Chapter I

BACKGROUND OF THE STUDY

1.1 Project Context

Food business has grown in popularity and rate in this sector. It has made for rapid competition among them. One of the weaknesses of such a system is the calculation of money, which is done manually, and the end result of the calculation is the income. It will take a long time if we use paper. Therefore, it can be a disadvantage in many cases. A paper-based system will make it difficult for employees to provide customer service.

In today's modern life, modern technologies, invented by IT courses and tons of computer programmers, have something to do with human living. One of its most popular inventions is the different systems that are now used in everyday life. School Canteen's Customer Management System deals with the evaluation of income and organizing sales records. This program was initiated to secure the daily income of the school canteen and to see if the income from tax is enough since the school canteen's daily revenue review is very important to monitor.

A sale is an activity involved in the selling of products or services in return for money or other compensation. It is an act of completion of a commercial activity, while inventory A list of what you have in company accounts "Inventory" usually refers to the value of stocks, as distinct from fixed assets. In comparison to its actual cost, the advanced sales system provides a more reliable record of the sales company. In addition, the data needed by the company to decide matters in relation to inventory can be easily generated.

However, using a manual recording system or listing sold-out menus is now time-consuming and confusing. Schools must adapt to modern technologies by now. This will be a great thing for the staff or cashiers because they will have no hard time calculating how many menus were sold. No more headaches and problems will be remembered.

By generating this idea, the researcher has an opportunity to conduct a study regarding this topic. The developer will propose a system that they think, according to the preview study, will be very helpful, especially to the school canteen’s staff and administrator, because the school canteen is a small business. Like any business, it requires good management practices to be efficient and successful. The system can be a big help for them to reduce their stress levels if they get benefits or not. The researchers will go deeper and finalize their plans before introducing their output system.

1.2 Purpose and Description

The purpose of this project is to develop an automated system to replace the current manual system. It develops the system to be user-friendly, very accurate, and effective for Mater Dei College. This project is focused on being fully automated where the current manual paper-based system will be improved big time. This project will help solve the manual-based system problems. It will make the school’s canteen easy to compute and manage while keeping it confidential. This system is believed to reduce time consumption and improve the accuracy of computing. This will be a great thing for the staff or cashiers because they will have no hard time thinking about how many menus were sold. Through this, it will record the daily income of Mater Dei College School Canteen and determine if the income from tax is enough since the school canteen’s daily revenue review is very important to monitor.

STATEMENT OF THE PROBLEM

The Mater Dei College (MDC) School Canteen is currently using a manual base system. With manual systems, the level of service is dependent on individuals, and this puts a requirement on management to run training continuously for staff to keep them motivated and to ensure they are following the correct procedures. It takes more effort and physical space to keep track of paper documents, to find information, and to keep details secure. When mistakes are made or changes or corrections are needed, often a manual transaction must be completely redone rather than just updated. With manual or partially automated systems, information often has to be written down and copied or entered more than once. This can reduce the amount of duplication of data entry.

The problem faced by the MDC canteen is that they do not have any systematic system to record and keep their inventory data. It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and it is not properly organized. Without a computerized inventory system, it is a big problem since they are using a manual process using the pen and paper method of recording their sales as well as the debt and credit of their clients, which is very prone to errors and very troublesome. For instance, if the teacher asks for a receipt and credit record, it would be difficult to confirm the accuracy when it is manually recorded due to unorganized listings, perhaps because they have been using multiple logbooks to make a list of their debts.

OBJECTIVES OF THE STUDY

General Objective:

This project, Canteen Customer Management System with Online Reservations, and Inventory, aims to provide an easy user interface that will help cashiers, administrators, and students for faster, efficient, and effective management of the canteen's inventory.

- Inventories and sales can be reconciled.
- Credit can be systematically monitored through the debt-aging process.
- The system can be accessed from the different computer units within the organization as long as they are connected. Furthermore, the canteen custodian can provide appropriate documents such as receipts and records to the customers.

Specific Objective:

- To replace the current, existing manual recording system with a fully computerized and automated web-based recording system.
- To develop a system that uses less paper.
- To make the application easy to use so that even a non-technical user will use it very well.
- To reduce time, energy, and effort in writing.
- To monitor daily and monthly store sales.
- To be able to process transactions suitable for the MDC Canteen Customer Management System with online reservations and inventory.
- To manage customer purchases where you can create, display, edit/update, and delete an item which results in proper resource management of Canteen data.
- To make it easy for customers to make reservations.

SIGNIFICANCE OF THE STUDY

The study is significant to the business because it will provide an easy-to-use and easy-access system. Thus, transactions will be more reliable and faster, so they will not have to hire another employee to do the job. This will be beneficial to the following entities:

MDC Canteen

With businesses like Mater Dei Canteen, time is of the essence, so with the help of a computerized sales system, the business can use their time in a more productive way. They can also reduce their expenses, specifically in salaries, by hiring only a limited number of people. They can respond quickly to the queries of a customer, and they will not have to perform any calculations anymore because the system will do it for them and allow them to get accurate and timely information.

Administrator

After the implementation of the system, the admin could easily monitor the sales of the product every day.

Cashier

This simplifies their work in managing the stocks and sales. The cashier will ease his work because the system will automatically generate reports.

Developers

This research helps the enhancement of the researcher’s ability, knowledge, and skills in software development.

Future Developers

This research will serve as reference for the future researcher that choose canteen customer management system with online reservation and inventory as their title.

SCOPE AND LIMITATIONS

Scope

The scope of this system is to develop a canteen management system with online reservations and inventory from the old, inefficient canteen manual, inventory-based system. The scopes of the system are the following:

- Security – The system has the capability to secure the data.
- Inventory – The system has the capability to create an inventory of the product.
- Summary report – The system has the capability to summarize the transactions of items.
- Item History- The system is capable of viewing items. Accessing the date of the transaction.
- File Maintenance
  - The system includes file maintenance that would automatically add, edit, delete, save, and retrieve information.
  - To be able to know the remaining stocks.
  - To be able to know how many items/products are fast moving.
  - To be able to know how many items are in a critical stage.
  - To be able to know how many items are already sold.

Limitations

The system only covers the identification of the number of stocks available in store. The system is intended only for Mater Dei College Canteen and its employees.

CHAPTER II

REVIEW OF RELATED LITERATURE/SYSTEM

This chapter consists of a review of literature related to the influence of web-based canteen customer management systems on other school canteens and deals with multiple perspectives. Then, it reviews the current issues in the manual-based system and factors affecting the adoption of a web-based canteen customer management system with online reservations and inventory. The literature and studies cited in this chapter tackle the different concepts, understandings, and ideas; generalizations or conclusions; and different developments related to the development of the canteen customer management system from the past up to the present, which serve as the researchers' guide in developing the project. Furthermore, it provides a critical review of miscellaneous studies related to other reservation, recording, and inventory systems. Here are some samples which are of palpability with this system:

RIVA Solutions uses a web-based school canteen POS system to be fast and efficient to cater to the constant stream of students. The items are displayed on the touch screen, making the selection fast and accurate. The POS system can be customized to suit the operational needs and requirements.

CNN(Dubai) also uses a Web-Based School Canteen Management POS System. The software authenticates the identities of the employees by verifying their details. An order is placed only after the confirmation of an employee’s unique identity. Employees, hence, are restricted from placing multiple orders, for companies that like to set a daily limit for canteen use. Organizations providing meals at subsidized rates to their workers can prevent unauthorized individuals from taking advantage of these benefits.

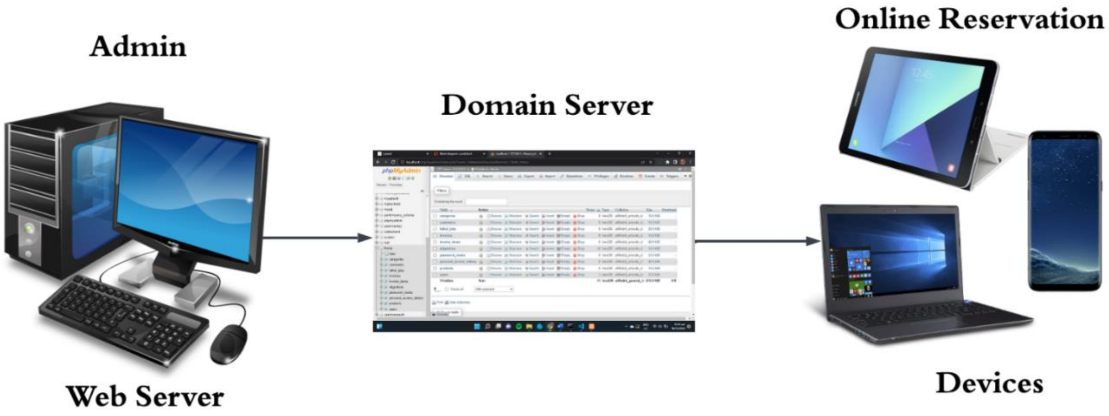
BOHECO also uses a computerized warehouse inventory system. The system has the capability to keep an inventory of products in warehouse stock and the system can notify the sender what happens to the request via SMS and account notification.

CHAPTER III

TECHNICAL BACKGROUND

In this chapter we will discuss what are the technical background and the tools that are used in making this project.

Architecture Design



This system will use a web server, a domain server, and online reservations. This system encrypts all the data that the administrators need. All teacher reservations will be automatically calculated, sent to the admin/client, and displayed. If you need to cancel your reservations, you may do so. Our system may only be intended for teachers and admins. After all teacher reservations are made, the admin may examine and monitor the domain server for each sale and reservation.

The MDC Canteen Customer Management with online reservations and inventory web application runs on a web server. It has a domain server, making it possible for the administrator to access it from a location remote from the main web application and on any device. If they are making an online reservation, not only the administrator but also the teachers have access to the web application.

3.1 Details of Tools and Technology Used

The technology that will be used in this system as follow:

XAMPP 1.8 - Developers will use this as a development tool to allow website programmers to test their work on their own computers without any access to the Internet.

MySQL - pronounced either "My S-Q-L" or "My Sequel," is an open-source relational database management system. It is based on the structured query language (SQL), which is used for adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE, can be used with MySQL.

MySQL can be used for a variety of applications, but is most commonly found on Web servers. A website that uses MySQL may include Web pages that access information from a database. These pages are often referred to as "dynamic," meaning the content of each page is generated from a database as the page loads. Websites that use dynamic Web pages are often referred to as database-driven websites.

MySQL will be used by the researcher because it is one of the databases that is compatible with the development of the system.

PHP: Hypertext Pre-processor (or simply PHP) is a server-side scripting language designed for web development but can also be used as a general-purpose programming language. It was originally created by Rasmus Leadoff in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive acronym PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

Hypertext Mark-up Language (HTML) It is the standard mark-up language for creating web pages and web applications. with Cascading Style Sheets (CSS) and JavaScript alongside.

CSS stands for Cascading Style Sheets - CSS describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple web pages all at once. External style sheets are stored in CSS files.

JavaScript - jQuery is a Java Script library that allows web developers to add extra functionality to their websites. It is open source and provided for free under the MIT license. In recent years, jQuery has become the most popular JavaScript library used in web development.

The tools or program we (will) used to code:

Microsoft Visual Code - It is a source code editor developed by Microsoft for Windows, Linux, and macOS. It is freeware to let computer programmers develop software and is provided by Microsoft. It allows programmers to develop applications and websites on platforms such as Visual Basic, Visual C#, Visual C++, JavaScript, PHP, etc. The Express Editions are more suitable for novice developers.

Web Browsers - A web browser (commonly referred to as a browser) is a software application for accessing information on the World Wide Web. Each individual web page, image, and video is identified by a distinct URL (Uniform Resource Locator or Web address like: https://www.wikipedia.org), enabling browsers to retrieve and display them on the user's device.

Here are some of the browsers:

1. Chrome Browser

2. Mozilla Firefox

3. Microsoft Edge

4. Opera Browser

There are a lot of other browsers, but those four are some of them and are very popular.

Here is the hardware that will be used are as follow:

For laptops and/or desktop:

- Minimum 5 GB HDD/SSD space
- At least Intel Pentium and/or AMD Athlon/Ryzen 3 processor
- At least 2 GB RAM

For tablets and mobile

- Android OS 4.2.0 and above
- IOS 9 and/or above

Chapter IV

METHODOLOGY

4.1 Requirements Analysis and Requirements Documentation

In describing how the project is designed, the researcher used a use-case diagram to explain how the project functions.

