

An Online Restaurant Management System (District50)

by

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Dissertation submitted in partial fulfilment
of the requirements for the
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CERTIFICATION OF APPROVAL

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A project dissertation submitted to the

Information Technology Programme

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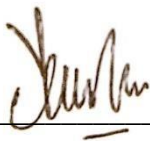
UNIVERSITI TEKNOLOGI PETRONAS

TRONOH, PERAK

January 2022

CERTIFICATE OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.



(Nur Yasmin Binti Mohd Nasir)

ABSTRACT

Online Restaurant Management System (ORMS) is a restaurant management online application. This system wakes up to give service to both the restaurant and the customer. Food ordering and reservation table management by the customer through the system online, customer information management, waiter information management, menu information management, and reporting are among the services provided. The main goal of developing the system is to provide customers with online purchasing and reservation services. Ordering and reservation administration will become easier and more methodical with this online system, which will replace the existing paper-based system.

Furthermore, this system may be used at any time by any customer. The prototyping model is being utilised throughout the development of ORMS. Each phase of the prototype model corresponds to a certain stage of the development process. Visual Studio, Live Server, GitHub, and Netlify are all examples of software and hardware utilised. Additionally, this project will be designed for restaurant management and will help the system firm boost its business through the use of the internet. For others, this endeavour will improve the ordering and reserving processes online.

ACKNOWLEDGEMENT

I express my heartfelt gratitude to Allah SWT for giving me the strength and knowledge I needed to complete my final-year project, and I pray that Allah SWT continues to bless me in the future. Never least, I would like to convey my heartfelt appreciation to Dr. Dayang Rohaya, who oversaw this project, for her direction and continuous encouragement. Her insightful suggestions and constructive criticism contributed to the project's success.

Additionally, the success of this endeavour is highly dependent on the assistance and direction of a large number of individuals. As a consequence, I'd want to use this occasion to express my gratitude to the other seniors who have been working on a website developer project for their willingness to exchange ideas and opinions during the project's duration. The project was then looked at from many different perspectives and points of view in order to make it better.

Finally, I'd want to convey my deepest appreciation to my husband, Muhammad Syafiq B. Mohd Rahiman, for his unwavering emotional and psychological support during the construction of An Online Restaurant Management System and the completion of my dissertation. Finally, I'd want to express my gratitude to everyone who helped to this project, whether directly or indirectly. May Allah SWT recompense you for your kindness.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

The system for managing the restaurant business is known as an "online restaurant management system." The major goal of building this system is to assist restaurant administrators in managing the restaurant business as well as assist customers with online ordering and table reservations. The project is being developed because many restaurants find it difficult to manage their businesses, such as client ordering and reservation tables. It is difficult for waiters to preserve accurate client information and they might lose the customer information while employing manual customer ordering.

As a consequence, an online restaurant management system will be implemented to help restaurant administrators with restaurant operations management and to allow customers to place online orders and reserve tables. Apart from that, this project's aim is to streamline the manual process and make the business more accessible and methodical.

1.2 Problem Statement

Nowadays, many restaurants operate manually, particularly when it comes to customer ordering. Today, restaurant waiters and waitresses accept customer orders manually and on paper. This is a concern for restaurant waiters and waitresses since it increases the possibility of customer information being lost or duplicated. Additionally, it would have a negative effect on the restaurant's reputation for order handling.

Moreover, restaurant management experience is essential for this part of the menu. This is necessary for restaurant waiters and waitresses to properly organise the menu. Apart from that, this area enables customers to peruse the restaurant's menu and place their orders.

As a result, the current system (manual system) is no longer functional or efficient to use since it is incapable of properly saving, managing, and monitoring menu information and customer ordering information as well as creating reports.

1.3 Objectives

The project's objectives are based on the problems listed above:

- to develop an online ordering and reservation system for a restaurant and for customers.
- to design a user-friendly user interface for an online restaurant management system.
- to deliver menu information to customers via the internet.

1.4 Scope of Study

The target user, target location, and project deliverables are all included in this section.

1.4.1 Target User

Customers and administrators are the two types of users that have been recognised to utilise the system.

- Customer

This online ordering system is divided into two types of customers: dine-in customers and takeaway customers. Customers who order dine-in will view the menu, place an order online and reserve a table at the reserve table page. Customers may check the menu and order online for takeaway. After placing an online order, the customer can pick up their product on the day specified during the online ordering process. Customers must check with the restaurant before they accept an order for both dine-in and take-out, whether by email or phone.

- Administrators

The administrator is the one who is in charge of the whole system. This user will also be in charge of the system's maintenance and operation. The administrator is in

charge of adding new customers, waiters, and menu items to the database, among other things.

1.4.2 Target Area

This system is going to be installed in a restaurant.

1.4.3 Project Deliverables

The flow of an activity will be characterised in terms of customer online ordering and reservation module, feedback module, and menu module depending on the module that was recognised.

- Customer Online Ordering and Reservation Module

The customer online ordering and reservation module provides a form that needs to be filled out in terms of ordering food and reserving a table online.

- Feedback Module

Customers may give any suggestion or comment to the restaurant using the Contact and Inquiry form, whether it is regarding the cuisine or anything else about the business. This form will reveal the restaurant's weak points and strengths.

- Menu Module

The menu module displays the dishes served by a restaurant to its customers. Customers may use this module to see the menu and place orders.

CHAPTER 2

LITERATURE REVIEW

2.1 Fact and Finding

Facts and findings define what the existing system performs and what the issues are, leading to the establishment of a set of choices from which users can select the system they desire (Yeates and Wakefield, 2004).

This section will lay out many points of view on the project that will be produced. It was centred on the importance of the online ordering and reservation table to customers and administrators. In the other case, it will define any element or approach that may be utilised to search for and acquire relevant information in the development of this system.

Case Study 1: Internet application for restaurant industry

According to Nich (1999), today's restaurants are the most significant enterprises in a developed country. The restaurant sector is the third biggest in the United States, with approximately 25% of retail shops being eating or drinking facilities, employing 5% of the total. Furthermore, according to Palmer (1999), the internet is a significant application in the development of this business since it allows restaurants and customers to engage. The internet has evolved into a formidable marketing and communication tool for businesses. Nonetheless, Schneider and Perry (2001) claim that for new business prospects-often known as e-business or e-commerce today.

According to Flynn et al. (2005), internet ordering is a critical service in the restaurant sector today. Currently, the restaurant is using a traditional ordering method. This old approach makes it difficult for waiters to manage a portion of a customer's order. Furthermore, it may be a challenge for the restaurant's administrator in terms of storing client information, and it is possible that the information will be lost. To address this issue, the

restaurant sector anticipates a rapid surge in online ordering. The internet is becoming more popular, and public access to the internet is becoming easier and more convenient. The computerised system is utilised in the restaurant sector to make restaurant administration easier and more efficient. Furthermore, this initiative aims to transform the old system into a computerised system that is more methodical, productive, and accessible.

2.2 Existing System

There are several system concerns with online restaurant management systems that exist nowadays. Expressive Creations Sdn. Bhd. (ECSB), DJU Catering, and Saloma Theatre Restaurant are the companies behind the systems.

2.2.1 Saloma Theatre Restaurant

Saloma Theatre Restaurant welcomes customers to a Malaysian showcase of excellent cuisine, service, and entertainment. Saloma Theatre Restaurant is situated in the Golden Triangle, a shopping, entertainment, and business centre. The structures and surrounding areas provide visitors with a stunning view of the city's skyscrapers juxtaposed against the magnificent Petronas Twin Towers. It's close to the Malaysia Tourism Center (MTC), which makes it a good place for people who want to try a lot of different foods, go on vacation, see traditional traditions and culture, and see some of the best entertainment in Malaysia.

This website has an online booking system. This online reservation system will be provided as a restaurant management system online for this project. This website also has more information about this restaurant, like a map, extra amenities, special events, culture and customs, arts and crafts, and a cultural performance.

