INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT (IJSREM)
VOLUME: 08 ISSUE: 06 | JUNE - 2024 SJIF RATING: 8.448 ISSN: 2582-3930

Canteen Crave - Website for College Canteen

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Abstract **-** This project addresses the outdated canteen website in our college by introducing a modern, user-friendly platform. Focused on enhancing the ordering process and overall dining experience, our research surveys, and iterative design to meet diverse user needs. Through this project, we aim to set a new standard for campus dining, offering insights and best. This research paper investigates the integration of our project (pre-ordering food systems) in college canteens as a means to revolutionize traditional food service models.

This research paper explores the implementation and impact of our project CANTEEN CRAVE, pre-ordering food systems in college canteens to enhance efficiency and customer satisfaction. With the rising demand for convenient dining experiences, especially within educational institutions, pre-ordering food has emerged as a promising solution to minimize long queues, reduce waiting times, and optimize resource utilization in canteen operations. The study investigates the feasibility, effectiveness, and user perceptions of integrating pre-ordering technology into college canteen services.

Keywords — Admin, Backend, Database, Frontend, User.

I. INTRODUCTION

In college, canteens play an important role in providing students with convenient and nutritious meals. However, traditional food service models often struggle to meet the demands of a growing student population, leading to long queues, delays, and inefficiencies. Recognizing the need for innovation in canteen operations, this research focuses on the implementation of pre-ordering food systems as a means to fulfil college student's demand.

Our project CANTEEN CRAVE is a user-friendly website that allows students to pre-order food from their college canteen, providing a convenient and efficient way to browse a digital menu and place order, reducing wait time, crowd and enhancing the overall dining experience on campus. Pre-ordering systems allow students to place food orders in advance through digital platforms, reducing wait times and streamlining the ordering process. By integrating this technology into canteen operations, educational institutions can optimize resource utilization, improve service quality, and meet the evolving preferences of their student community.

II. METHODOLOGY/EXPERIMENTAL

A. Synthesis/Algorithm/Design/Method

The system comprises 2 major modules: Admin and User. The admin can log in using their credentials. They can manage the food items, their prices and description. They can add, update, delete, and view food items. The admin can view the orders placed by students. User can log in using their credentials and order the food which they want from canteen before going to canteen. Also, they can set the timing for order preparation.

The steps taken by us to complete this project are –

1) Gathered and analyzed the specific requirements of the college canteen and its users.

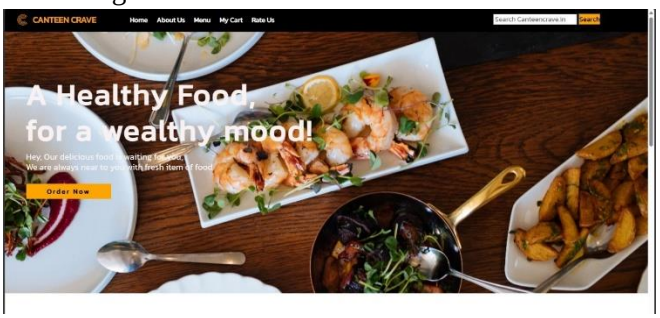
2) Designed the user interface for web. Created login page, menu page, home page and admin page. Designed the database schema for storing menu items, user data, owner data and order details.
3) Created frontend using HTML, CSS, and JavaScript. We have made a user-friendly frontend. The first page is the login/signup page. Once the user has set up an account on the website, he is directed to the home page. Where he/she can see various food items available in canteen. Then he/she can choose the food of his/her choice. All items have a brief description written about them including their name, price, and image.
4) Created the backend of the system using Java, SQL, and PHP. The backend of the system will make sure that all account data is stored in our database. Backend ensures that once the admin updates the description/price, it will be visible to the user and will also be part of the backend of our code.
5) Implemented the backend logic for user authentication, menu management, and order processing. Then we made connection between the backend and frontend components.
6) To complete the process, we will test the website beforehand to make sure there are no bugs, or errors in code, and take reviews from others after they have used our system so we can improve.

III. RESULTS AND DISCUSSIONS

Student can order food from canteen through our website and save their time and efforts.
Our website also improves canteen management system i.e. canteen staff efficiently manage orders and focus on preparing food.
Orders are processed faster and with greater accuracy. So, students can get their order within break between lectures.
The system provides a wide range and advantages and should be introduced at the college level.
In conclusion, our website is beneficial to both students and canteen staff.
It is a more environment friendly approach by reducing paper usage.

