The New Tech For Digitalized Room Service

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Abstract- *The system is implemented to reduce the manual work and enhances the accuracy of work in restaurant. This system manages and maintains the record of customers and their order online. So that Customer can add and delete the food items easily. The menu card of different restaurant consists of various food varieties available in the restaurant. Through the place ordering menu, the customer can simply click and order the food. The messaging module tells the supplier to supply the food. Also tracking module track the order. The billing system prepares the bill according to the delivered food. This system entirely reduces the unnecessary time. Every order is associated with an individual seat at the table, and orders are built one customer at a time, just like on paper, but with greater accuracy. Items can also easily be shared by the whole table, moved or modified, and noted and the cost can be calculated in user experience in real time.There was a large problem regarding the customers data source and efficient way to fulfill the need of the customer's needs.To avoid this problem our project of hotel management system helps the hotel management team to depend on the data storages and also, they can fulfill the need of the large no of crowd gathering in their hotel.*

Keywords- messaging module, data source, greater accuracy, user experience in real time.

I. INTRODUCTION

The traditional restaurant system which was carried out by all the restaurants over the past few decades had no flaws in it accept that the customer was unaware about the fact that where his order was had no clue about the background process and even the restaurants feel it too heavy to manage all the tables at a certain time during a busy day in the restaurants and all the order details in their registers makes it harder for the restaurants to manage everything together. To make it a bit simpler and easy we have come up with an idea of the digital restaurant management system.

The flaws in the traditional system were overcome by out new digital restaurant and was given a technological phase. Our system was built so that the customers in the restaurant can easily order from their table and know about the time that when the order reaches to their table this make more customer friendly and also from the restaurants point of view there was no waiter required for taking the orders and also all their data was stored digitally which makes too easy to calculate their daily sales and can also save their money on having a extra waiter for the same. The web application was created user friendly where the users can easily order all the required items and find the restaurants facts during their waiting time.

Fig1. *Digital ordering setup*

II. RESEARCH AND DATA OBSERVATIONS

1. Limiting existing system or researchgap

There was a large problem with the customers data storage and efficient way to fulfill the need of the customer's needs. To avoid this problem our project of hotel management system helps the hotel management team to depend on the data storages and also, they can fulfill the need of the large no of crowd gathering in their hotel. The system will be established in each table of the hotel and give them a separate pair of id and passwords that allows the chef and the manger to get to know that which item has to be reached to which counter and would thereby take less time than the expected and also the customers satisfaction would be more since they can choose from a variety of variants available in their hotel in pictographically view the items and order it accordingly.

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allows the chef and the manger to get to know that which item has to be reached to which counter and would thereby take less time than the expected and also the customers satisfaction would be more since they can choose from a variety of variants available in their hotel in pictographically view the items and order it accordingly. This lets the user to get a clear view of the food item they tend to order and also suggest the modifications that they want to make in the food item by communicating with the chef and also it will be an easier for the chef to decline and accept the order that the restaurant is currently not serving.

2. Model selected and Research Planned

The main functions of the food ordering system are:

Step 1: Customer registration. This enables customer to save personal details for the next orders. Customers are also forced to register first before placing order in the system. Step 2: Outlet delegation function. This function to choose the suitable outlet for handling the order. It is based on the distance between outlet and customer address. Step 3: Generate optimized delivery address routing. Optimized routing is generated in the system to provide detailed information about the sequence of delivery routes. Step 4: Order management. Order management enables the staff of the restaurant to receive the order information and update the status of each process. Step 5: Order status checking. This function enables customer to monitor the status of his/her order. Step 6: Order closure function. This function is to close an order by changing the status of the order as being handled and the payment has been reported.

System Admin need to refresh the page after these latest detected threats are updated along with the calling details, transcripts, and threat severity of the callers are maintained in the database. The manager panel will be accessed by the manager and owner to get all the details of ordered food, feedback forms filed by customers, also privileges of adding and deleting food item is possible for manager with easy user-friendly interface.After login into table customer would be greeted with home page with different category of food, its specialty, option for different menu. it would also consist of cart where ordered food would be displayed with its status in kitchen. After they done with their order customer can ask for bill split up to 3 induvial with option for online payment.

3. Replication of the Authors' Results on the Original Data and Our Preprocessing Models

The results of our system application include an Android Application as well as a Web-based application. Once a customer places an order for a restaurant he/she will get the order Id on the screen dynamically. The customer can check the status of the order through the Order Status interface provided within the GUI of the appliance We have developed the system application in such how that the customer can order the food first then enter the required credentials while checkout. Once the order is delivered to the customer, a feedback mail is sent to the customer regarding his experience with the entire application. The feedback mail consists of the star rating as well as comments of the customer. The system thus developed have been most efficient and a new technological change in the current system and has also developed a drastic increase in the sales of the current restaurants that have under gone such systems.

Fig 2: *2D representation of food*

The block diagram of the proposed system. The block diagram has three deferent sections. One is chef panel where orders from different tables are seen and also progress of order is confirmed and second is caller Main activity where the console will provide GUI for customer to look at menu and order food. The Manager panel can view the order details and also add or remove food items form existing menu. The system has thus impacted on the regular backup of the customers data as well has produce a list of the elite customers in the restaurants that visit on a higher frequency rate.

Fig 3: *Examples of item display and orderingschema*

III. CONCLUSION

The developed system has the capacity to easily transform the restaurant system and can make their work easy so that the restaurant can easily run and the customers can easily know about their orders and have a glance at the dishes of the menu as well know about the fact that when their dish is to be served. The system helps the restaurants to calculate their daily sales on its own which makes a lot of paperwork issue getting solved and thus have successfully helped the restaurants as well the customers to solve their problems that the old traditional system had. The developed a systematic change in the current ordering system and has developed a massive impact of the overall performance of the restaurants.

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