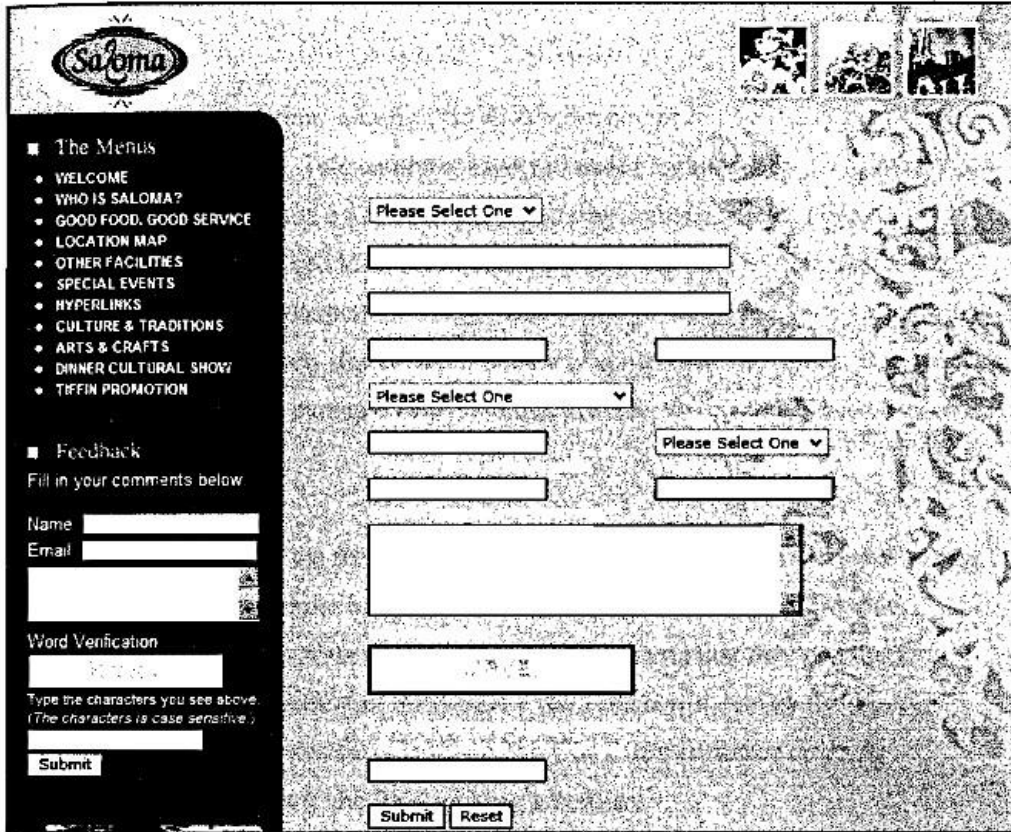


Figure 1: Saloma Theatre Restaurant

2.2.2 DJU Catering

DJU Catering is a seasoned organisation with a diverse range of abilities. DJU Catering is prepared to accept meal orders for events such as weddings, charity night banquets, Hari Raya feasts, meetings, and seminars. DJU Catering also offers online ordering.

To place an order online with the DJU catering restaurant, the customer must give all the necessary ordering information in addition to their personal information. DJU Catering will get the information and will call the customer for confirmation.

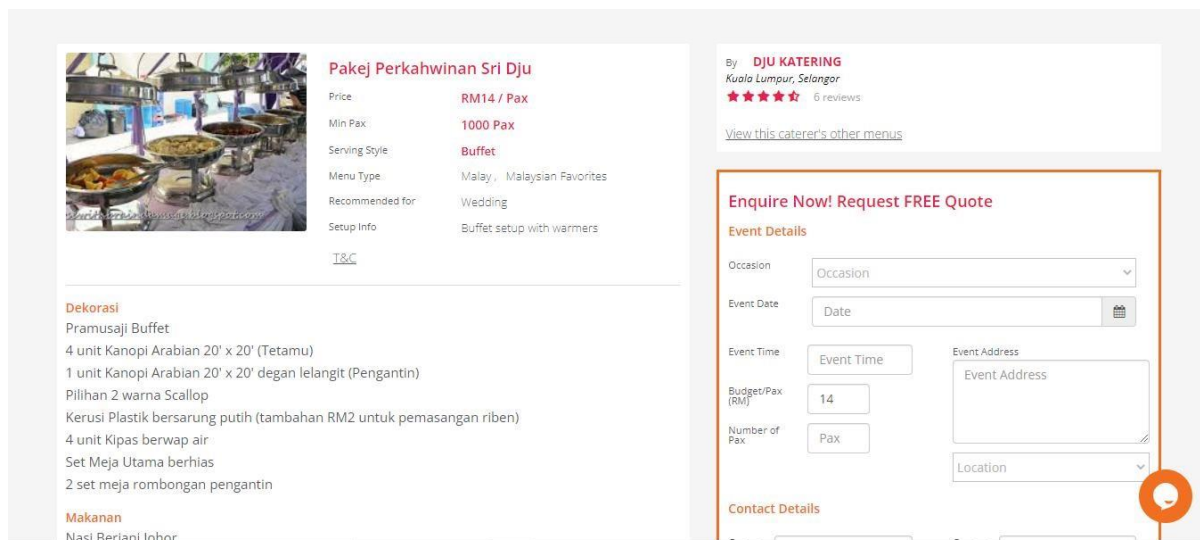



Figure 2: DJU Catering

2.2.3 Expressive Creations Sdn. Bhd.

The website for Beryani King Restaurant is designed by Expressive Creations Sdn Bhd (ECSB). This company is engaged in the legal food sector, which encompasses catering, restaurants, equipment rental, and related industries. As a provider of local catering services, ECSB assists client councils with the following services: marriage, recital of religious verses, open house, family day, corporate dinner party, and business conference. Beryani King's website is an example of a restaurant that accepts online orders.

The form requested information from customers, such as customer information and order information. Additionally, this restaurant presented the whole menu that they produced for their clients. After you have entered all of the required information, the system will show a notice stating that the order has been placed successfully. All customer orders will be sent straight to the Beryani King restaurant.



BERYANI KING
"Citarasa 100% Batu Pahat"

HOME

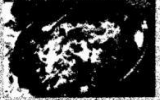
Info Syarikat

Latar Belakang
Jenama Unggul
Perkhidmatan
Pengurusan
Kawalan Mutu
Perkakasan & Peralatan
Pengalaman
Menu Makanan
Pakej Jamuan
Kementerian Kewangan
Hubungi Kami

Quick Links

Tempahan
Feedback

Latest Photo



[...view photo gallery here...](#)

TEMPAHAN ONLINE

:: Anda boleh menggunakan borang tempahan dibawah untuk membuat tempahan direct kepada kami.

Name:

Telefon No: (ex. 03-2855906)

Fax No: (ex. 03-2855906)

Hp No: (ex. 019-2855906)

Alamat:

Poskod Negeri

Negara

Email:

Tarikh Jamuan: ?

Waktu Jamuan: - : - AM

Kuantiti: Orang

Perlu khidmat penghantaran: Tidak Ya

Perlu khidmat pelayan: Tidak Ya Orang pelayan.

Perlu sewaan pinggan mangkuk: Tidak Ya

Perlu sewaan khemah: Tidak Ya Untuk Orang.

Perlu sewaan kerusi / meja: Tidak Ya Untuk Orang.

Menu pilihan: Pilih menu:

Keperluan lain:

Figure 3: Expressive Creations Sdn. Bhd.

CHAPTER 3

METHODOLOGY

3.1 Introduction

To develop this system (ORMS), I found a suitable approach to use during the Online Restaurant Management System's installation. This section discusses the prototyping model in detail.

3.2 Prototype Model

The prototype model is shown in Figure 4 below, which is based on an explanation of the prototyping model by Yeates and Wakefield that was discovered on the internet (2004).

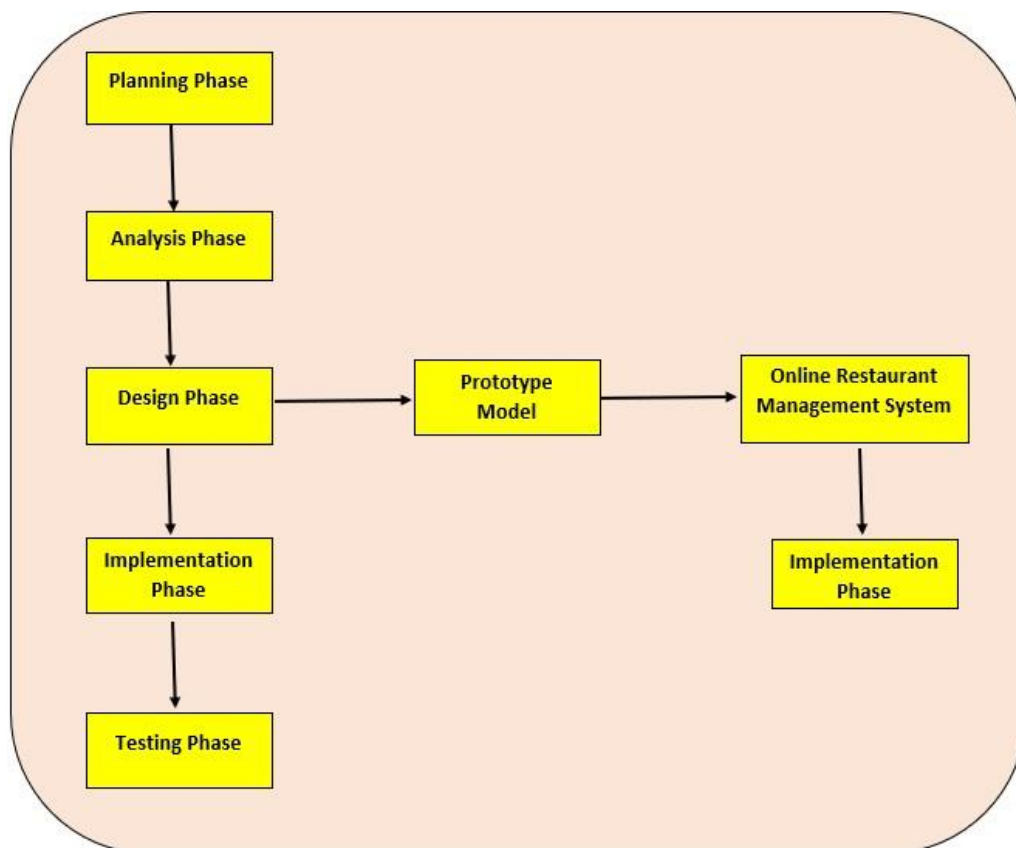


Figure 4: Prototype Model

As seen in Figure 4, the following phases are involved:

3.2.1 Planning Phase

This phase starts off the project planning process. To begin with, information on the manual method is gathered from the restaurant and its customers. Prior to commencing the system's construction, the issue must be analysed manually and then tried to be solved. Simultaneously, the database element should be recognised.