IV. IMAGES

Home Page



Menu Page

V. HELPFUL HINTS

A. Abbreviations and Acronyms

P.H.P- Hypertext preprocessor
C.S.S- Cascading Style Sheets
H.T.M.L- Hypertext Markup Language
S.Q.L- Structured Query Language

VI. FUTURE SCOPE

The future scope of the project –
1)Integration with Campus Services: integration with other campus services, such as library systems or event management.
2)Mobile App Enhancements: Further enhance the mobile app, possibly incorporating features like real-time order tracking, push notifications, etc.
3)Expanded Payment Options: Introduce additional payment options, such as mobile wallets or campus-specific payment systems

VII. CONCLUSION

In conclusion, the implementation of our project Canteen Crave presents a transformative solution to enhance the overall dining experience for students.

In this website admin updates the events and the user is then able to see it. This work aims to make the process of canteen smoother and provide a user-friendly experience.

We attempted to successfully introduce the most number of concepts of pre-ordering food system in this "Canteen Crave" project.

We also provided a brief overview of the technologies that were employed in the creation of our suggested website.

It has been designed with hoping that this website will be helpful to college canteen.

This project marks a significant step towards embracing digital transformation and catering to the evolving needs of modern educational institutions

VIII. ACKNOWLEDGMENT

We would like to express our sincere gratitude to everyone who contributed to the development and completion of our project CANTEEN CRAVE.

First, we extend our heartfelt thanks to Prof. Vaishali Rajput, for her guidance, mentorship, and valuable insights throughout the project. Additionally, we would like to express our appreciation for her constructive feedback during the testing phase. Her attention to detail and thoughtful suggestions improved the overall quality of the project.

We want to acknowledge the support received from the H.O.D. of DESH - Prof. C.M. Mahajan and the college administration, which provided us the opportunity to do this project in our very First Year of Engineering. And finally, we would like to thank our friends.

This project would not have been possible without the collaborative efforts of everyone involved. Thank you for your invaluable contributions.

IX. REFERENCES

[1] Gosavi, A., Joshi, S., & Balasubramaniam, P. (2019). Impact of pre-ordering on wait time in a quick-service restaurant: A simulation study. Computers & Industrial Engineering, 127, 66-77.

[2] Rupali Kale (2020). The objective of the project is to streamline and modernize the process of ordering food in college canteens. The proposed system uses software to simplify the ordering process, making it more efficient and user-friendly

[3] Ghebreyesus, D., Koehler, G., & Schneider, S. (2018). The impact of pre-ordering on customer waiting times and service efficiency in food service operations. Journal of Retailing and Consumer Services, 40, 274-282.

[4] Smith L., Brown M., & Wilson K. (2021). Evaluating the impact of a pre-ordering app on waiting times and customer satisfaction in a university campus canteen. Journal of Foodservice Business Research, 24(1), 72-85.

[5] Jones, R., & Patel, N. (2019). Enhancing campus dining experiences through mobile pre-ordering technology. Journal of Hospitality, Leisure, Sport & Tourism Education, 24, 64-70.

[6] Tang, Q., & Hao, S. (2017). The impact of technology glitches on customer satisfaction with mobile pre-ordering services: An empirical study. Journal of Hospitality Marketing & Management, 26(5), 518-539.

[7] Rashid, S., & Yadav, R. (2018). Understanding the factors affecting the adoption of pre-ordering apps in restaurants: An integrated model. International Journal of Hospitality Management, 75, 64-74.

[8] Kim, J., & Lee, C. K. (2020). The effects of mobile order-and-pay service quality on customer satisfaction and behavioral intention in restaurants. International Journal of Contemporary Hospitality Management, 32(3), 1291-1312.

[9] Ong, F. S., & Lim, W. M. (2018). Mobile food ordering system: A review on the critical factors affecting students' intention to adopt. International Journal of Engineering & Technology, 7(4.14), 129-134.

[10] Kelly, L., & Molesworth, M. (2019). The impact of pre-ordering on the online consumer experience: A case study of the UK quick service restaurant sector. International Journal of Hospitality Management, 81, 31-39.