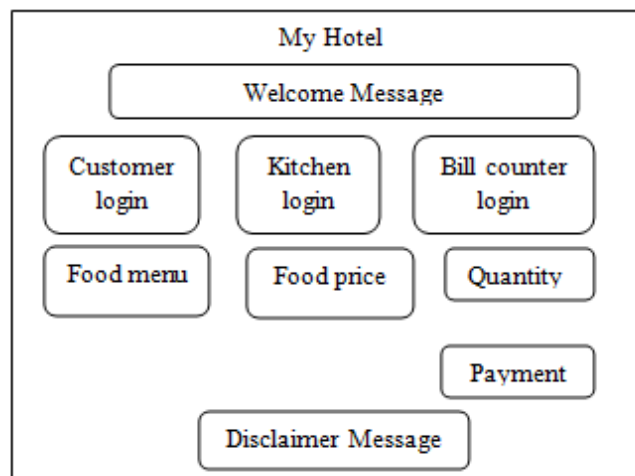Fig. 1:Ordering system

Fig. 2:Kitchen section

Fig. 3: HTML webpage :

First screen of the module is welcome screen. After that menu screen will appear. This page contains information about the menu item and its respective price. For quantity, customers will tap on the „+" or „_" symbol to increase or decrease amount and then place order. Customers will add and remove items and the total cost is calculated in the database. The Restaurant Block diagram is shown This order is proceed into kitchen and cash counter module. This order will display in cash counter and kitchen for the food preparation. This order will be communicated through web medium to the database. Orders received from different dining tables will be parked in software This display will be present in kitchen and according to customer order catering staff will prepare the food. The belt will move around customers and meal serving.   Customer can order via mobile screen from table in the restaurant. Customers view the

menu, price and make an order directly using web system. Then, their orders are sent to the database on the computer screen at the kitchen for food preparation. HTML is used for the designing web pages of restaurant. A line follower robot follows a path that is predetermined in the restaurant and server meal. It reduces customer's time for waiting. So customers don't have to wait for the waiter to take the order. Thus it saves the time. This project is users friendly and fast. Self-service or self-ordering systems in restaurants refer to the restaurants taking order from customers using technologies such as the internet, kiosks etc. Usually the users prefer self-service because of speed and convenience in making order and transaction while minimizing the miscommunication. The advantage is that there are no money related issues as the transactions are done online. The disadvantage is that high installation cost, authorization cost and the development of custom   software.

There is a major scope in enhancing the visual experience by replacing paper menu with e- menu card. To avoid delay in ordering process, wireless communication can be used here to replace the waiter who manually delivering the order to kitchen. Currently due to a increased literacy, awareness of advance communication technology among people, they are crazy about the latest technology and they are eager to automated their routine tasks. So introducing new technology and new approach in conventional food ordering system will lead to improved experience of a customer

IV.   RESULT
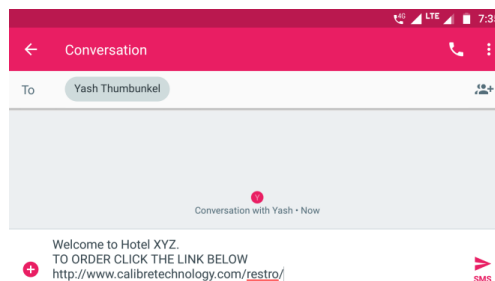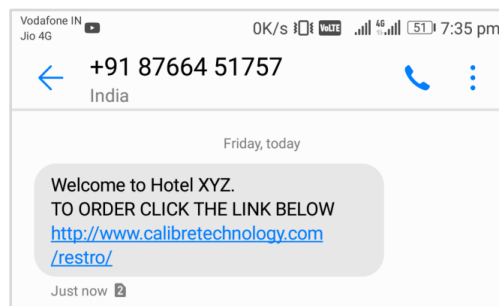

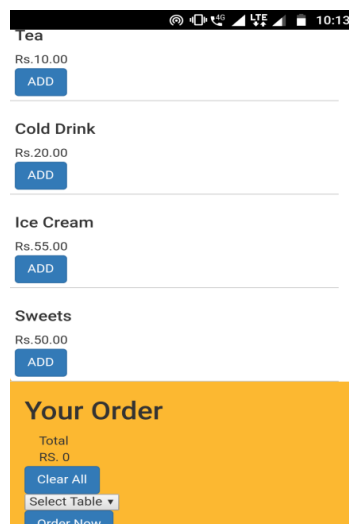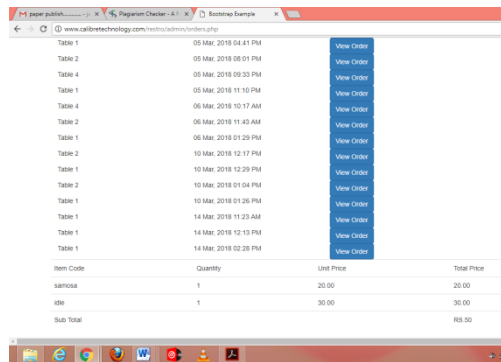Fig. 4 : message send to customer

Fig. 5: message shows on customer molibe

Fig. 6: menu shows on customer mobile

Fig. 7: order display on kitchen section

V.   CONCLUSION

In our project, We are designing a Restaurant food ordering & Delivery system that can operate without the waiters help. every table, and it is wirelessly connected to the cash counter and the kitchen follower belt is used to serve meal to customer which will carry food from kitchen.

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