

# TECHNICAL REPORT FINAL YEAR PROJECT

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KEMENTERIAN PENGAJIAN TINGGI



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**DFT 50114**  
**INTEGRATED PROJECT**  
**SESSION 2 2022/2023**  
**TECHNICAL REPORT**

**RESTAURANT BILLING SYSTEM PROJECT**

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## DECLARATION

We hereby that the technical report entitled “Restaurant Billing System” is based on the original work under the supervision and guidance of Puan Ezzatus Syima Binti Azizan except for excerpts and excerpts that have been acknowledged with accordingly. we also declare that it has never been and simultaneously handed to any diploma or other award at polytechnic or other institutions.

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**PROJECT TITLE : RESTAURANT BILLING SYSTEM**

**SESSION : 1 2022/2023**

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“This technical report has been read, reviewed and approved in terms of scope and quality for Awarding of Diploma in Information Technology (Digital Technology)”.

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## **ABSTRACT**

The billing system was developed to provide an efficient system to Restaurant Pak Mokhtar. Previously, this restaurant used manual methods in managing things such as calculating bills, storing receipt data and so on. Technical errors often occur such as loss of customer information, irregular money calculations and related issues. The paperwork method used by this restaurant causes a lot of trouble and slightly disturbs the restaurant management. Because of that, we have decided to build a billing system in this store to help the management of this restaurant run more smoothly. The billing system that was built consists of several interfaces that are easy and suitable for use by everyone. This system is able to accurately calculate the average bill, display food and set prices and store each customer's data. So, this billing system is developed for all the records to be stored in a database which will be more secure with a backup in case any data lost can be restored back.

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## **1.0 PROJECT PLAN**

### **1.1 INTRODUCTION**

In an organisation, the most crucial aspect of the sales process is the billing system. A streamlined billing system is setup after careful consideration and preparation. Recent years have seen a significant increase in the use of billing system software to assist organisations in increasing the effectiveness of their operational procedures. Choosing a billing system depends on the requirements of each business. For small businesses, especially those that still use manual methods in management, the use of this billing system helps a lot in simplifying and speeding up the business process.

Pak Mokhtar's restaurant, a restaurant that operates from Monday to Friday selling various types of food from 12 noon to 7 pm. This restaurant located in Kampung Malaysia Raya, Sungai Besi was our choice in developing project billing system. This is because after being researched, this restaurant was found to have some shortcomings which we would like to help by developing a billing system.

## 1.2 PROBLEM STATEMENT

Based on the situation that has been mentioned above, the problem spotted was the amount of calculation at the restaurant. People really value time and will not waste it on any small matters especially when they are running out of time.

- Lack of workers  
There is only one worker who is responsible for the payment. Other workers are busy with their own work. This causes the line of customers to make payments to be very long, especially during peak hours.
- Communication between workers and customers  
There was also the problem of communication since the worker was not really fluent in Bahasa Malaysia regarding the nationality, they had which is Indonesia.
- An error occurred in the calculation process
  1. The worker that was responsible for the calculation sometimes forgot the price of a certain food. Because of this, the worker needs to check the price from the price list.
  2. Take a long time when the calculation was done manually using a calculator.
  3. Some mistake will happen during the calculation of food when there was innumerable amount of customer at the same time.
- Method of payment  
Most of the restaurants or even small stalls on the roadside already start to apply online payments such as BOOST, QR PAY, and DUIT NOW but this restaurant yet cannot apply the same way. The reason is that there are still many elderly or middle age customer that does not skillful in the modern technology.



### **1.3 OBJECTIVE**

1. To develop a computer-based billing system for accurate bill calculation.
2. To store data that contain every price of food and drink.
3. To store every customer payment information and food-related data.

### **1.4 PROJECT SCOPE**

To help Pak Mokhtar's store receive the amount of cash it deserves, this project was created. We use Figma because it is a free website for sketching prototypes. Then we use PHP to create a user interface and keep a record of sales payments. Below is the scope of this project, user scope and system scope.

#### **1.4.1 USER SCOPE**

##### **a) Staff:**

- i. This system will be used by Pak Mokhtar's restaurant employees to get the correct amount of payment, especially when it involves a large amount.
- ii. Employees take orders from customers based on the menu that is available.

##### **b) Restaurant Owner**

- i. Employees can see the food data entry that has been ordered every day.
- ii. Restaurant owners can see daily profits through the system that will be built.

#### **1.4.2 SYSTEM SCOPE**

The primary goal of this billing system is to create an information system that will help Pak Mokhtar's restaurant automate manual transactions.

- Daily and monthly sales reports should be generated using the suggested automated system.
- Every payment submitted into the system will produce a receipt.
- Each payment's computation view will be shown by the software.
- The Billing System complies with two user logins with various access levels for management security and privacy.
- The customer's order will be saved and recognized by the system

## 1.5 LITERATURE REVIEW

Analysis in terms of advantages and disadvantages is carried out to develop a better system. The review of the literature will enable system performance to be increased, hence reducing issues that frequently arise in some systems, such as system loading, functionality issues, and similar issues.

**QuickBooks** online was chosen as the comparison's first system. The system is suitable for small business. Growing firms benefit from its assistance in streamlining time-consuming and laborious accounting and financial management procedures, freeing up more time for other critical obligations. Additionally, QuickBooks Online provides automated tax computations, bill administration, sales monitoring, invoice management, cost tracking and more.

The next system selected is **Sage Business Cloud Accounting**, which is renowned for being user-friendly. The system includes a robust dashboard that can provide images reflecting your transactions and, as a result, give you a broad overview of how your firm is doing.

**vCita** is the final system in our comparison. It is a collection of strong tools that includes solutions for marketing, CRM, billing and invoicing, and scheduling. The solution's extensive capabilities enable users to manage their daily business operations from a single interface. Additionally, vCita expedites billing and enables customers to pay online with a credit card or PayPal.

System function	QuickBooks online	Sage Business Cloud Accounting	vCita
Login page	✓	✓	✓
Easy to use	✓	✗	✓
Cash payment	✗	✓	✗
Store data	✗	✓	✓
Security	✓	✓	✓

**Table 5.1**

We intend to include the following functionalities in the system that will be built:

1. Create a login page for administrators and employees to utilise to access the system.
2. Has an easy-to-use interface system. This is to make the system more user-friendly so that not only young people but also elderly people may utilise it.
3. A system that continues to employ simple money payment methods that are more acceptable for those who are still uncomfortable with internet payments. Furthermore, difficulties such as insufficient balance cards, rejected cards, and so on are reduced.
4. Data storage that is more safe, complete, and quick. Customer payment information, for example, can be preserved by simply clicking the save data button. This allows it to avoid losing consumers' purchase history.
5. This system has its own security in that the login username and password are stored in the database. Not everyone has the freedom to enter their own login and password.

## 1.6 METHODOLOGY

The methodology our group used to develop the restaurant billing system is an agile methodology. We chose this methodology because it helps teams manage their work more efficiently and get work done more effectively, while delivering the highest quality product on budget.



### 1.6.1 Planning phase

Planning phase is a crucial phase in developing our new system. The reason is to identify the problems encountered by the restaurant owner. In this phase, we will identify the purpose and method to develop the system. Other than that this method also figure out what goals need to be applied to create a system that user need.

### 1.6.2 Design phase

In this phase, our group decide to design our project restaurant billing system. This phase will also explain the design sketched to make it easier for the system owner understand how the system will work.

### 1.6.3 Development Phase

After sketching the design that has been made, we will make a system that can function completely, that is, by making coding so that it can be used in reality. This phase will take a long time to complete a coding and prepare a system that can function completely and well.

#### **1.6.4 Testing Phase**

After the system finished develop, our group will test the system for checking some error that appear in the system. This phase, very important because our group test the system until the error is no longer found. The testing begins when the project almost complete, so our group can configure the error.

#### **1.6.5 Deployment Phase**

After the testing phase passes successfully, the system is ready to launch or publish in the website. Other than that, this system is ready to be used in a real environment by all end users of the system. Next, users will know more in-depth and can see for themselves how this system functions according to the flow in more detail.

#### **1.6.6 Review Phase**

In this last phase, the owner will give some feedback for our system project based on the way it works. Then, this phase also made for user to find out if something is wrong with the system so it can be improved.

