Digital Food ordering system based on Spring Framework

R.Karthik, T.S.Sridhar, R.Sriram

Abstract: As people nowadays engage themselves in busy schedules they skip their meals just because they have to go somewhere for food. So to avoid these, applications like Zomato, swiggy, and foodpanda need to be efficient and be able to order multiple items from multiple restaurants in a single order. Food orders from mobile devices are common nowadays, and they can help consumers order food more easily and efficiently. It can also give manufacturers and consumers full benefit. This allows the consumer to get the advantage of delivering food online. This research used a quantitative approach with 187 respondents to find out what stimulus variables important people in the online supply order. In existing systems, only order is placed in a single grocer. With this system we can place orders for multiple grocers.Apps are limited to mobile phones where this web application is accessed across various devices like mobile phones, PC, PDA, tablets etc.

KEYWORDS: Consumer, Devices, Food, Mobile, Restaurant, swiggy, Zomato

I. INTRODUCTION

The Nourishment Requesting Framework is an application which will assist eateries with optimizing and controlling their cafés. [7]For the servers, it is making life simpler on the grounds that they don't need to go to the kitchen and give the requests to the gourmet expert no problem at all. From the administration perspective, the director will have the option to control the eatery by having all the reports to hand and ready to see the records of every worker and requests. This application encourages the eateries to do all functionalities all the more precisely and quicker. The Nourishment Requesting Framework lessens manual work and improves the effectiveness of cafés.[8][10]This application is helping Nourishment Requesting s to keep up the stock and incomes and there are a lot more functionalities, as.

- To store records.
- Control requests and administrations.
- Control staff and their moving.
- Control numerous branches.
- Causes Supervisor to control each piece of the eatery.

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Primary objective is to keep up the eatery's capacities in a viable and exact way and furthermore it is diminishing the utilization of manual sections. This product encourages nourishment requests to keep up everyday records in the framework. It is keeping a legitimate record of the database.

II. RELATED WORK

Many restaurants manually store and manually manage daily transactions.. But some of them are having automation systems which are helping them to store the data. Such restaurants however store information about orders and customer data. [5] They have no facilities to store input details and requested orders for some time. They don't have facilities to store the information of feedback and favorite orders of customers over some period of time. Such restaurants however store information about orders and customer data. They have no facilities to store input details and requested orders for some time.

[8]Restaurants are having standalone applications so at one time, they have the facility of many screens or many operations which are happening at one time. So they are storing them and then at last, the restaurant managers will be able to see the data of the last day.

Goods are growing considerable significance in the present days as a consequence of [12]global environmental issues, resource decline, policy legislation and economic conditions as they eventually are utilized and recovered from the sector. The same is done by the reverse distribution networks.content mining is an online mining sub-area that involves valuable details and expertise from web material[11]. The software which we tried and got the information from was called "Food Delivery". This software is free for download but the restaurant has to pay after some time.

A.Food Delivery:

Food delivery[1] is designed to save trees by helping you to keep track of ordinary customers. You can save your bookings on a computer. We have not been so impressed by its architecture and brief test period for such a high price tag; however, it does. The user interface is quite simple, but even without the support feature it is intuitive and easy to navigate. Should you need it, [6]it also provides useful tutorials and tips to start and find any issues you might have. Order buttons to display and books, buttons for displaying customer history and reports. the top of the window.



We could quickly and easily hop in. Create a new booking. New booking. Just click the Reservation button and enter all the details you need, including the name, time of booking, and period. The customer's address, telephone, email and business details are also given fields. It is not required, but it will certainly be useful to use the background and reviews of customers. Our booking appeared on the main screen of the program immediately. We may change the entry, change state (come in, go out, seat, at bar,...) and even add a message using the buttons at the bottom of the window[2]. While we'd like a longer trial period compared to the 10 uses offered, we could still grasp the usability and functionality of the system. This is a perfect tool for making reservations if you're looking for a way to join and handle them

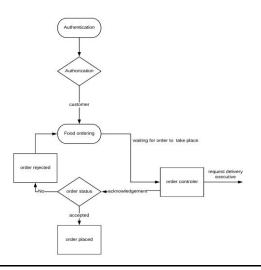
III. PROPOSED METHODOLOGY

Figure 1.1 indicates that a stable link must first be formed between client and server.



Figure 1.1 Initial connection to the server

Figure 1.2 indicates that the consumer is allowed to perform the role of customer and distribution manager after effective authentication if he is a customer the end user has a food order account. When the order is arrived the order is passed to the order controller and wait until the response from the distribution manager has been received.



_Figure 1.2 Customer order cycle

After the customer's request the orders are placed on the list of orders in Figure 1.3 and pending approval by the distribution manager. The distribution manager will approve or deny the order at will. The confirmation is then sent to the client

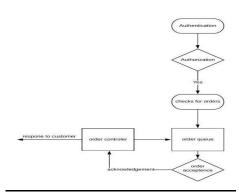


Figure 1.3 Delivery executive cycle

IV. EXPERIMENTAL WORK

This system's main objective is to save time for people as much as possible. This is because travelling consumes a lot of time which in turn makes people tired and ultimately their schedule gets disturbed. To avoid this people can order food from their location and eventually the food will be delivered to their doorstep[8][10]. This application is provided with the facilities to order foods from multiple restaurants in a single order, show best rated restaurants and even best rated foods. By this way the user can order foods confidently without even trying it before. In this system the delivery agent can accept or reject order based on his status and even he can assign multiple orders under his name. The user can even generate pdf of the received order and he can use it in case of any problem.