Use-Case Narrative

Use Case Name: Manage Admin User	ID:1	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to manage the user of the system.		
Brief Description: This use case describes how the admin manage the user of the system.		
Trigger: The Admin wants to manage the user of the system.		
Normal Flow of Events: 1. The Admin wants to manage the user of the system. 2. The Admin must fill up the register's information to login into the system. 3. The admin receive a verification message from the Gmail. 4. The admin click verify to save the registration information. 5. The admin provide the log in information. 6. The Admin enters username & password to the system. 7. The Admin click the login button. 8. The system validates the admin username & password from database. 9. The system navigates to dashboard. 10. The Admin can add and edit a user. 11. The system end.		

Table 4.1.1 Manage Admin User

Use Case Name: Add Client	ID:2	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add a customer.		
Brief Description: This use case describes how the Admin add a customer.		
Trigger: The Admin wants to add a customer.		
Normal Flow of Events: 1. The Admin starts the application. 2. The Admin click the customer function. 3. The Admin click the add customer button. 4. The Admin provides the customer information. 5. The Admin click the save button. 6. The system saves the customer registration information. 7. The system successfully add a customer. 8. The Admin can add, edit and delete customer. 9. The system end.		

Table 4.1.2 Add Customer

Use Case Name: Add Category	ID:3	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to add category into the system.		
Brief Description: This use case describes how the admin creates a category.		
Trigger: The admin wants to create a category.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the categories function. 4. The admin click the new category button. 5. The admin provides the category information. 6. The admin click the save button. 7. The system successfully saves the category registration information. 8. The Admin can add, view, edit, delete and print category. 9. The system ends.		

Table 4.1.3 Add Category

Use Case Name: Add Product	ID:4	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add product into the system.		
Brief Description: This use case describes how the admin handles the process of adding product into the system.		
Trigger: The admin wants to add product into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the products function. 4. The admin click the new product button. 5. The admin provides the product information including the stocks and prices. 6. The admin click the save button. 7. The system successfully saves the product registration information. 8. The Admin can add, view, edit, delete and print product. 9. The system ends.		

Table 4.1.4 Add Product

Use Case Name: Add Invoice	ID:5	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to add invoice into the system.		
Brief Description: This use case describes how the admin handles the process of adding invoices into the system.		
Trigger: The admin wants to add invoice into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the invoices function. 4. The admin click the add invoice button. 5. The admin provides the customer invoice information. 6. The admin click the create invoice button. 7. The system successfully created the clients invoice information. 8. The Admin can add, view, edit, delete and print invoice. 9. The system ends.		

Table 4.1.5 Add Invoice

Use Case Name: Add Food Categories	ID:6	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to add category item into the system.		
Brief Description: This use case describes how the admin handles the process of adding food category into the system.		
Trigger: The admin wants to add food category into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the food categories function. 4. The admin click the new category button. 5. The admin provides the name of category. 6. The admin click the save button. 7. The system successfully saved a category. 8. The Admin can add, edit, and delete category. 9. The system ends.		

Table 4.1.6 Add Food Categories

Use Case Name: Add Food Item	ID:7	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to add food item into the system.		
Brief Description: This use case describes how the admin handles the process of adding food item into the system.		
Trigger: The admin wants to add food item into the system.		
Normal Flow of Events: 10. The admin starts the application. 11. The admin click the inventory function. 12. The admin click the food items function. 13. The admin click the new item button. 14. The admin provides the food item information. 15. The admin click the save button. 16. The system successfully saved an item. 17. The Admin can add, edit, and delete item. 18. The system ends.		

Table 4.1.7 Add Food Items

Use Case Name: Add Food Sliders	ID:8	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to add food slider into the system.		
Brief Description: This use case describes how the admin handles the process of adding food slider into the system.		
Trigger: The admin wants to add food slider into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the food sliders function. 4. The admin click the new slider button. 5. The admin provides the food slider information. 6. The admin click the save button. 7. The system successfully saved a slider. 8. The Admin can add, edit, and delete slider. 9. The system ends.		

Table 4.1.8 Add Food Sliders

Use Case Name: View Food Reservations	ID:9	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
Admin wants to view food reservation into the system.		
Brief Description: This use case describes how the admin handles the process of viewing food reservation into the system.		
Trigger: The admin wants to view food reservation into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the inventory function. 3. The admin click the food reservations function. 4. The system displays the food reservations field. 5. The system ends.		

Table 4.1.9 View Food Reservations

Use Case Name: Manage User Reservation	ID:10	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to manage user reservation.		
Brief Description: This use case describes how the admin manage user reservation into the system.		
Trigger: The Admin wants to manage user reservation into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the user reservation function. 3. The system navigates to online reservation interface. 4. The system ends.		

Table 4.1.10 Manage User Reservation

Use Case Name: Manage Profile	ID:11	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to manage user profile into the system.		
Brief Description: This use case describes how the admin manage user profile into the system.		
Trigger: The Admin wants to manage user profile into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the settings function. 3. The admin click the my profile function. 4. The admin can edit the name, role and email. 5. The admin click the save button. 6. The system successfully updated the user information. 7. The admin can change password. 8. The admin provides new password. 9. The Admin click the change password button. 10. The system successfully updated the password. 11. The system ends.		

Table 4.1.11 Manage Profile

Use Case Name: Manage Users	ID:12	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to manage user into the system.		
Brief Description: This use case describes how the admin manage user into the system.		
Trigger: The Admin wants to manage user into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the settings function. 3. The admin click the manage users function. 4. The admin click the add user button. 5. The admin provides the user information. 6. The admin click the save button. 7. The system successfully created a user. 8. The Admin can edit user. 9. The system ends.		

Table 4.1.12 Manage Users

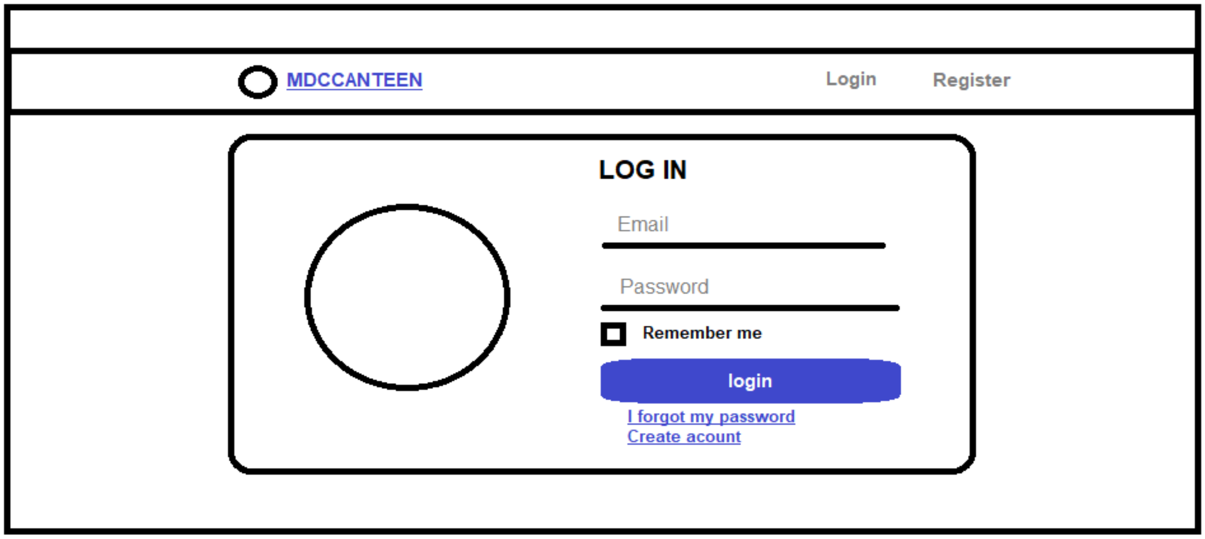
Use Case Name: View Contact Message	ID:13	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view contact.		
Brief Description: This use case describes how the admin view contacts into the system.		
Trigger: The Admin wants to view contacts into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the settings function. 3. The admin click the contact function. 4. The system displays all contact messages. 5. The system ends.		

Table 4.1.13 View Contact Message

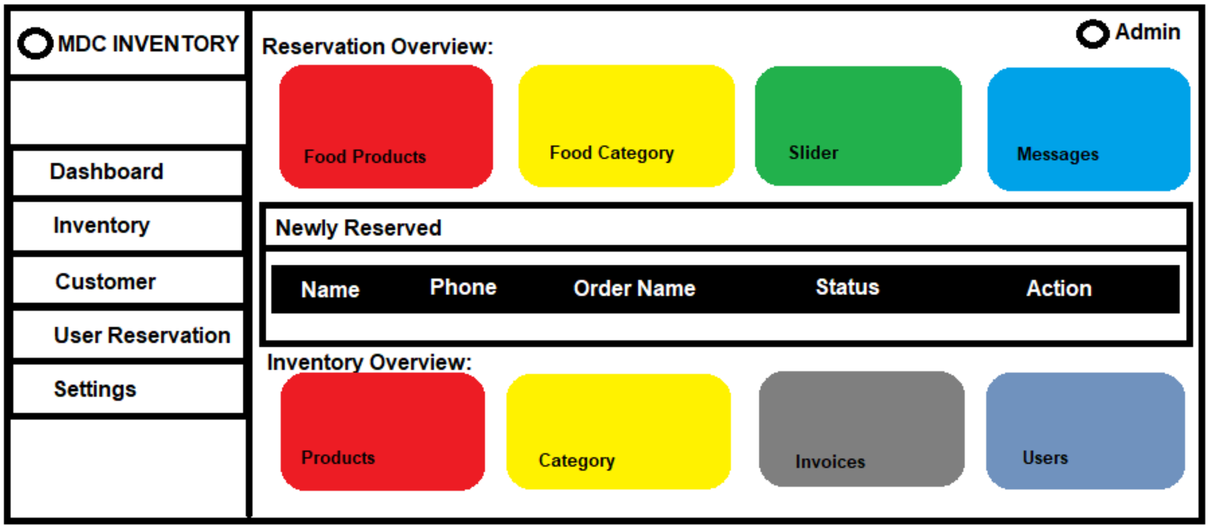
4.2 Design of Software, Systems, Product, and Processes

Researcher show a certain view of what to be expect in the system. It is useful for the researcher to guide them on how they develop the system. It is serves as the blue print of the system.