## 1.7 GANTT CHART

1	Task	Date started	Date ended	Duration
2	<b>Planning phase</b>	11/9/2022	18/9/2022	7 Days
3	Identify a problem statement	11/9/2022	12/9/2022	3 Days
4	Identify a objective	12/9/2022	14/9/2022	2 Days
5	Identify scope project	14/9/2022	16/9/2022	2 Days
6	Identify total expenses	16/9/2022	18/9/2022	2 Days
7				
8	<b>Design phase</b>	20/9/2022	27/9/2022	7 Days
9	sketch a design of system	20/9/2022	24/9/2022	4 Days
10	sketch interface in the system	24/9/2022	27/9/2022	3 days
11				
12	<b>Development phase</b>	30/9/2022	2/11/2022	1 Month 3 Days
13	create coding of interface	30/9/2022	9/10/2022	10 Days
14	make a programming to build system	11/10/2022	2/11/2022	23 Days
15				
16	<b>Testing phase</b>	5/11/2022	23/11/2022	19 Days
17	make test on each interface	5/11/2022	10/11/2022	6 Days
18	do maintenance	11/11/2022	23/11/2022	13 Days
19				
20	<b>Deployment phase</b>	26/11/2022	6/12/2022	11 Days
21	publish the system	26/11/2022	6/12/2022	11 Days
22				
23	<b>Review phase</b>	9/12/2022	15/12/2022	6 Days
24	Present the system	9/12/2022	15/12/2022	6 Days



## **2.0 REQUIREMENT SPECIFICATION**

### **2.1 FUNCTIONAL REQUIREMENT**

#### **2.1.1 Authentication**

- The system must allow the user to log in to the system by entering the username and password that have been set accurately.
- This system allows users to log in as admin or staff.

#### **2.1.2 Interfaces**

- This system allows users to select the desired page by clicking on the bar on the left side.
- Users can use the search bar to find the data they need.
- This system allows users to print customer payment receipts.

### **2.2 NON-FUNCTIONAL REQUIREMENT**

#### **2.2.1 Usability**

- The error rate of users submitting the payment details must not exceed 10 percent.
- User learning in using this system should be fast because of the easy-to-understand interface.
- This system offers a simple and appealing design.

## 2.3 HARDWARE AND SOFTWARE REQUIREMENT

### 2.3.1 HARDWARE SPECIFICATION

Hardware	Description
Laptop Model	Dell Inspiron 15 3000
Processor	AMD Ryzen 3 3250U with Radeon Graphics
RAM	12 GB
Hard Disk space	256 GB + 1TB
Display	1920 x 1080, 60 hz
Others	Keyboard RK71, Mouse Armaggeddon Raven - III

Hardware	Description
Laptop Model	HP Pavilion Gaming 15
Processor	NVIDIA GeForce GTX 1650(4 GB GDDR6 dedicated)
RAM	8 GB
Hard Disk space	512 GB
Display	1920 x 1080, 144 hz
Others	HP backlit keypad, HP touchpad

### 2.3.2 SOFTWARE SPECIFICATION

Software	Description
Server Environment	
Operating System	Microsoft Windows 10
Programming Tool	Visual Studio Code v1.74
Database server	MySQL 5.2.0 database (Windows)
Web Server	Apache 3.3.0
Client Environment	
Internet Browser	Google Chrome Version 108.0.5359.100

Software	Description
Server Environment	
Operating System	Microsoft Windows 11
Programming Tool	Visual Studio Code v1.74
Database server	MySQL 5.2.0 database (Windows)
Web Server	Apache 3.3.0
Client Environment	
Internet Browser	Google Chrome Version 108.0.5359.100

## 2.4 SYSTEM CONFIGURATIONS

### 2.4.1 DATABASE AND MAIN COMPONENTS

1. Start Apache and MySQL by clicking the start button in the Control Panel.Xampp. Wait for Apache and MySQL to turn green.

