MarkMyMeal:
A Web Platform for Food Management

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ABSTRACT

The Mess Management Project intends to provide an automated system to manage a college or university's dining facilities. To streamline and improve the mess management process, technology will be used in the project. Students can sign up for the mess facilities using the system. Users can quickly view the menu and mark their availability for meals using the system. Additionally, it enables mess managers to monitor visitors and produce reports so that food may be prepared appropriately. The proposed solution will improve the students' overall dining experience while also streamlining the mess management procedure. The initiative has the potential to completely change how the mess facilities are run and help educational institutions greatly.

KEYWORDS

Automated System, Track Visitors, Generate Report, Revolutionize, Significant Benefits, Food Safety, Data analysis and reporting, Mess Management.

INTRODUCTION

The management of mess facilities in educational institutions can be a challenging task, requiring a great deal of planning, coordination, and management. In Many colleges and universities, the traditional manual system of managing mess facilities is still in use, which can lead to several inefficiencies and difficulties for both students and staff. However, with the rapid advancement of technology, it is possible to develop an automated system to manage the mess facilities of educational institutions, which can simplify the entire process and make it more efficient.

The Mess Management Project aims to develop such an automated system to manage the mess facilities of a college or university.

The system will provide users with

1. A user-friendly interface.

2. Students can mark their presence for meals.

3. Check out the updated/existing menus of their preferred mess.

4. Enable mess managers to plan menus

5. Allows mess administrators to keep track of visitors and generate reports.

Another advantage of an automated mess management system is that it can provide real-time information to the institution's management and stakeholders, allowing them to monitor the performance of mess facilities and identify areas for improvement. For example, the system can provide data on food consumption patterns, feedback on the quality of food and service, and other metrics that can help administrators make data-driven decisions.

The proposed system will not only simplify the mess management process but also provide [5] significant benefits to the educational institution. It will save time and effort, reduce the workload on mess staff, and eliminate the possibility of errors in manual systems. Moreover, the system will improve the overall dining experience for students by providing

them with more options, ensuring timely service, and minimizing food waste.

RESEARCH METHODOLOGY
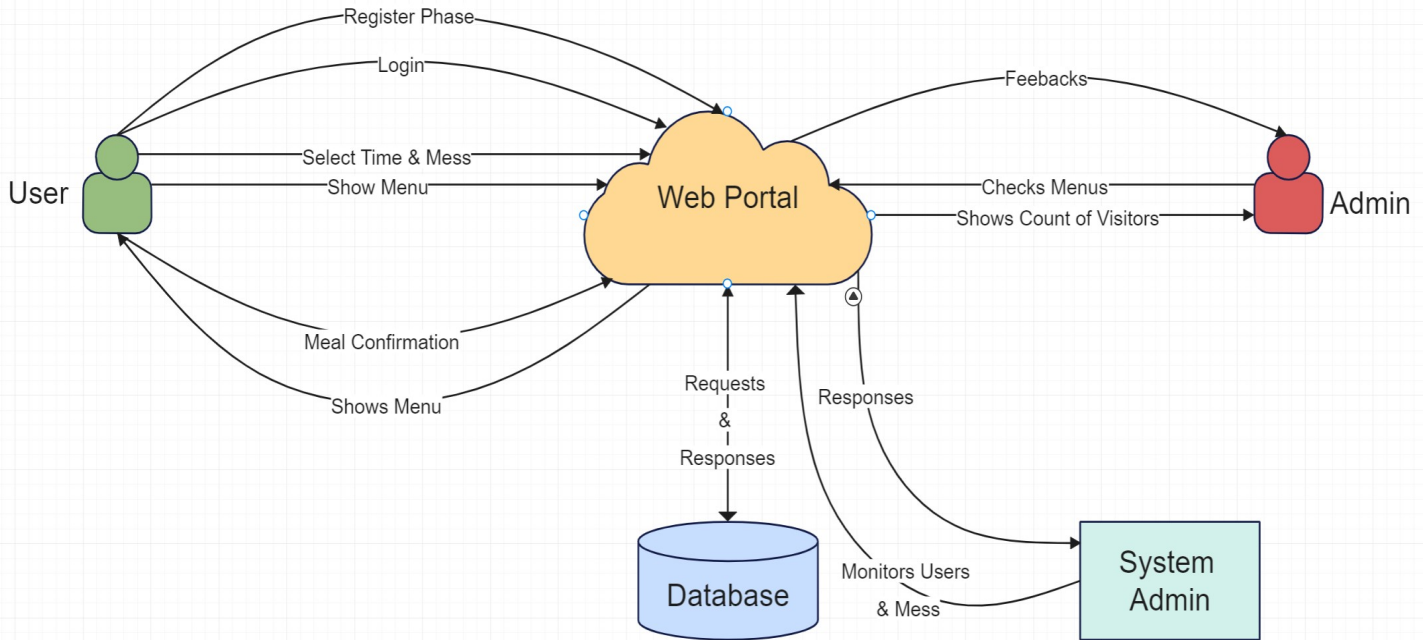
- Admin creates the mess account of the web portal.[7]
- Each student has their own login information, which they can use to access the system.
- Admins has the ability to update menus and meal options.
- Each user will be able to choose the mess of their choice and enroll.
- The portal allows users to rate the mess and displays the number of students who frequent it.
- Users may provide feedback regarding the mess they encounter.

