Digital Food Ordering System for Restaurants

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Abstract- The recognition of restaurants is ever increasing. Accordingly, the wide variety of restaurants has elevated too. Taking gain of the advancement in technology, this assignment objectives to use a virtual touch to the way eating places function, in order to increase its recognition amongst customers. This paper ambitions at replacing the traditional food ordering device in eating places with tablet food ordering. The customer, on getting into the eating place and occupying his desired table, may be welcomed with a tablet constant at his table. He will then pick out his desired meal and his showed order will be sent directly to the kitchen. Once his meal is ready, it could be introduced by means of the waiters to the corresponding table. The consumer can publish his feedback relying upon his experience. The client’s login credentials and order history are saved in a vital database. This answer quickens the meals ordering technique and is likewise an attractive, error loose method way to the digital factors involved.

Indexed Terms- Android, Feedback, LCD, Login, Offers, Tablet

I. INTRODUCTION

Popularity of eating places has extended in current years. The standard exercise in a eating place includes the purchaser making his order and awaiting the ordered meal. However, the complaints received from clients concerning services presented in eating places has multiplied too. This feeling of dissatisfaction is caused by many reasons, specifically, delay in delivering customer’s order. Advancement in conversation technologies can be used to remedy those issues. Accordingly, this examine aims at removing the limitations in the meals ordering system, with the assist of an incorporated and networked machine. This examine includes the use of drugs for assignment the food ordering process in restaurants. In definition, it’s far an incorporated device, evolved to help customers make their orders greater without difficulty and efficiently. It additionally ambitions at dashing up the meal serving system. The consumer will first input the eating place. The table he shall occupy could have a tablet constant to it. The pill will include the overall facilities provided via the particular eating place namely menu, offers, modes of payment, etc. The customer can select among the types of meals available at the restaurant. His choice will be despatched to an LED screen placed inside the kitchen making the cooks privy to the patron’s choices. The chefs thereby prepare the requested meal that’s served to the customer by way of the waiters. Once the customer finishes his meal, he will be shown his total invoice amount which he can pay through cash or card. The supervisor keeps record of the table’s total invoice. He additionally acts as an admin. This venture deals with pill meals ordering system for restaurants. This topic consists of scope of the mission, existing environment, proposed environment and design and implementation constraints. Scope of the project includes features that may be implemented.

II. LITERATURE SURVEY

The current gadget is paper based. Papers are used in eating places for showing the traditional menu cards, writing down the orders of customers, storing the information of customers. The disadvantage paper-based gadget is that papers can get effortlessly damaged through stain marks, they can be lost due to fireplace or accidents or can wander off in general. Hence, time and money is wasted. As conventional menu playing cards are paper based, any adjustments that need to be made in the menu will require reprinting of the complete menu card, main to wastage. For small adjustments, reprinting the entire menu card is impossible. Changes in the menu card can not be made dynamically. It is inefficient to get right of entry to a particular document from the stack.
of papers. This system is time consuming. One has to
call a waiter quantity of times till he notices it, and
await him to arrive at their desk to take their order.
Also, the waiter can misread the customer’s order
since he’s writing the order on paper, and the case of
serving a wrong dish is possible. The management
of restaurants has advanced with time. Each waiter
is assigned a collection of tables, and after taking orders
for a table, the waiter enters the order (listing of meals,
drinks ordered via the purchaser or a group of
customers) into the machine at the PC. The waiter
commonly has an idea of the dishes which can be
unavailable earlier than taking an order. The system
must confirm the supply of dishes. If a food item isn’t
available, PDA systems additionally did not offer any
actual time feedback from customers. Menu playing
cards inside the PDA’s were not appealing and
uninformative because it did no longer guide images.