Output and User-Interface Design

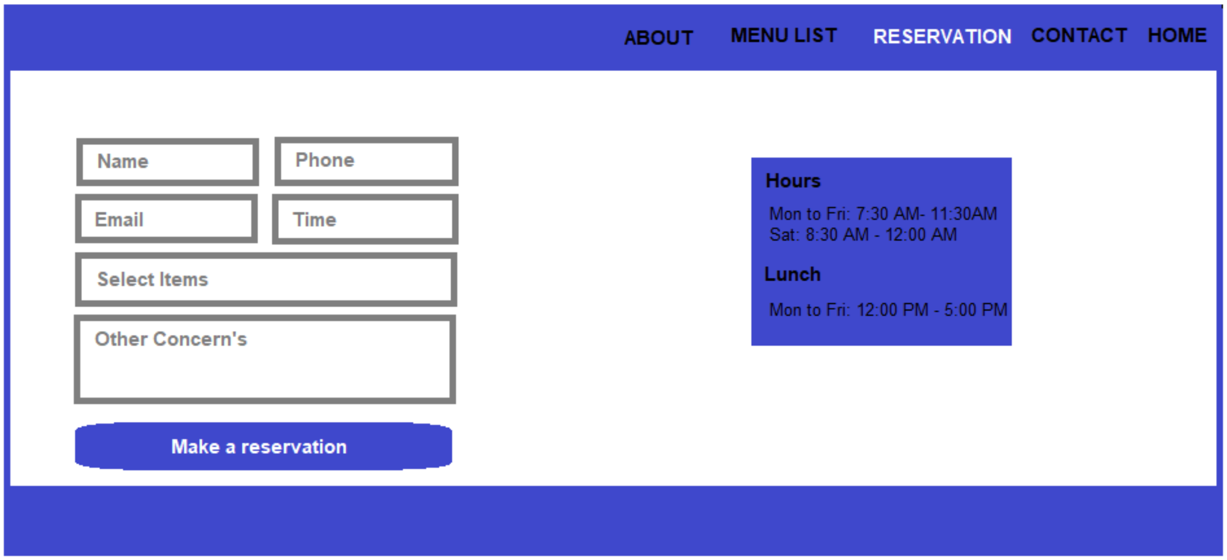


4.2.1 Login Interface



Name	Phone	Order Name	Status	Action

Figure 4.2.2 Admin Dashboard



Hours

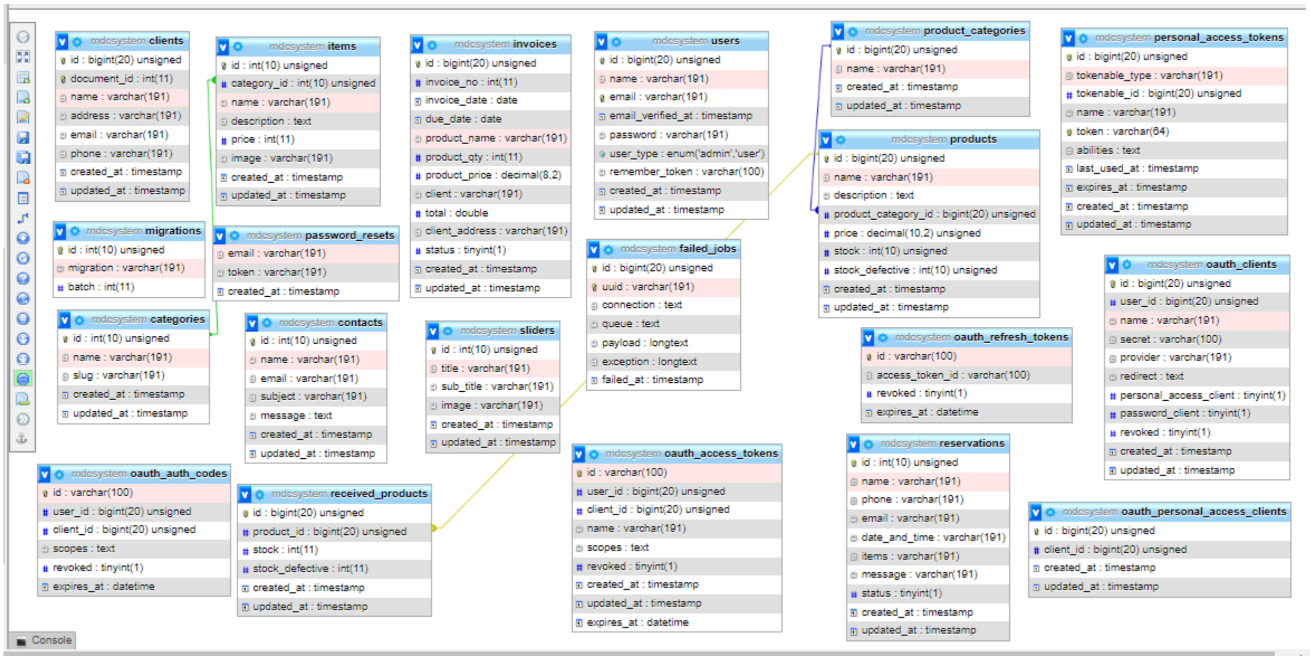
Mon to Fri: 7:30 AM- 11:30AM
Sat: 8:30 AM - 12:00 AM

Lunch

Mon to Fri: 12:00 PM - 5:00 PM

Figure 4.2.3 Online Reservation Interface

Entity Relationship Diagram



mdcsystem **clients**
id : bigint(20) unsigned
document_id : int(11)
name : varchar(191)
address : varchar(191)
email : varchar(191)
phone : varchar(191)
created_at : timestamp
updated_at : timestamp

mdcsystem **migrations**
id : int(10) unsigned
migration : varchar(191)
batch : int(11)

mdcsystem **categories**
id : int(10) unsigned
name : varchar(191)
slug : varchar(191)
created_at : timestamp
updated_at : timestamp

mdcsystem **oauth_auth_codes**
id : varchar(100)
user_id : bigint(20) unsigned
client_id : bigint(20) unsigned
scopes : text
revoked : tinyint(1)
expires_at : datetime

mdcsystem **items**
id : int(10) unsigned
category_id : int(10) unsigned
name : varchar(191)
description : text
price : int(11)
image : varchar(191)
created_at : timestamp
updated_at : timestamp

mdcsystem **password_resets**
email : varchar(191)
token : varchar(191)
created_at : timestamp

mdcsystem **contacts**
id : int(10) unsigned
name : varchar(191)
email : varchar(191)
subject : varchar(191)
message : text
created_at : timestamp
updated_at : timestamp

mdcsystem **received_products**
id : bigint(20) unsigned
product_id : bigint(20) unsigned
stock : int(11)
stock_defective : int(11)
created_at : timestamp
updated_at : timestamp

mdcsystem **invoices**
id : bigint(20) unsigned
invoice_no : int(11)
invoice_date : date
due_date : date
product_name : varchar(191)
product_qty : int(11)
product_price : decimal(8,2)
client : varchar(191)
total : double
client_address : varchar(191)
status : tinyint(1)
created_at : timestamp
updated_at : timestamp

mdcsystem **sliders**
id : int(10) unsigned
title : varchar(191)
sub_title : varchar(191)
image : varchar(191)
created_at : timestamp
updated_at : timestamp

mdcsystem **users**
id : bigint(20) unsigned
name : varchar(191)
email : varchar(191)
email_verified_at : timestamp
password : varchar(191)
user_type : enum('admin','user')
remember_token : varchar(100)
created_at : timestamp
updated_at : timestamp

mdcsystem **failed_jobs**
id : bigint(20) unsigned
uuid : varchar(191)
connection : text
queue : text
payload : longtext
exception : longtext
failed_at : timestamp

mdcsystem **oauth_access_tokens**
id : varchar(100)
user_id : bigint(20) unsigned
client_id : bigint(20) unsigned
name : varchar(191)
scopes : text
revoked : tinyint(1)
created_at : timestamp
updated_at : timestamp
expires_at : datetime

mdcsystem **product_categories**
id : bigint(20) unsigned
name : varchar(191)
created_at : timestamp
updated_at : timestamp

mdcsystem **products**
id : bigint(20) unsigned
name : varchar(191)
description : text
product_category_id : bigint(20) unsigned
price : decimal(10,2) unsigned
stock : int(10) unsigned
stock_defective : int(10) unsigned
created_at : timestamp
updated_at : timestamp

mdcsystem **oauth_refresh_tokens**
id : varchar(100)
access_token_id : varchar(100)
revoked : tinyint(1)
expires_at : datetime

mdcsystem **reservations**
id : int(10) unsigned
name : varchar(191)
phone : varchar(191)
email : varchar(191)
date_and_time : varchar(191)
items : varchar(191)
message : varchar(191)
status : tinyint(1)
created_at : timestamp
updated_at : timestamp

mdcsystem **personal_access_tokens**
id : bigint(20) unsigned
tokenable_type : varchar(191)
tokenable_id : bigint(20) unsigned
name : varchar(191)
token : varchar(64)
abilities : text
last_used_at : timestamp
expires_at : timestamp
created_at : timestamp
updated_at : timestamp

mdcsystem **oauth_clients**
id : bigint(20) unsigned
user_id : bigint(20) unsigned
name : varchar(191)
secret : varchar(100)
provider : varchar(191)
redirect : text
personal_access_client : tinyint(1)
password_client : tinyint(1)
revoked : tinyint(1)
created_at : timestamp
updated_at : timestamp

mdcsystem **oauth_personal_access_clients**
id : bigint(20) unsigned
client_id : bigint(20) unsigned
created_at : timestamp
updated_at : timestamp

Figure 4.2.4 ERD of the Project

4.3 Data Dictionary

To further understand the data being saved in the database, the data dictionary will help to show the fields of the tables.

Users Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID number of user unsigned
name	varchar	191	Name of the user
email	varchar	191	Email address of the user
email_verified_at	timestamp		Date verified
password	varchar	191	Password of the user
user_type	enum		Type of the user
remember_token	varchar	100	Token of user
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.1 Database Table of User

Clients Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID number of client unsigned
document_id	int	11	ID of the document
name	varchar	191	Name of the client
address	varchar	191	Address of the client
email	varchar	191	Email address of the client

phone	varchar	191	Phone number of the client
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.2 Database Table of Client

Products Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID of the product unsigned
name	varchar	191	Name of the product
description	text		Description of the product
product_category_id	int	20	Category id of a product unsigned
price	decimal	10,2	Price of the product unsigned
stock	int	10	Stocks of the product
stock_defective	int	10	Stock damaged of the products unsigned
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.3 Database Table of Products

Product Categories Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID of the product category unsigned
name	varchar	191	Name of the product category
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.4 Database Table of Product Categories

Received Products Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID of the received product unsigned
product_id	int	20	Product ID of the received product unsigned
stock	int	11	Stock of the of the received product
stock_defective	int	11	Stock damaged of the productsc
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.5 Database Table of **Received Products**

Reservations Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	10	ID of the reservation unsigned
name	varchar	191	Name of reservation
email	varchar	191	Email address of the client
phone	varchar	191	Contact number of client
date_and_time	varchar	191	Date and time reserved
items	varchar	191	Items reserved
message	varchar	191	Message for reservation
status	int	1	Status for reservation
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.6 Database Table of Reservations

Invoices Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	20	ID of the invoices unsigned
invoice_no	int	11	Number of invoices
invoice_date	date		Date of invoice
due_date	date		Due date of invoice
product_name	varchar	191	Name of the product
product_qty	int	11	Quantity of the product
product_price	decimal	8,2	Price of the product
client	varchar	191	Invoice client
total	double		Total of invoices
client_address	varchar	191	Address of the client
status	int	1	Status of invoice
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.7 Database Table of Invoices

Sliders Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	10	ID of the slider unsigned
title	varchar	191	Title of the slider
sub_title	varchar	191	Subtitle of the slider
image	varchar	191	Image of the slider
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.8 Database Table of Sliders

<table>
<tr><th colspan="4">Items Table</th></tr>
<tr><th>Field Name</th><th>Data Type</th><th>Length</th><th>Description</th></tr>
<tr><td>id</td><td>int</td><td>10</td><td>ID of the item
unsigned</td></tr>
<tr><td>category_id</td><td>int</td><td>10</td><td>Category id of the item
unsigned</td></tr>
<tr><td>name</td><td>varchar</td><td>191</td><td>Name of the item</td></tr>
<tr><td>description</td><td>text</td><td></td><td>Description of the item</td></tr>
<tr><td>price</td><td>int</td><td>11</td><td>Price of the item</td></tr>
<tr><td>image</td><td>varchar</td><td>191</td><td>Image of the item</td></tr>
<tr><td>created_at</td><td>timestamp</td><td></td><td>Date created</td></tr>
<tr><td>updated_at</td><td>timestamp</td><td></td><td>Date updated</td></tr>
</table>

Table 4.3.9 Database Table of Items

<table>
<tr><th colspan="4">Categories Table</th></tr>
<tr><th>Field Name</th><th>Data Type</th><th>Length</th><th>Description</th></tr>
<tr><td>id</td><td>int</td><td>10</td><td>ID of the category
unsigned</td></tr>
<tr><td>name</td><td>varchar</td><td>191</td><td>Category name</td></tr>
<tr><td>slug</td><td>varchar</td><td>191</td><td>Slug of the category</td></tr>
<tr><td>created_at</td><td>timestamp</td><td></td><td>Date created</td></tr>
<tr><td>updated_at</td><td>timestamp</td><td></td><td>Date updated</td></tr>
</table>

Table 4.3.10 Database Table of Categories

Contacts Table			
Field Name	**Data Type**	**Length**	**Description**
id	int	10	ID of the contact unsigned
name	varchar	191	Contact name
email	varchar	191	Email of the client
subject	varchar	191	Subject of the contact
message	text		Contact message
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.11 Database Table of Contacts

4.4 Development and Testing

To test the system, it must be used by the respondents of the system to evaluate the system and to produce reliable information that makes the project more effective system.

