e-ISSN: 2582-5208
International Research Journal of Modernization in Engineering Technology and Science
(Peer-Reviewed, Open Access, Fully Refereed International Journal)
Volume:05/Issue:10/October-2023 Impact Factor- 7.868 www.irjmets.com

AUTOMATED CANTEEN MANAGEMENT SYSTEM

Vaishnavi Pise*1, Vaibhavi Modak*2, Pranali Bhosale*3, Vishal Pachangane*4

*1,2,3,4Department Of Information Technology, Jayawantrao Sawant Polytechnic ,
Pune, Maharashtra, India.

ABSTRACT

With our automated canteen management system, you can say goodbye to long queues. Order your food in advance and pick it up hassle-free. No more mix-ups or incorrect orders. Our system ensures accurate food selection and payment, minimizing errors and customer dissatisfaction. By streamlining the canteen operations,employees can focus on their work instead of waiting in lines. Boost productivity and morale.

Keywords: Canteen, Food, Customer.

I. INTRODUCTION

Through canteen Management system you can Order your meals online through our user-friendly platform, allowing you to select your favorite dishes in advance. In this type of system Seamless integration with various payment methods, making transactions quick, secure, and hassle-free. This system allows Flexible menu customization, allowing you to tailor your order based on dietary preferences or special requirements. With oursystem, you can save time, increase efficiency, and provide a better customer experience.

II. METHODOLOGY

1. **Requirements Gathering**: The first step in the methodology is to gather the requirements for the system. This will involve identifying the key features and functionalities that the system must have, as well as the user requirements and constraints.
2. **Design**: The next step is to design the system architecture and user interface. This will involve creating wireframes, mockups, and prototypes to test the system's usability and functionality.
3. **Implementation:** The implementation phase involves developing the system using the chosen programming language and frameworks. This will involve writing the code, integrating the system with the canteen's existing infrastructure, and testing the system for functionality and performance.
4. **Testing:** The testing phase involves testing the system for functionality, performance, and security. This will involve creating test cases, running the system, and analyzing the results to identify any issues or bugs.
5. **Deployment:** The final step is to deploy the system to the canteen's infrastructure. This will involve configuring the system, training the staff on how to use the system, and monitoring the system for any issues or bugs.

III. MODELING AND ANALYSIS

The first step in the modeling process is to identify the key entities and their relationships within the canteen management system. This includes entities such as customers, menu items, orders, inventory, and payments. By understanding these entities and their interactions, we can create an entity-relationship diagram that visually represents the structure of the system.

Next, we analyze the functionality and behaviour of the system. This involves identifying the different processes and operations that take place within the canteen management system, such as placing orders, processing payments, managing inventory, and generating reports. We use techniques like use case diagrams and activity diagrams to capture and illustrate these processes.

Once we have a clear understanding of the system's entities, relationships, and processes, we can move on to creating a data flow diagram to represent the flow of data and information within the system. This diagram helps us visualize how data moves between different components of the system, such as the customer, kitchen, cashier, and inventory management.

By modeling and analyzing the canteen management system, we gain insights into how different components interact and how the system functions as a whole. This allows us to identify potential areas for improvement, optimize processes, and ensure a smooth and efficient operation of the canteen.

e-ISSN: 2582-5208
International Research Journal of Modernization in Engineering Technology and Science
(Peer-Reviewed, Open Access, Fully Refereed International Journal)
Volume:05/Issue:10/October-2023 Impact Factor- 7.868 www.irjmets.com

IV. APPLICATION

- Canteen Management can be used for Canteen, Cafeteria, etc.
- Inventory management: The system allows for easy tracking of inventory levels, including food items, utensils, and other supplies.
- Order management: The system enables canteen managers to manage orders from customers, including placing orders, tracking orders, and managing payments.
- Customer data management: The system allows for easy management of customer data, including contact information, order history, and preferences.

V. CONCLUSION

A canteen management system is an efficient and automated solution that addresses the challenges faced by traditional canteen management systems. With features such as menu management, order tracking, and payment processing, it offers numerous benefits, including increased efficiency, cost savings, and improved customer experience. The Canteen Management System is a powerful tool for modern organizations looking to streamline their canteen operations. With its comprehensive set of features, it can help canteen managers and owners save time and money, while providing a better experience for customers.

VI. REFERENCES

[1] Shuvo, M., & Foysal, M. (2019). Canteen Management System.

[2] J Rajanikanth -time billing process for canteen management system -international journal of emerging trends in engineering research.

[3] Katkar, A., & Jangale, S. (2018). Canteen management system using E-wallet. International journal of advance research, idea and innovation.