3.2.2 Analysis Phase

This phase evaluates the manual system and identifies areas for improvement based on the information gathered during the planning phase. Users' needs are gathered, appraised, and reviewed. The Analysis Report is the phase's last deliverable. This phase makes an entity relationship diagram (ERD), a context diagram (CD), and a data flow diagram (DFD), among other things.

3.2.3 Design Phase

The analysis phase's findings are used to guide the design of this system. During this phase, the database will be designed. It is constructed to suit the specifications of this system. Apart from that, a user interface will be developed. It is based on the organization's analysis phase outcomes.

3.2.4 Implementation Phase

The system is really built during this phase, utilising Visual Code Studio and Live Server, and all source code is pushed to GitHub. Then, I will deploy it to Netlify to make all the forms functional and to get and keep the database. A database and interface design will be established during the design phase. The process of writing the code will then be finished. Programming in this system was divided into three parts: the HTML language to arrange and provide meaning to this web content; generating paragraphs, headers, and data tables; or embedding graphics in the page. The second is the CSS language of style rules, which we use to apply styling to our HTML content, such as setting background colours and fonts and arranging our information in multiple columns. Last but not least, the JavaScript scripting

language allows you to build dynamically updated material, manipulate multimedia, animate graphics, and pretty much anything else.



Figure 5: Visual Studio Code



Figure 6: Live Server



Figure 7: Netlify



Figure 8: GitHub

3.2.5 Testing Phase

The system will be tested when it has been fully developed. This is necessary to determine whether or not the code that has been implemented is accurate. If an error occurs, a solution to the problem will be discovered. If there is a mistake, the code will be modified from the beginning of development.

3.3 Database Life Cycle (DBLC)

According to Rob and Coronel (2004), the database life cycle (DBLC) is divided into six phases: initial research, database design, implementation and loading, testing and evaluation, operation, and maintenance and evaluation. Figure 5 depicts the DBLC process and an explanation for each phase.

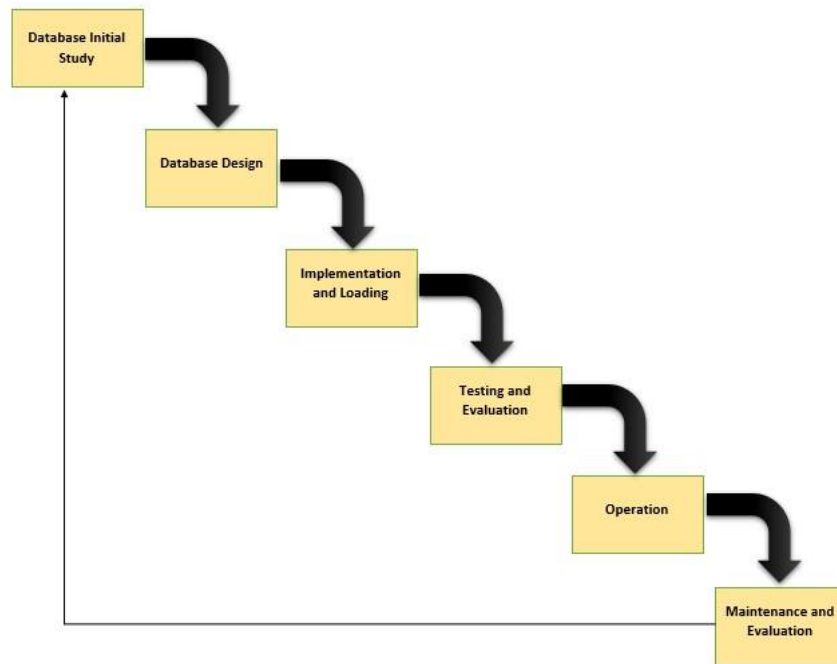


Figure 9: DBLC

3.3.1 Data Initial Study

The initial database investigation must uncover a portion of:

- The company's operational components, such as their type, role, and so on.
- Identify the issues and limits that have impacted the company's operations.
- Define the objective for resolving the corporate problem.
- Define the application's scope and bounds.

3.3.2 Database Design

The second phase focuses on creating a database model that will support the company's activities and goals. It is divided into four sections: conceptual design, logical design, physical design, and DBMS software selection.

CHAPTER 4

RESULT AND DISCUSSION


This chapter describes the successful development of a prototype as a working prototype for the interface idea proposed in the previous chapter. Additionally, the Online Restaurant Management System's prototype test results will be included. The implementation and testing phases' results are summarised here.

4.1 Prototype

A prototype is a rough sample or model made to evaluate an idea or approach or to act as a template for replication or learning. The term is used in a variety of contexts, including semantics, design, electronics, and software development. Additionally, a prototype is created to evaluate and trial a new design, allowing system analysts and users to improve dependability. Prototyping establishes specifications for a functional, rather than a theoretical, system ("Prototype," 2021). As a consequence, the descriptions of the prototypes for An Online Restaurant Management System that were created over the semester are included below.

4.1.1 Home Page



An Online Restaurant Management System, as depicted in the figure below, starts with a Home Page. When a person does a search using a web browser, the Home Page is shown. The user is then not required to sign in or login. Users can access the navigation bar at the top right, but if they scroll down, the website will display as seen below.



The Taste Place
The first bite will blow your mind. The second will transport you to another dimension.

[Explore Menu](#)

[Reserve Table](#)

The Taste Place
The first bite will blow your mind. The second will transport you to another dimension.

[Explore Menu](#)


[Home](#)

[Menu](#)

[About](#)

[Contact](#)


[Reserve Table](#)




4 PM - 12 AM
Opening Hour

Mainroad Tunjung, Kota Bharu, Kelantan
Address

+60193609484
Whatsapp Now



Maggi Ketam Nipah
RM 22
★★★★★
"Maggi Ketam Nipah" is a great value for the money since it's really fresh and flavorful. We're certain that you'll be satisfied.



Oglio Olio Lobster
RM 42
★★★★★
Spaghetti Oglio Olio with Lobster, a luxurious dish to enjoy. We're delighted that you're enjoying it.

Special Menu
We serve food based on your requests in order to maintain our quality and your satisfaction.


[Reserve Table](#)

Western

Grilled Chicken Chop
RM 11.90
★★★★★


Lamb Chop
RM 17.90
★★★★★

Meatball
RM 10.80
★★★★★



20% OFF NEW MENU
RM 12 RM 9.60
★★★★★

[Reserve Table](#)



Corporate Events
District50 is the perfect venue for your corporate events. We specialise in private parties.

Birthday Party
Make your birthday celebration an event to be remembered!

Book For Events
Book your private event or corporate function at District50 to experience a truly unique experience.

[Contact Now](#)

Why Choose District50
Quality of Service, Food, Ambiance, and Value of Money are the primary elements for choosing a restaurant. District50 is one of the best family restaurants in Kota Bharu, with a perfect ambiance and scrumptious food.

- Quality Food
- Various taste
- Skilled chef
- Best service

Keep Up to Date With Us!

Get notified with the latest news and recent offers from the "District50"


Your Email Address

[Submit](#)

LINKS
[Home](#)
[Menu](#)
[Reserve Table](#)
[About Us](#)
[Contact](#)

SUPPORT
[Contact](#)
[Feedback](#)

CONTACT
+60193609484
yasmin.nasir21@gmail.com
Mainroad Tunjung, Kota Bharu, Kelantan



THE TASTE PLACE
Follow Us
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Figure 10: Home Page

4.1.2 Menu Page

When users click the Menu Page link at the top right of the navigation bar, or at the bottom of each page's website, or at the explore menu button, the Menu Page appears, and the user can view the menu catalogue as shown below.

The screenshot displays the District50 Menu Page, organized into several sections:

- Explore Our Menu**: A header section with a 'Special Menu' sub-section.
- Special Menu**: Features two items: 'Maggi Ketam Nipah' (RM 35) and 'Oglio Olio Lobster' (RM 40).
- Western**: Includes 'Grilled Chicken Chop' (RM 11.80), 'Lamb Chop' (RM 17.90), and 'Meatball' (RM 10.80).
- Masakan Panas**: A large section with 12 items including 'Tomyam Seafood' (RM 12), 'Sotong Goreng Kunyit' (RM 8.40), 'Nasi Goreng Pattaya' (RM 7.20), and 'Mee Goreng' (RM 7.20).
- Family Set**: Includes 'Shell Out Set' (RM 22-RM 180) and 'Ikan Siakap 3Rasa Set' (RM 42-RM 162).
- Pizza**: Features 'Hawaian Chicken Pizza (Medium/Large)' (RM 11-RM 20), 'Beef Pepperoni Pizza (Medium/Large)' (RM 11-RM 20), and 'Seafood Pizza (Medium/Large)' (RM 13-RM 23).
- The Foodiloco**: Includes 'Buttermilk Chicken Rice' (RM 9.90), 'Buttermilk Prawn Rice' (RM 10.90), and 'Beef/Chicken Tacos' (RM 10.90).
- Thai Indon Food**: Features 'Kerabu Maggi' (RM 6.50), 'Pulut Ayam' (RM 7.20), 'Pulut Mangga' (RM 7.20), 'Bakso' (RM 6.50), 'Soto' (RM 6.50), and 'Nasi Khaumok' (RM 6.50).
- District50 Special Drink**: Includes 'Apple Asam Boi Juice' (RM 6.40), 'Lalci Kang' (RM 6), 'Orange Juice' (RM 4.90), 'Jagung Ais' (RM 2.90), 'Mangga Juice' (RM 5.90), and 'Milo Tabur Ais' (RM 3.40).
- Footer**: Contains the District50 logo, 'THE TASTE PLACE', social media icons, and contact information including links, support, and contact details.

