

Online Food Requesting Framework for Enhancing Small Scale Business

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Abstract:

In this paper a framework for online nourishment requesting system is implemented which overcomes the drawback of the conventional framework. A simplest way to access online nourishment for cafés (hotels) as well as mess is suggested. This paper primarily focuses on enhancing small scale business in a city. Various features like payment, user history; multi-admin is added in the system.

Keywords: Small Business, Food Ordering, Food Requesting.

1. INTRODUCTION

With the progression of new innovations particularly cell phones has made nourishment requesting by means of online applications become progressively prominent.[1] As of late, a large portion of this conveyance orders were put via telephone, however there are numerous downsides of this framework. [2] Presently, all frameworks are overseen by PC. Additionally all business exchange, charging framework, stock framework are overseen by information and communication technology (ICT). The quick development in ICT has significantly influenced the business exchanges. [3] Giving quick administrations to client inside less time and furthermore lessening human endeavors is point of all automated framework. The little scale merchants need to give the best administrations and keep up associations with their client so as to make due in this competition. [4] In addition the nourishment which is accessible is from cafés there is no accessibility of home prepared nourishment. Since there is consistent movement of individuals in different states, eatery nourishment isn't thought to be sound for customary utilization. In this way the framework proficiently deals with the home positioned nourishment in different strata of society. There can be an arrangement of enrollment for standard client. Framework gives the proposal related menu. There can be an arrangement for client, in the event that guess client need their request after some time, at that point it will give on that time. Framework likewise gives menus according to time of client. In the event that client needs formula of any menu, at that

point our framework gives that office. [5] Use as per your convenience within the city should be focus of food apps. [6]

2.RELATED WORK

Details regarding existing frameworks are discussed along with their advantages and disadvantage in table 1.[7-16]

Table 1: Pros and Cons of the existing Frameworks

Sr. No.	Author	Technique	Advantage	Disadvantage
1	C.G. Brush et.al	Full Service Based restaurant	Reduced paper usage and reprinting of menus	Limited for single hotel only
2	H.M. Neck et. al	Self Service Technique	Menu Items were present in poster hence saved paper work	Failed to be applicable in the places where menus were dynamically changing.
3	SakariPieska et. al	Automated Food Ordering System	Reduced human effort and improvised customer experience	System was very costly because of the automation and hence small restaurant can't afford it.
4	Tan-Hsu Tan et. al	Personal Digital Asistants(Pda's) Based System	Recommends the menus as per customer requirements and ultimately saves lot of time	For this system PDA's were compulsory and hence results in more cost.
5	Sun Guilinget. al	ZigBee Technology	Provide multitouchfeature to	this system was failed to provide

			attract the customer	more durability as it requires more power consumptions.
6	M. Z. H. Noor et. al	Digital Food ordering system	System which saves lots of manual work and reduce maintenance cost.	This system was useful for single hotel only.
7	Soon Nyeon Cheong et. al	personal menu recommendation service	Provides online menu ordering and reservation-making process.	Without the availability of membership cards this system results into failure.
8	Ashwini Bankaret. al	Menu Ordering System	Provide robots based service to their customer which reduces the manual work and gives time saving alternative	This system was very costly as it requires robots to provide service
9	Shubham Takalkar et. al	Android Application	Provides digitize solution for local food ordering.	This system fails to provide portal for small scale users.
10	Khairunnisa K., Ayob J et. al	Bluetooth technology	Provide time saving food ordering mechanism	This technique is useful in limited range of area as Bluetooth is having its range constraint.

3. PROPOSED SYSTEM

This Framework will work in the steps given below& its flow is shown in figure 1.

- Users need to initially enroll themselves.
- Then after Logging into their profile they can choose any of the hotels accessible in the city.

- Further they can order their nourishment and according to their choice they can put in the request for desired food.
- With regard to their request the manager will do the proceeding and address the client request.

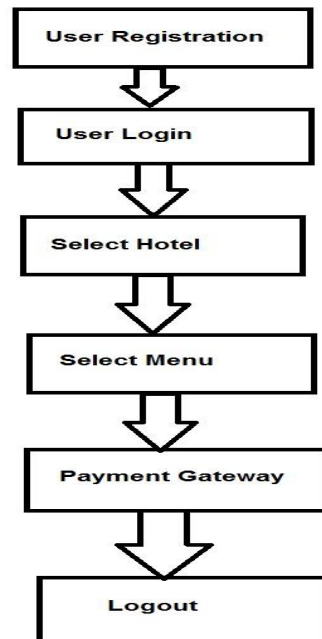


Figure 1: Dataflow diagram of the proposed system

Web Ordering System Module

This module gives the usefulness to clients to put in their request and supply essential subtleties. Clients of the framework, specifically eatery clients, must be given the accompanying usefulness:

Menu Management System Module

Following features are available in this module

- Add/update/delete food category to/from the menu.
- Add /update/delete food item to/from the menu.
- Update price for a given food item.
- Update additional information (description, photo, etc.) for a given food item.

Request Retrieval System Module

This module out of all the 3 modules is very simple. It is intended to be utilized uniquely by eatery representatives, and gives the accompanying capacities:

- Retrieve new orders from the database.
- Display the orders in an easily readable, graphical way

4.RESULT ANALYSIS& EXPERIMENTAL SETUP

In table 2 comparative analyses between the existing system and the proposed system is discussed using various parameters.