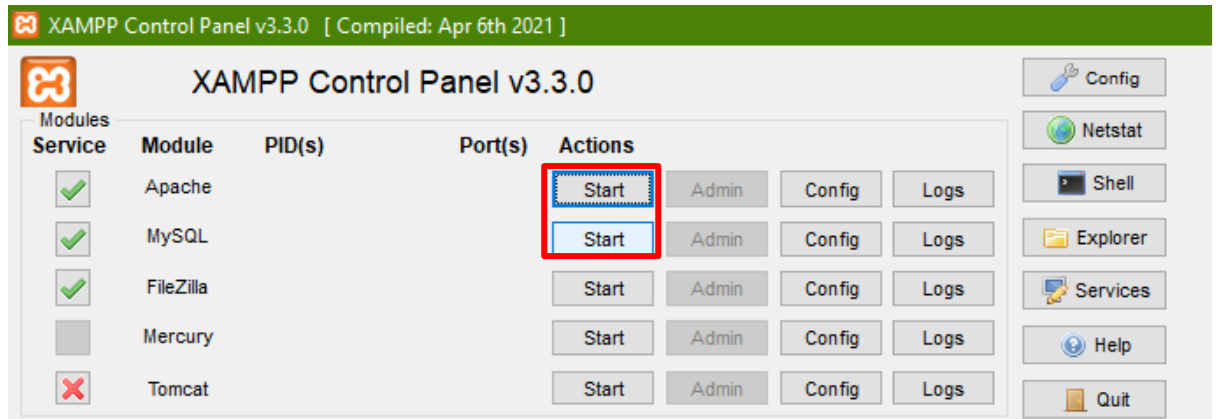


FIGURE 2.4.1 XAMPP CONTROL PANEL

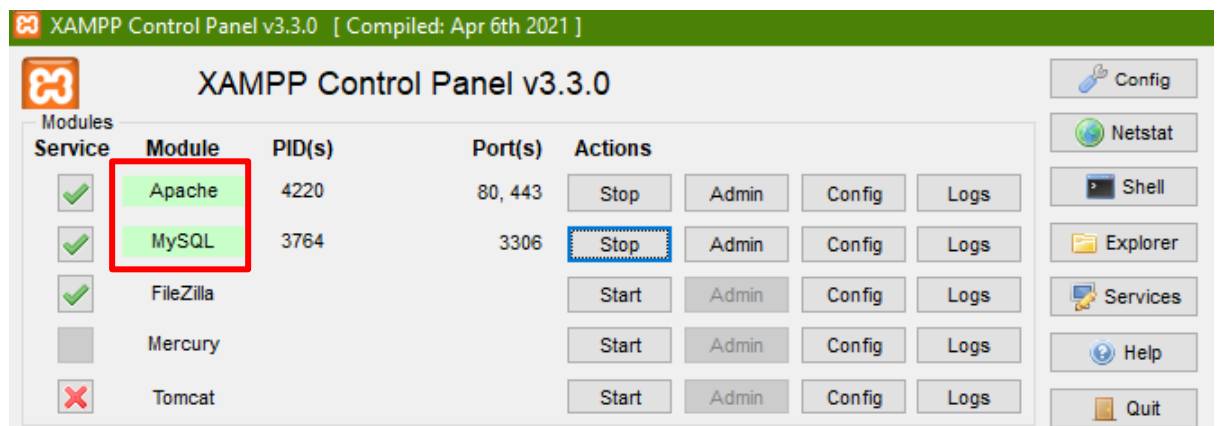


FIGURE 2.4.1 XAMPP CONTROL PANEL



2. Click the Admin button on MySQL to go to the PhpMyAdmin page

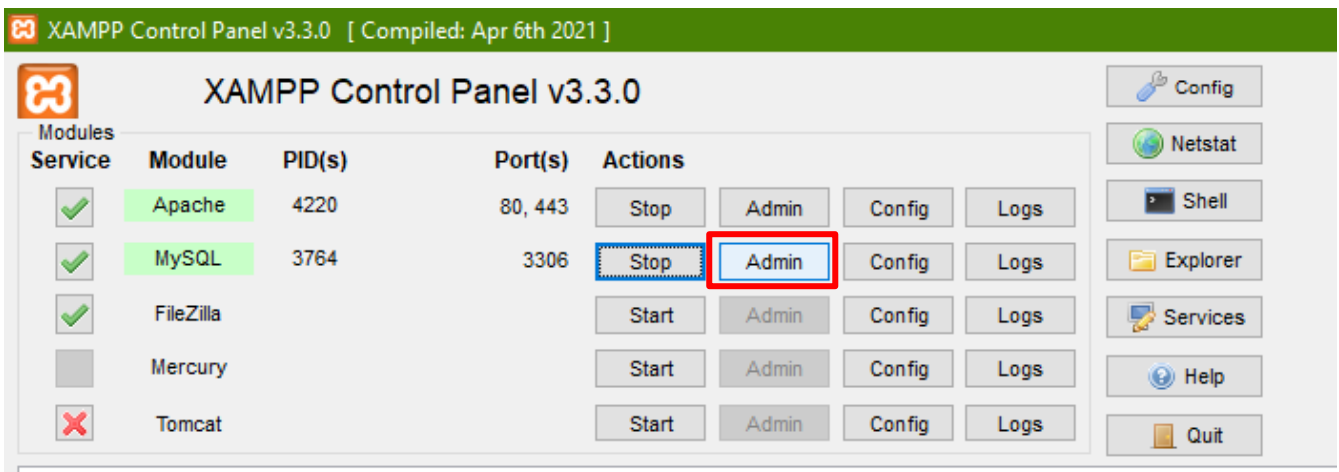


FIGURE 2.4.1 XAMPP CONTROL PANEL

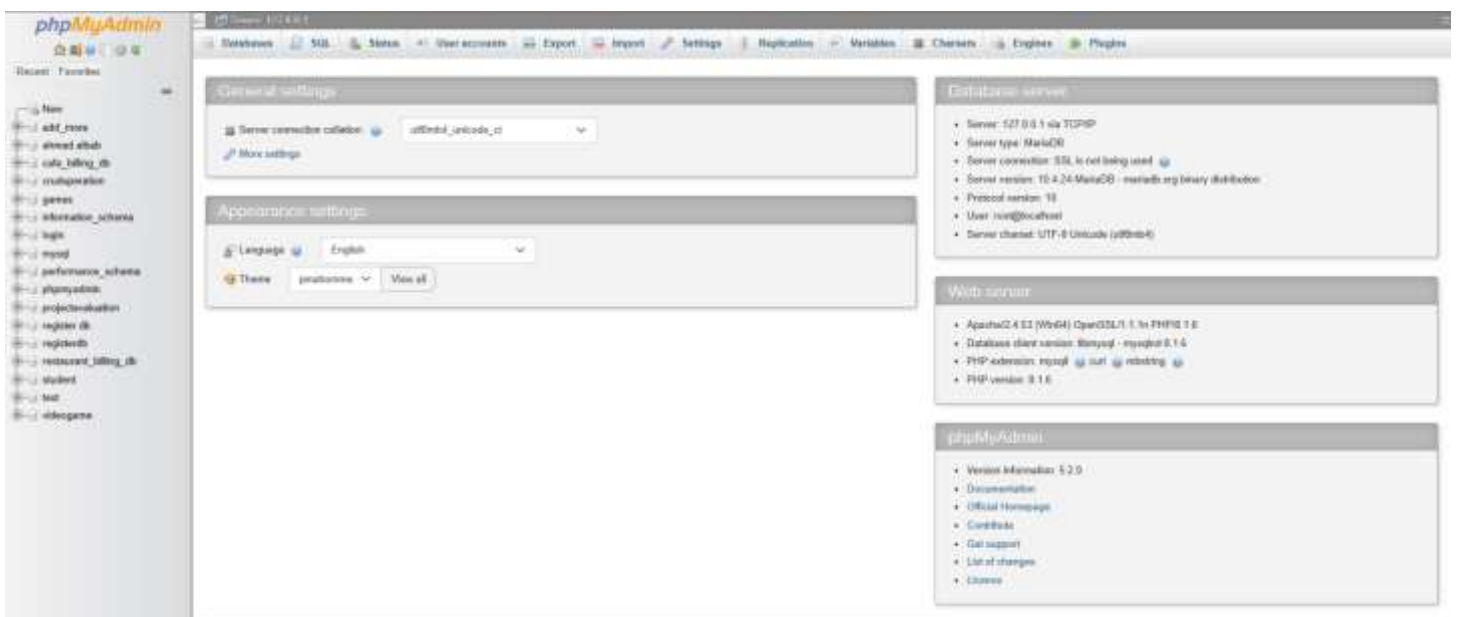


FIGURE 2.4.1 PHPMYADMIN

3. Click new for create new database for this system.

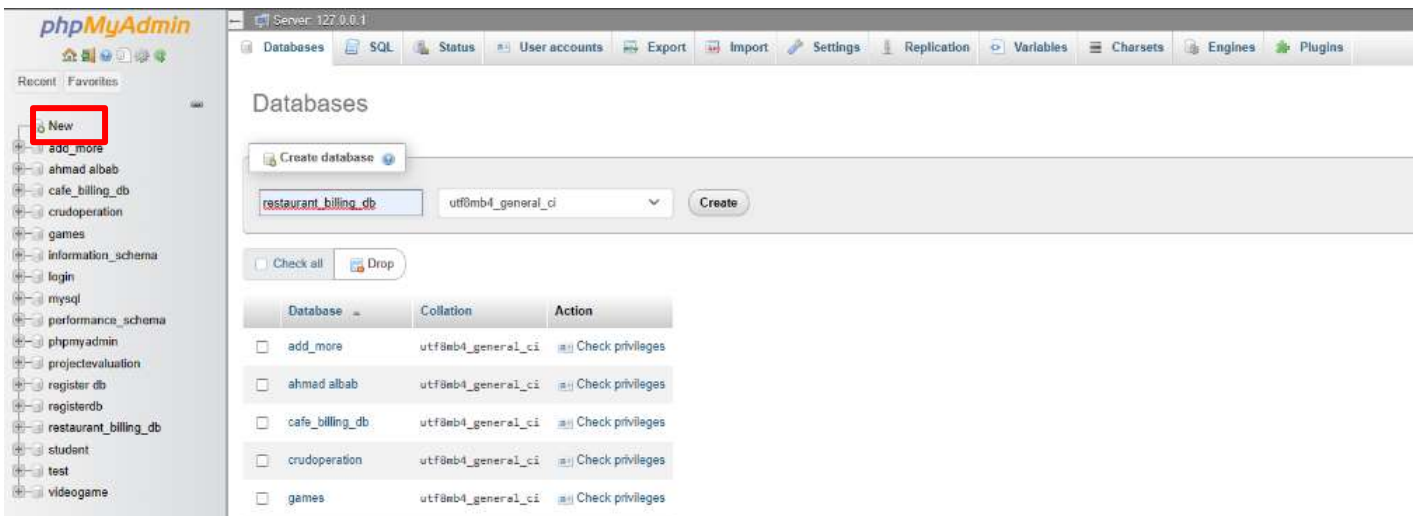


FIGURE 2.4.1 CREATE NEW DATABASE

4. Import the provided SQL file to this system and click go. Then you can see some of the available database tables.

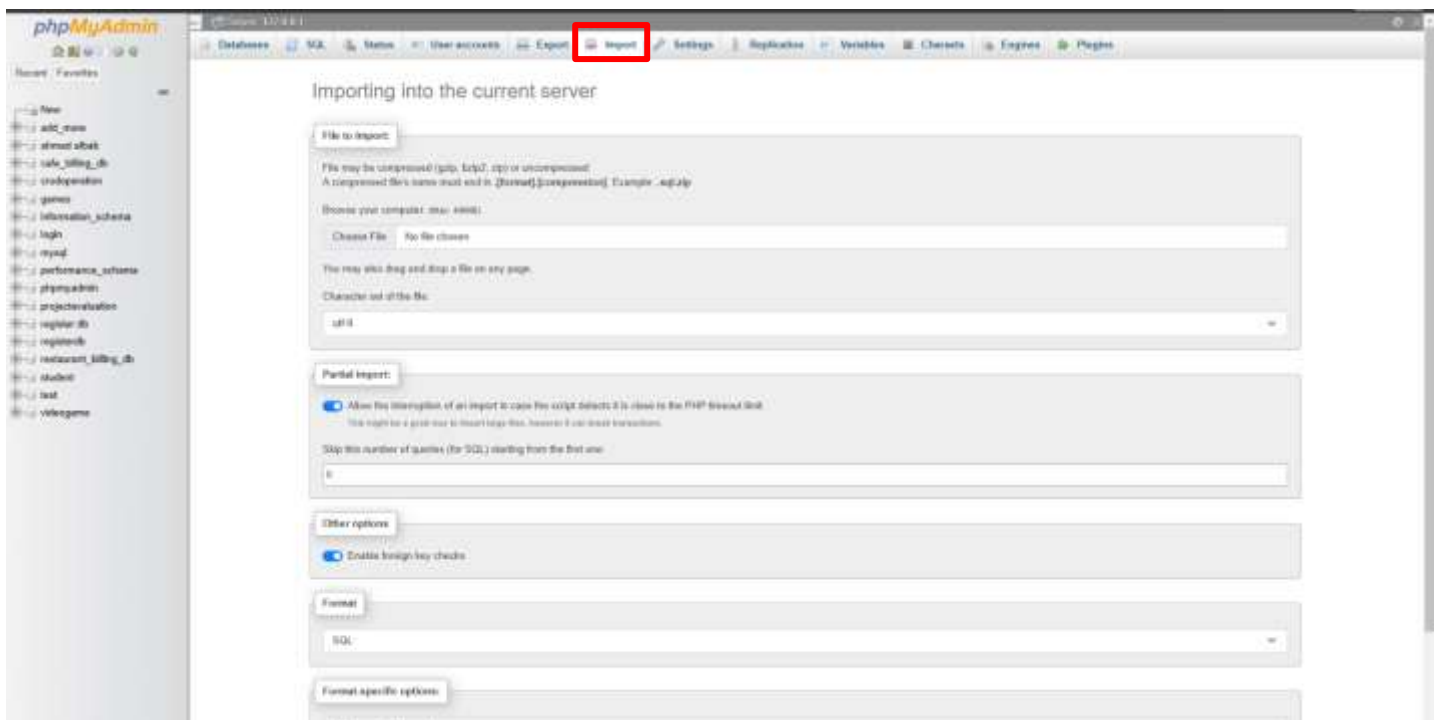


FIGURE 2.4.1 IMPORT FILE

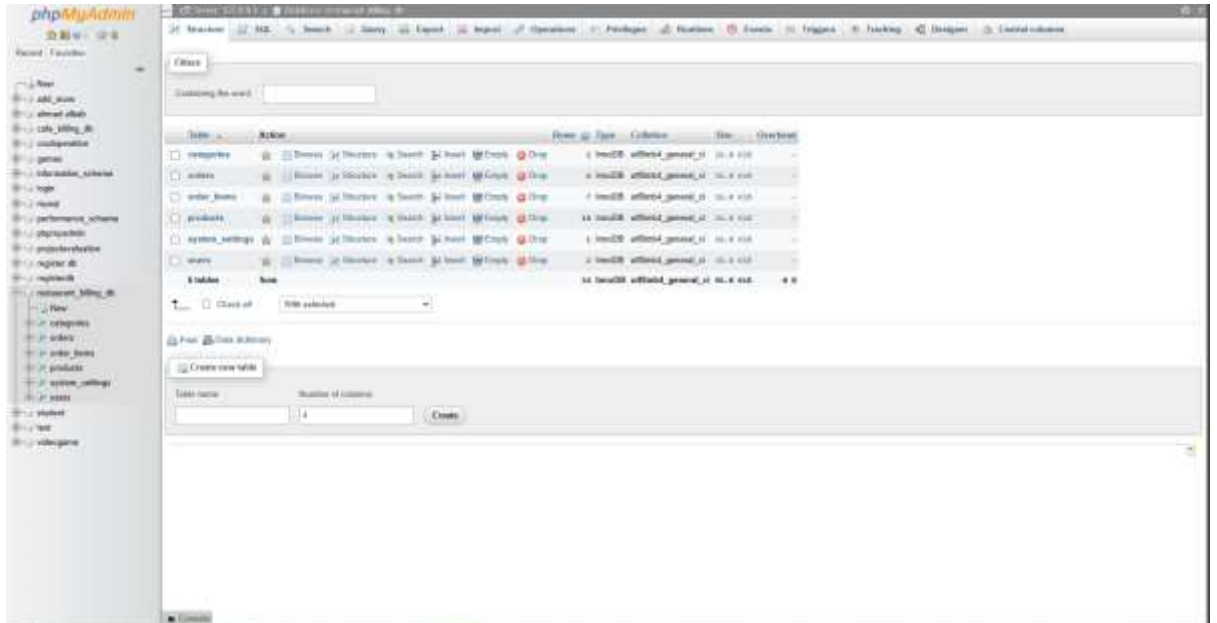


