Task Collaborative Digital Ordering System for Restaurant Using Handheld Devices

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Abstract - In conventional restaurants all the errand (Task) performed are manual beginning from taking requests to charging. Henceforth we propose an e-restaurant that empowers us to incorporate all the assignments of the restaurants and makes the framework more proficient so it spares time of the clients and representatives of the restaurant.

Keywords – Digital Order, Handheld, Android, Tab-Rest, Restaurant

1. Introduction

The field of restaurant are one of the biggest businesses in the private administration area. It is additionally one of the developing field which includes all other field. The restaurant field experienced high development at regular intervals generally speaking. Software for overseeing restaurants will incorporate and mechanize all procedure. Software commonly offer scope of peculiarities that with conventional necessities, for example, charging and restaurant particular prerequisites like reservation, visitor administration and menu. There are quantities of programming accessible in business to aid restaurant for dealing with their number of office. Case in point ezee Burrp bar, Restaurant Maid, Abcom, RSVP, Winrest, Respak, etc.all these product are restricted for desktop application.

As earlier mentioned all the product needs to have printed menu & transcribed request taking. "TAB-REST" tackle this two issue effectively it gives GUI which will pull in clients. It will be helpful for supervisor to upgrade their menu without much hardwork. It means updation like Add/alter/erase of various dishes can be done in menu effortlessly utilizing this E-Restaurant software. Administrator can change GUI as indicated by time/condition, so keeping in mind the end goal to make the Restaurant administration framework totally proficient and incorporated, we have proposed online Restaurant charging and request administration framework named as "TAB-REST" (Tablet + Restaurant).

Bill payment administration and customer relation management is the spine of any business. In Restaurants clients makes choice of their dishes from the given menu and make orders, but some of the time Customers may get baffled or disappointed when they are late entertained by the servers in taking requests or serving the dishes. And circumstance may happen actually when administrators may require significant time in charging or taking cash. With "TAB-REST", the waiter can take requests on a Tablet. The commander needs to simply include the things and request from his Tablet gadget, immediately the notice turns out at their point of view (kitchen) similarly it reflects in the money counter machines, Admin Server, culinary specialist's Display, hence Employees will work in their particular administration region without leaving their area of work.
2. Related Work

The current system in conventional restaurants is manually written based framework where they utilize paper. Request from customer is tackled paper. This records are kept up on paper. With respect to any paper based framework paper can be indiscernible or can be lost also its exercise in futility recording it. Additionally when restaurant need change in menu each time it have to be reproduced. It is not practical to hunt all paper to discover single record. From perspective customer's point of view, this framework is drawn out. There has been changes in the organization of restaurants. Each waiter is connected with particular group of tables from which he needs to take requests and after that he enters the requests into the PC. The waiter generally stay informed concerning occupied dishes. The framework ought to know the dishes that are accessible. In the event that dish is not accessible the framework must permit server to change or scratch off a customer's solicitation. Rundown of requested thing is send to regarded counters. Commonly starters and principal course are taken together to client. Refreshments and desert can be taken freely. Kitchen staff perspective request on their screen, cooks the requested dishes and informs availability to the framework when request is finished. As soon as when a waiter sees the prepared signs on his terminal he assembles request dishes and takes them to the particular table. The waiter can comparably check the prepared status of other asked for dish and refreshment. When client finish their dinner the waiter will print a bill and enter instalment data into framework.

In the meantime, your POS framework gets the arrangements information for later charging. Once the client had their dinner and is prepared to leave waiter prints the bill printer and methodology portion with the handheld unit much like he would on the POS framework. In any case there are still various extents which are not almost looked at. Like, taking off dynamic updation in the menu card, to make tracks in an inverse bearing from the stack of manually written notes as records, to ensure the client that he'll be given what he has requested, to get the customer feedback on record.