Figure 11: Menu Page

4.1.3 About Us Page

Users can navigate straight to the About Us page to read a brief history of District50. Additionally, users can examine District50's goals, which are shown below.

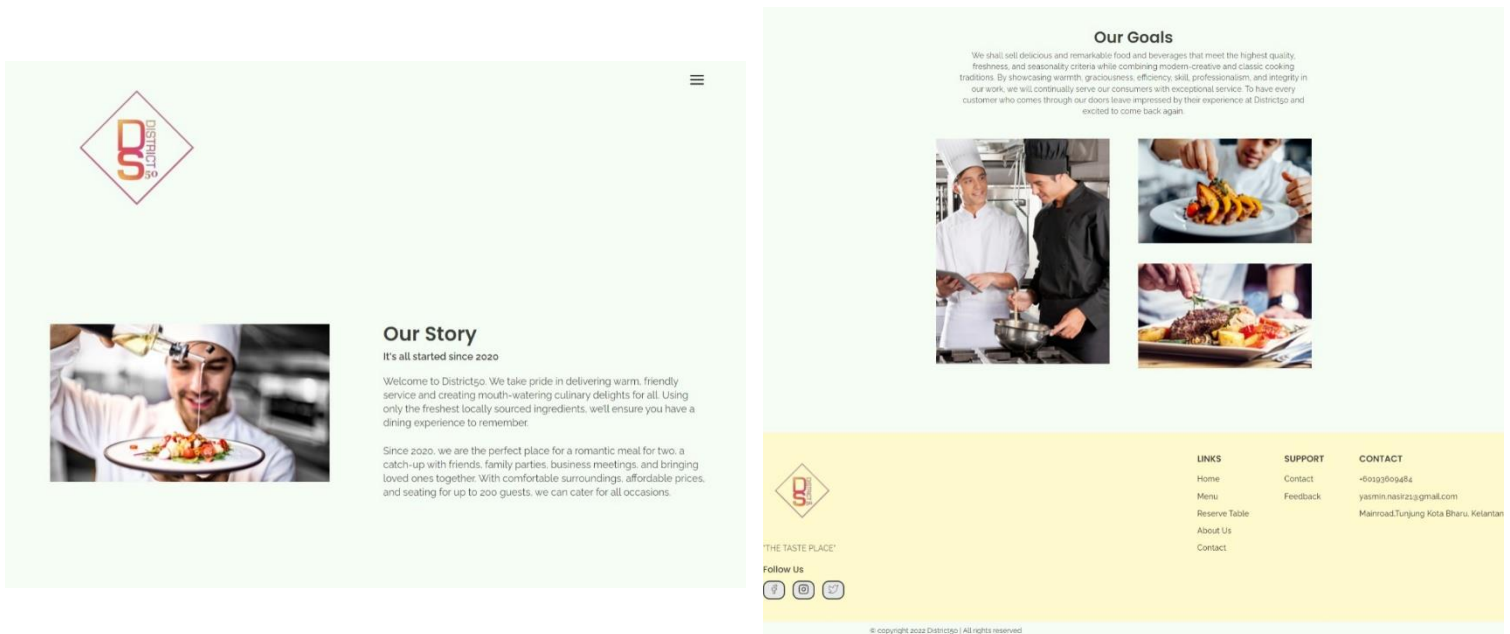


Figure 12: About Us Page

4.1.4 Contact Page

Users can contact us directly through WhatsApp by clicking the WhatsApp icon or by filling out the contact and inquiry form on the contact page. This page allows users to contact us and place a take away order. Additionally, users may provide comments or reviews regarding our services and meals. Generally, if a user wants to place an order for take away, they may do it directly using WhatsApp, which is much more convenient. All information entered by the user, including first and last names, email addresses, subject boxes, and messages, will be stored in the database.

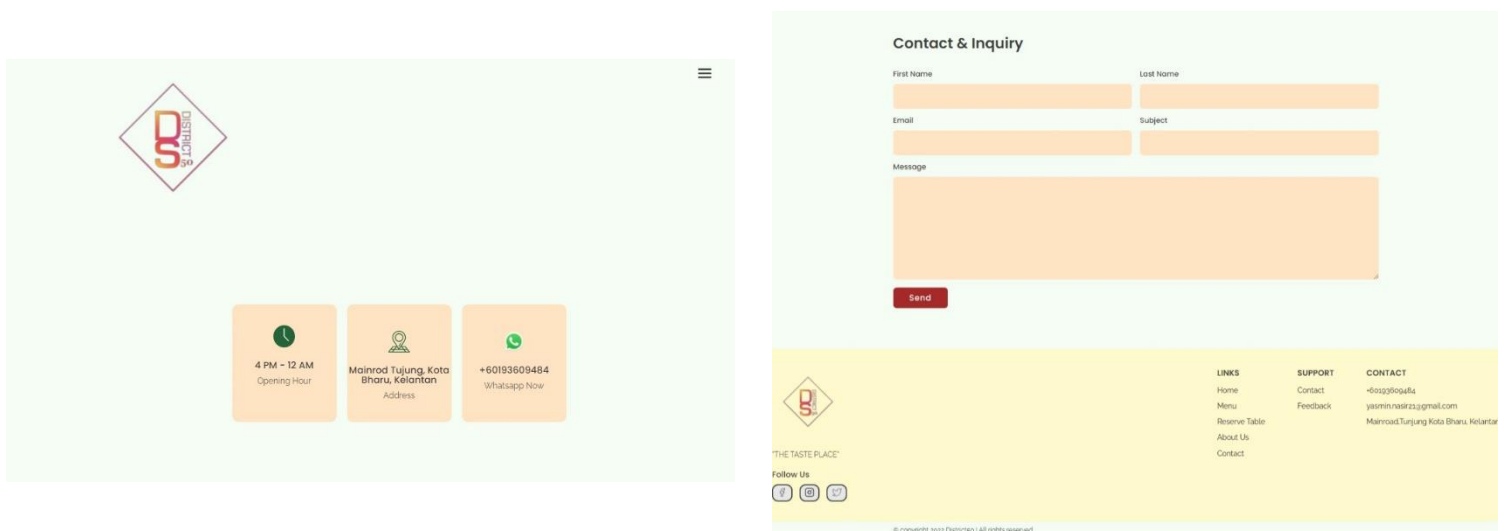


Figure 13: Contact Page

4.1.5 Reserve Table Page

Users who wish to reserve a table for dine-in, a birthday party, a business event, or a meeting can go directly to the Reserve Table Page. The Reserve Table Page will give the customer the reservation form to fill out. The form is shown below. The information provided by users will be stored in a database for review by the administrator.

The screenshot displays a web page titled "Reserve Table" with a light green background. At the top left is a logo for "THE TASTE PLACE" featuring a stylized 'S' and 'P' inside a diamond shape. The main content area contains a reservation form with the following fields:

- First Name: Text input field
- Last Name: Text input field
- Email: Text input field
- Table Type: Dropdown menu with "Choose" and a downward arrow
- Phone Number: Text input field
- Placement: Dropdown menu with "Choose" and a downward arrow
- Date: Text input field with a date picker icon and the format "dd/mm/yyyy"
- Time: Text input field with a time picker icon and the format "--:--"
- Note: Large text area for additional information

Below the form is a red button labeled "Reserve Table". The footer is yellow and contains the following information:

- THE TASTE PLACE logo and name
- Follow Us: Social media icons for Facebook, Instagram, and Twitter
- LINKS: Home, Menu, Reserve Table, About Us, Contact
- SUPPORT: Contact, Feedback
- CONTACT: +62937809484, yasmih.nasir23@gmail.com, Mainroad, Turjong Kota Bharu, Kelantan

Figure 14: Reserve Table Page

4.2 Testing

Despite appearances, testing is not synonymous with debugging. Debugging finds and removes "unknown" faults. The objective of the test is to find problems in the system or application and determine if they are not only not performing as expected (defects), but also performing in unexpected ways (errors) or malfunctioning. Debugging, on the other hand, seeks to ascertain the nature and position of "found" errors prior to redefining, redesigning, or coding them out, depending on the degree of testing at which defects are identified. As a consequence, testing and debugging should occur simultaneously and sequentially (Li, 1990).

For this system, I performed three distinct types of tests: unit tests, integration tests, and acceptance tests. Unit testing is a process for verifying the functionality of individual subsystems or functions inside a system or application. Its goal is to guarantee that the device adheres to the system's or application's internal standards. This is done throughout the development phase to allow for the simultaneous testing of several units. Debugging tasks are much easier because they only affect one unit and must be done on that unit if a flaw is found.