FIGURE 2.4.1 DATABASE

5. Finally, you need to enter localhost and access the restaurant billing system and you can see the login page of the system.



FIGURE 2.4.1 LOG IN PAGE

## **2.5 SECURITY REQUIREMENT/EXCEPTIONAL HANDLING**

### **1. Encryption**

The password encrypts for more high security. The password decrypt when the user input the same with user database.

### **2. Exception Handling**

When the user input wrong password there will go stay at login page until the password correct to go to the main page

### **3. Form Validation**

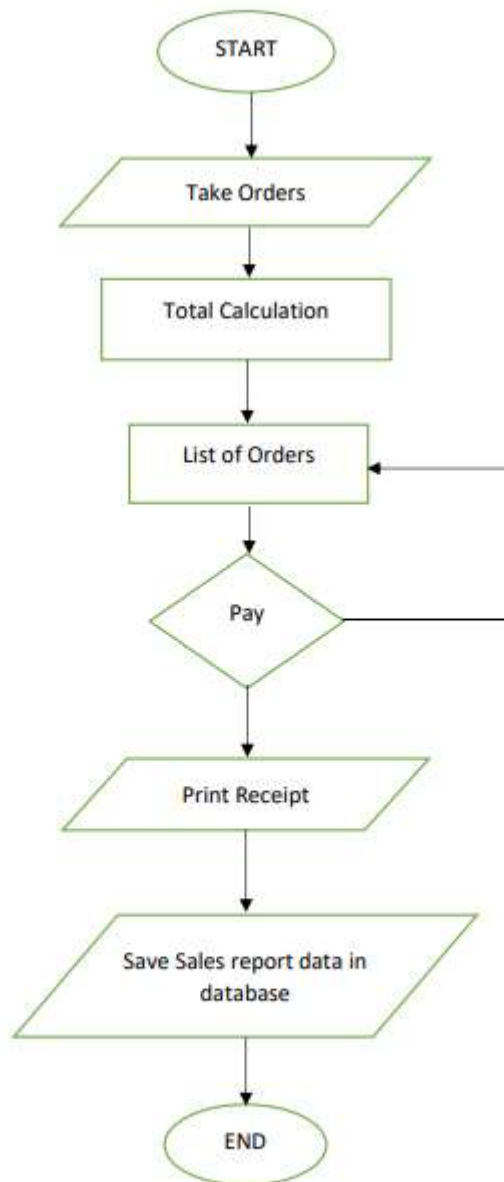
When user input leave blank in the textbox, there will pop up a message for fill the blank space