4.5 Implementation Plan

Implementation plan is to help the researcher to build a method on how the project will be implemented. It is very important in order to see the effects and importance of the proposed system from the present system.

Implementation Issues and Challenges

4.6 System Implementation & Results

The system implementation and deployment are the part in which the system will be implemented and deployed into real life to be used. Before starting to develop the MDC Canteen Customer Management System with recordings, reservations and inventory it must be installed and prepare well for the efficient usage of the system and development.

Chapter V

RESULTS AND DISCUSSIONS

Chapter five shows the screenshots of the system. In this chapter, it will discuss what the screenshot is, and how the screenshot works. Chapter five also answers the objective of the project.

5.1 User-guide

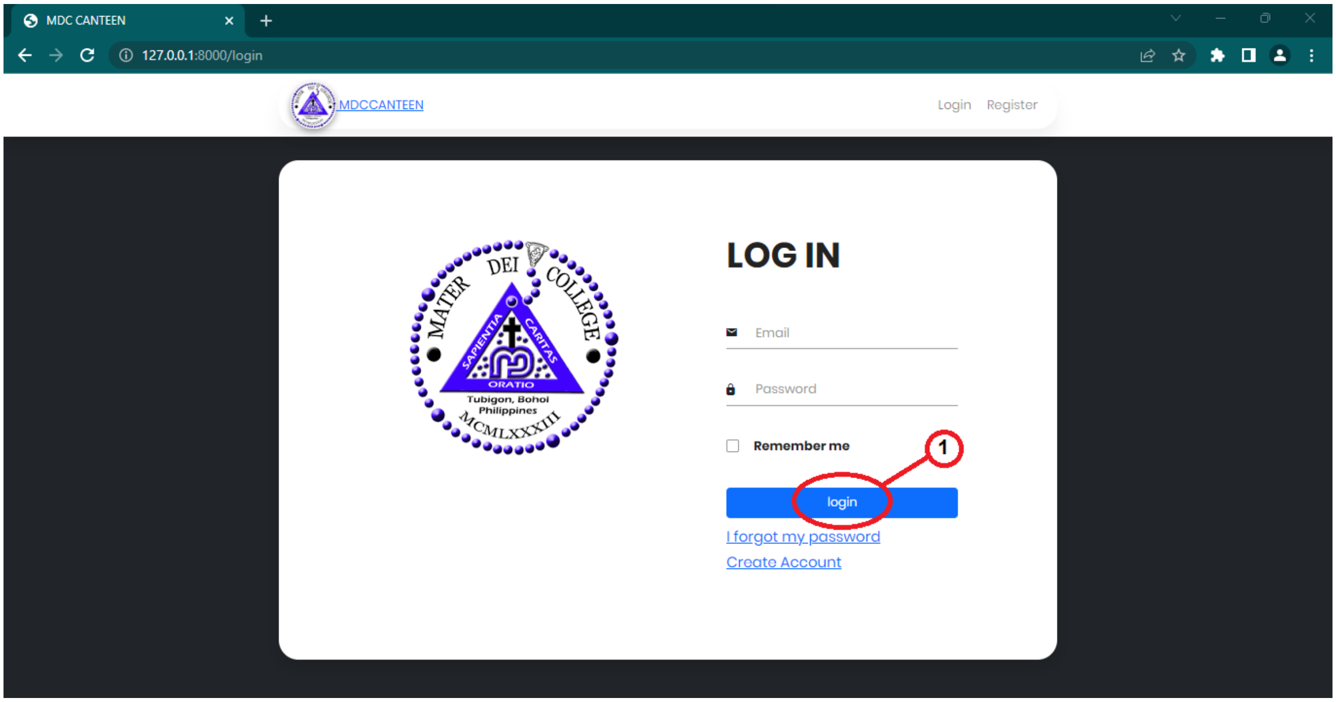
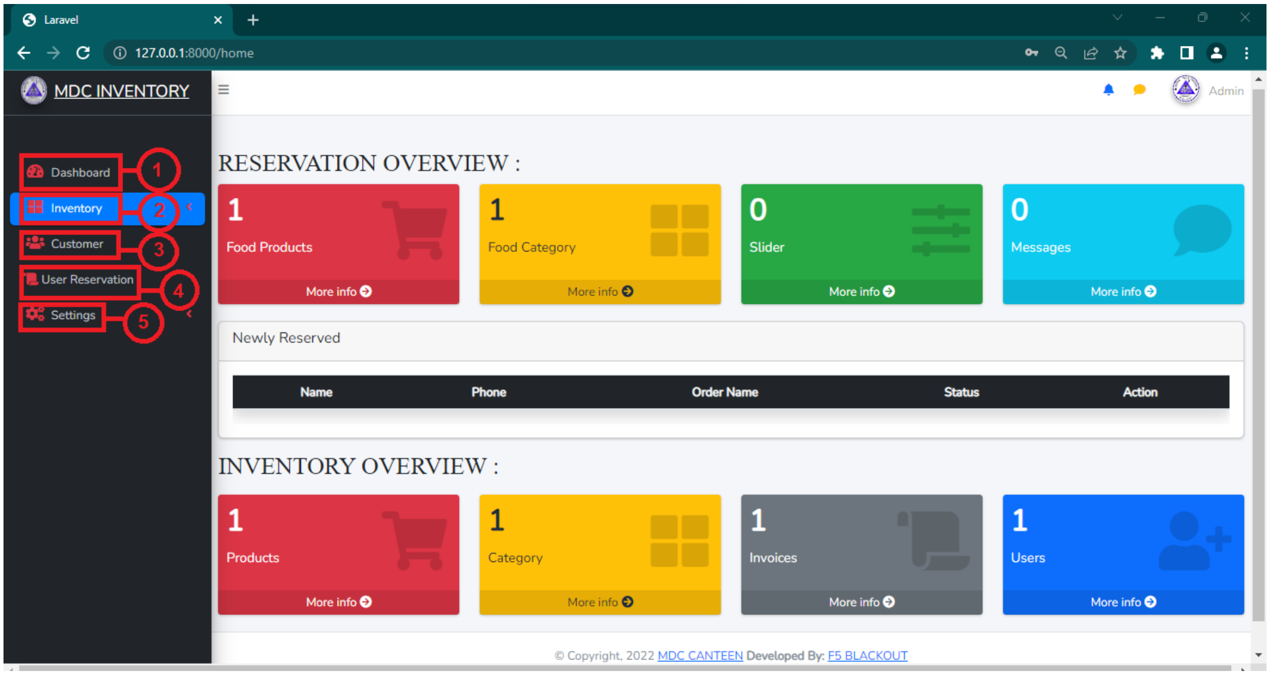


Figure 5.1 Log in Window

Figure 5.1 is the interface of logging in the system. There are two types of users in the system, the admin and the teacher. It follows how the parts work:

1. This button is used to log in to the system.



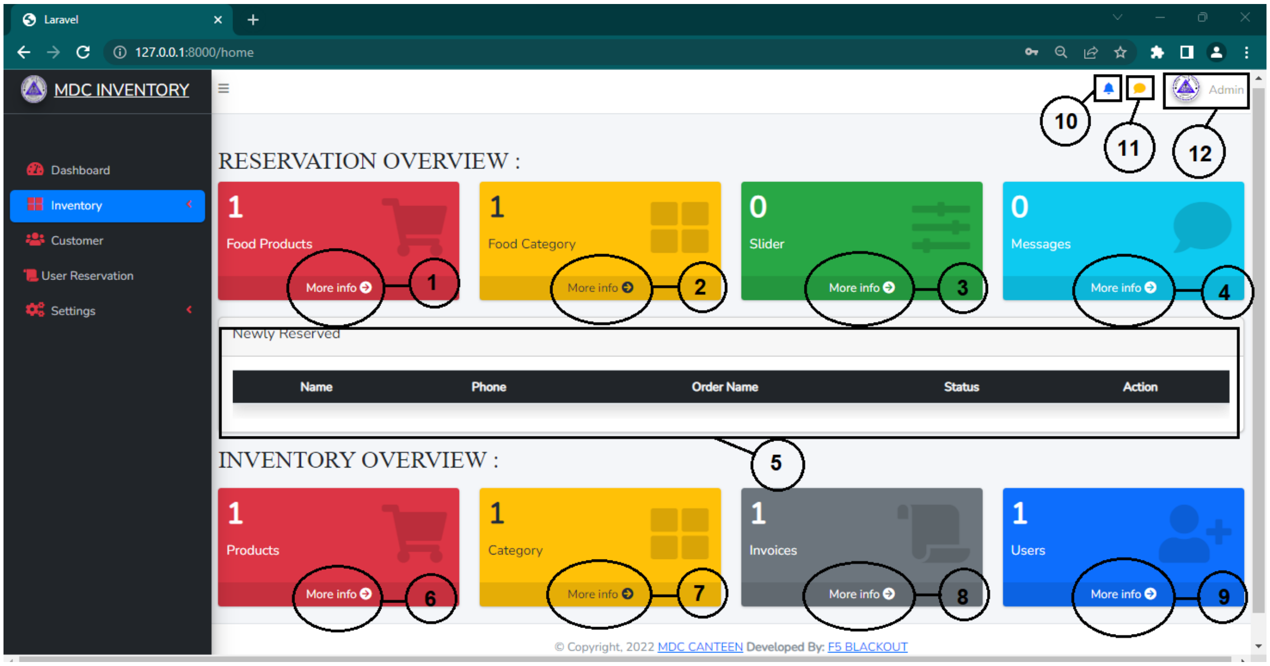
Newly Reserved

Name	Phone	Order Name	Status	Action

Figure 5.2 Dashboard View

Figure 5.2 depicts the system's UI once you've logged in. The workings of the pieces are as follows:

1. This function shows the Dashboard Interface.
2. This function shows the Inventory Interface.
3. This function shows the Customer Interface.
4. This function shows the User Reservation Interface.
5. This function shows the Settings Interface.

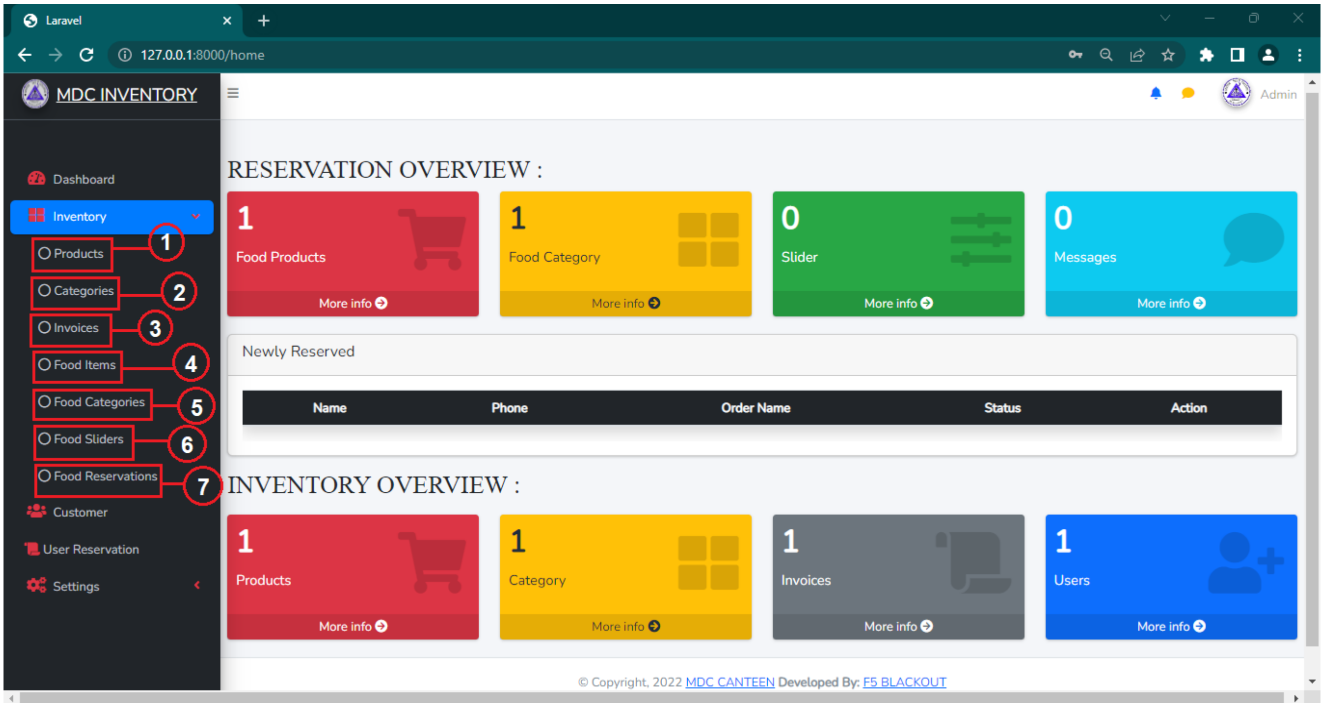


Name	Phone	Order Name	Status	Action

Figure 5.3 Dashboard Interface

Figure 5.3 depicts the dashboard interface. The workings of the pieces are as follows:

1. This will redirect to the food products field that shows food item name, image, category name, description, price, date created, date updated, and action which admin can edit and delete a product/item.
2. This will redirect to food category module where the admin can add, view, edit and delete category information.
3. This will redirect to food slider module where the admin can add, edit and delete slider information.
4. This will redirect to the contact field that shows all the customers contact messages.
5. This will list all customer reservations and allow the admin to modify the status to confirm a reservation.
6. This will redirect to product field where the admin can add, view, edit, delete and print a product information.
7. This will redirect to category field where the admin can add, view, edit, delete and print a category information.
8. This will redirect to invoices field where the admin can add, view, edit, delete and print an invoice information and allow the admin to modify the status.
9. This will link to manage users field.
10. This will show all the customer notifications coming from the online reservation.
11. This will show the clients concerns and messages.
12. This will link to users profile.