Table 2: Comparative Analysis using various parameters

Parameters used for testing	Conventional System	Proposed System
Adding all items to the database of different hotels.	Failed to add new items of different hotels	Successfully stores new items from different hotels
Calculation of amount of placed order	Successfully calculated at time of order placing and sent to hotel admin	Successfully calculated at time of order placing and sent to hotel admin belonging to that food items.
Simplify ordering process	Failed to simplified order process	Successfully allows to place order in any of the registered hotels
Meal serving by line following Robot	Failed to provide this facility	Failed to provide this facility
User-friendly interface design	Successfully supported for single hotel	Successfully supported for multiple hotel portal facility
Adding New hotel to the system.	Failed to provide this feature	Successfully available for the admin

➤ Setting Environment

- Configuration Requirement :- (Recommended)

- Platform for software envelopment: Windows 7
- Programming Language: C#, MySQL
- Technology Used: DOTNET
- Database: MYSQL Server
- Development Tool: Microsoft Visual Studio
- Server Side Technology: ASP.NET
- Client Side Technology: HTML, CSS, JavaScript.

5. CONCLUSION & FUTURE SCOPE

An advanced eateries and inter-restaurant framework has been proposed to clients and merchants. This framework enables clients to order nourishment from any eatery accessible in the city. The core of the whole requesting framework is the Database. As of now the framework is accessible for small scale cafés (hotels). Security vulnerabilities ought to be assessed for large scale frameworks. In future focus will be given on making this application accessible in the form of mobile application which can be downloaded from playstore.

6. REFERENCES

- [1] N. Tawil, A. Halim, S. Ramlee and N. Arsad, "Enhancing Small Medium Enterprises Opportunity through Online Portal System", 2016 International Conference on Advances in Electrical, Electronic and System Engineering, 14-16 Nov 2016, Putrajaya, Malaysia, pp. 631-635.
- [2] V. Chavan, P. Jadhav, S. Korade and P. Teli, "Implementing Customizable Online Food Ordering System using Web Based Application", IJSET - International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 4, April 2015, pp-722-727.
- [3] N. Tawil, R. Hassan, S. Ramlee, and Z. K-Batcha, "Enhancing Entrepreneurship Skill among University's Students by Online Business Simulation," Journal of Engineering Science and Technology, Special Issue on 4th International Technical Conference 2014, pp. 71-80, 2015.
- [4] L. Peter, M. Rice, and M. Sundararajan, "The role of incubators in the entrepreneurial process," The Journal of Technology Transfer, vol. 29, pp. 83-91, 2004.
- [5] L. Lesáková, "The Role of Business Incubators in Supporting the SME Start-up," Acta Polytechnica Hungarica, vol. 9, pp. 85-95, 2012.

- [6] G.B. Murphy, J.W. Traylor, and R.C. Hill, "Measuring performance in entrepreneurship research," *Journal of business research*, vol. 36, pp. 15-23, 1996.
- [7] C.G. Brush and P.A. Vanderwerf, "A comparison of methods and sources for obtaining estimates of new venture performance," *Journal of Business venturing*, vol. 7, pp. 157-170, 1992.
- [8] H.M. Neck, G.D. Meyer, B. Cohen, and A.C. Corbett, "An entrepreneurial system view of new venture creation," *Journal of Small Business Management*, vol. 42, pp. 190-208, 2004.
- [9] Sakari Pieska, Markus Liuska, Juhana Jauhiainen, Antti Auno — Intelligent Restaurant System Smart- menu 14th IEEE International Conference on Cognitive Info communications . December 2–5, 2013 , Budapest, Hungary
- [10] Tan-Hsu Tan, Ching-Su Chang, and Yung-Fu Chen — Developing an Intelligent e-Restaurant With a Menu Recommender for Customer-Centric Service | IEEE Transactions on systems, man, and cybernetics-part c: Applications and reviews, vol.42,no-5, September 2012.
- [11] Sun Guiling, Song Qingqing — Design of the Restaurant Self-service Ordering System Based on ZigBee Technology | Communications and embedded system lab College of Information Technology and Science, Nankai University Tianjin, China. 2010.
- [12] M. Z. H. Noor, A. A. A. Rahman, M. F. Saaid, M. S. A. M. Ali, M. Zolkapli — The Development of Self-service Restaurant Ordering System (SROS) | 2012 IEEE Control and System Graduate Research Colloquium (ICSGRC 2012)
- [13] Soon Nyeon Cheong, May Hui Tze Yeong, Jia Jia Neoh, Chun Yee The, Wen Jiun Yap — Enriching Dining Experience with the Multi-Touchable Entertainment Applications | 2010 International Conference on Science and Social Research (CSSR 2010), December 5 - 7, 2010, Kuala Lumpur, Malaysia
- [14] Ashwini Bankar , Sheeja S. Suresh , Intelligent Restaurant - Menu Ordering System, *IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)* Volume 5, Issue 5, Ver. I (Sep - Oct. 2015), PP 47-53
- [15] Shubham Takalkar, 2 Devendra Phatak, 3 Kumar Abhinav, 4 Salman Hadi, 5 R. H. Borhade, Android Application for Local Food Ordering System, *IJCSN International Journal of Computer Science and Network*, Volume 5, Issue 2, April 2016.
- [16] Khairunnisa K., Ayob J., Mohd. Helmy A. Wahab, M. Erdi Ayob, M. Izwan Ayob, M. Afif Ayob, The Application of Wireless Food Ordering System, *MASAJUM Journal of Computing*, Volume 1 Issue 2, September 2009