Integration testing, on the other hand, is used to identify interface incompatibilities between system or application components. It should operate flawlessly. Integration tests ensure that the interfaces and communications between the various components of a system or application function properly. The interface has been unit tested at this stage. As a result, the Table 1 below sums up the results of integration tests on a prototype of an online restaurant management system that were done.

I've completed acceptance testing in addition to unit and integration testing, as previously detailed. Acceptance testing is largely conducted by the user to confirm that the system or application is fully functional, satisfies the user criteria that motivated its development, and is user-acceptable.

To begin with, I provide an overview of the system to the tester. Following that, the testers were given a test system. Throughout the testing process, I'll take notes or record suggestions or opinions about the system under examination. On this basis, I can determine the system's utility. Finally, we gave testers a survey form to complete in order to offer

feedback on the system. All the data collected will be used to enhance an online restaurant management system. The results of the tests are shown in Table 1 below and in Table 5 in the appendices.

Table 1: Summary of Feedbacks from Acceptance Test of An Online Restaurant Management System

Respondent 1	<ul style="list-style-type: none"> • Able to understand the flow of the system • Background colour that is interesting.
Respondent 2	<ul style="list-style-type: none"> • All of the images of the meals on the menu page are very appealing. • Reduced the space between the logo and the description.
Respondent 3	<ul style="list-style-type: none"> • If possible, provide some video. • Should have functionality on each dish's image so that when we click on it, we can immediately order it.
Respondent 4	<ul style="list-style-type: none"> • The page for adding items to the cart is not available.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

An online restaurant management system for customers and administration must be implemented in two academic semesters, September 2021 and January 2022. The phases have been divided into two since the website is being developed using prototyping methodologies. The planning, analysis, and design phases were finished in September 2021, and the implementation and testing phases will be completed in January 2022, during the second academic semester. Although the designs were finished during the Design Phase in September 2021, they were modified later, notably during the Implementation Phase, to meet the needs of the users and implement the experts' recommendations.

Currently, an online restaurant management system is in progress. This project is nearing completion of its goal of developing a website with information about the restaurant, including a brief history and mission statement for District50, the restaurant's locations, a menu catalogue for users to view and order from, a reservation table form, and a contact and inquiry form for users to provide feedback on our services and meals. To be more specific, rather than focusing on customer service, we've designed the website to make it easy for people to examine the menu, place an order, book a table, and provide comments on us. As a consequence, in addition to placing a take-out or dine-in order, providing feedback or a review, or seeing the menu, customers can now focus on convenience. Additionally, management may easily get database information from users.

After completing the first session of the final year project, the first thought that occurs to me is to expand the website's language capabilities. While English is the world's official language, it would be excellent if it could be created in a local language such as Bahasa Malaysia. For example, this initiative will be of little service to the elderly generation of the Malaysian majority if they do not speak English fluently. Additionally, if the app is available in Bahasa Malaysia, Malaysians will be more inclined to use it since it is easier to understand.

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APPENDICES

1. Gantt Chart FYP I

FYP 1												
Tasks	Weeks											
	1	2	3	4	5	6	7	8	9	10	11	12
FYP Title Approval	■											
Identify Problem Statements		■	■									
Objectives, Project Scope			■	■								
Literature Review and research work				■	■							
Researching on existing and similar application					■	■						
Methodology						■	■					
Prepare interview and survey questions							■	■				
Proposal defence presentation								■				
Preparation of software and hardware tools									■	■		
Interim Report draft											■	■
Submission of interim report												■

Table 2: Gantt Chart for the development of an Online Restaurant Management System in 1st Semester (FYP I)

2. Gantt Chart FYP II

FYP II															
Tasks	Weeks														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Doing some research and exploration about Netlify	■	■													
Prepare the flow and tools			■												
Implementation phase (create file, build code for every page)			■	■	■	■	■	■	■	■	■				
Implementation Phase (add transition, background colours, fonts style)								■	■	■					
Testing Phase								■	■	■					
Push source code in the GitHub										■					
Deploy into Netlify											■	■			
Dissertation report progress								■	■	■	■	■			
Dissertation report submission												■			
Viva Presentation															■

Table 3: Gantt Chart for the development of an Online Restaurant Management System in 2nd Semester (FYP II)

3. Use Case Diagram

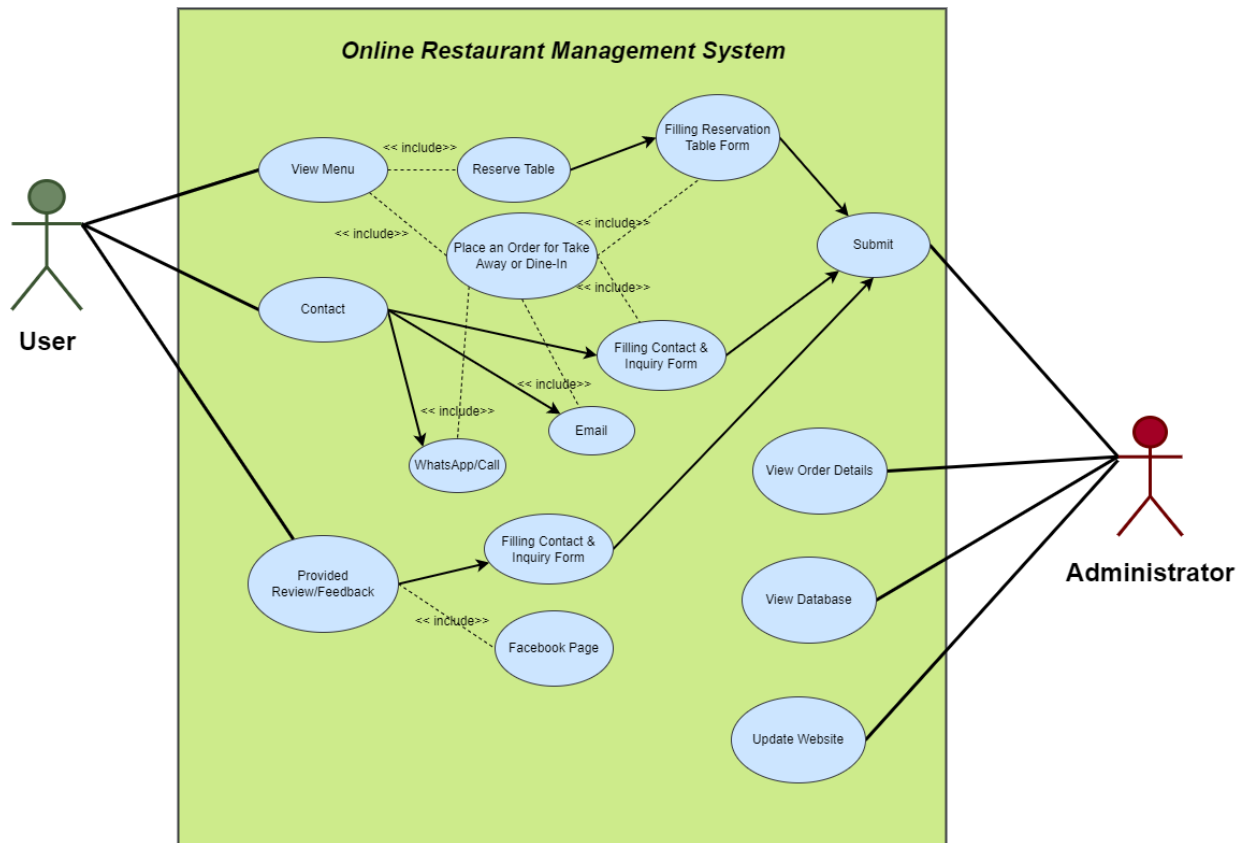


Figure 15: Use Case Diagram for Online Restaurant Management System

4. MVC

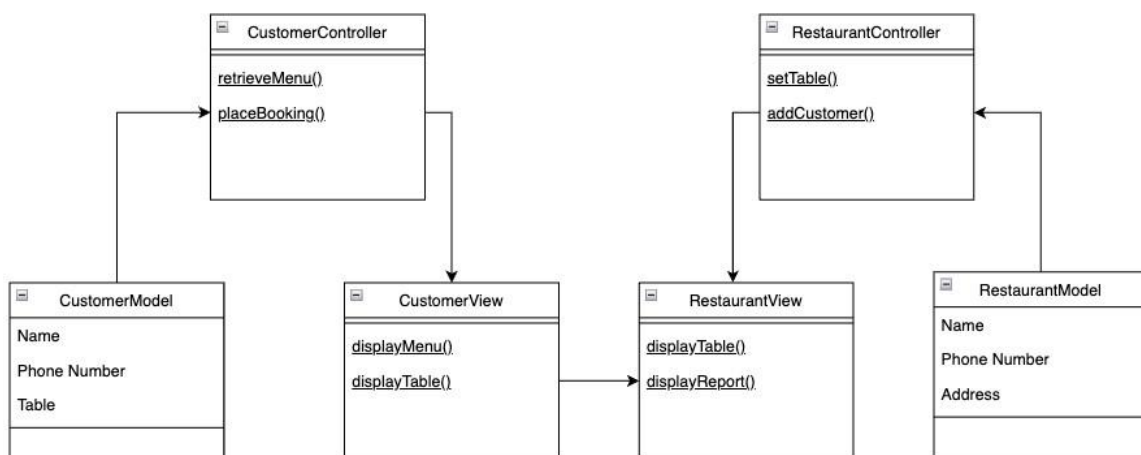


Figure 16: MVC (3-Tier Client Server Pattern)

