

Chapter I

Background of the Study

1.1 Project Context

Technology has made our lives easier today, from the smallest things to Space, Deep Learning, and even Artificial Intelligence (Machine Intelligence), from Automated Water Sprinklers to Automated Cars that mostly don't need you to steer to drive you to your destination. Technology also helps in quality education and effective learning in schools.

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 researcher 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.

Researchers

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

Future Researchers

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/Systems

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.

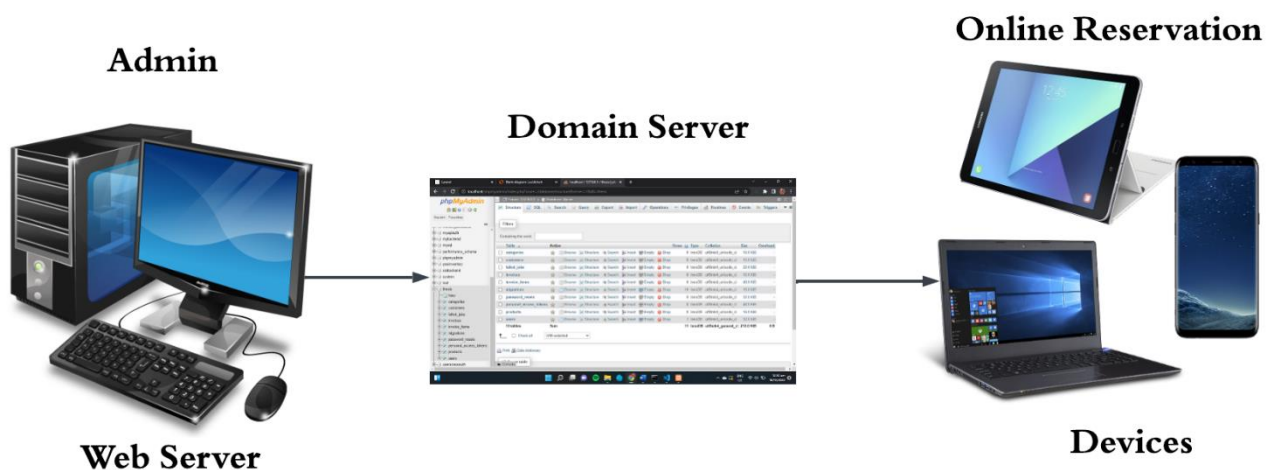
BOHECO also uses a computerized warehouse inventory system. The system has the capability to keep an inventory of products in warehouse stock and the system can notify the sender what happens to the request via SMS and account notification.

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 Diagram

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 canteen's user into the system.		
Brief Description: This use case describes how the admin manage or monitor the canteen's user into the system.		
Trigger: The Admin wants to manage the canteen's users of the system.		
Normal Flow of Events: <div>1. The Admin wants to manage the canteen's users of the system.</div> <div>2. The Admin must fill up the register's information to login into the system.</div> <div>3. The Admin starts the application and request to log in.</div> <div>4. The Admin enters username & password to the system.</div> <div>5. The system validates the admin username & password from database.</div> <div>6. The system navigates to dashboard.</div> <div>7. The Admin can add, view, edit and delete user.</div> <div>8. The system end.</div>		

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 client.		
Brief Description: This use case describes how the Admin add a client.		
Trigger: The Admin wants to add a client.		
Normal Flow of Events: <div>1. The Admin starts the application.</div> <div>2. The Admin click the clients function.</div> <div>3. The Admin click the add client button.</div> <div>4. The Admin provides the client information.</div> <div>5. The Admin click the save button.</div> <div>6. The system saves the client registration information.</div> <div>7. The system successfully add a client.</div> <div>8. The Admin can add, view, edit and delete client.</div> <div>9. The system end.</div>		

Table 4.1.2 Add Client

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

Table 4.1.3 Add Provider

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: <ol style="list-style-type: none">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 and delete product.9. The system ends.		

