FINAL YEAR PROJECT REPORT
UMP ONLINE FOOD ORDERING SYSTEM

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INTRODUCTION

1.1 Background of Study

Presently in this modernized world, food ordering is becoming a thing of the future as most restaurants and catering system exist in a wide variety of format and styles. Online food ordering is the process of food delivery and takeout from a local restaurant or food cooperative through a web page. Most common are those that are independent catering facilities and fast food restaurants. The ordering services need to consider their customer’s orders and the admins that post the orders.

Mostly, online ordering services only provide about their company’s services in their website. It makes the customers want to know more and dig deeper into their websites to see what the company provides. Customers will waste their time comparing different companies for their menu. If they are not satisfied then they can proceed to another cite.

A website is crucial these days and online food ordering are developed to spread and promote their business. This website will let the user survey the orders available for order for that particular day. The purpose of the development is to reduce the time of ordering and make the process feels more professional.

When such an unfortunate situation, a website is developed just for a certain ordering company, the customer does not have multiple choices to choose from their menu. Some of them are not so user friendly that they just list out their package without details.

The new system must be developed to ease the customer while ordering from the menu. They can search for the packages and place an order without wasting much time. If they want to know more details they can contact the food provider.

The ordering services need to promote their operations to the public by this system to change their messy marketing. The system also cooperates with other caterers to get their data to state in the website. The system will help both customers and caterers to make an order more systematic.
1.2 Aims and Objectives

I. To investigate current system for food ordering.

II. To propose online food ordering system for UMP students.

III. To evaluate the proposed food ordering system.

1.3 Problem Statement

I. Nowadays, students are too busy or too tired to cook for themselves as they go to class till late evening and will have no time to cook. To reduce energy, students often order or cater food from outside sources.

II. Caterers cannot promote their menus to some of the customers. Sometimes students will not order food from a caterer that does not satisfy the customer’s needs. Orders are very limited.

III. When a customer orders food, the caterer has to manually list down the customer’s details and order manually. Caterer has to waste much time on tedious jobs like this.

IV. Sometimes, customers want to order the best dish from the best or most popular caterer. When there are several caterers involved, customers will have more choices but not sure which is the most worth it. So, the system will help them to make an order with other customers review.
1.4 Scope of Project

Admin

I. Admin can add food items details like name, photo, description/ingredients, price etc.
II. Admins can view, edit the food items details as well as enable or disable food items according to availability.
III. Admins can track live order of customer.
IV. Admins can view the user details which are given during registration.

The User

I. Users have to register with essential details for food ordering system.
II. Users have to login with their registered information to access food ordering system.
III. Different food items with respective categories viewable to user.
IV. User can view food items details.
V. User can view their cart details, delete items from cart, update quantity etc.

1.5 Significance of the project

This project is beneficial in the catering industry to improve their marketing strategy and get customers easily. It’s not only about how they serve their meal but how their quality scarifies to the customer’s choices.

The system helps the customers to find what they want easier. Customers can just search from categories or through reviews to help them make their decision. Customers can configure their order details to inform the caterer on how much order is wanted. It is roughly very helpful system for UMP. All orders can be organized successfully without any problems.
1.6 Summary

This report consists of background study of the project that informs about what food ordering systems is in detail and how the system can help the catering services. The system wants to help their customers to be able to enjoy food outside campus.

Next, the problem statement which states the problems that happens on the customers and the caterer. It shows how the system can help that leads to the proposal of solution. When we know how the problem occurs, we can solve it by making some improvements and information details in the system.

The objectives of the project are to archive the useful system that can be used in the future for beneficial purposes. It will become equally same with the scope of project. We want to know our customers and their orders.

The significances of the project show the importance of my project that are necessary for others. Chapter 1 is about the system to be built on their aim to continue for the next procedure of the project.
2.1 Review of websites

Figure 2.1 Website of FoodValet

2.1.1 Review of websites (FoodValet)
FoodValet is an online food ordering, payment and delivery service that has been established in Kuantan. The company delivers food from all restaurants to their customer without actually visiting the restaurant. FoodValet’s vision is to ease the burden of customer service problems in restaurants’. They empower customers to access all restaurants’ menu and restaurants are likewise able to publicize themselves.
2.1.2 Review of websites (FoodPanda)