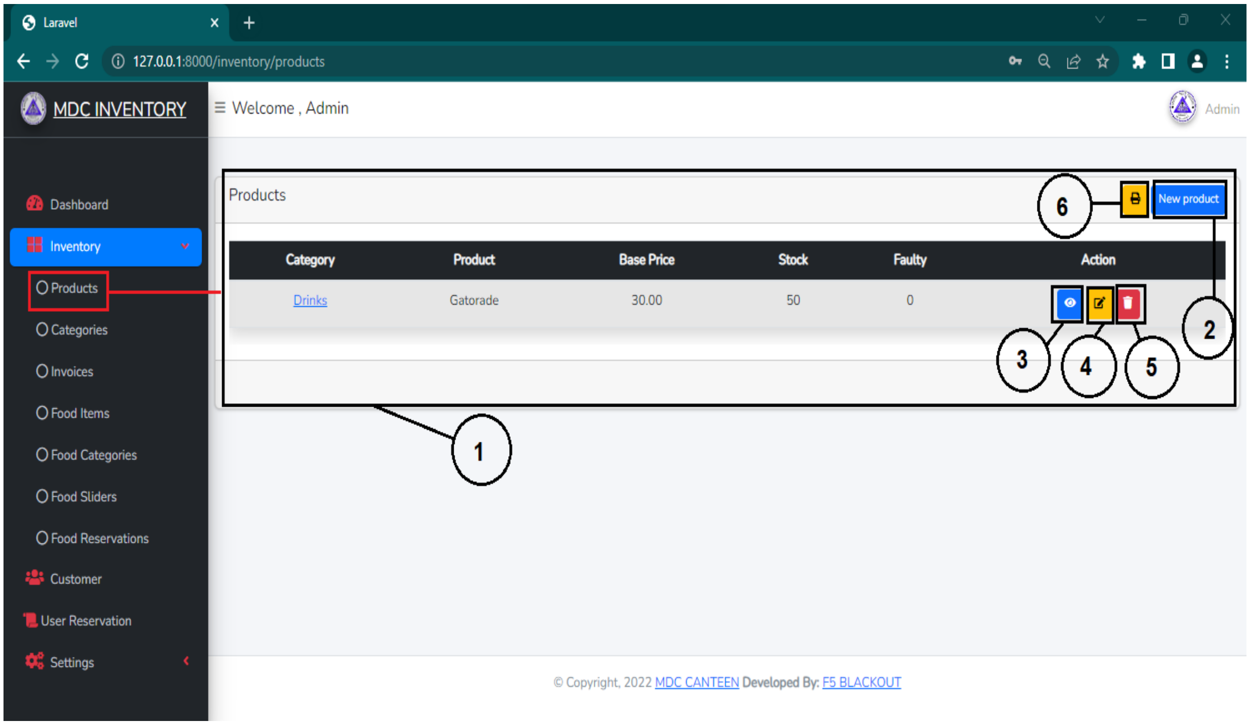


Name	Phone	Order Name	Status	Action

Figure 5.4 Inventory Slider

Figure 5.4 is the inventory slider. It follows how the parts work:

1. This function shows the products field.
2. This function shows the categories field.
3. This function shows the invoices field.
4. This function shows the food items field.
5. This function shows the food categories field.
6. This function shows the food sliders field.
7. This function shows the food reservations field.

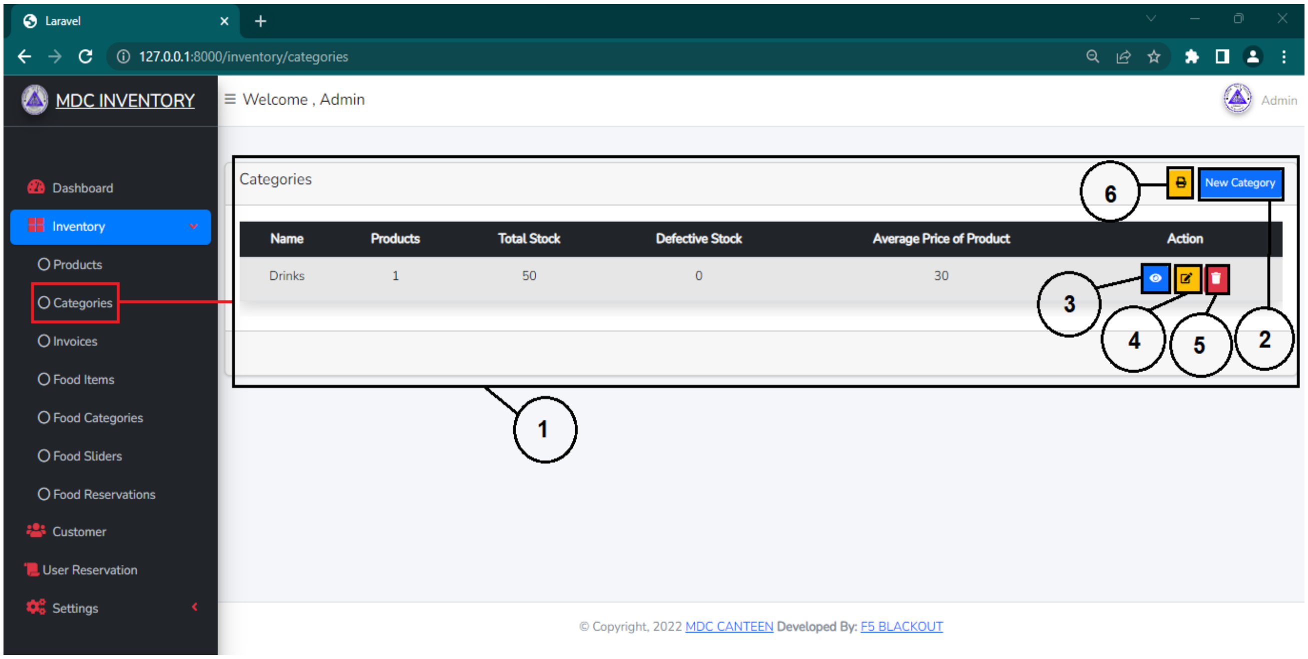


Category	Product	Base Price	Stock	Faulty	Action
Drinks	Gatorade	30.00	50	0	

Figure 5.5 Product Module

Figure 5.5 is the product module. It follows how the parts work:

1. This shows the products field.
2. This button is used to add a new product.
3. This is used to view a product information.
4. This is used to edit a product information.
5. This is used to delete a product.
6. This is used to print a products information.



Name	Products	Total Stock	Defective Stock	Average Price of Product	Action
Drinks	1	50	0	30	

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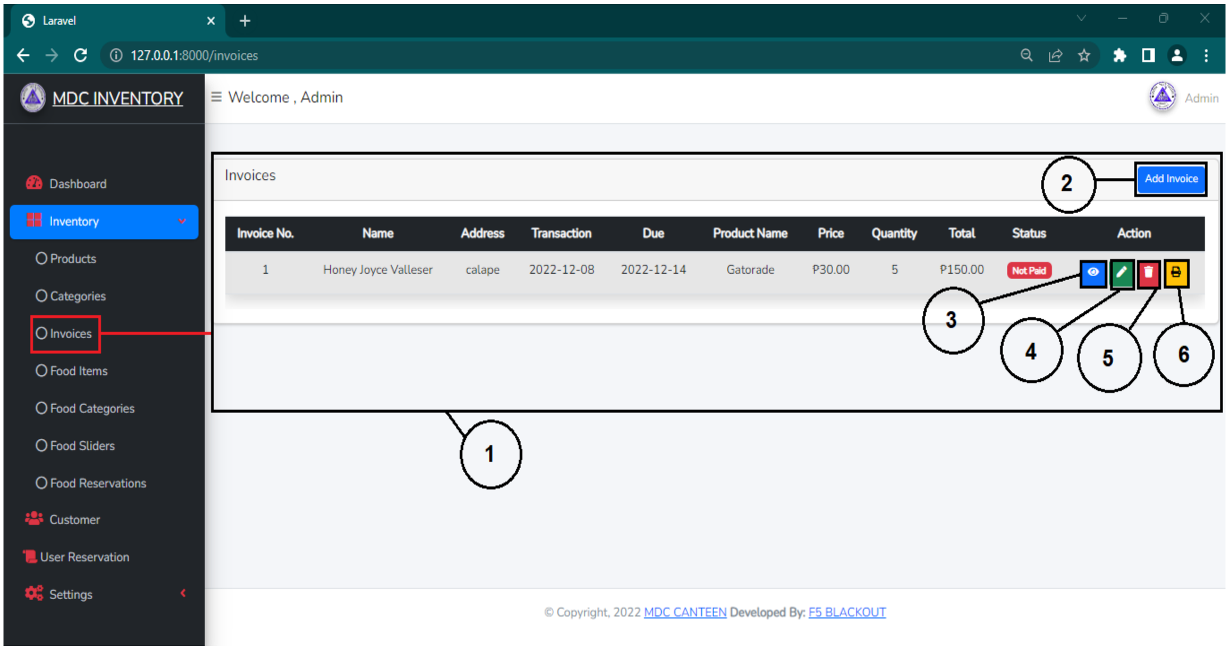
Figure 5.6 Categories Module

Figure 5.6 is the categories module. It follows how the parts work:

1. This shows the categories field.
2. This button is used to add a new category.
3. This is used to view a category information.
4. This is used to edit a category information.
5. This is used to delete a category.
6. This is used to print a categories information.



