MYUTEM CAFE

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BORANG PENGESAHAN STATUS LAPORAN

JUDUL: [myUTeM Cafe]

SESI PENGAJIAN: [2022/ 2023]

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This report is submitted in partial fulfillment of the requirements for the Bachelor of [Computer Science (Software Development)] with Honours.

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2023

DECLARATION

I hereby declare that this project report entitled

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is written by me and is my own effort and that no part has been plagiarized

without citations.

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DEDICATION

I would like to dedicate this final year project to my supervisor Ts. Dr. Abdul Karim Bin Mohamad for the continuous support given throughout the completion of the project for her patience to guide me until the end and to motivate me during the duration of this project. I appreciate all the help I have received from my supervisor. I would also like to dedicate this project to my beloved parents. They have always stood by me and given me unwavering support morally, financially and emotionally during my studies in university as well the continuous encouragement during the completion of this project. Lastly, I would like to dedicate to my dear fellow friends who have always been supportive and assist me in my studies and given me plenty of encouragement.

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I also would like express wholehearted gratitude towards my family for the continuous support they have given me. They have been there for me no matter what and that has helped me tremendously in encouraging me to complete this project.

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ABSTRACT

As we transition into the endemic phase, the availability of dine-in services has increased. However, the myUTeM Cafeteria at Universiti Teknikal Malaysia Melaka (UTeM) faces challenges in adhering to Standard Operating Procedures (SOP) due to limited manpower and a high volume of customer demand. This has led to issues such as order miscommunication, missing orders, and long queues during peak hours. To address these challenges, the myUTeM Cafe system has been introduced, automating the food ordering process in restaurants. This system was developed to provide a contactless dining experience, allowing customers to place food orders via a web application and monitor the status of their orders. Meanwhile, restaurant staff can use the web application to manage order statuses, and administrators can oversee user management in the database. The implementation of this system not only enhances the safety of both staff and customers but also improves the overall food ordering experience for everyone involved.

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ABSTRAK

Semasa kita beralih ke fasa endemik, ketersediaan perkhidmatan makan di dalam telah meningkat. Bagaimanapun, Kafeteria myUTeM di Universiti Teknikal Malaysia Melaka (UTeM) menghadapi cabaran dalam mematuhi Prosedur Operasi Standard (SOP) berikutan tenaga kerja yang terhad dan jumlah permintaan pelanggan yang tinggi. Ini telah membawa kepada isu seperti miskomunikasi pesanan, pesanan hilang dan beratur panjang semasa waktu puncak. Untuk menangani cabaran ini, sistem Kafe myUTeM telah diperkenalkan, mengautomasikan proses pesanan makanan di restoran. Sistem ini dibangunkan untuk menyediakan pengalaman makan tanpa sentuh, membolehkan pelanggan membuat pesanan makanan melalui aplikasi web dan memantau status pesanan mereka. Sementara itu, kakitangan restoran boleh menggunakan aplikasi web untuk mengurus status pesanan, dan pentadbir boleh mengawasi pengurusan pengguna dalam pangkalan data. Pelaksanaan sistem ini bukan sahaja meningkatkan keselamatan kedua-dua kakitangan dan pelanggan tetapi juga menambah baik keseluruhan pengalaman tempahan makanan untuk semua orang yang terlibat.

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LIST OF ABBREVIATIONS

FYP	**-**	**Final Year Project**
SMS	**-**	**Short Message/Messaging Service**
SDLC	**-**	**Software Development Life Cycle**
UTeM		**Universiti Teknikal Malaysia Melaka**
HTML	**-**	**Hypertext Markup Language**
CSS	**-**	**Cascading Style Sheets**
PHP	**-**	**Hypertext Preprocessor**
XAMPP	**-**	**Cross-Platform, Apache, MySQL, PHP, and Perl**
MYSQL	**-**	**Structured Query Language**
GHz	**-**	**Gigahertz**
FR	**-**	**Functional Requirement**
PK	**-**	**Primary Key**
FK	**-**	**Foreign Key**

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CHAPTER 1: INTRODUCTION

1.1 Introduction

The project myUTeM Cafe is a web based application ordering system. This is a system for students in UTeM to reserve foods and beverages while in campus. Students can view the menu and place an order that has been prepared by admin from time to time. Furthermore, students also can make a payment through online like topup. After students make payment, they will get receipt. The purpose of this receipt is to make sure that there will be no fraud among students. During the pickup time, students must show the receipt in front of seller. Besides, students must order within the prescribed period. Not just that, students can give a rating and review regarding to service and food.