### 3.0 FINAL DESIGN

#### 3.1 LOGICAL DESIGN

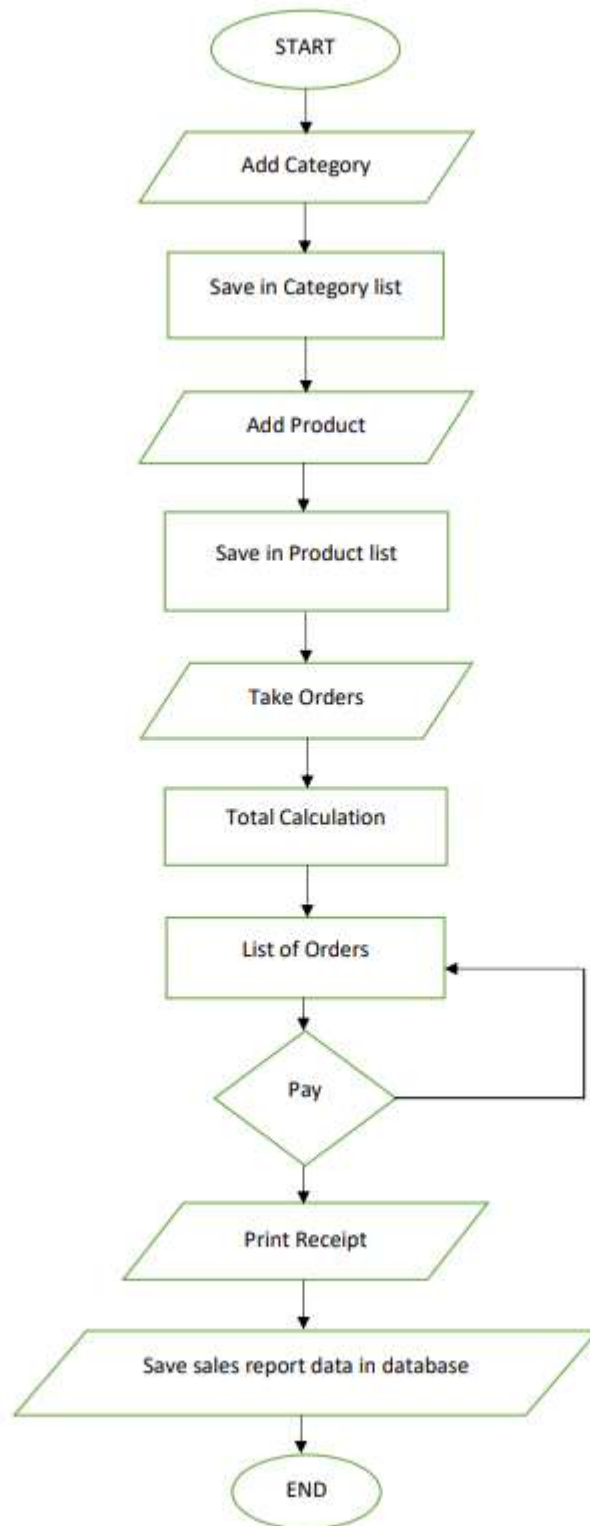
##### 3.1.1 FLOWCHART

###### USERS

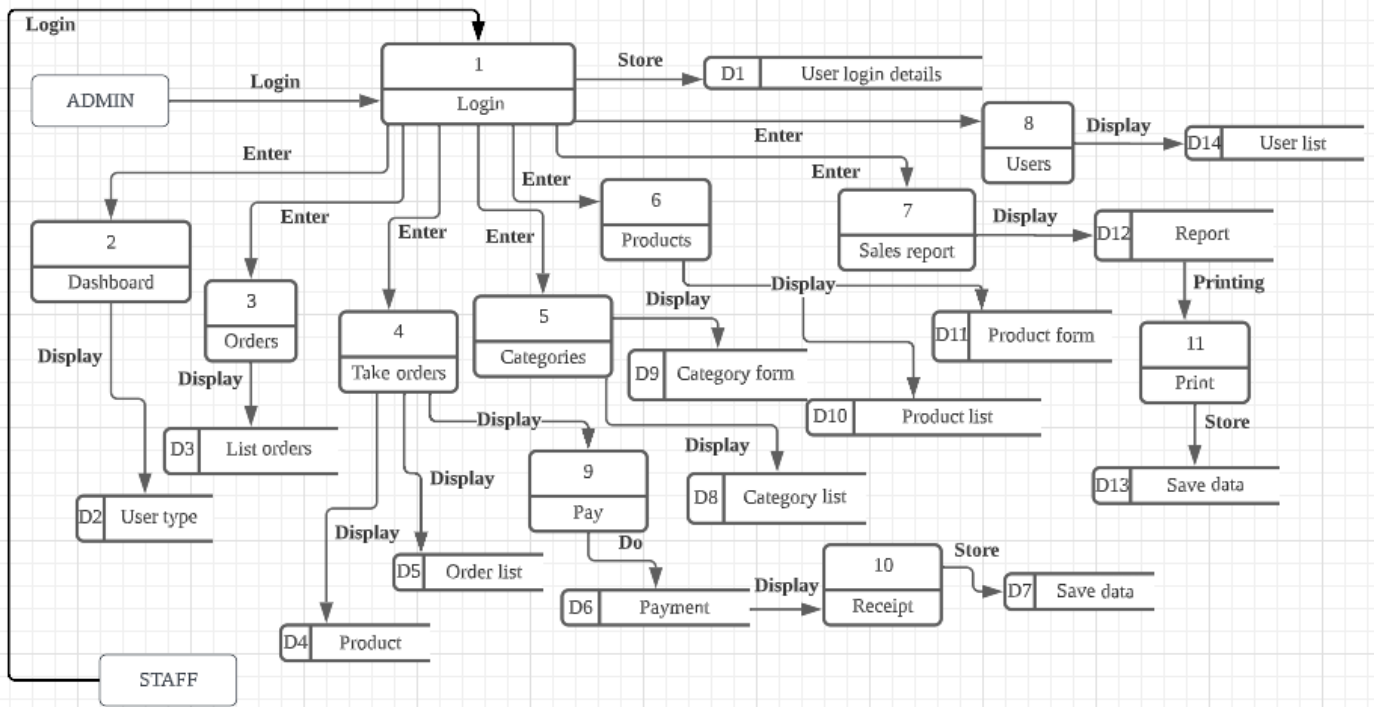


## ADMIN

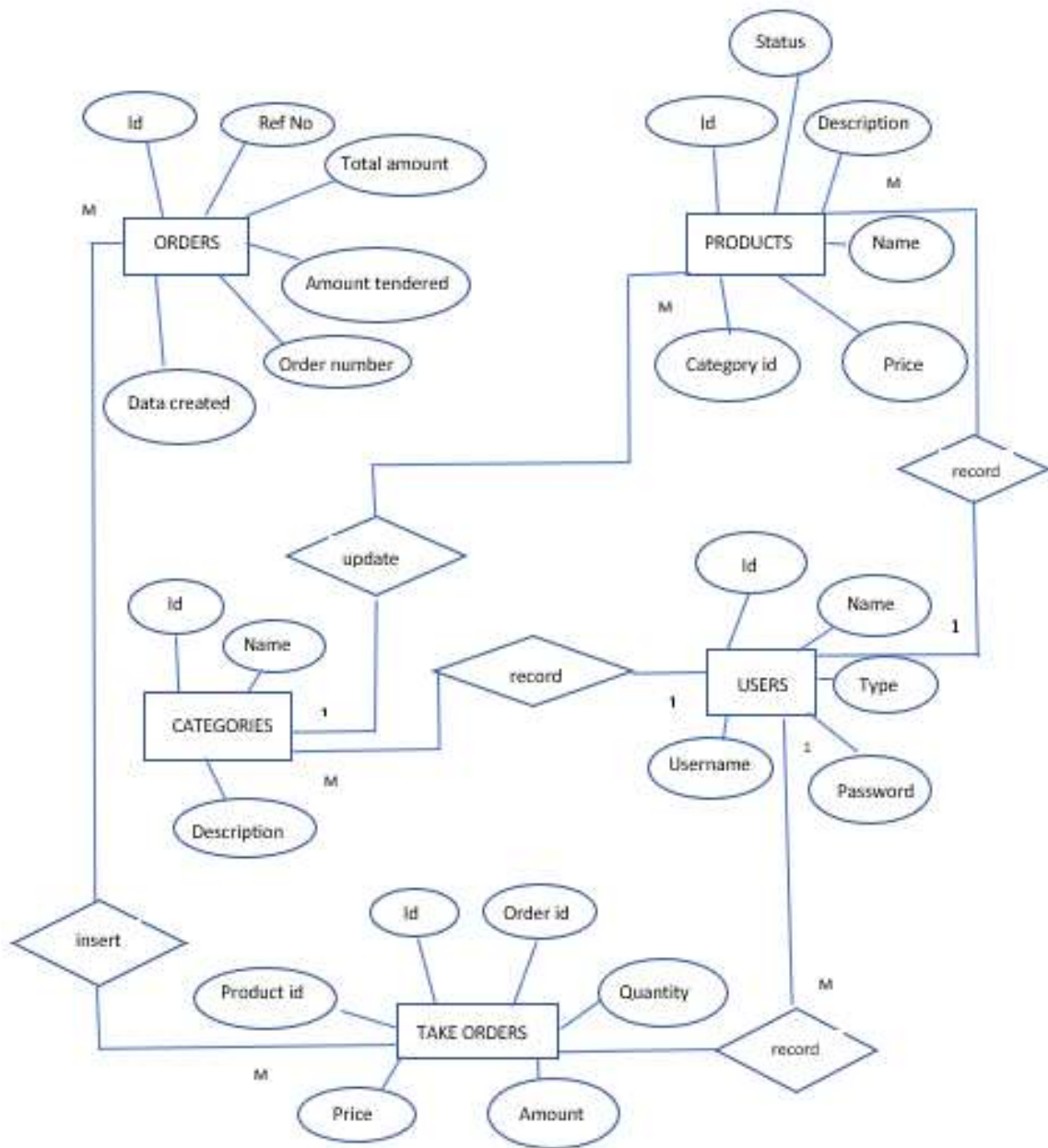
\*\*\*\*\*



### 3.1.2 DATA FLOW DIAGRAM (DFD)



### 3.1.3 ENTITY RELATIONSHIP DIAGRAM





## 3.2 PHYSICAL DESIGN/EXPERIMENTAL CONCEPT

### 3.2.1 LOGIN PAGE



FIGURE 3.2.1 LOGIN PAGE

### 3.2.2 HOMEPAGE/DASHBOARD

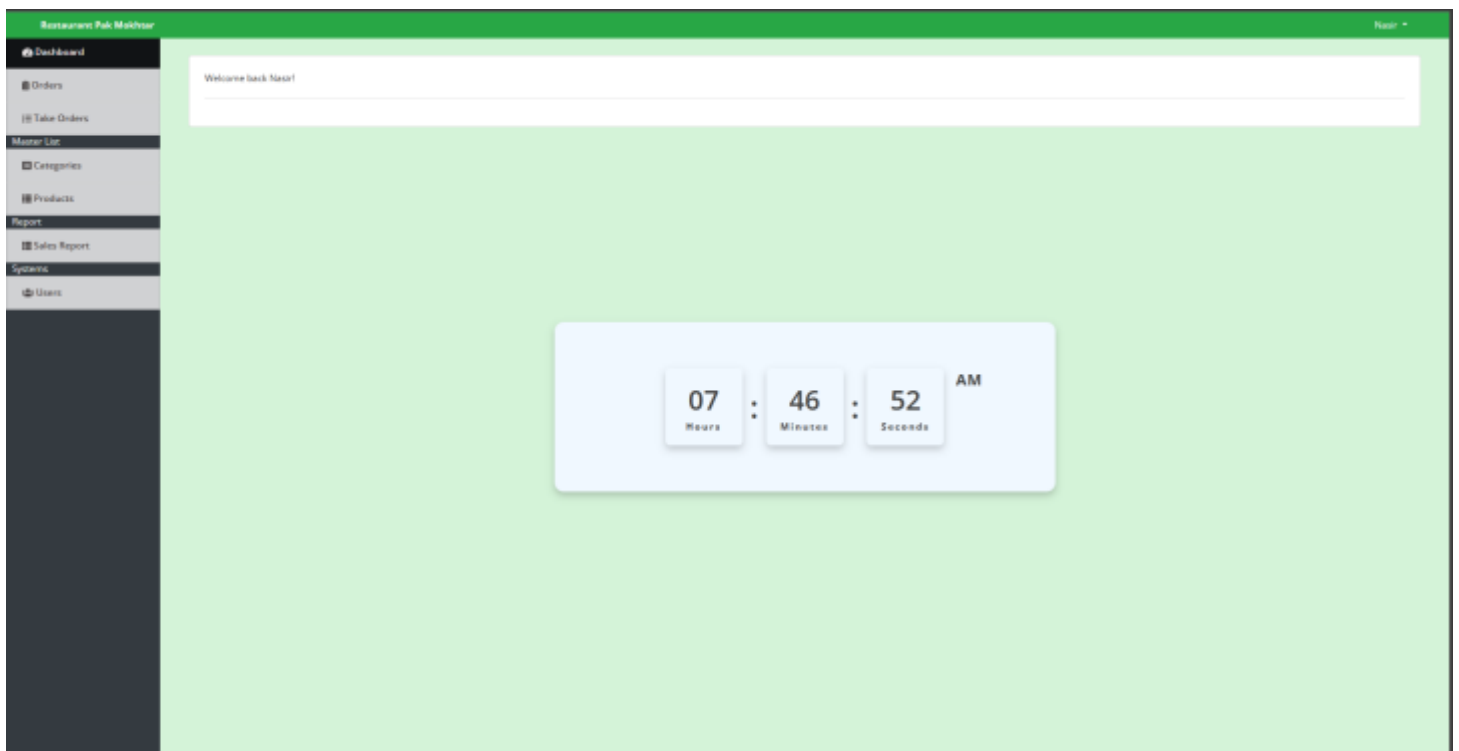


FIGURE 3.2.2 HOMEPAGE/DASHBOARD

### 3.2.3 PREVIOUS ORDERS PAGE

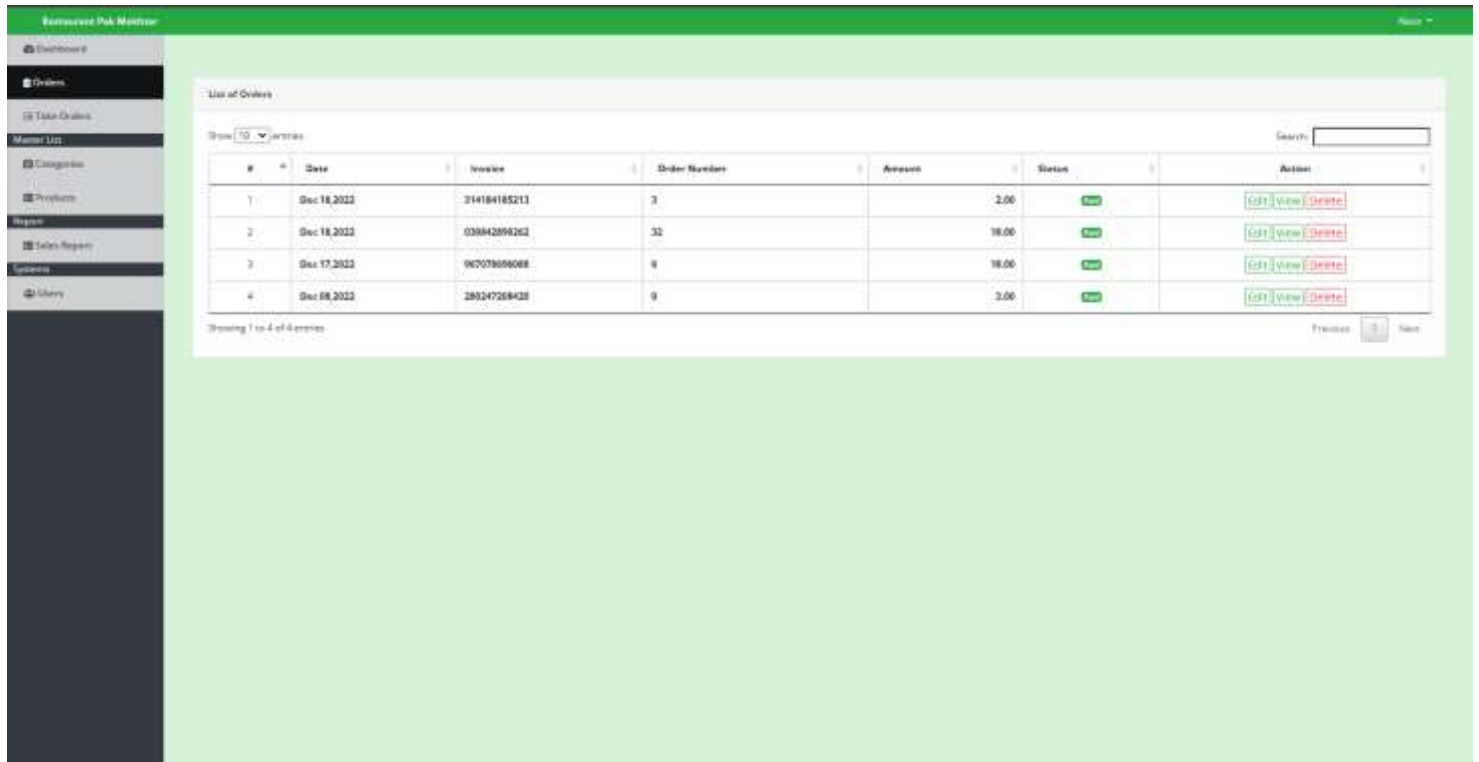


FIGURE 3.2.3 PREVIOUS ORDER PAGE

### 3.2.4 CALCULATION FOOD AND DRINK PAGE

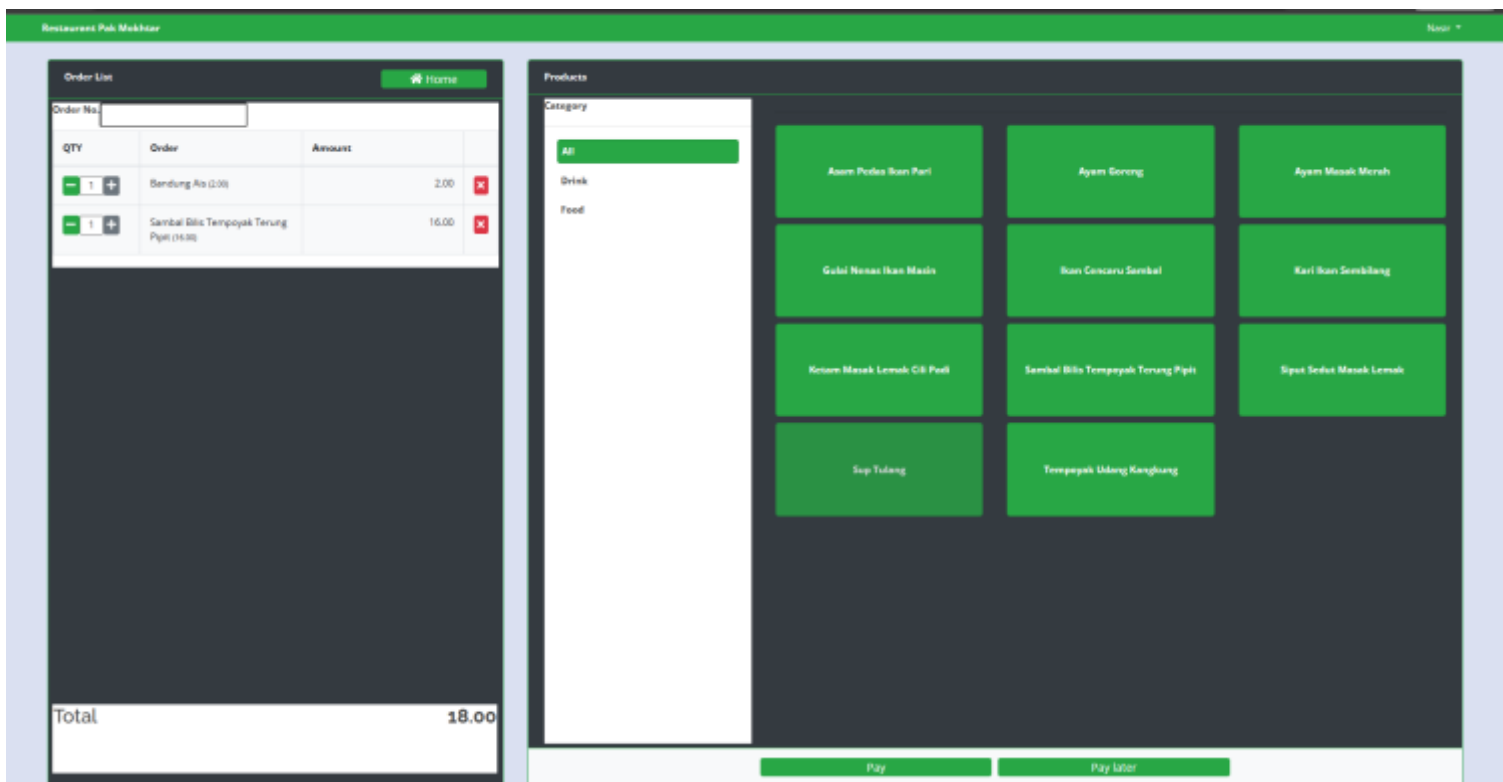


FIGURE 3.2.4 CALCULATION FOOD AND DRINK PAGE

### 3.2.5 ADD/EDIT/DELETE PRODUCT CATEGORIES PAGE

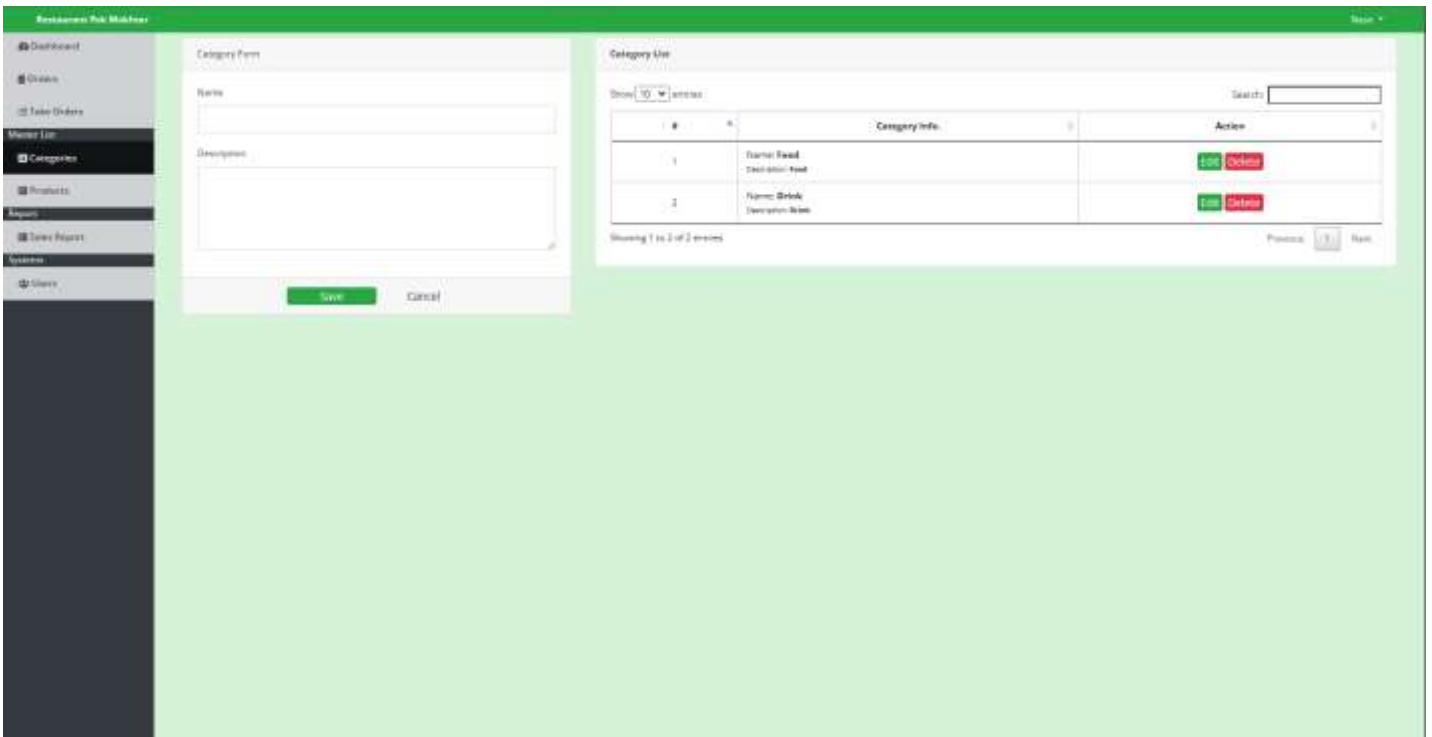


FIGURE 3.2.5 ADD/EDIT/DELETE PRODUCT CATEGORIES PAGE

### 3.2.6 ADD/EDIT/DELETE FOR PRODUCT/FOOD & DRINK PAGE

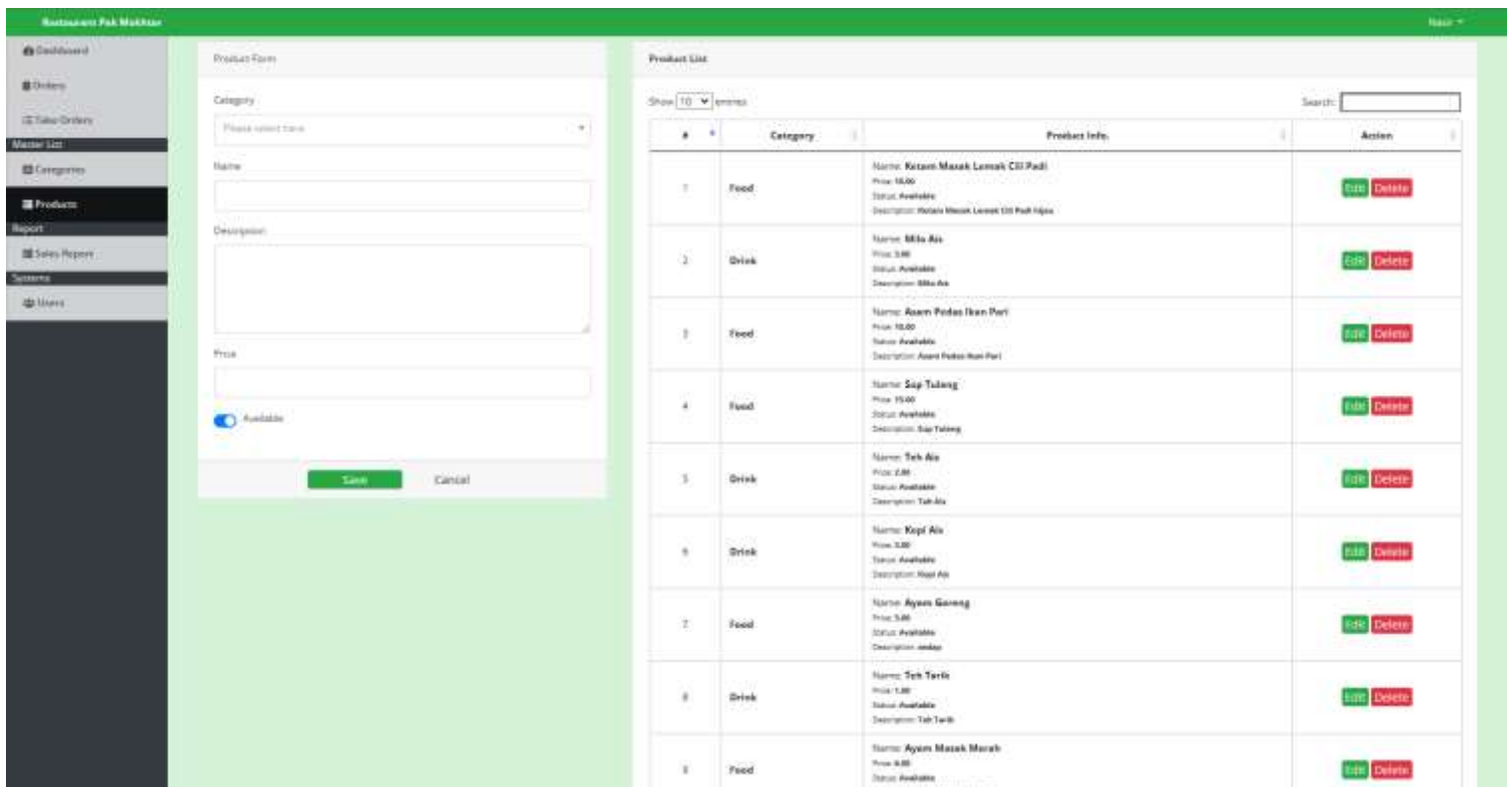


FIGURE 3.2.6 ADD/EDIT/DELETE FOR PRODUCT/FOOD & DRINK PAGE

### 3.2.7 SALES REPORT PAGE

Month: December, 2022

#	Date	Invoice	Order Number	Amount
1	Dec 06, 2022	282247209420	6	3.00
2	Dec 17, 2022	967078406886	6	18.00