Invoices

Invoice No.	Name	Address	Transaction	Due	Product Name	Price	Quantity	Total	Status	Action
1	Honey Joyce Valleser	calape	2022-12-08	2022-12-14	Gatorade	₱30.00	5	₱150.00	Not Paid	👁 ✎ 🗑 🖨

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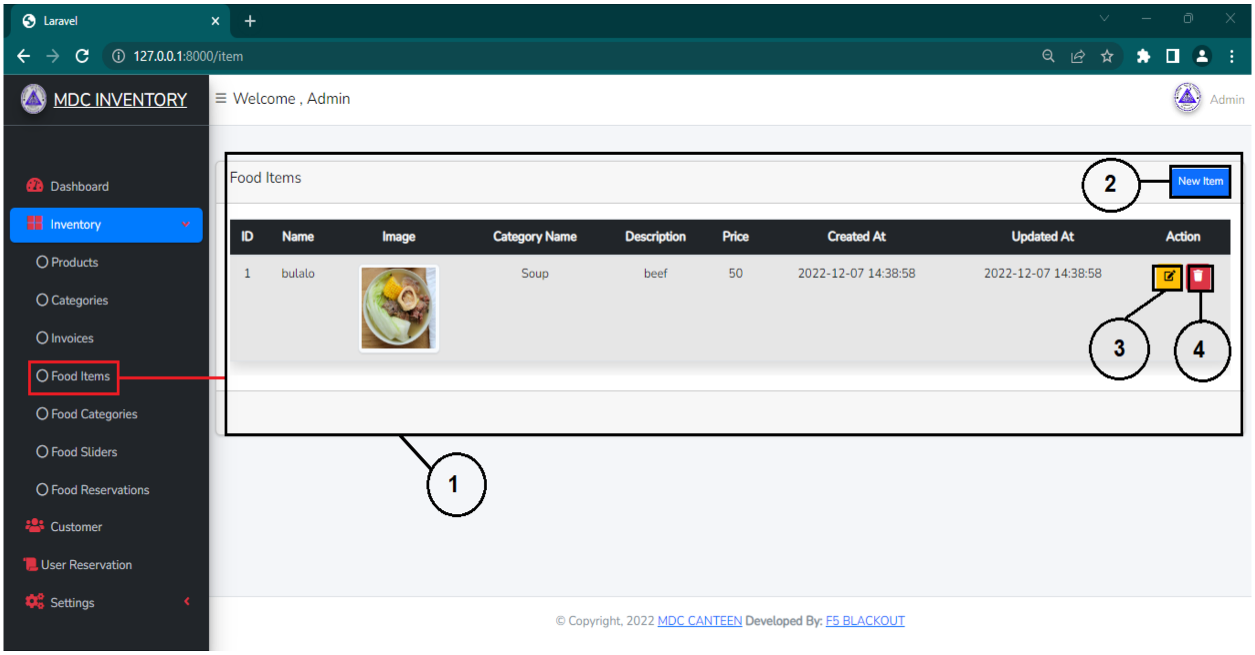
Figure 5.7 Invoices Module

Figure 5.7 is the invoices module. It follows how the parts work:

1. This shows the invoices field.
2. This button is used to add a new invoice.
3. This is used to view an invoice information.
4. This is used to edit an invoice information.
5. This is used to delete an invoice.
6. This is used to print an invoices information.

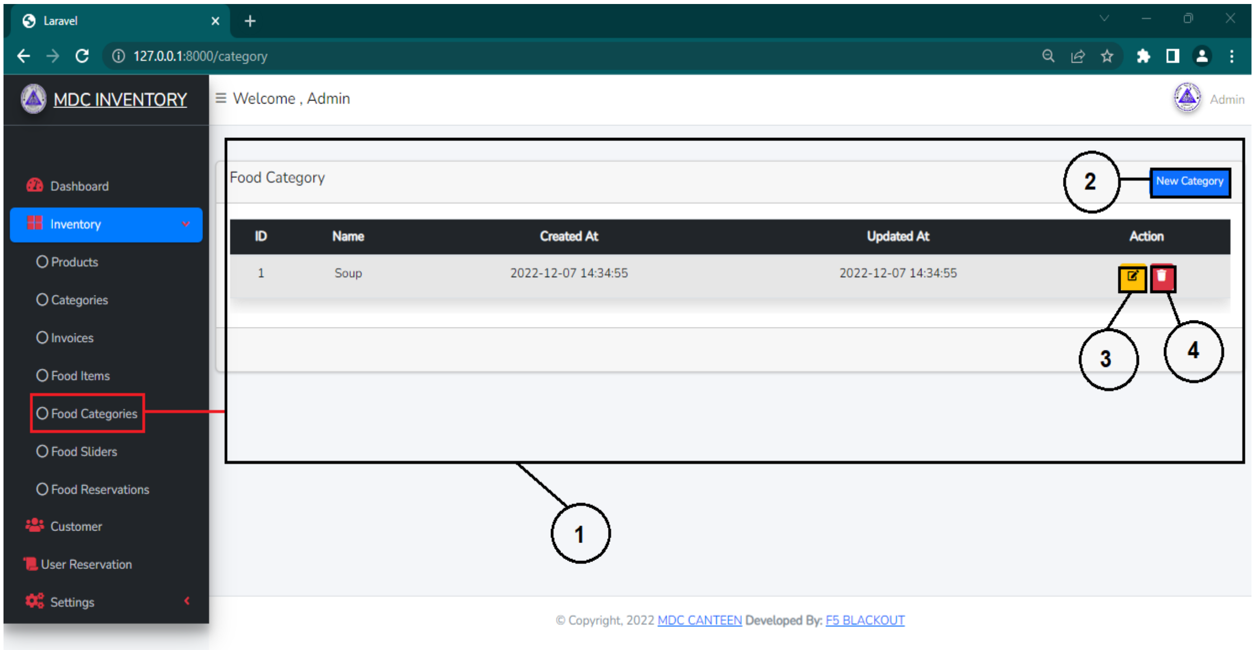


ID	Name	Image	Category Name	Description	Price	Created At	Updated At	Action
1	bulalo		Soup	beef	50	2022-12-07 14:38:58	2022-12-07 14:38:58	

Figure 5.8 Food Items Module

Figure 5.8 is the food items module. It follows how the parts work:

1. This shows the food items field.
2. This button is used to add a new item.
3. This is used to edit an item information.
4. This is used to delete an item.



ID	Name	Created At	Updated At	Action
1	Soup	2022-12-07 14:34:55	2022-12-07 14:34:55	

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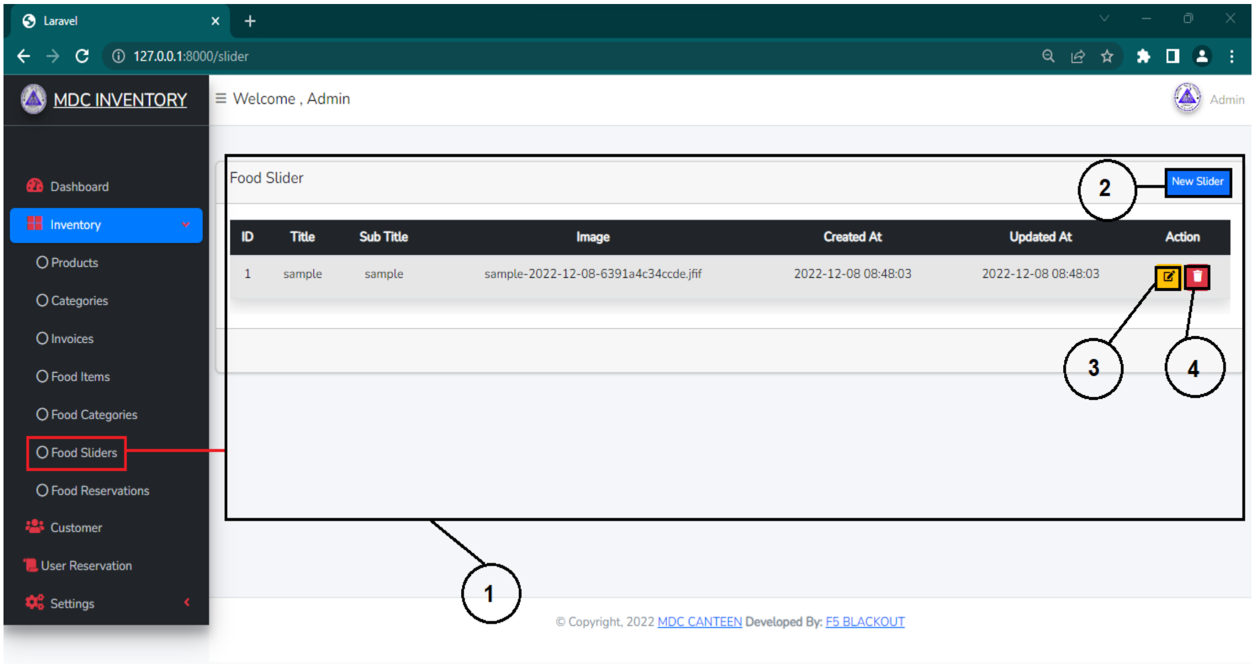
Figure 5.9 Food Categories Module

Figure 5.9 is the food categories module. It follows how the parts work:

1. This shows the food categories field.
2. This button is used to add a new food category.
3. This is used to edit a food category information.
4. This is used to delete a food category.



Food Slider

ID	Title	Sub Title	Image	Created At	Updated At	Action
1	sample	sample	sample-2022-12-08-6391a4c34ccde.jfif	2022-12-08 08:48:03	2022-12-08 08:48:03	

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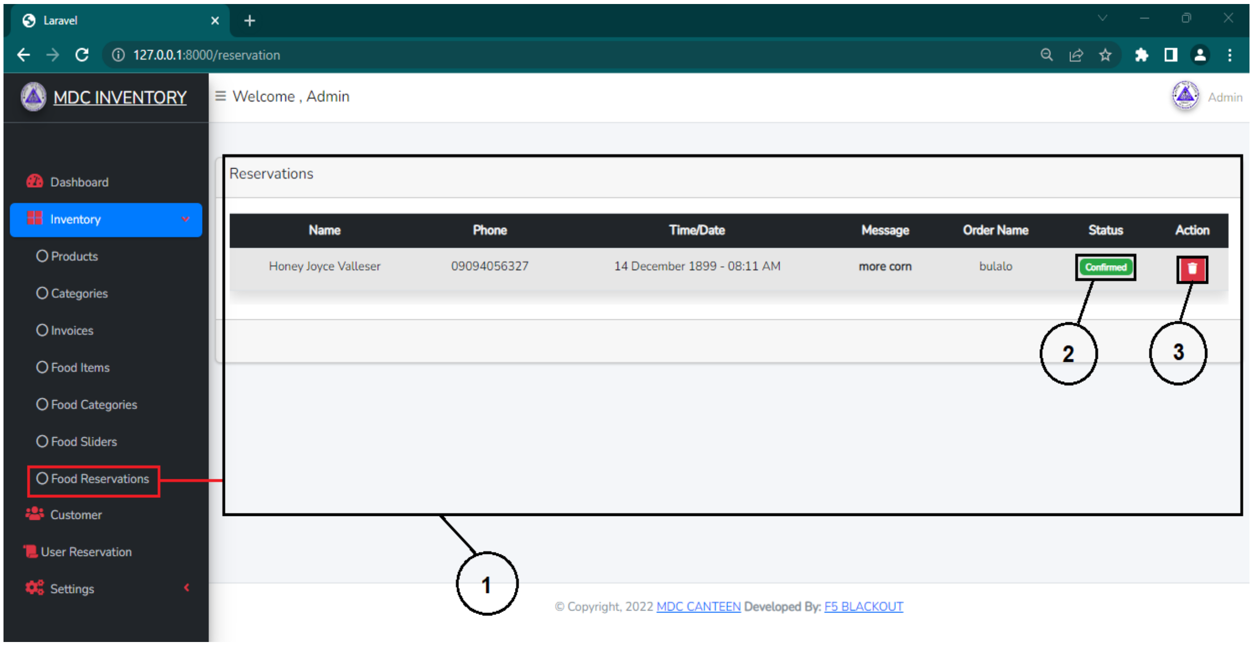
Figure 5.10 Food Sliders Module

Figure 5.10 is the food sliders module. It follows how the parts work:

1. This shows the food sliders field.
2. This button is used to add a new food slider.
3. This is used to edit a food slider information.
4. This is used to delete a food slider.