V. PSEUDO CODE

```
public class AppController  //Application Controller
{
    public String updateContact(Customer customer,Contact
    contact)
    {
        if (customerIsPresent) //customer verification
        {
             customer.setContact(contact); //setting contact
        }
        else
        {
             return error; //returns error if customer is unavailable
        }
    }
    public String assignOrderToDeliveryPartner(Model model, ong id, HttpSession session)
    {
        if (session.getAttribute("cart") != null)
        {
             int index = this.exists(id, cart);
            if (index != -1)
        }
}
```



```
int quantity = cart.get(index).getQuantity() - 1;
    if (quantity != 0)
    {
        cart.get(index).setQuantity(quantity); //add items
    }
    else
      {
        cart.remove(index); //remove items from cart
      }
    }
    session.setAttribute("cart", cart); // add session attribute
}
return "redirect:/customer/hotels/{hotelId}";
//corresponding screen will be displayed through jsp.
}
```

VI. RESULT

Figure 1.4 shows the login module where the server can be logged in by the end user

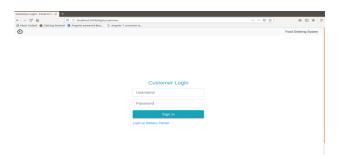


Figure 1.4 Login module

Figure 1.5 displays the user's food buying page and food selection in several restaurants.

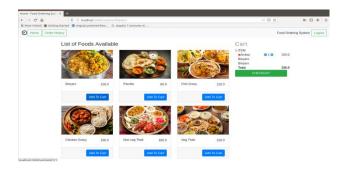


Figure 1.5 Food ordering Module

Figure 1.6 displays the end-user order description after the arrival of the product



Figure 1.6 Order summary

VII. FUTURE ENHANCEMENT

In future the application can include pre book foods for specific occasions. In addition to this users can also be recommended with certain foods based on their health conditions and even the nutritional values of the food can be displayed. By this way the users can have the awareness of what they eat.

VIII. CONCLUSION

By doing this, we had the option of ordering in single order in several food shops instead of placing multiple orders. This application will play a major role for people who have busy schedules in not skipping their meals and also for sick persons to get food on their doorstep. It can even help restaurants in cutting down the environment set-up costs as well as electricity costs. Thus this application will be beneficial for both customers as well as providers in managing their time as well as money.

REFERENCES

- Chandra, Yakob Utama, and Cadelina Cassandra. "Stimulus Factors of Order Online Food Delivery." In 2019 International Conference on Information Management and Technology (ICIMTech), vol. 1, pp. 330-333. IEEE, 2019.
- D. Suhartanto, M. H. Ali, K. H. Tan, and F. Sjahroeddin, "Loyalty toward online food delivery service: the role of e-service quality and food quality," J. Foodserv. Bus. Res., vol. 00, no. 00, pp. 1–17, 2019.
- Guntupally, Kavya, Ranjeet Devarakonda, and Kenneth Kehoe.
 "Spring Boot based REST API to Improve Data Quality Report Generation for Big Scientific Data: ARM Data Center Example." In 2018 IEEE International Conference on Big Data (Big Data), pp. 5328-5329. IEEE, 2018.
- 4. "Web on Servlet Stack." Web on Servlet Stack. docs.spring.io/spring.
- Yong, Lim Tek, Choong You Qi, Chai Soon Yee, Alexander Johnson, and Ng Kar Hoong. "Designing and developing a PDA food ordering system using interaction design approach: a case study." In 2009 International Conference on Computer Technology and Development, vol. 1, pp. 68-71. IEEE, 2009.
- K. J. Patel, U. Patel, and A. Obersnel, "PDA-based wireless food ordering system for hospitality industry - A case study of Box Hill Institute," Proceedings of Wireless Telecommunications Symposium, 2007, pp. 1-8.
- Gutierrez, Felipe. "Spring Framework 5." In Pro Spring Boot 2, pp. 1-30. Apress, Berkeley, CA, 2019.
- Scifo, Danilo, Marianne Scifo, Daniel Scifo, Lisa Valente, and Robert Valente. "Online food ordering system and method." U.S. Patent Application 12/069,895, filed August 13, 2009.
- Kuai, Shuo, Yupeng Hu, Xinxiao Zhao, Dong Qin, Wentao Li, and Xueqing Li. "A Novel Efficient Query Strategy on Hibernate." In Proceedings of the 2019 8th International Conference on Software and Computer Applications, pp. 105-108. 2019.
- Salam, Shiny. "RESURGENCE OF SMALL EATERIES-THE SUCCESSFUL BUSINESS MODEL OF ONLINE FOOD APPS IN MAJOR CITIES OF KERALA." Our Heritage 68, no. 18 (2020): 516-534.
- Sathya Bama, S., IRFAN AHMED, M. S., & Saravanan, A. (2014). A
 MATHEMATICAL APPROACH FOR IMPROVING THE
 PERFORMANCE OF THE SEARCH ENGINE THROUGH WEB
 CONTENT MINING. Journal of Theoretical & Applied Information
 Technology, 60(2).
- Kumar, B. M., & Saravanan, R. (2014). Network design for reverse logistics—a case of recycling used truck tires. In Applied Mechanics and Materials (Vol. 592, pp. 2677-2688). Trans Tech Publications Ltd.



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AUTHORS PROFILE



Mr. R. Karthik works as a assistant professor in Sri Krishna College of Technology in the Department of Computer Science and Engineering with work experience of 13 years. His area of interests are analysis of algorithms and computer networks. His research works include database management system.



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