The system may include features such as a user-friendly interface for taking orders, tracking inventory levels, generating reports on sales and expenses, managing customer loyalty programs, and scheduling staff shifts. It may also integrate with other systems such as payment(topup), and customer relationship management (CRM) systems. The main goal of a cafe system is to improve the efficiency and profitability of the cafe business by providing real-time insights into its operations. With accurate data on sales and inventory levels, seller can make informed decisions on menu offerings, pricing, and promotions.

Additionally, by streamlining the ordering and payment processes, cafes can enhance the customer experience and increase customer loyalty. The main objective for develop a myUTeM Café that can provides convenience for both seller and students. In the online payment process, this system will help to save time since payment can be done in the system. The problems are seller and student have an unsystematic ordering flow, the seller cannot recognize student who didn't pick up the food, and have to count the food amounts from time to time. That will waste the seller

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and student time. Many student in café will make the situation become noisy and crowded area during peak hour. The purpose of the project is to produce the MyUTeM Cafe System is an integrated system that can simplify transactions for student or sellers based on the use of online purchases. The student will get notifications use SMS to know the order was ready.

So with this system all the problem will be solved like order food will be more systematic and orderly. The café will not be too crowded with students because they must go down to pick up their food by follow the specific time which it will reduce the noise in the cafeteria. Students do not have to wait longer and queue at the cafeteria.

1.2 Problem statement

Firstly, unsystematic ordering flow. Since there is no specific time schedule to pick up the food at cafe. Furthermore, waste of food. Seller don't know the amount of food they should make and this will lead to waste. Students will lie about information of their order such as changing menu last minute.

Furthermore, it will waste the time. They must wait for more than an hour to have their food without engaging in any beneficial activities. For example, seller cannot recognize student who didn't pick up their food and have to count food amount from time to time.

` Lastly, noise. This is because, when there are many students in the cafeteria will make the situation become noisy and crowded area during peak hour. Furthermore, there's no social distancing between students. Admin also led to difficulty to manage them.

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1.3 Objective

• To design a solution for facilitate UTeM students, seller, management and organization related to myUTeM Cafe System

• To develop a myUTeM Café that provides convenience for both seller and students. In the online payment process, this system will help to save time since payment can be done in the system.

• To test the system for system functionality for ordering food process at UTeM cafeteria and user satisfaction in terms of usability by the students, administrators and seller

1.4 Scope

There are several module to be developed in the myUTeM Cafe System involving three stakeholders which are admin, seller and customer.

1.4.1 Admin Module

- Login, Blacklist Student and Manage user

1.4.2 Seller Module

- Login, view student order, manage status order, manage menu, and view reports, top up student, manage profile.

1.4.3 Customer Module

- Login, View Menu, Manage profile, manage order, make payment, can review and rating, Get notification via SMS

1.4.4 Target User

1. Student
2. Seller

1.5 Project Significance

The primary beneficiaries of the project are the students, faculty, and staff of Universiti Teknikal Malaysia Melaka (UTeM). The website will offer them convenient access to the cafe's menu, allowing them to explore options, place online orders. This enhances their dining experience by saving time, reducing waiting periods, and providing a user-friendly platform for engaging with the cafe.

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The local community surrounding UTeM can also benefit from the myUTeM Cafe website. It provides an opportunity for community members to discover and engage with the cafe's offerings. The online ordering feature allows them to conveniently place orders for takeout or delivery, expanding the cafe's customer base beyond the university population.

By offering features such as online ordering, and access to updated information, the website improves the overall user experience for both students and the local community. Users can easily navigate the menu, customize their orders, and choose preferred pick-up or delivery options, thereby enhancing convenience and satisfaction.

The website's functionalities, such as online ordering and reservations, streamline the cafe's operations. It allows the cafe to manage orders more efficiently,

reducing errors and minimizing wait times. By automating certain processes, the cafe can optimize its resources and provide faster service to customers.

1.6 Expected Output

The purpose of the proposal is to produce the MyUTeM Cafe System is an integrated system that can simplify transactions for students or sellers based on the use of online purchases. The system is also used to show the sales report, and details of the purchased menu.

Firstly, with this system, every process for the students to order food will be more systematic and orderly. This is because, everyone knows what they need to do to ensure the smooth process of ordering and pick up the food at cafeteria. Students will order food through the system, seller will prepare the food by refer to the amount of order and prevent food waste. Admin can make sure all parties follow the flow of the system.

Last but not least, the cafeteria will not be too crowded with students because they must go down to pick up their food by follow the specific time which it will reduce the noise in the cafeteria. This is because the lesser student, the less noises at the café.

1.7 Conclusion

It can be concluded that a well-designed and well-managed cafeteria system can provide a range of food options and accommodate dietary preferences, while also promoting healthy eating habits and reducing food waste. To ensure the success of the myUTeM cafeteria system, it may be important to consider factors such as menu planning, portion control, food quality, pricing, and customer service. Additionally, implementing sustainable practices such as composting and recycling can help to minimize the environmental impact of the cafeteria.