Reservations

Name	Phone	Time/Date	Message	Order Name	Status	Action
Honey Joyce Valleser	09094056327	14 December 1899 - 08:11 AM	more corn	bulalo	Confirmed	🗑

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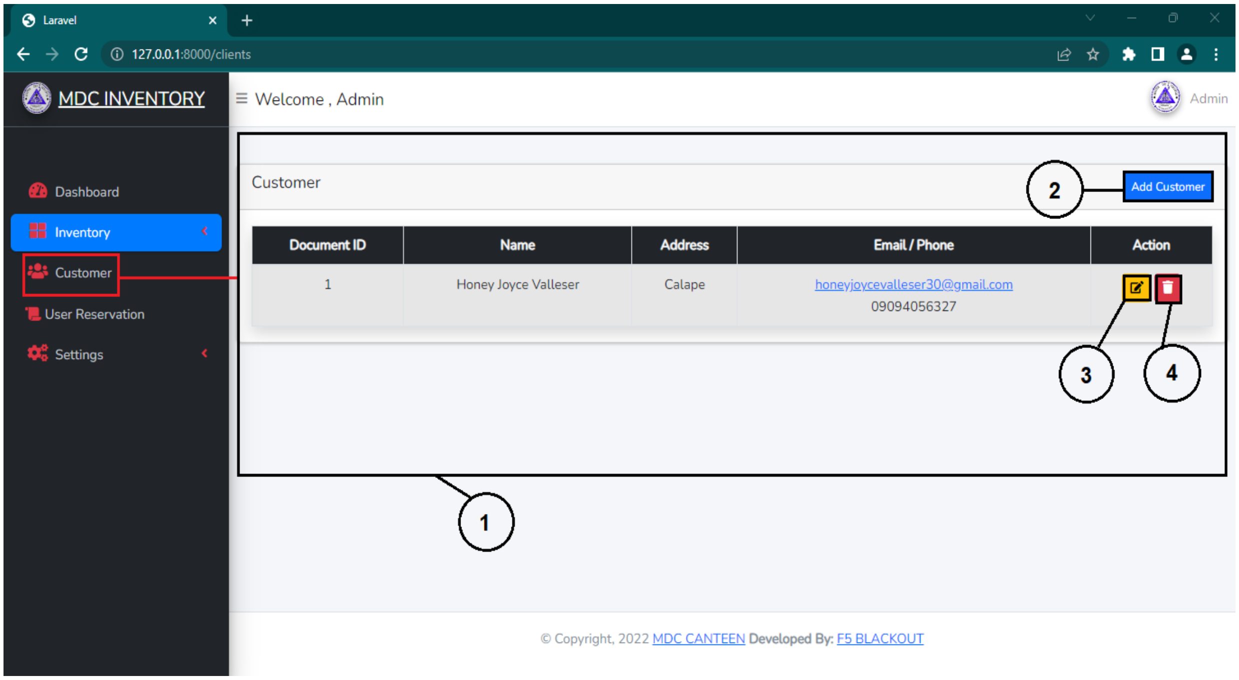
Figure 5.11 Food Reservations Module

Figure 5.11 is the food reservations module. It follows how the parts work:

1. This shows the food reservations field.
2. This will modify the status depending on whether or not the reservation is confirmed.
3. This is used to delete a food reservation.

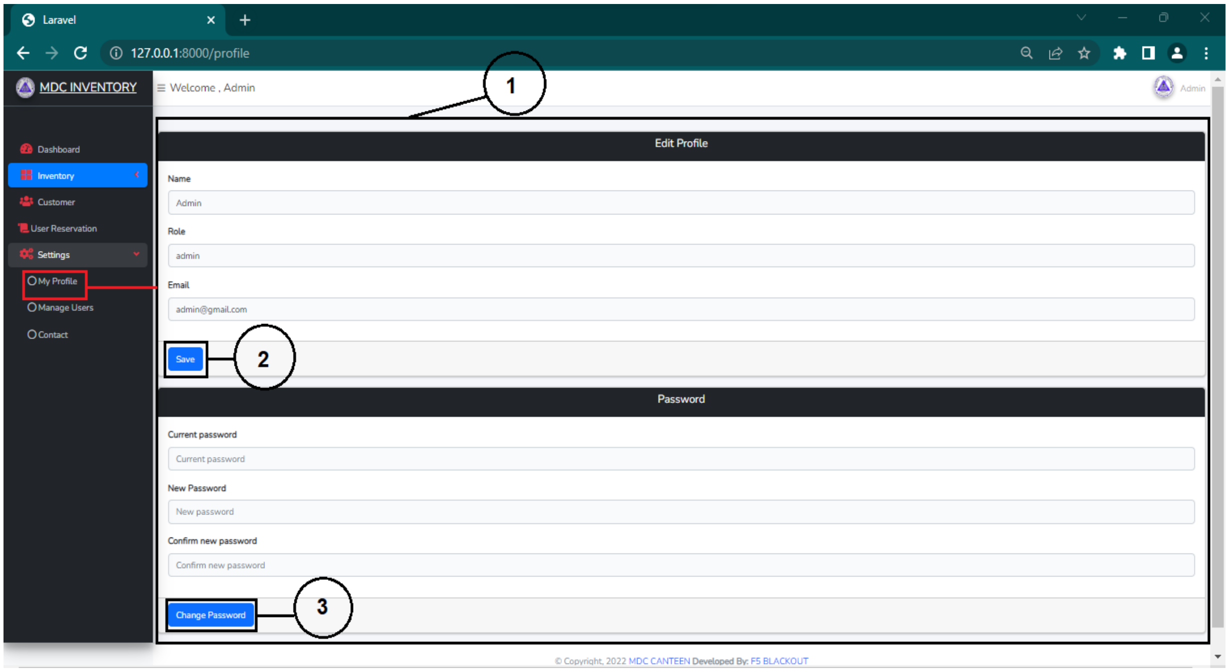


Document ID	Name	Address	Email / Phone	Action
1	Honey Joyce Valleser	Calape	honeyjoycevalleser30@gmail.com 09094056327	

Figure 5.12 Customer Interface

Figure 5.12 is the customer interface. It follows how the parts work:

1. This shows the customer field.
2. This button is used to add a new customer.
3. This is used to edit a customer information.
4. This is used to delete a customer.



Edit Profile

Name: Admin

Role: admin

Email: admin@gmail.com

Password

Current password: Current password

New Password: New password

Confirm new password: Confirm new password

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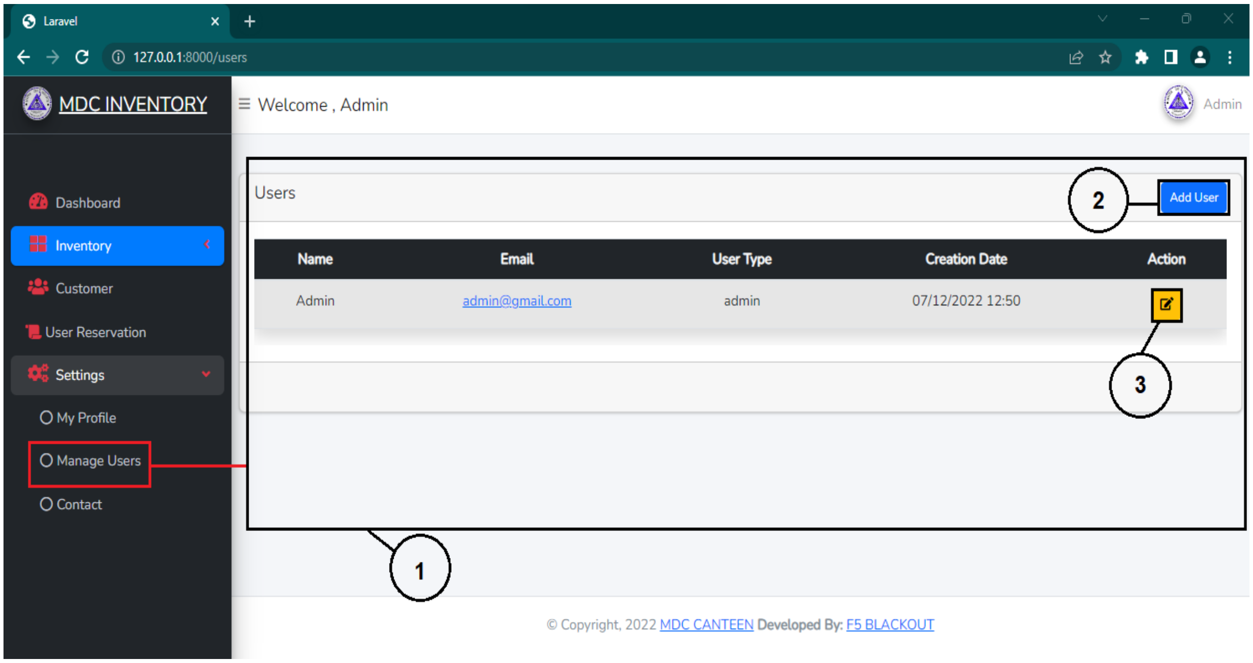
Figure 5.13 My Profile View

Figure 5.13 is my profile view. It follows how the parts work:

1. This shows the admin profile field.
2. This button is used to save admin name, role, and email.
3. This button is used to change admin new password.



Welcome , Admin

Users

Name	Email	User Type	Creation Date	Action
Admin	admin@gmail.com	admin	07/12/2022 12:50	

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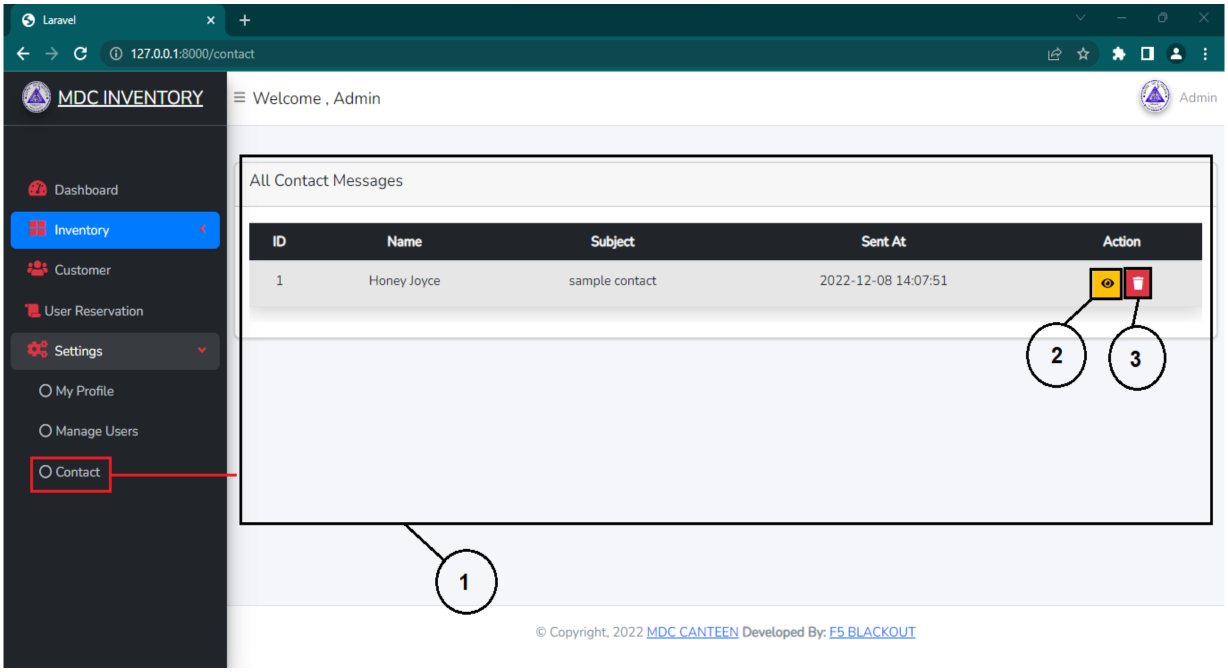
Figure 5.14 Manage Users View

Figure 5.14 is the manage users view. It follows how the parts work:

1. This shows the users profile field.
2. This button is used to add a user.
3. This button is used to edit a user information.



All Contact Messages

ID	Name	Subject	Sent At	Action
1	Honey Joyce	sample contact	2022-12-08 14:07:51	

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Figure 5.15 Contact View

Figure 5.15 is the contact view. It follows how the parts work:

1. This field shows all the contact messages.
2. This button is used to view a customer contact information and messages.
3. This button is used to delete a contact.