5. Sequence Diagram

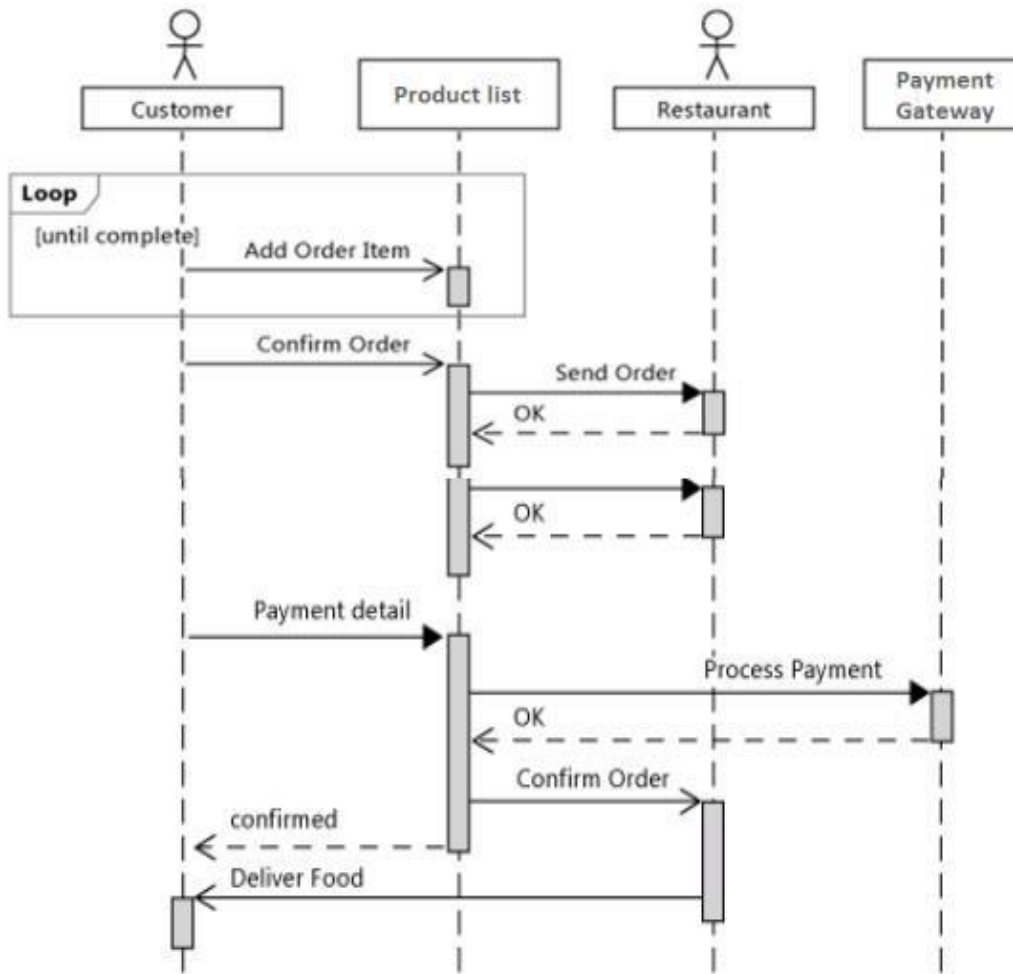


Figure 17: Sequence Diagram

6. Activity Diagram

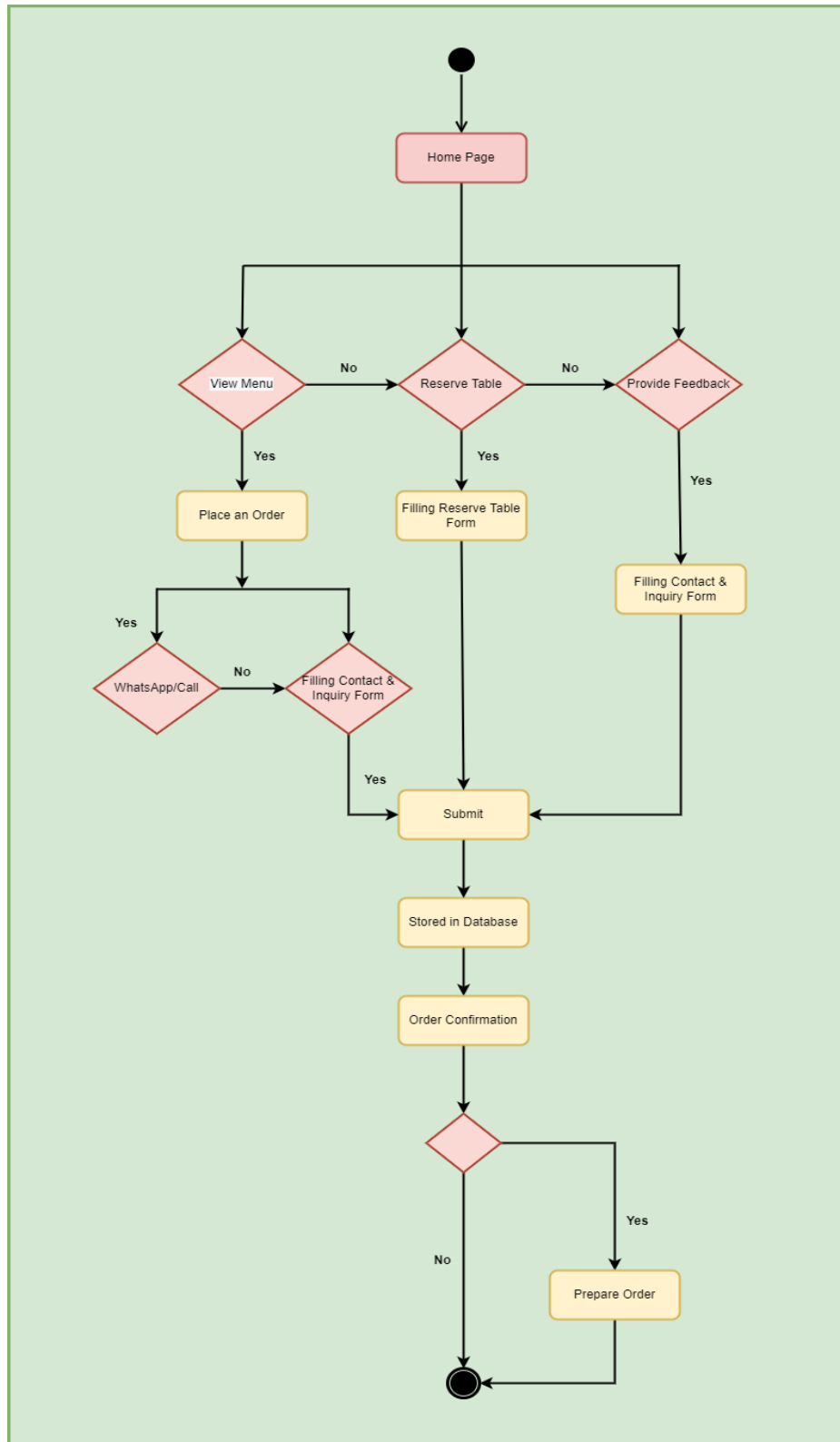


Figure 18: Activity Diagram for an Online Restaurant Management System

7. Design of Interface



Figure 19: Home Page

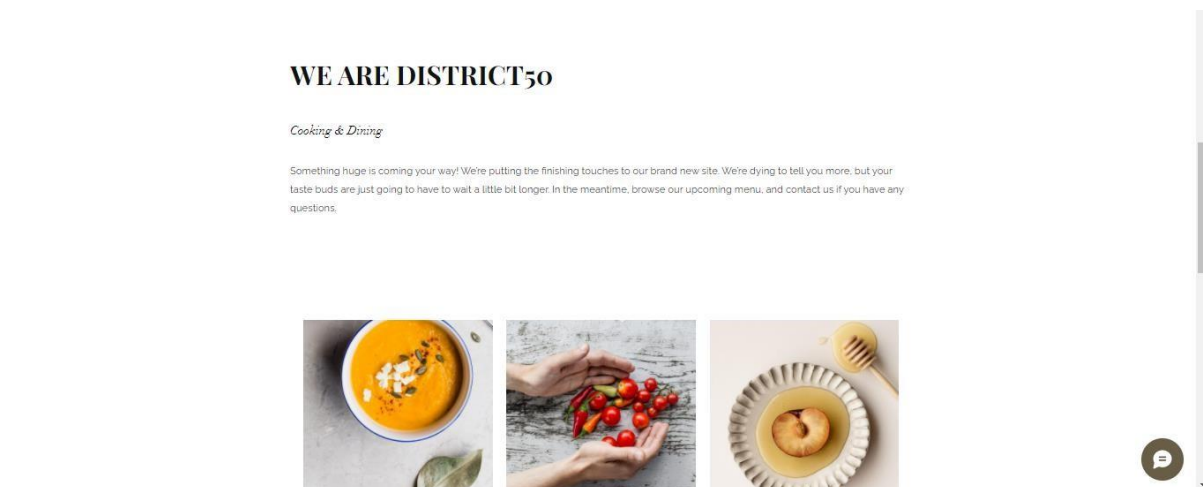


Figure 20: Home Page (About Us)