FoodPanda is a company that brings the first bite of food to customers. Their team of individuals helps people to get their food without moving much. FoodPanda helps restaurants gain additional income as people are always in search for new and good food. They support restaurant owners to perfect their delivery menu to improving their performance. Chefs can pause incoming orders if they are feeling overwhelmed. Restaurant owners have full control and constant flexibility. Sadly, most states do not receive their service.
2.1.3 Review of websites (RunningMan)
RunningMan is an online food ordering management website that delivers only to Selangor areas and they only focus to bring delicious food from restaurants to hawker stalls to your location. They do not have a minimum order with a minimum delivery fee starting with RM 1. They manage orders from restaurants to convenience stores. Their website only shows very few restaurants to order from but many dishes.
2.1.4 Review of websites (DeliverEat)
DeliverEat is a food ordering and delivery company founded by Penangites who wants to make others life easier. They also help restaurants manage in terms of delivery manpower. DeliverEat provides a diverse amount of culinary fields for customers to choose from. Moreover, they also deliver food to offices, where people are most busy and ordering is just a few clicks away. Payment can be dealt online and by cash payment.
<table>
<thead>
<tr>
<th>Websites Criteria</th>
<th>FoodValet</th>
<th>FoodPanda</th>
<th>RunningMan</th>
<th>DeliverEat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graphical User Interface (GUI)</strong></td>
<td>The layout of the website is very simple. Their website has a button that redirects the user to another page to order food. In that page, there is a list of restaurants to choose from including the opening and closing time. The simplicity makes the user understand the interface of the system faster.</td>
<td>The interface of the website looks very colorful with an aesthetic feel. It contains a few images which represents the different cities that they deliver to. They provide a button that lets the user search the location of stores. The layout is simple but compact and full of information and dishes but not all restaurants’ menu provides pictures of the dish.</td>
<td>The website contains a picture and banner that states the delivery time. It website provides a button to select places in KL only and the interface shows a few options to guide user for easier search. The menu is in an image list form which includes some information regarding price, delivery fee and the availability of the item.</td>
<td>This food ordering website displays a guide on how to order using their website. The layout of information and details are in a list form that can be changed into a grid form. They provide a filter for users. The website mostly contains simple words and the pictures does not contain more words other than the logo to not confuse its user.</td>
</tr>
<tr>
<td><strong>Speed of browser</strong></td>
<td>The speed of browser is fast but not all images load at the same time. When it comes to clicking on the other page to get information, it takes relatively quite some time to display all the information perfectly.</td>
<td>The browsing speed is not really quick as it contains a lot of images of restaurants and some of the images never load.</td>
<td>It is slightly faster than the previous two websites because the images are small and the list is not compact. The users need to click a lot in order to access the final page.</td>
<td>The website at first loads fast but after pressing the search button the website takes time to load as they are searching for restaurants near your area. The display of information after the search is fast.</td>
</tr>
<tr>
<td><strong>Mobile site</strong></td>
<td>When users open the website in their phone, the page loads faster and it</td>
<td>The graphical user interface feels the same as the web based version.</td>
<td>The website is a multi-platform website, thus it works perfectly on a mobile site.</td>
<td>The loading time of the mobile site is very slow. The mobile site sometimes</td>
</tr>
</tbody>
</table>
looks just like the original web version except without the information of opening and closing time of restaurant.

This website requires only a smaller database.

becomes unable to click search.

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The customer can easily maneuver though the website. They provide a filter by cuisine. They provide delivery hours for the whole week.</td>
<td>Does not have an app and does not provide order tracking service. The comment section only has two comments and both are paid. Not sincere.</td>
</tr>
<tr>
<td>They provide a language change option. Moreover, they also enable customers to order in advance. Provides order tracking. The list of food is put in rows of 4 which is compact and does not seem like wasting space.</td>
<td>The images in website will take some time to load all. Most of the food listed is pricy.</td>
</tr>
<tr>
<td>No minimum order is needed for any order. Customer can adjust the price range of food. They sell and deliver daily needs.</td>
<td>Some pages in the website do not contain anything. The blog page is in Chinese only. For payment they only accept credit card. The company is hard to find as there is a famous show with the same name that overpowers their company name.</td>
</tr>
<tr>
<td>This company sends food even to companies. They provide area of delivery coverage. Main page is easy to spot that it is a food ordering company.</td>
<td>The browsing speed is too slow. The buffering and log-in is red which makes user’s eyes uncomfortable. People with color blindness are not taken into consideration. Space is wasted by listing food in only two rows.</td>
</tr>
</tbody>
</table>
METHODOLOGY

3.1 System Development Life Cycle
SDLC is the process for software project to plan the process before develop the system. It helps developer to estimate duration to develop a system based on phase in SDLC. It consist planning, analysis, design, implementation, testing and deployment.