3	Dec 18, 2022	038943860302	32	18.00
4	Dec 18, 2022	314184405218	3	2.00
Total				41.00

Print

FIGURE 3.2.7 SALES REPORT PAGE

### 3.2.8 USERS PAGE

User List

Show 10 entries

No.	Name	Username	Type	Action
1	Nash	Nash	Admin	Action
2	Wafy	Wafy	Staff	Action

Showing 1 to 2 of 2 entries

Previous Next

FIGURE 3.2.8 USERS PAGE

## 4.0 TEST DESCRIPTION AND RESULTS

### 4.1 UNIT TEST PLAN

<b>UNIT TEST PLAN (UTP)</b>						
<b>No</b>	<b>Test Case Name</b>	<b>Test Procedure</b>	<b>Pre-Condition</b>	<b>Expected Result</b>	<b>Tester</b>	<b>Result (Pass/Fail)</b>
<b>1</b>	Login page	User required to fill in username and password	User need to register before login	User successful go access into the system	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
<b>2</b>	Homepage	User can access every page in the system	No condition	User can access every page in the system	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
<b>3</b>	Previous orders page	User can view previous orders in this page	Must take orders and make calculation first	User can view previous orders. User also can view every order in detail and edit and delete the order	ROHAFIZAH BINTI ABDUL RAHIM	Pass
<b>4</b>	Calculation food and drink page	User can make calculation of the food and drink in this page	No condition	User can make calculation of the food and drink. User also can print receipt	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
<b>5</b>	Add/edit/delete product categories page	User can add, delete and edit for the categories of the product in this page	No condition	User can add, delete and edit for the categories of the product	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
<b>6</b>	Add/edit/delete for product/food & drink page	Admin can add, delete and edit for the product in this page	No condition	User can add, delete and edit for the product	ROHAFIZAH BINTI ABDUL RAHIM	Pass
<b>7</b>	Sales report page	Admin can view all history all of orders in this page	Must take orders and make calculation first	User can view all history all of orders in the system and print	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
<b>8</b>	Users page	User can add, edit, delete	No condition	User can add, edit, delete	NUR SYAIDA ATHIRAH	Pass

		the account in this page		the account in the system	BINTI ISMAIL	
--	--	-----------------------------	--	------------------------------	-----------------	--