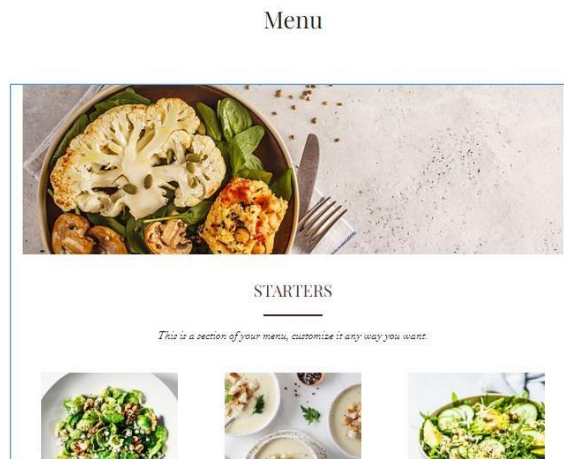


Figure 21: Menu Page

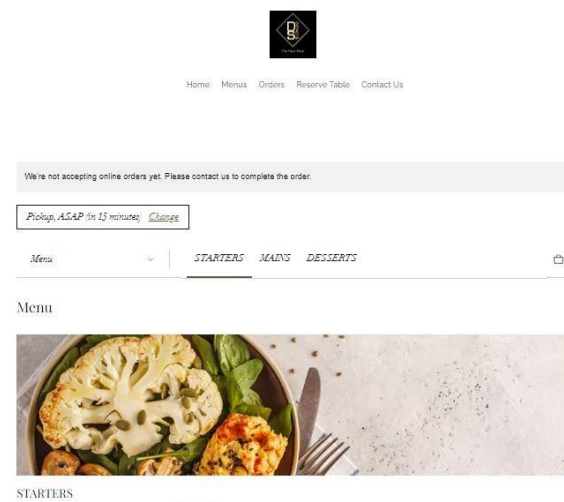


Figure 22: Order Page

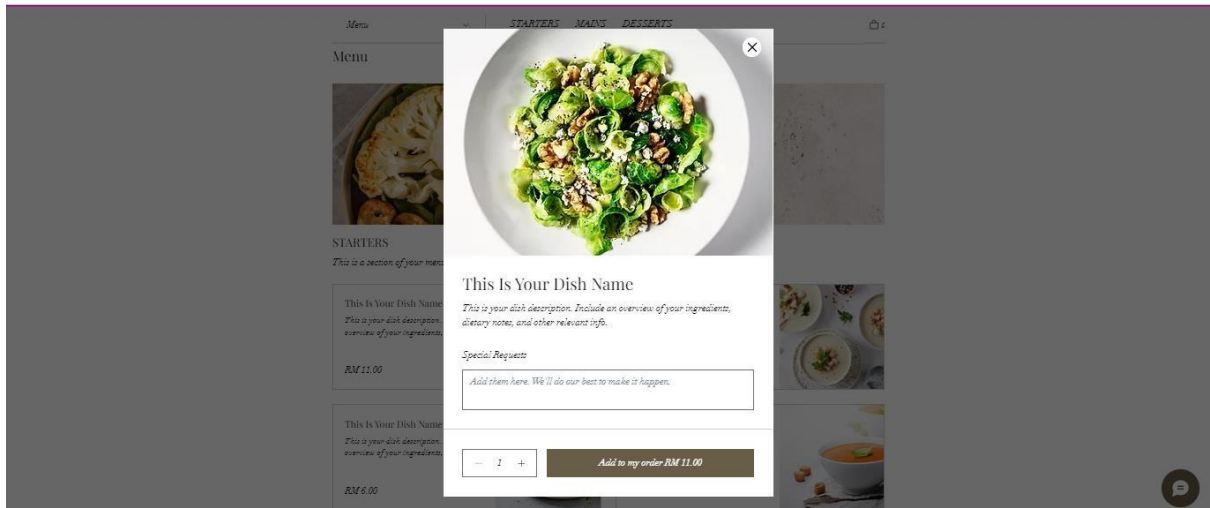


Figure 23: Order Page (Add to My Order)

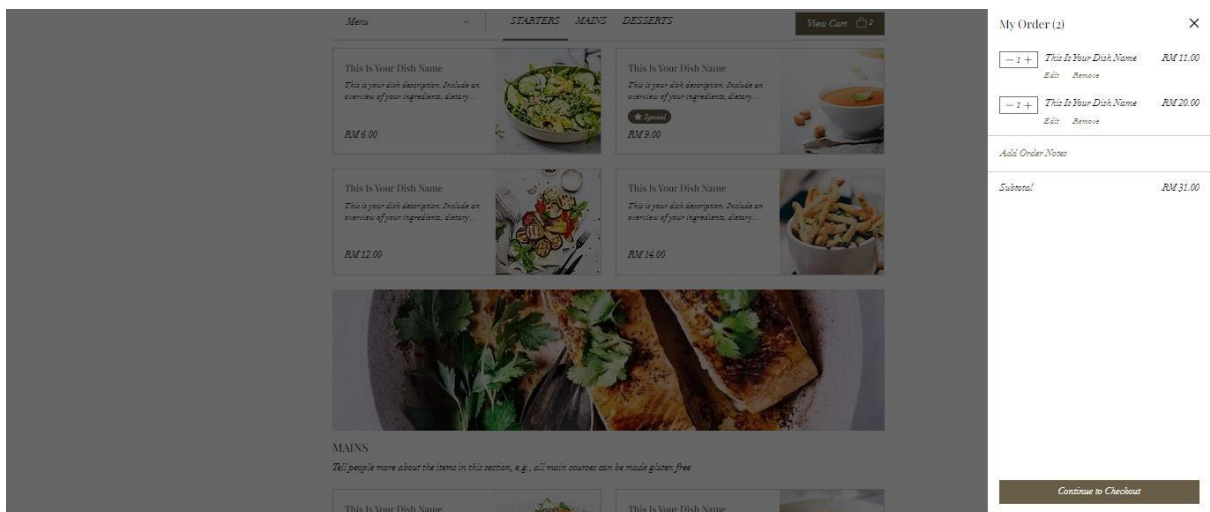


Figure 24: Order Page (My Order)

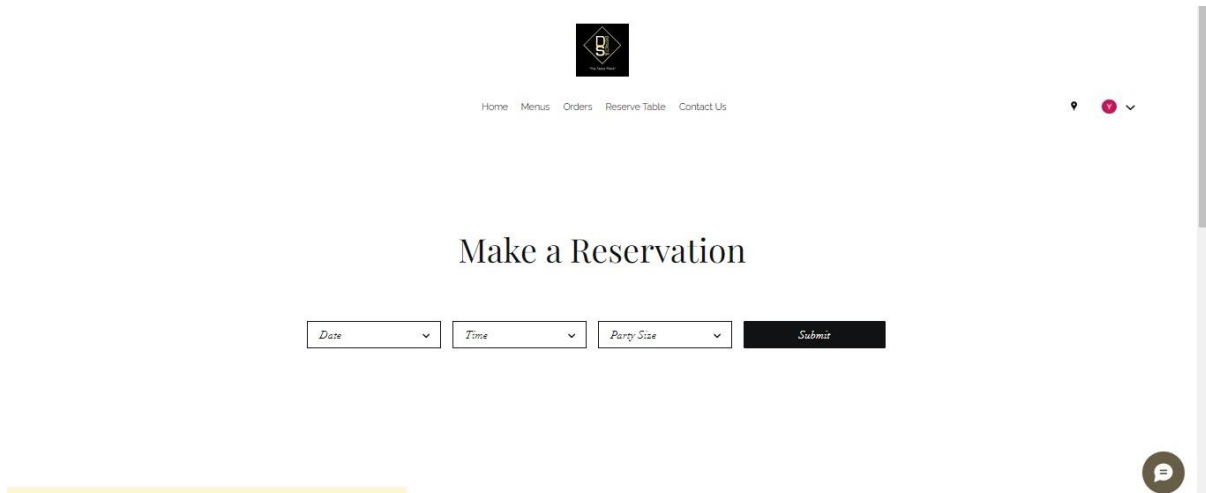


Figure 25: Reserve Table Page

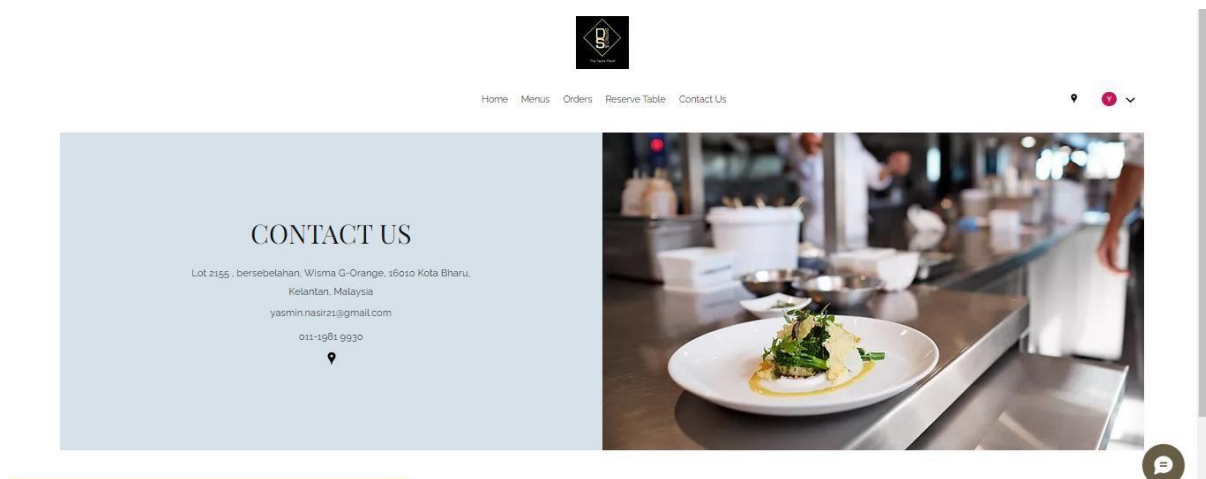


Figure 26: Contact Us Page

8. Results of online survey

What age do you belong to ?