3. Purpose

Restaurants majorly nowadays handle their data stream in framework through a written by hand paper note. Essential steps they take after a client is displayed with menu their request is composed on paper note by chief. This note is then gone to culinary expert by waiter. One duplicate is gone to charging counter.

3.1 Handwriting Distortion

Now and then culinary specialist is not able to peruse composing of request given by the server. So defer in planning nourishment or it conceivable that wrong sustenance is readied & served to the client.

3.2 Repetitious Excursion to and from the Kitchen by the Waiters

Servers will proceeds with move from kitchen to table & need to recall the specific request for the table.

3.3 No Request Logging

Since all the work is automated by TAB-REST, hence there is better co-ordination and efficiency in doing work so, the ordered dishes will no longer be late.

3.4 Paper Wastage

When paper is utilized to record the request it is completely squandered. Each time waiter needs another paper for new request. So it is not eco inviting.

3.5 Wrong Counts of Bills

It is clear that manually written bills will con-conduit a slip. Amid estimation or at some point server neglects to note down something on paper which will make the wrong figuring toward the end. Getting tablet (in the requesting framework) to deal with the data can tackle this issues. To lessen this sort of disappointment we are proposing “TAB-REST”. In “TAB-REST” we will utilize handheld for displaying menu.

The Feature of TAB-REST:
- Better View of menu that interact customer
- eco-Friendly.
- No confusion in place.
- Waiters will get the request specifically.
- No figuring slip-up.

4. Purposed Work

The TAB-REST will help us between three related functions Restaurant Menu and Ordering System i.e. Taking Order, Notifying Chef and Billing. TAB-REST will roll out three improvements in present framework first it will completely remove written by hand request framework with electronic device. Second is to remotely advise culinary specialist of request when clients request their dish of choice. Last is to produce electronically bill of particular request.
4.1 Menu and requesting

In our proposed framework "TAB-REST" the clients do not have to be physically present and sit tight in the line for the table. Utilizing the site we have given the choice that clients can book the table for any picked date and time. Not just this however a menu is given which is outlined in an alluring way in which the pictures of nourishment are shown which helps the client to know how sustenance will be after it is served. Menu shows the ingredients of particular dishes. Favourites helps the client to pick the dish which is preferred by different clients and accordingly spares their time. Menu likewise shows the holding up time in serving every dishes, not just this yet restaurant can post different offers the clients as per the celebrations, shows special foods. Menu shows just those dishes which are available. Thus the "TAB-REST" serves to make different overhauls effectively as contrasted with the static menu gave in the conventional restaurants.

4.2 Kitchen Display

At the point when client give the request it is first indicated in culinary expert display. All given requested things are shown in gourmet specialist show with table number, server id, remarks. The Display is substantial so cook is effectively perused request from some specific distance. After dish is prepared the culinary expert presses the “done” and this affirm is simultaneously shown in clerk display.

4.3 Waiter/User Display

In this sort of showcase entire menu class astute is indicated. This menu is non editable by client or server. Client can simply peruse menu and if any troubles is confronted by the client, waiter can comprehend the questions. All the presentation associated by system to waiter.

4.4 Cashier Display

It also additionally called Billing and Feedback Display. In this all running request is shown means unbilled client show. Also make bill from running request.

4.5 Admin (Manager) Display

Supervisor has been given the all benefits of the "TAB-REST". Such that supervisor can include or expel thing from the menu. He/she can likewise change the value, offers, special sustenance and table portion for the server when He/She is not available.

5. Technical Specification

1) Asp.net, html, Css programming dialect is utilized for creating Website.
2) C# programming dialect utilized for creating Desktop Application.
3) Sql server Database will be utilized to interface both Application and site.

6. Conclusion

This Software(TAB-REST) will draw in clients furthermore enhance the effectiveness of maintaining, charging records, taken request, simple and easy to Update and keep up menu. Thus this framework serves to incorporate all the undertaking performed in the restaurants in a productive manner. In future we can change over the site in "Android " or "IOS" application.

References

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