I choose the traditional type of system development life cycle which is the Waterfall method. This is because it is easy to understand and use. Even if the system takes longer to complete but it is ensured that the previous phase is complete before a new one is started. It is defined more clearly as this is a small project.

![General Overview of “Waterfall Model”](image)

**FIGURE 3.1 Waterfall SDLC**
3.2 System Requirement

**HARDWARE**

<table>
<thead>
<tr>
<th>No</th>
<th>Development Tool</th>
<th>Function and Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>• Laptop</td>
<td>Use the laptop and monitor in lab to complete all the task and mini project. This hardware contains all development software that we needed to complete the project.</td>
</tr>
<tr>
<td>2.</td>
<td>• Printer</td>
<td>This hardware use to print all the requirement data and document needed to succeed our hardcopy submission.</td>
</tr>
</tbody>
</table>

**SOFTWARE**

<table>
<thead>
<tr>
<th>No</th>
<th>Development Tool</th>
<th>Function and Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>• Microsoft Word</td>
<td>To write a report and data by using this tool and compile the entire document after all report and project had been built.</td>
</tr>
<tr>
<td>2.</td>
<td>• Microsoft Powerpoint</td>
<td>To construct a Gantt chart.</td>
</tr>
<tr>
<td>3.</td>
<td>• Balsamic</td>
<td>In my project I use this software tool to construct and design the user interface by each module and it very helpful in design interface of my system project.</td>
</tr>
<tr>
<td>4.</td>
<td>• Lucid Chart, Draw.io</td>
<td>While I construct the uses cases, I use this tool to ease construct in design use cases diagram and dialogue diagram itself.</td>
</tr>
<tr>
<td>5.</td>
<td>• HTML, PHP, JavaScript, CSS</td>
<td>To build a coding of the system by using this languages.</td>
</tr>
<tr>
<td>6.</td>
<td>• MySQL</td>
<td>To create a database of the system.</td>
</tr>
</tbody>
</table>

**TABLE 3.1** Hardware of system requirement

**TABLE 3.2** Software of system requirement
3.3 User Requirement

Manage Member Login

- The system will provide a registration form to students if they want to access the food ordering system.
- The system will allow user to place an order only after user has registered.

Manage Admin Login

- The system will allow admins to login and manage account.
- The system will enable admins to add, update, and delete user info.

Update Order Menu

- The system must provide a list of available orders.
- Students can choose to the desired catering services.
- Admins can update their menu.

Adding Order Cart

- The cart will update if the student selects any order.
- The system will record and selected order and price.
- The system allow user to review their order.
- The system will provide pickup and payment details.
3.4 Proposed Design
3.4.1 Flowchart

![Flowchart of Login System]

**FIGURE 3.2** Flowchart of Login System
FIGURE 3.3 Flowchart of Main Menu
FIGURE 3.4 Flowchart of Checkout
3.4.2 Context Diagram

FIGURE 3.5 Context Diagram of UMP Online Food Ordering System
3.4.3 Use Case Diagram

FIGURE 3.6 Registration Use Case Diagram
FIGURE 3.7 Main Menu Use Case Diagram
FIGURE 3.8 Ordering Use Case Diagram
3.4.4 Entity Relationship Diagram

FIGURE 3.9 UMP Online Food Ordering ERD
3.5 Database Design

Database of the UMP Online Food Ordering System provide primary key for unique attribute. Each attribute has their own type of data to show what input should be included in the database. The database will store the data of the whole system as admin reference.

FIGURE 3.10 User Table

FIGURE 3.11 Food Table

FIGURE 3.12 Cart Table
3.6 Interface Design

The user can instantly log-in without needing to register. It will automatically connect to their account.

Sign up link is set for those who do not want to connect their social media account.

Sign up as admin is for those who want to start a new service.

FIGURE 3.13 Log-in Page
FIGURE 3.14 Registration Page

Saves data into database.
When clicked, the page will redirect user to the caterer’s page.

User will be brought to their account page.

FIGURE 3.15 Main Page
User can change their password.

User can update their profile.

FIGURE 3.16 Account Page
FIGURE 3.17 Catering Service Page
User can select the amount of order.

User can select the date of order.

User can add selected items to cart.

**FIGURE 3.18** Caterer’s Menu Page
User can add number of orders.

User can delete order.

Checkout to receive QR code.

FIGURE 3.19 Cart Page
FIGURE 3.20 QR-Code Page
CHAPTER 4 IMPLEMENTATION & TESTING

4.1 Introduction

The documentation of all processes is as followed below. This system is explained in a more detailed manner from the interfaces to the implementation of source code in the system.