Table 4.1.4 Add Product

Use Case Name: Add Category	ID:5	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: <div><div>1. The admin starts the application.</div><div>2. The admin click the inventory function.</div><div>3. The admin click the categories function.</div><div>4. The admin click the new category button.</div><div>5. The admin provides the category information.</div><div>6. The admin click the save button.</div><div>7. The system successfully saves the category registration information.</div><div>8. The Admin can add, view, edit and delete category.</div><div>9. The system ends.</div></div>		

Table 4.1.5 Add Category

Use Case Name: Add Invoice	ID:6	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: <ol style="list-style-type: none">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 clients 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 and delete invoice.9. The system ends.		

Table 4.1.6 Add Invoice

Use Case Name: Create Receipt	ID:7	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to create receipt.		
Brief Description: This use case describes how the Admin create a receipt.		
Trigger: The Admin wants to create a receipt.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the inventory function.3. The admin click the receipts function.4. The admin click the new receipt button.5. The admin provides the receipt information.6. The admin click the continue button.7. The system successfully created the receipt information.8. The Admin can add, view and delete receipt.9. The system ends.		

Table 4.1.7 Create Receipt

Use Case Name: View Inventory Statistics	ID:8	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view inventory statistics information.		
Brief Description: This use case describes how the Admin view inventory statistics information.		
Trigger: The Admin wants to view the inventory statistics information.		
Normal Flow of Events: <div>1. The admin starts the application.</div> <div>2. The admin click the inventory function.</div> <div>3. The admin click the statistics function.</div> <div>4. The system displays the inventory statistics information.</div> <div>5. The system ends.</div>		

Table 4.1.8 View Inventory Statistics

Use Case Name: View All Transactions	ID:9	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view all transactions information.		
Brief Description: This use case describes how the Admin view all the transactions information.		
Trigger: The Admin wants to view all the transactions information.		
Normal Flow of Events: <div>1. The admin starts the application.</div> <div>2. The admin click the transactions function.</div> <div>3. The admin click the all function.</div> <div>4. The system displays all the transactions information.</div> <div>5. The system ends.</div>		

Table 4.1.9 View All Transactions

Use Case Name: View Transactions Statistics	ID:10	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view transactions statistics information.		
Brief Description: This use case describes how the Admin view transactions statistics information.		
Trigger: The Admin wants to view the transactions statistics information.		
Normal Flow of Events: <div>1. The admin starts the application.</div> <div>2. The admin click the transactions function.</div> <div>3. The admin click the statistics function.</div> <div>4. The system displays the transactions statistics information.</div> <div>5. The system ends.</div>		

Table 4.1.10 View Transactions Statistics

Use Case Name: Register Sales	ID:11	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to register sales into the system.		
Brief Description: This use case describes how the Admin register sales into the system.		
Trigger: The Admin wants to register sales into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the transactions function.3. The admin click the sales function.4. The admin click the register sale button.5. The admin register sale by providing customer information.6. The admin click the continue button.7. The system successfully registered client sales information.8. The system displays sale summary.9. The admin can delete sale and add product.10. The admin provides the products information.11. The admin click the continue button.12. The system successfully registered a product.13. The admin can finalize sale.14. The admin click the finalize sale button.15. The system successfully completed the sale.16. The system ends.		

Table 4.1.11 Register Sales

Use Case Name: Register Expenses	ID:12	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to register expenses into the system.		
Brief Description: This use case describes how the Admin register expenses into the system.		
Trigger: The Admin wants to register expenses into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the transactions function.3. The admin click the expenses function.4. The admin click the register expense button.5. The admin provides expense information.6. The admin click the save button.7. The system successfully recorded expense information.8. The Admin can edit and delete expense.9. The system ends.		

Table 4.1.12 Register Expenses

Use Case Name: Register Income	ID:13	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to register income into the system.		
Brief Description: This use case describes how the Admin register income into the system.		
Trigger: The Admin wants to register income into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the transactions function.3. The admin click the income function.4. The admin click the register income button.5. The admin provides income information.6. The admin click the save button.7. The system successfully recorded income information.8. The Admin can edit and delete income.9. The system ends.		