CHALLENGES

Mess management project challenges:

Resource Constraints: The successful implementation of mess management projects might be hampered by a lack of resources, including funding, supplies, and staff.

User Preferences:

Meeting the different user preferences and cultural requirements might be difficult, and it calls for good planning and efficient communication.

Food Safety:

Maintaining food safety and cleanliness is essential for preventing health concerns, and it calls for regular inspection and adherence to applicable laws.

Operational Challenges:

Timely record-keeping, service delivery, and procurement can be difficult and call for effective management and collaboration.

EFFECTIVENESS

1. Users can mark their absence for days and particular meals with a single click rather than traditional methods of leave application.

2. Health and nutrition: By serving users wholesome, well-balanced meals, a well-managed mess facility can encourage excellent nutrition and overall well-being.

3. Productivity: A fit and well-fed workforce can perform better and be more productive.

4. User satisfaction with the mess facilities has the potential to boost morale and drive.

5. Cost-effectiveness: Effective mess management can decrease food waste, cut down on operating expenses, and boost revenue.

6. Social Cause: Through this program, we also plan to channel the left-over food to the needful people with the help of NGOs and organizations.

7. Sustainability: An improved system for mess management will incorporate various sustainable practices which would reduce waste and promote environmental sustainability.
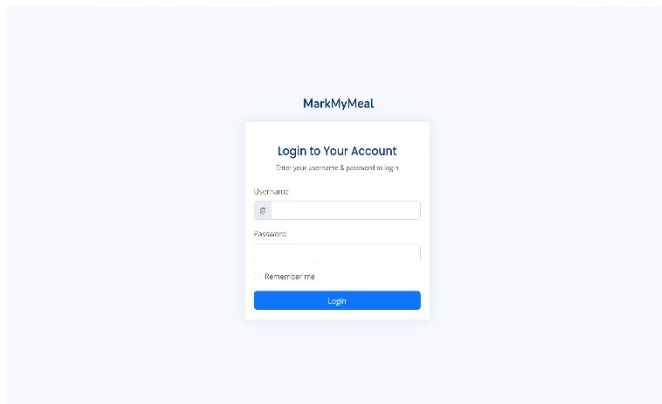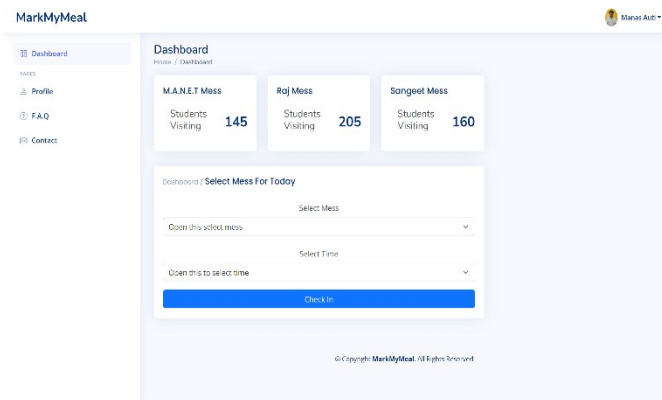
RESULTS