This system consists of two parts which are admin’s page and user’s page. The system is developed this way because it will be easier for the users to differentiate the different forms. To store the information for each part, a database with many tables is created to store and sort all information. The information stored can be accessed and modified through SQL Query such as SELECT, UPDATE, DELETE. But this function can only be accessed through PHP function

In conclusion, this chapter will explain the process from start to end.

4.2 SQL Explanation

The help of other existing system and templates were helpful. With the use of CSS and bootstrap helped reduced the burden when implementing the codes. Addition to that, adding JavaScript and some validations help further secure the data when sending information into the database. This helps the system to function more systematically with less errors. This system is run by using a webserver like XAMPP. The function of it is to enable the user to use the system as a website by putting the URL as “localhost/“ followed by the name of the folder or file of the system. Without a webserver, the system will not be able to run because PHP language does not support display.

4.2.1 Implementation of database

The database is the back-end of the system as it uses MYSQLi. To access the system, the use of phpMyAdmin can be run by using XAMPP web server. The database name and tables including structure is as follows:

1. UMPEats
2. Users
3. Food
4. Cart
4.3 User Manual

There are a few stages to build this Online food Ordering System which are designing the page layout and implementing the whole process behind the page layout.

![User Login Form]

**Figure 4.1: User Login Form**

Figure 4.1 shows that the user needs to have an account to login before entering the system. The users and admin can login the system by suing the correct username and password.
If User oes not have an account, user can register by selecting the sign-up button. A form will appear and user will enter their details in order to register.

When successfully logged in, the home page will show as below in figure 4.3.
Upon selecting the favoured services, the user will be redirected to the caterer’s menu page in figure 4.5.

Here, user can select their order and the amount and be added to the cart.

In figure 4.6, user can view their purchased order.
## User Acceptance Test

Project’s Name: UMP Online Food Ordering System

<table>
<thead>
<tr>
<th>No</th>
<th>Module</th>
<th>Activities</th>
<th>Test Result (Successful?)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Admin</td>
<td>Admin login</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Admin</td>
<td>Admin can edit the menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Admin</td>
<td>Admin can delete the menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Admin</td>
<td>Admin can update the menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Admin</td>
<td>Admin can manage the data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Users</td>
<td>Choose menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Users</td>
<td>Calculate total price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Users</td>
<td>Delete the ordered food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Users</td>
<td>Add new menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Users</td>
<td>Update the quantity of menu selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Users</td>
<td>Search for the menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Users</td>
<td>Can navigate through the back button</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This test has been performed by:

Name: ______________________________________________

Signature: __________________________________________

Date: _____________________________________________
Chapter 5
Conclusion

5.1 Introduction
This chapter contains the overall conclusion of this project and also show all the data retrieved together with the observation on how far this project meet the objectives. Moreover, the methodology and implementation of this system will also be covered along with the system’s limitation and future suggestion to enhance the existing system.

This project has achieved its purposed objectives which are to study and evaluate existing problems in our food ordering system. Furthermore, the purpose of this system is to enhance the current existing system and performance of several organisations for the existing system. By using this new system, this will allow a more stable and efficient workflow.

In addition, we provide a more reliable platform for students in UMP to perform their business in a systematic and proficient manner. As a result, the purpose of this system will be able to bring ease the users.

Other than that, each project must have their suitable methodology that will be as guideline in developing the project from the beginning till it is successfully built. Waterfall Methodology is used for this particular project development. The selected methodology is suitable as it just a simple system that does not need the collaboration between the developer and targeted user throughout the process of developing the system. This project managed to be implemented for the use of targeted user.

5.2 Research Constraints
Constraints for this project are:

1. Lack of resources (References)
   Due to the lack of references and suitable resources such as professional web-based application developer, the codes and documentation format, the duration for this project development is becoming longer than it should be. With this, the developer needs to find the solution for every error that occurs during the completion of this system and thesis itself.

2. Limited time
   Time management is the most critical part of this project development. This project needs some more development and testing time for the system to be able to run smoothly and have better performance. In addition, there are a few time constraints in this project as we need to attend classes, assignments and test.
5.3 Future work

Not every first system will be a perfect system. It might still need some enhancement in order for it to adapt with upcoming new technologies and techniques. Same goes for the UMP Online Food Ordering System which could undergo some improvements to ensure it can keep up the pace with incoming new technologies.

1. Make it able to be more user friendly and more accessible elsewhere.
5.4 Gantt Chart