Table 4.1.13 Register Income

Use Case Name: Register Transfers	ID:14	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to register tranfers into the system.		
Brief Description: This use case describes how the Admin register tranfers into the system.		
Trigger: The Admin wants to register tranfers into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the transactions function.3. The admin click the transfers function.4. The admin click the register transfer button.5. The admin provides transfers information.6. The admin click the save button.7. The system successfully registered transaction information.8. The Admin can delete tranfers.9. The system ends.		

Table 4.1.14 Register Transfers

Use Case Name: Add Payments	ID:15	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add payments into the system.		
Brief Description: This use case describes how the admin handles the process of adding payments into the system.		
Trigger: The Admin wants to add payments into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the transactions function.3. The admin click the payments function.4. The admin click the new payment button.5. The admin provides payment information.6. The admin click the save button.7. The system successfully registered payment information.8. The Admin can edit and delete payment.9. The system ends.		

Table 4.1.15 Add Payments

Use Case Name: Add Methods and Accounts	ID:16	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add payment methods and accounts into the system.		
Brief Description: This use case describes how the admin handles the process of adding payment methods and accounts into the system.		
Trigger: The Admin wants to add payment methods and accounts into the system.		
Normal Flow of Events: <ol style="list-style-type: none">1. The admin starts the application.2. The admin click the methods and accounts function.3. The admin click the new method button.4. The admin provides payment method information.5. The admin click the save button.6. The system successfully created payment method information.7. The Admin can view, edit and delete method.8. The system ends.		

Table 4.1.16 Add Methods and Accounts

Use Case Name: Manage Profile	ID:17	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: <ol style="list-style-type: none">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 4.1.17 Manage Profile

Use Case Name: Manage Users	ID:18	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: <ol style="list-style-type: none">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 4.1.18 Manage Users

Use Case Name: Manage Reservation Dashboard	ID:19	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to manage reservation dashboard.		
Brief Description: This use case describes how the admin manage reservation dashboard into the system.		
Trigger: The Admin wants to manage reservation dashboard into the system.		
Normal Flow of Events: <div>1. The admin starts the application.</div> <div>2. The admin click the reservation dashboard function.</div> <div>3. The system navigates to reservation dashboard.</div> <div>4. The system ends.</div>		

Table 4.1.19 Manage Reservation Dashboard

Use Case Name: View Users Reservation	ID:20	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view users reservation.		
Brief Description: This use case describes how the admin view users reservation into the system.		
Trigger: The Admin wants to view user reservation into the system.		
Normal Flow of Events: 5. The admin starts the application. 6. The admin click the reservation dashboard function. 7. The system navigates to reservation dashboard 8. The admin click the users reservation function. 9. The system displays the online reservation interface. 10. The system ends.		

Table 4.1.20 View Users Reservation

Use Case Name: View Reservations	ID:21	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view reservations.		
Brief Description: This use case describes how the admin view reservations into the system.		
Trigger: The Admin wants to view reservations into the system.		
Normal Flow of Events: 11. The admin starts the application. 12. The admin click the reservation dashboard function. 13. The system navigates to reservation dashboard 14. The admin click the reservations function. 15. The system displays the reservations information. 16. The system ends.		

Table 4.1.21 View Reservations

Use Case Name: Add Slider	ID:22	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add slider.		
Brief Description: This use case describes how the admin add slider into the system.		
Trigger: The Admin wants to add slider into the system.		
Normal Flow of Events: 17. The admin starts the application. 18. The admin click the reservation dashboard function. 19. The system navigates to reservation dashboard. 20. The admin click the sliders function. 21. The admin click the add new button. 22. The admin provides the sliders information. 23. The admin click the save button. 24. The system successfully saved the slider information. 25. The admin can edit and delete a slider. 26. The system ends.		