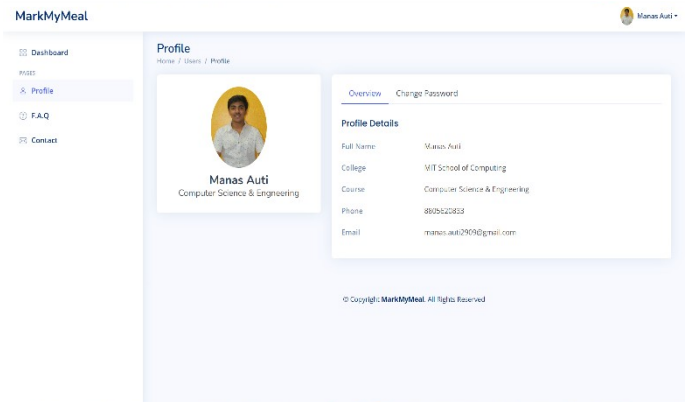**Figure 1. Login Screen**

Figure 2. Dashboard

Figure 3. Profile

CONCLUSION

The Mess Management Project intends to provide an automated system to manage mess facilities in educational institutions. This system can streamline mess management, enhance dining overall, minimize food wastage, and provide significant advantages to both students and staff.

FUTURE SCOPE

The future scope of mess management systems is quite promising, given the increasing demand for efficient and streamlined systems in various industries. Here are some potential areas of growth and development:

Integration with emerging technologies: Mess management systems can benefit from integrating with emerging technologies such as artificial intelligence, machine learning, and the internet of things (IoT) to improve efficiency, reduce costs, and enhance user experience.

Customization and personalization: Mess management systems can be customized and personalized to meet the specific needs of different users. For example, the system can be tailored to accommodate dietary restrictions and preferences.

Mobile compatibility: With the increasing use of smartphones and tablets, mess management systems need to be mobile-friendly to enable users to access the system from anywhere, at any time.

Sustainability and waste reduction: Mess management systems can incorporate sustainable practices such as waste reduction, composting, and

energy-efficient appliances to promote environmental sustainability.

<u>Data analysis and reporting:</u> Mess management systems can collect and analyze data to identify areas for improvement, measure performance, and generate reports that can be used for decision-making.

On top of university or college mess, this system can even be implemented to streamline small-scale mess facilities (e.g.: someone who runs a small-scale mess facility could use this platform for management)

Overall, the future of mess management systems looks bright, with opportunities for innovation and growth in various areas.

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REFERENCES

[1] Kirti Bhandge, Tejas Shinde, Dheeraj Ingale, Neeraj Solanki, Reshma Totare,"A Proposed System for Touchpad Based Food Ordering System Using Android Application", International Journal of Advanced Research in Computer Science Technology (IJARCST 2015).

[2] Varsh Chavan, Priya Jadhav,SnehalKorade,PriyankaTeli, "Implementing Customizable Online Food Ordering System Using Web Based Application", International Journal of Innovative Science, Engineering Technology(IJISET) 2015.

[3] Resham Shinde, Priyanka Thakare, Neha Dhomne, Sushmita Sarkar Design and Implementation of Digital dining in Restaurants using Android International Journal of Advance Research in Computer Science and Management Studies Volume 2, Issue 1, January 2014 pg. 379-384

[4] Noor AzahSamsudin, Shamsul Kamal Ahmad Khalid, MohdFikry Akmal MohdKohar, ZulkifliSenin, Mohd Nor Ihkasan," A customizable wireless food ordering system with real time customer feedback", IEEE Symposium on Wireless Technology and Applications(ISWTA) 2011.

[5] Serhat Murat Alagoza, HalukHekimoglub," A study on tam: analysis of customer attitudes in online food ordering system", Elsevier Ltd. 2012

[6] Ashutosh Bhargave, Niranjan Jadhav, Apurva Joshi, Prachi Oke, S. R Lahane,"Digital Ordering System for Restaurant Using Android", International Journal of Scientific and Research Publications 2013.

[7] Ijarcce.com

[8] Zhikun Hu, Peng Zhao, Jiawei Li, Yuanyuan Chen et al. " Metal–organic framework-derived porous ternary ZnCo O nanoplate arrays grown on carbon cloth for simultaneous electrochemical determination of ascorbic acid, dopamine, and uric acid "Analytical Methods, 2022

[9] Patel Krishna, Patel Palak, Raj Nirali, Patel Lalit," Automated Food Ordering System", International Journal of Engineering Research and Development (IJERD) 2015.

[10] Mayur D. Jakhete, Piyush C. Mankar," Implementation of Smart Restaurant with e-menu Card," International Journal of Computer Applications 2015 of Smart Restaurant with e-menu Card,"International Journal of Computer Applications 2015.

[11] Michele F. Fontefrancesco "Food Donation and Food Drive: Strategies to Achieve Zero Hunger" Springer Nature Switzerland AG,2019

[12] Divyesh Jethwa, Ayushi Agrawal, Rohan Kulkarni, Leena Raut "Food Wastage Reduction through Donation" International Journal of