III. AIMS

This machine pursues at increasing the pleasant and
speed of service. This machine also pursuits at
growing appeal of region for huge variety of clients.
In present day formal eating environments, some form
of bodily static menu is utilized to carry the to be had
meals and beverage alternatives to customers. Said
menus are generally paper based and subsequently
impose restrictions on the textual actual estate
available and the potential a restaurateur has to replace
them. This record specifies the requirements for a
restaurant paper menu and ordering replacement
method to relieve the troubles associated with the
contemporary archaic method. Implementing this
system Starters and main course orders are normally
taken together. Drinks and dessert orders can be taken
separately. The chefs inside the kitchen can view the
dish orders on their display, prepare them in the best
order and affirm coaching to the device when
complete, further with the bar. When a waiter sees the
completion indication on his terminal, he collects the
meals/drinks/cakes and takes them to the table. The
waiter can also test on the repute of dish and drink
orders. At the end of the meal, the waiter orders the
gadget to print the total invoice and he enters the
payment details for it. The management has the
selection of giving discounts. The gadget keeps
records of the numbers of clients served with the aid
of each waiter and the amount of money taken by way
of them. These statistics can be viewed by means of
the management. The next development was
“QORDER”. It is a portable ordering machine for
Android devices. Here the waiter procedures the
purchaser’s desk with the QOrder, a hand-held device,
rather than the conventional notepad. He makes use of
the touch screen to go into the order statistics and then
sends it to the kitchen in actual time for processing.
Simultaneously, the POS system gets the sales facts
for the cause of billing. QOrder makes use of WIFI to
without difficulty access every corner of the
restaurant, encompassing all the tables establishes
within. Once the client wishes to leave, the waiter
makes use of his belt printer to print the receipt and
strategies fee with the hand-held unit similar to he
would on the POS machine. But there are nevertheless
many regions which require serious attention. Like,
making dynamic changes within the menu card, to
dispose of the heap of paper-based totally statistics, to
guarantee the consumer that he’ll be served with what
he has ordered, to report the patron feedback. Some of
the existing systems are referred to below: - Pixel
Point PAR Pixel Point Company makes use of this
software program for eating place control. The gadget
consists of the company’s hardware and software. This
network machine is TCP/IP compatible, enabling
sending of information via both wireless and
conventional networks. - LRS Restaurant Server Pager
Starter Kit This system reduces the ready time of
customers and improves the food-ordering service
quality in restaurants. The on-web page paging device
for sending the order facts is used at UHF frequency
or the frequency variety of 467 MHz. -
Implementation of Network-based totally Smart Order
System the Smart Order System in Restaurants
(SOSIR) has been changed to take order from the
client’s table through RS-232 signal, which is sent to
the cashier counter. The cashier counter device is
connected to a database. When the clients’ orders are
sent the cashier counter system will display and
prioritize the orders earlier than sending the records to
the kitchen for the chef to cook. Personal Digital
Assistant (PDA) primarily based systems A range of
wi-fi structures like WOS, i-menu, FIWOS had been
developed while new technologies and processes
being introduced to automate the food ordering offers
a cost-efficient opportunity to provide the customers a
personalized service experience where they are in
control selecting what they want, whilst they need it – from eating ordering to payment and feedback.

IV. OBJECTIVES

There must be a tablet on every table.
- This will permit the clients to browse the food items for the time they wish.
- Customer feedback: - Customer ought to be able to input the comments about the carrier and the meals served.
- This allows the Restaurant proprietor to analyses the carrier and make necessary changes if needed.
- This also helps the Customers to decide a selected meals object with a high quality feedback.
- Searching Item: - Customer must be able to search a specific meals object in step with name, price, category etc.
- This saves quite a few time of patron to order an object.
- Offers for Customer: - The Restaurant proprietor can post diverse gives on tablet.
- This will assist the purchaser in addition to the eating place owners.
- Attractive Presentation: - The Menu should be organized in an attractive way with appropriate imagery.
- Sorting an Item: - The food gadgets should be sorted according to price, season and user rankings.
- This enables the client to discover or pick a food item which has a great rating and which is liked by way of a many consumer.
- This also enables the Restaurant owner to make changes in a selected meals object if it has low rankings which improves the best of food.
- The menu can be modified through the Kitchen manager.

V. PROPOSED SYSTEM

This document specifies the requirements for a restaurant paper menu and ordering replacement strategy to alleviate the problems associated with the current archaic method, by replacing paper menu with an electronic medium i.e. a digital tablet.

- Due to a digitalized system, the risk of manual errors is eliminated, thus eliminating the communication barrier.
- The tablet displays all the information the customer needs to know about the order he has placed
- The Manager is the admin of the overall digital system. Hence, he can update the menu from time to time since he has access to all the tablets placed in the restaurants.
- In tablet food ordering system, the tablet has ample space to accommodate numerous advertisements in an appealing fashion, thus contributing to the income received the restaurants.
- One-time investment in tablets eliminates the need of waiters in the order placing procedure.
- Valuable customer feedback regarding overall quality of the restaurant can be obtained.
- Knowledge of offers available in a particular restaurant can be known by any customer around the world due to access to project website.
- Tablet food ordering system gives complete description of the respective food item like image content, ingredient description etc.

VI. SYSTEM ARCHITECTURE

- The customer first enters the restaurant. He occupies the desired table. Every table has a tablet fixed to it. The tablet consists of android software which assists the customer in his food ordering procedure. It has various sections like offers, menu, modes of payment, feedback etc.
- The customer is greeted with a welcome screen on the tablet. He can use the tablet as a guest or can login into his account.
Once he has logged in, he can view his previous transactions in the restaurant. He can then browse through the offers section, if any, and select any desired offer he wants to.

The customer can browse through the menu and select his desired food items. Once he’s done, he can confirm his order.

His order is transferred directly to the LED screen placed in the chef’s kitchen.

The chef then cooks the meal and sends a confirmation signal to the waiter. The waiter then collects the meal and dispatches it to the corresponding table.

Once the customer finishes his meal, he has the option of providing feedback. The feedback of one customer helps the new customers to decide their orders.

On completion of the above procedure, the customer is then shown his total bill in the ‘Payment’ tab. The Payment tab consists of two choices, Cash or Card. If the customer wishes to pay via cash, he is required to provide the respective amount to the waiter. If he wishes to pay via Card, he is required to complete his transaction at the manager’s table by swiping his card.

VII. ALGORITHM

![Figure 2: Proposed Algorithm](image)

CONCLUSION

Thus the need for tablet food ordering is analyzed and its advantages over the traditional food ordering system in restaurants are studied. It is concluded that the proposed tablet food ordering system is time saving and error free as compared to the traditional system.

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