Table 4.1.22 Add Slider

Use Case Name: Add Categories	ID:23	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add categories.		
Brief Description: This use case describes how the admin add categories into the system.		
Trigger: The Admin wants to add categories into the system.		
Normal Flow of Events: 27. The admin starts the application. 28. The admin click the reservation dashboard function. 29. The system navigates to reservation dashboard. 30. The admin click the categories function. 31. The admin click the add new button. 32. The admin provides a category name. 33. The admin click the save button. 34. The system successfully saved the category information. 35. The admin can edit and delete a category. 36. The system ends.		

Table 4.1.23 Add Categories

Use Case Name: Add Items	ID:24	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to add items.		
Brief Description: This use case describes how the admin add items into the system.		
Trigger: The Admin wants to add items into the system.		
Normal Flow of Events: 37. The admin starts the application. 38. The admin click the reservation dashboard function. 39. The system navigates to reservation dashboard. 40. The admin click the items function. 41. The admin click the add new button. 42. The admin provides the items information. 43. The admin click the save button. 44. The system successfully saved the items information. 45. The admin can edit and delete an item. 46. The system ends.		

Table 4.1.24 Add Items

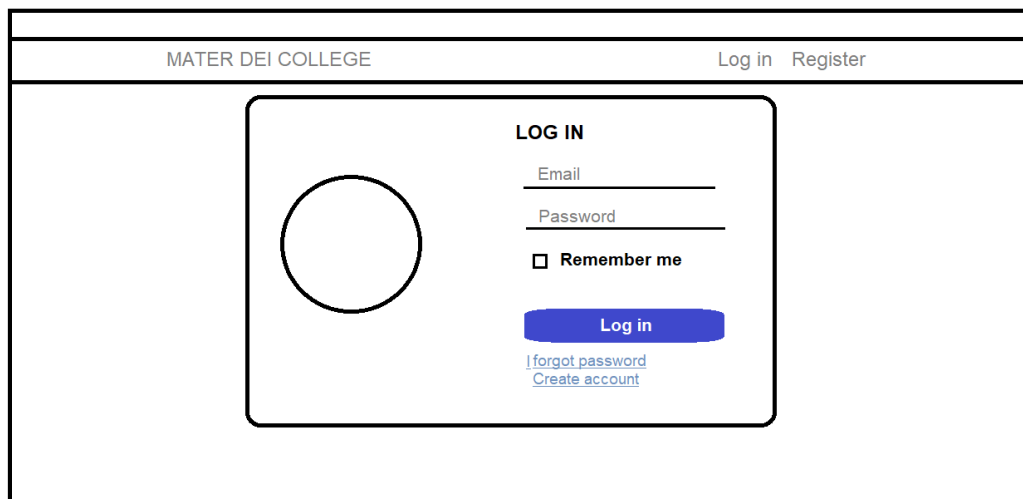
Use Case Name: View Contact Message	ID:25	Important Level: High
Primary Actor: Admin	Use Case Type: Essential, Detail	
The Admin wants to view contact.		
Brief Description: This use case describes how the admin view contacts into the system.		
Trigger: The Admin wants to view contacts into the system.		
Normal Flow of Events: 1. The admin starts the application. 2. The admin click the reservation dashboard function. 3. The system navigates to reservation dashboard 4. The admin click the contact message function. 5. The system displays all contact message. 6. The system ends.		