13 responses

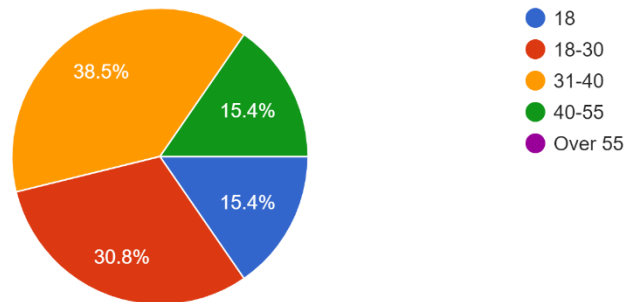


Figure 27: The percentage of respondents of different ages who attempted to access this website.

Gender?

12 responses

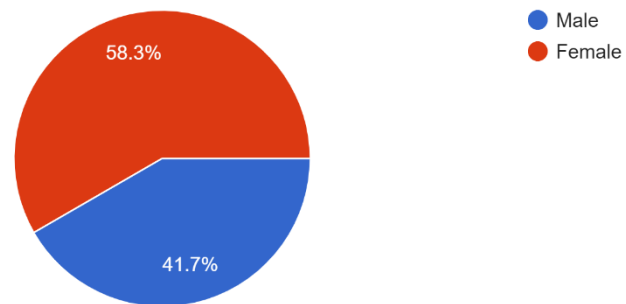


Figure 28: the percentage of respondents of different genders that visit this website

Profession?
12 responses

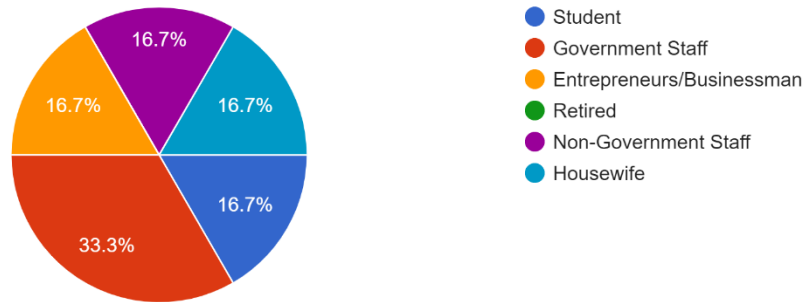


Figure 29: The percentage of responders from various professions who visit this website

How often do you dine at restaurant?
12 responses

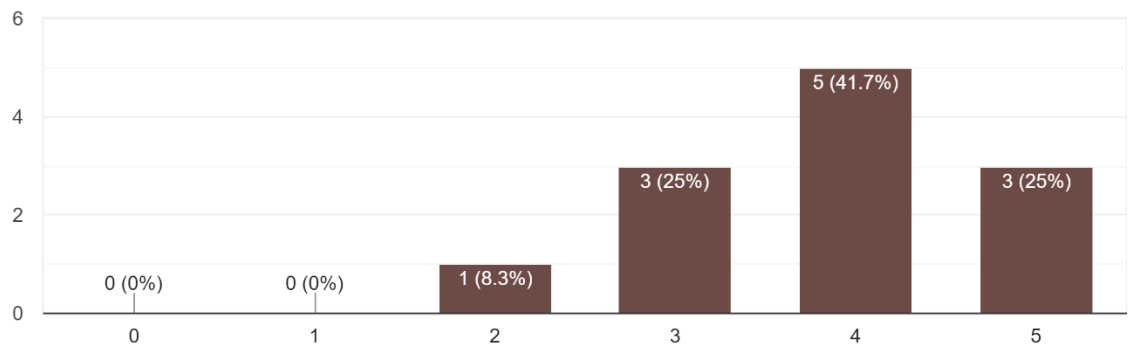


Figure 30: The percentage of respondents who dine in restaurants often or seldom

How would you rate our Website?
13 responses

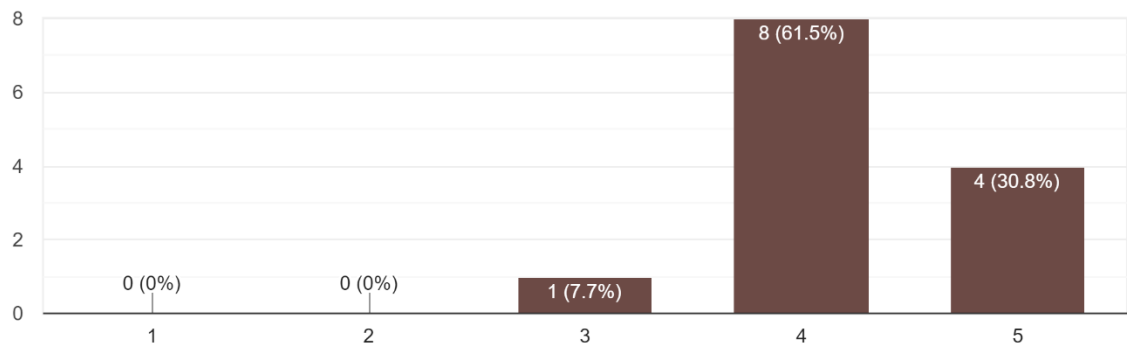


Figure 31: The percentage of respondents who rate our website

9. Integration Test Results

1	Navigation Bar	Click on the navigation bar	The Home Page, Menu Page, Contact Us Page, About Us Page, and Reserve Table Page Button will be shown, and when clicked, the user will be sent directly to the page selected.	Pass
2	District50 Logo	Click on the logo	When user click the button, it will direct go to the Home Page	Pass
3	Explore Menu Button	Click on the explore menu button	This directs the user to the menu page, where they may see all of the available menus.	Pass
4	Reserve Table Button	Click on the reserve table button	This directs the user to the reserve table page, where they may book a table by completing the given reserve table form.	Pass
5	Location Icon	Click on the location icon	This directs the user to the location of District50	Pass
6	WhatsApp Icon	Click on the WhatsApp icon	This button directs the user to the WhatsApp apps, where they can make a take-out or dine-in order or contact the restaurant with any questions.	Pass
7	Contact Now Button	Click on the contact now button	This button directs the user to the contact us page, where they can fill out the form and send us their information and requests.	Pass
8	Email Address Box	Key in the email address	This box allows the user to enter their email address to receive notifications from us on menu updates and special offers.	Pass
9	Submit Button	Click on the submit button	An email address may be submitted by clicking on this button.	Pass

10	Facebook Icon	Click on the Facebook icon	Directs user to our official Facebook page	Pass
11	Instagram Icon	Click on the Instagram icon	Directs user to our official Instagram page	Pass
12	Twitter Icon	Click on the Twitter icon	Directs user to our official Twitter account	Pass
13	Feedback Link	Click on feedback link	This link will direct the user to our Facebook page, which has comments and reviews from other customers regarding our service and meals.	Pass
14	Email Link	Click on the email link	Directs user to our email address which user can direct email us with any question or requests.	Pass
15	Contact & Inquiry Form	Filing the form	User can fill the form given if have any questions or want to place an order or want to give feedback regarding our service and meals	Pass
16	Send Button	Click on the send button	All of the information that the user has entered may be submitted by clicking this button.	Pass
17	Reserve Table Form	Filling the form	User can fill out the form give to book table and entered all the information	Pass

Table 4: Integration Test Results for an Online Restaurant Management System

10. Feedback on Prototype

Table 5: Feedback on Prototype of An Online Restaurant Management System Survey Form

QUESTION	RESPONDENT 1	RESPONDENT 2	RESPONDENT 3	RESPONDENT 4
User-friendly				
The system has a user-friendly graphical user interface (GUI)	4	3	5	5
User can easily navigate from one page to another using this website	5	5	5	4
Informative				
This system will help customer in ordering and reservation	4	4	3	5
The dishes image, the button, form and other functionality are attractive and easy to understand	3	4	5	4
This system help user to provide the information	4	3	3	5
The information presented is simple and straightforward	5	3	4	5
User Feedback				
Are you interested using this website?	3	4	5	4

Are you familiar with any website or application for online and reservation system?	No	Yes	Yes	No
How might we improve this system in the future to make it better?	Add “add to cart” page	-	-	Add more meal options