FIGURE 4.1 UNIT TEST PLAN

## 4.2 INTEGRATION TEST PLAN

UNIT TEST PLAN (UTP)						
No	Test Case Name	Test Procedure	Pre-Condition	Expected Result	Tester	Result (Pass/Fail)
1	Login page	User required to fill in username and password	User need to register before login	User successful go access into the system	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
2	Homepage	User can access every page in the system	No condition	User can access every page in the system and can see the user name and clock	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
3	Previous orders page	User can view previous orders in this page	Must take orders and make calculation first	User can view previous orders. User also can view every order in detail and edit and delete the order	ROHAFIZAH BINTI ABDUL RAHIM	Pass
4	Calculation food and drink page	User can make calculation of the food and drink in this page	No condition	User can make calculation of the food and drink . User also can print receipt	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
5	Add/edit/delete product categories page	User can add, delete and edit for the categories of the product in this page	No condition	User can add, delete and edit for the categories of the product	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
6	Add/edit/delete for product/food & drink page	Admin can add, delete and edit for the product in this page	No condition	User can add, delete and edit for the product	ROHAFIZAH BINTI ABDUL RAHIM	Pass
7	Sales report page	Admin can view all history all of orders in this page	Must take orders and make calculation first	User can view all history all of orders in the system and print	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
8	Users page	User can add, edit, delete the account in this page	No condition	User can add, edit, delete the account in the system	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
9	Button log in	User must click the button log in for access into system	No condition	If user click the log in button there will go to the homepage	ROHAFIZAH BINTI ABDUL RAHIM	Pass

10	Button in homepage	User must click every button in homepage to access every page	No condition	If user click the button in homepage there will go to any pages that user want to do	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
11	Button previous order	User must click button previous order to see previous order	Must take order and do calculation of the food and drink first	If user click the button previous order ,there will display previous order ,edit ,delete and view every order in detail	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
12	Button edit in previous order page	User can click the button edit in previous order page to edit the orders	No condition	If user click the button edit in previous order, there will go to calculation page to edit the order	ROHAFIZAH BINTI ABDUL RAHIM	Pass
13	Button view in previous order page	User can click the button view in previous order page to view in detail about the order	No condition	If user click the button view in previous order page, there will go to view the order in detail and can print it	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
14	Button print in view section	User can click the button print in view section to print the order	No condition	If user click the button print in view section ,there will print the order	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
15	Button delete in previous order page	User can click the button delete in previous order page for delete order that not use anymore	No condition	If user click the button delete delete in previous order page, there will delete the selected order	ROHAFIZAH BINTI ABDUL RAHIM	Pass
16	Button calculation page	User must click the button calculation page to make the calculation order	No condition	If user click the button calculation page ,there will go to the calculation section for make the calculation	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
17	Button food and drinks for calculation in calculation page	User must click the selected button food and drinks for calculation in calculation page to get total price of the orders.	No condition	If user click the selected button food and drinks for calculation in calculation page ,there will be get ouput for total price and how much the customer put the money and get automatic change	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass



18	Button pay in calculation page	User must click button pay in calculation page for further the process for the payment	No condition	If user click the button pay in calculation page,there will be print receipt about their orders and price	ROHAFIZAH BINTI ABDUL RAHIM	Pass
19	Button pay later in calculation page	User can click the button pay later in calculation page for who those want to pay later	No condition	If user click the button pay later in calculation page ,the data of order will save in the previous order and tag unpaid	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
20	Button home in calculation page	User can click the button home in calculation page for go back to the home page	No condition	If user click the button home in calculation page ,there will be go back to the homepage	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
21	Button add/edit/delete product categories page	User can click the button add/edit/delete product categories page for add,edit and delete for the categories	No condition	If user click the button add/edit/delete product categories page ,there will display all the categories and user can edit , delete and add categories	ROHAFIZAH BINTI ABDUL RAHIM	Pass
22	Button save in add/edit/delete product categories page	User can click the save button for save the data of the categories	No condition	If user click the save button ,there will save the data of categories	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
23	Button add/edit/delete for product/food & drink page	User can click the button add/edit/delete product/food & drink page for add,edit and delete for the product	No condition	If user click the button add/edit/delete product/food & drink page ,there will be add,edit and delete for the product	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
24	Button sales report page	User can click the button sales report page the history of the total price orders	No condition	If user click the button sales report page ,there will be display the history of total price orders	ROHAFIZAH BINTI ABDUL RAHIM	Pass
25	Button print in sales report page	User can click the button print in sales report	No condition	If user click the button print in sales report page	MUHAMMAD WAFIY BIN	Pass

		page for print the sales report		,there will print out the sales report	MOHD NASIR	
26	Button users page	User can click the button users page for see all the user account in this system	No condition	If user click the button users page ,there will display all user account that have in this system	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
27	Button action in users page	User can click the button action in users page for edit and delete the account	No condition	If user click the button action in users page ,there will have two choice for delete and edit for the user account	ROHAFIZAH BINTI ABDUL RAHIM	Pass
28	Button edit under action section in users page	User can click the edit button for edit the user account	No condition	If user click the edit button ,there will popup a form that can edit the username,name,password and user type	MUHAMMAD WAFIY BIN MOHD NASIR	Pass
29	Button new user in users page	User can click the button new user in users page for create another account	No condition	If user click the button new user in users page ,there will popup a form that contain blank space for username ,name, password and user type	NUR SYAIDA ATHIRAH BINTI ISMAIL	Pass
30	Button log out	User can click the button log out for logging out the system	No condition	If user click the button log out, there will be log out and go to login page back	ROHAFIZAH BINTI ABDUL RAHIM	Pass

FIGURE 4.2 INTEGRATION TEST PLAN

### 4.3 USER ACCEPTANCE TEST

USER ACCEPTANCE TEST (UAT)						
No	Test Case Name	Acceptance Requirement	Test Result		Tester	Comments
			Pass	Fail		
1	Login page	User required to fill in username and password	Pass		MOHD NASIR BIN ISMAIL	Easy to login
2	Homepage	User can access every page in the system	Pass		MOHD NASIR BIN ISMAIL	Easy to access to every page
3	Previous orders page	User can view previous orders in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to see every previous order
4	Calculation food and drink page	User can make calculation of the food and drink in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to make calculation for the food and drink
5	Add/edit/delete product categories page	User can add, delete and edit for the categories of the product in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to add,edit,delete for product categories
6	Add/edit/delete for product/food & drink page	Admin can add, delete and edit for the product in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to add,edit,delete for product/food and drink
7	Sales report page	Admin can view all history all of orders in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to see all history order
8	Users page	User can add, edit, delete the account in this page	Pass		MOHD NASIR BIN ISMAIL	Easy to manage account

FIGURE 4.3 USER ACCEPTANCE TEST

## **5.0 MAJOR FINDINGS AND DISCUSSIONS**

### **5.1 PROJECT ADVANTAGES**

The advantage of this project is that all data information about the restaurant has been guaranteed. In addition, this system can also be used with a more efficient use where there are no more papers that are used a lot. This system is also able to make payment time, price calculation, add menu and so on easier and faster. Not only that, this system still maintains cash payments for those who are still less familiar with online payment methods. This provides convenience to customers where there are no more problems such as insufficient card balance, online payment system down and so on. Finally, in this system as well, users can print a complete payment receipt unlike before which was only handwritten. With this receipt, all the problems of misunderstanding can be reduced.

### **5.2 PROJECT LIMIT**

The previous project method used a lot of paperwork where half of it was written by hand. Because of that, this billing system was built in this restaurant with many advantages offered.

## 6.0 CONCLUSION

In conclusion, we strongly agree with the fact that this system provides many advantages to the owner and employees of Pak Mokhtar's restaurant. Firstly, with the billing system, this restaurant looks advanced by no longer using the old method. This can indirectly attract the attention of customers because the management system will certainly be smooth and orderly. Not only that, this system is built with many advantages. For example, in this system, an easy-to-use interface is adapted so that every employee can quickly learn to use it. Advantages such as, data that can be saved, receipts that can be printed directly, automatically calculate the total price and so on can bring this restaurant more advanced and successful. If we talk about time and energy, of course it can be saved a lot. With this billing system, the time for customers to queue to pay can be shortened. There are no longer long lines that are a source of anxiety for customers. In terms of energy, workers no longer need to rush like before. Restaurant management is definitely better than before with this system. Finally, this system can make it easier for this restaurant to operate, especially during the peak hours of operation where many customers come. The problem of data errors, calculation errors, waste of paper and the like can be avoided.

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**The End**