Table 4.1.25 View Contact Message

4.2 Design of Software, Systems, Product, and Processes

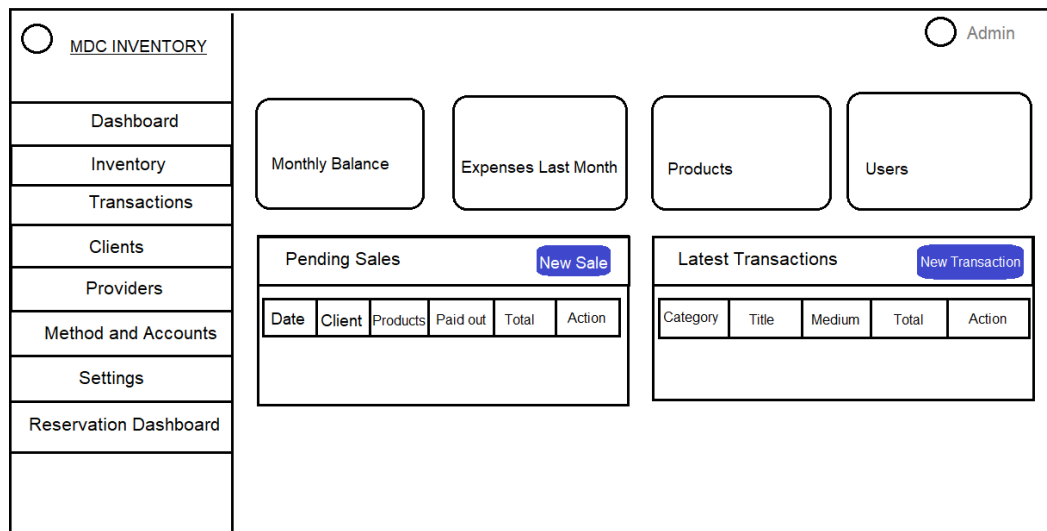
Researcher show a certain view of what to be expect in the system. It is useful for the researcher to guide them on how they develop the system. It is serves as the blue print of the system.

Output and User-Interface Design



The login interface is a web page for 'MATER DEI COLLEGE'. It features a header with the college name and links for 'Log in' and 'Register'. The main content area contains a 'LOG IN' section with a circular profile picture placeholder, input fields for 'Email' and 'Password', a 'Remember me' checkbox, a blue 'Log in' button, and links for 'I forgot password' and 'Create account'.

4.2.1 Login Interface



The admin dashboard is a web application for 'MDC INVENTORY'. It features a sidebar with a user profile icon and a list of menu items: Dashboard, Inventory, Transactions, Clients, Providers, Method and Accounts, Settings, and Reservation Dashboard. The main content area includes a top bar with a user profile icon and the name 'Admin'. The dashboard is divided into several sections: 'Monthly Balance', 'Expenses Last Month', 'Products', and 'Users'. Below these are two tables: 'Pending Sales' and 'Latest Transactions', each with a 'New Sale' or 'New Transaction' button. The 'Pending Sales' table has columns: Date, Client, Products, Paid out, Total, and Action. The 'Latest Transactions' table has columns: Category, Title, Medium, Total, and Action.

Figure 4.2.2 Admin Dashboard





MDC'S CAFETERIA	Hello, Admin [Logout]					
Dashboard	<div style="display: flex; justify-content: space-around;"> <div> Category/Item</div> <div> Slider Count</div> <div> Reservation</div> <div> Contact</div> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px 5px; text-align: center;">Reservations</div> <div style="display: flex; justify-content: space-between; padding: 5px 0;"> show entries search </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Name</th> <th style="padding: 5px;">Phone</th> <th style="padding: 5px;">Order Name</th> <th style="padding: 5px;">Status</th> <th style="padding: 5px;">Action</th> </tr> </thead> <tbody> <!-- Empty table body --> </tbody> </table> </div>	Name	Phone	Order Name	Status	Action
Name		Phone	Order Name	Status	Action	
Sliders						
Categories						
Items						
Reservations						
Users Reservation						
Contact Message						

Figure 4.2.3 Reservation Dashboard

About Menu List Reservation Contact Home
<div style="text-align: center; margin-bottom: 20px;">○</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <input style="width: 45%;" type="text" value="Name"/> <input style="width: 45%;" type="text" value="Phone"/> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <input style="width: 45%;" type="text" value="Email"/> <input style="width: 45%;" type="text" value="Time"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="Select Item"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="Other concerns"/> </div> <div style="background-color: #4a7ebb; color: white; text-align: center; padding: 5px; margin-top: 10px;"> Make a reservation </div> </div> <div style="width: 45%; border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>Hours Mon to Fri 7:30-11-30am Sat 8:00am-12:00am Lunch Mon to Fri 12:00-5:00pm</p> </div> </div>