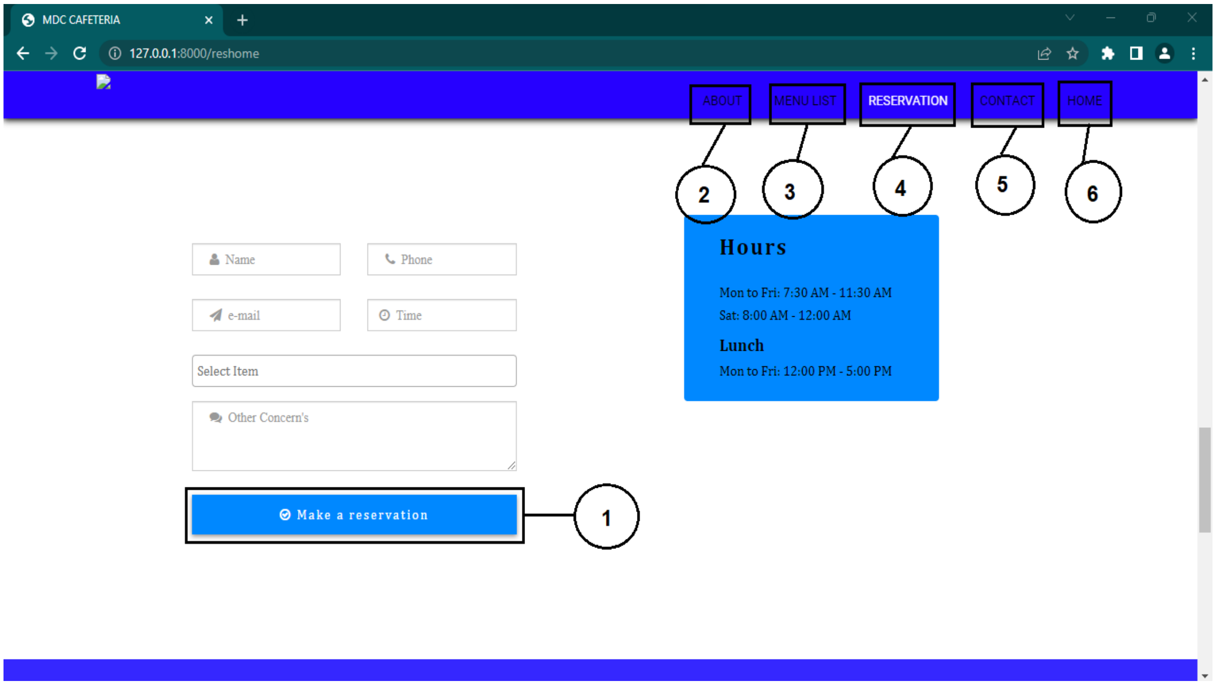


Figure 5.16 User Reservation Interface

Figure 5.16 is the online reservation Interface. It follows how the parts work:

1. This button will link to make, add or create an online reservation.
2. This will show about the system information.
3. This will show the list of menus.
4. This will show all the customers reservation information.
5. This will show the all the contacts information.
6. This function will redirect to inventory system dashboard.

Chapter VI
CONCLUSION AND RECOMMENDATION

This chapter provides the conclusion of the project based on the findings of the researcher and recommendations that the researchers believed would improve the project if added.

Conclusion

In conclusion, computerized canteen inventory system based on Web System, the school will be developed to replace the traditional manual based inventory system that is currently used. This project will be canteen customer management system with online reservations and inventory system considered succeed once automated canteen inventory system based on Web System is developed. This system is designed to make the whole canteen customer management taking process to become more reliable, convenient, efficient, and accurate. Besides that, with the implementation of Web based system technology will help in reduce errors and evaluation data will be able to computer in easier way.

This project is designed to aim in eliminating spotted problems during initial analysis. The problems spotted are includes time consuming and Tedious work. Prone to human error. It is slow, less reliable and inefficient in computing how many products were sold. These problems are the major problems faced by the canteen.

Therefore, this project is designed in effort to eliminate these problems. Some solution had been applied to eliminate these problems which include the use of Web based system, change the current traditional canteen manual inventory system to fully-computerized system, and provide easier way to view sales and inventories.

Recommendation

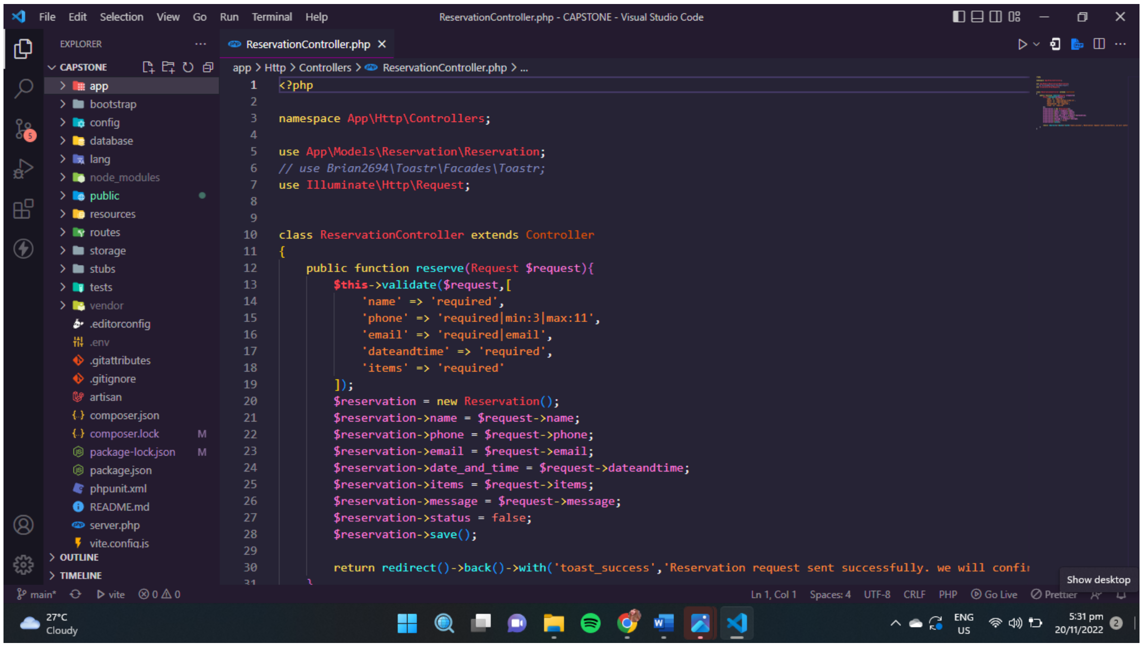
The researchers strongly recommended the implementation of the MDC Canteen Customer Management System with Online Reservations and Inventory System on Web based system. In addition, the following are recommended.

The proposed system is open for further development and enhancement in terms of developing the following features:

a. One product may be invoiced, which is the issue; how can multiple products be joined for an invoice for each customer.
b. Concern with reservations is that they can only order one product at a time; the solution is to figure out how to display multiple products simultaneously.

Appendices

Sample Source Code



```php
<?php

namespace App\Http\Controllers;

use App\Models\Reservation\Reservation;
// use Brian2694\Toastr\Facades\Toastr;
use Illuminate\Http\Request;


class ReservationController extends Controller
{
    public function reserve(Request $request){
        $this->validate($request,[
            'name' => 'required',
            'phone' => 'required|min:3|max:11',
            'email' => 'required|email',
            'dateandtime' => 'required',
            'items' => 'required'
        ]);
        $reservation = new Reservation();
        $reservation->name = $request->name;
        $reservation->phone = $request->phone;
        $reservation->email = $request->email;
        $reservation->date_and_time = $request->dateandtime;
        $reservation->items = $request->items;
        $reservation->message = $request->message;
        $reservation->status = false;
        $reservation->save();

        return redirect()->back()->with('toast_success','Reservation request sent successfully. we will confi
```

Pictures of showcasing data gathering

CURRICULUM VITAE

Kent Jeremai Abarquez
Macaas, Tubigon, Bohol
Contact No. 09052965982
Email Address: k2khenziemeliodas@gmail.com

SKILLS & QUALIFICATIONS:

FRONT END, BACKEND WEB DEVELOPMENT
-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter, Livewire, and basic of React
PROGRAMMING
-basic programming with Java, and Php

PERSONAL DATA:

Birthday: October 29, 2000
Citizenship: Filipino
Sex: Male
Civil Status: Single
Height: 5’6”
Weight: 60kls.

EDUCATIONAL ATTAINMENT:

Primary	Tubigon East Central Elementary School Macaas, Tubigon, Bohol	2012-2013
Secondary	Cawayanan High School Cawayanan, Tubigon, Bohol Junior High School	2013-2017
	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Senior High School	2017-2019
Tertiary	Bachelor of Science in Information Technology Mater Dei College, Tubigon, Bohol 2019-Present	

Mark Dwin Benablo
Centro, Tubigon, Bohol
Contact No. 09485384248
Email Address: benablomarkdwin@gmail.com

SKILLS & QUALIFICATIONS:

FRONT END, BACKEND WEB DEVELOPMENT
-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter, Livewire, and basic of React
PROGRAMMING
-basic programming with Java, and Php

PERSONAL DATA:

Birthday: May 22, 2000
Citizenship: Filipino
Sex: Male
Civil Status: Single
Height: 5’6”
Weight: 65kls.

EDUCATIONAL ATTAINMENT:

Primary	Ubojan Elementary School Ubojan, Tubigon, Bohol	2012-2013
Secondary	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Junior High School	2013-2017
	Mater Dei College Cabulijan, Tubigon, Bohol Senior High School	2017-2019
Work Immersion	2GO, Travel, Cebu City	
Tertiary	Bachelor of Science in Information Technology Mater Dei College, Tubigon, Bohol 2019-Present	

John Ritchie Coscos

Pooc Oriental, Tubigon, Bohol
Contact No. 09512355153
Email Address: johnritchiecosccos52@gmail.com

SKILLS & QUALIFICATIONS:

FRONT END, BACKEND WEB DEVELOPMENT
-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter, Livewire, and basic of React
PROGRAMMING
-basic programming with Java, and Php

PERSONAL DATA:

Birthday: July 23, 2000
Citizenship: Filipino
Sex: Male
Civil Status: Single
Height: 5’6”
Weight: 55kls.

EDUCATIONAL ATTAINMENT:

Primary	Tubigon West Central Elementary School Pooc Oriental, Tubigon, Bohol	2012-2013
Secondary	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Junior High School	2013-2017
	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Senior High School	2017-2019
Work Immersion	Municipality of Tubigon- LGU	
Tertiary	Bachelor of Science in Information Technology Mater Dei College, Tubigon, Bohol 2019-Present	

Louei Genita

Bunacan, Tubigon, Bohol
Contact No. 09462539505
Email Address: loueigenita@gmail.com

SKILLS & QUALIFICATIONS:

FRONT END, BACKEND WEB DEVELOPMENT
-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter, Livewire, and basic of React
PROGRAMMING
-basic programming with Java, and Php

PERSONAL DATA:

Birthday: March 03, 2000
Citizenship: Filipino
Sex: Male
Civil Status: Single
Height: 5’5”
Weight: 46kls.

EDUCATIONAL ATTAINMENT:

Primary	Bunacan Elementary School Bunacan, Tubigon, Bohol	2012-2013
Secondary	Cawayanan High School Cawayanan, Tubigon, Bohol Junior High School	2013-2017
	Mater Dei College Cabulijan, Tubigon, Bohol Senior High School	2017-2019
Tertiary	Bachelor of Science in Information Technology Mater Dei College, Tubigon, Bohol 2019-Present	

Honey Joyce R. Valleser
Lucob, Calape, Bohol
Contact No. 09094056327
Email Address: honeyjoycevalleser30@gmail.com

SKILLS & QUALIFICATIONS:

FRONT END, BACKEND WEB DEVELOPMENT
-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter, Livewire, and basic of React
PROGRAMMING
-basic programming with Java, and Php

PERSONAL DATA:

Birthday: January 26, 2001
Citizenship: Filipino
Sex: Female
Civil Status: Single
Height: 5’3”
Weight: 45kls.

EDUCATIONAL ATTAINMENT:

Primary	Mandaug Elementary School Abucayan Sur, Calape, Bohol	2012-2013
Secondary	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Junior High School	2013-2017
	Calape National High School Sta. Cruz, Calape, Bohol Senior High School With Honors	2017-2019
Work Immersion	Alturas Group of Company Tagbilaran City,Bohol	November, December 2018

ACHIEVEMENT:

NCII holder of Computer Systems Servicing	October 2018

Tertiary	Bachelor of Science in Information Technology Mater Dei College, Tubigon, Bohol 2019-Present