Overall, a well-executed cafeteria system can provide a valuable service to the UTeM community by offering convenient and nutritious food options, while also promoting sustainability and healthy eating habits.

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CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

A literature review is a type of research that involves analyzing and evaluating existing literature related to a specific topic or research question. The purpose of a literature review is to identify gaps in knowledge and to synthesize and summarize the current state of research in a particular area.The process of conducting a literature review involves searching academic databases, journals, books, and other sources of information for relevant research studies and publications. Once relevant literature has been identified, it is carefully evaluated and analyzed to determine its quality, credibility, and relevance to the research question. The literature is then synthesized and summarized to provide a comprehensive overview of the current state of research in the field.

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Literature reviews are commonly used in academic research to support the development of research proposals, to identify areas for further research, and to provide a foundation for evidence-based practice. They can also be used to inform policy decisions, to provide context for historical or theoretical research, and to support professional development in various fields. Overall, literature reviews play an important role in advancing knowledge and understanding in various fields of research by synthesizing and summarizing existing literature, identifying gaps in knowledge, and providing a foundation for further research.

Project methodology is the systematic approach and process of executing a project. It involves a series of activities, tasks, and tools that are designed to ensure that the project is completed successfully and meets its objectives. A project methodology can be broken down into several key phases, each with its own set of tasks and objectives. A well-defined project methodology helps to ensure that the project is completed on time, within budget, and to the satisfaction of all stakeholders. It provides a framework

for managing and executing complex projects, and helps to mitigate risks and address issues as they arise. The project will be managed using Agile methodology, with regular sprint reviews and retrospectives to ensure continuous improvement and alignment with project goals. The project will be managed using Agile methodology, with regular sprint reviews and retrospectives to ensure continuous improvement and alignment with project goals.

2.2 Facts and finding

2.2.1 Domain

The domain of the myUTeM Cafeteria System is the management of the cafeteria operations in the Universiti Teknikal Malaysia Melaka (UTeM) campus. The system is designed to provide a comprehensive solution for managing the cafeteria's day-to-day operations, including menu planning, food ordering, inventory management, sales tracking, and reporting.

The myUTeM Cafeteria System is designed to automate and streamline the cafeteria's operations, making it easier for the cafeteria staff to manage their tasks and responsibilities. The system is designed to be user-friendly, efficient, and flexible, allowing cafeteria managers to customize the system to meet their specific needs.

The system is intended to be used by a wide range of users, including cafeteria managers, cafeteria staff, and students. It provides a platform for managing and tracking cafeteria sales, inventory, and food orders, allowing cafeteria managers to optimize their operations and improve the overall customer experience.

In addition to the core cafeteria management features, the myUTeM Cafeteria System may also include additional modules and functionality, such as online ordering and payment, loyalty programs, and mobile app integration. The system may also integrate with other campus systems, such as student information systems and accounting systems, to provide a more comprehensive solution for managing campus operations.

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2.2.2 Existing System

Based on my research, there are currently several existing systems that are being used for cafeteria management in UTeM. Some of these systems include:

Manual System: Some cafeterias in UTeM still use a manual system, which involves the use of pen and paper to record sales and inventory data. This system is often time-consuming and prone to errors.

Spreadsheet-based System: Some cafeterias use a spreadsheet-based system to manage their operations. This involves using software such as Microsoft Excel to record sales and inventory data. While this system is more efficient than a manual system, it is still prone to errors and may not provide a comprehensive solution for managing cafeteria operations.

Point-of-Sale (POS) System: Some cafeterias in UTeM use a POS system to manage their operations. A POS system is a computerized system that allows cashiers to process transactions, record sales, and manage inventory. This system provides a more efficient and accurate solution for managing cafeteria operations.

Third-Party Cafeteria Management Software: Some cafeterias in UTeM use third-party cafeteria management software, such as Sodexo or Canteen Management System (CMS). These software solutions are designed specifically for cafeteria management and provide a comprehensive solution for managing sales, inventory, and menu planning.

Overall, while there are existing systems for cafeteria management in UTeM, there is still room for improvement in terms of efficiency, accuracy, and user-friendliness. The myUTeM Cafeteria System aims to provide a more comprehensive and user-friendly solution for managing cafeteria operations in UTeM.

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2.2.3 Technique

The waterfall methodology that can be used for the development of the myUTeM Cafe System:

Requirements Gathering: In this phase, gather detailed requirements for the MyUTeM Cafe system. This includes understanding the specific features, functionalities, and goals of the system. Document the requirements clearly to serve as a foundation for the subsequent phases.