Figure 4.2.4 Online Reservation Interface

Entity Relationship Diagram

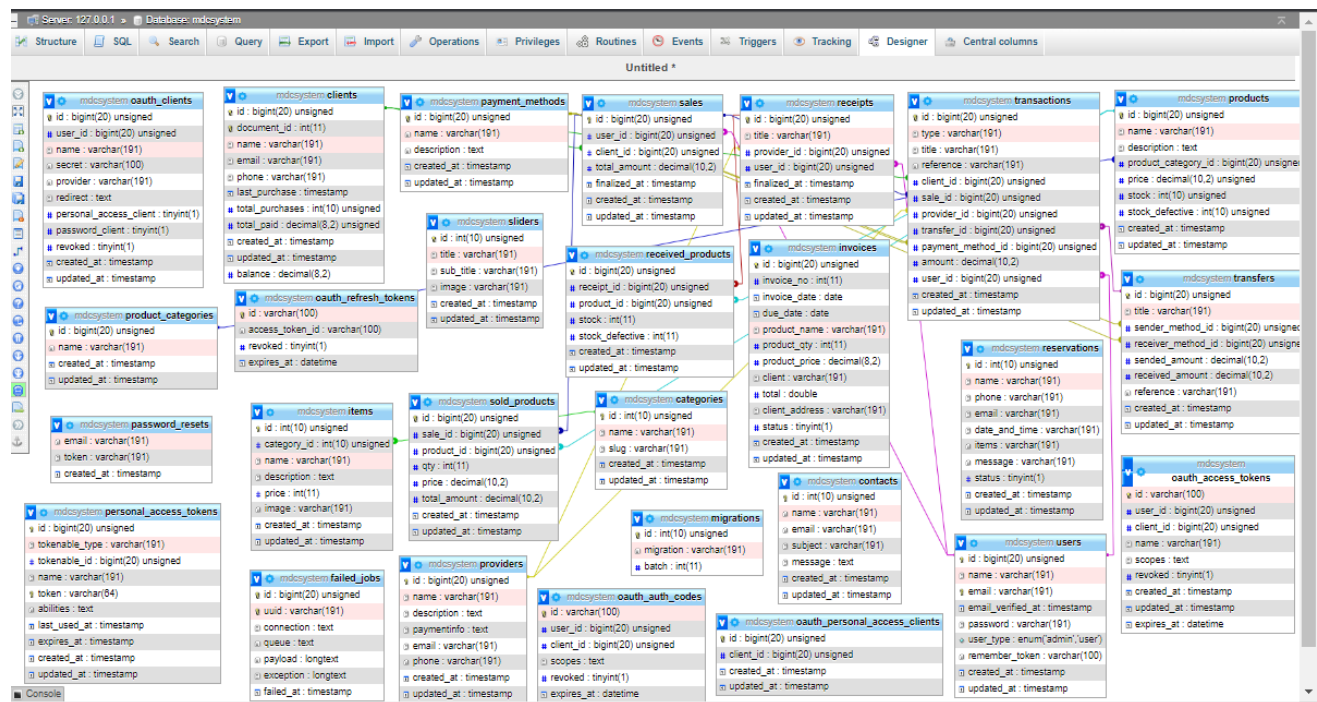


Figure 4.2.5 ERD of the Project

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
email	varchar	191	Email address of the client
phone	varchar	191	Phone number of the client
last_purchase	timestamp		Date purchased
total_purchases	int	10	Total of the client purchases unsigned
total_paid	decimal	8,2	Total paid of the client unsigned
created_at	timestamp		Date created
updated_at	timestamp		Date updated
balance	decimal	8.2	Balance of the client

Table 4.3.2 Database Table of Client

Providers Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the provider unsigned
name	varchar	191	Name of the provider
description	text		Description of the provider
paymentinfo	text		Payment information of the provider
email	varchar	191	Email address of the provider
phone	varchar	191	Phone number of the provider
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.3 Database Table of Providers

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 4.3.4 Database Table of Products

Sold Products Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the sold product unsigned
sale_id	int	20	Sale ID of the sold product unsigned
product_id	int	20	Product ID of the sold product unsigned
qty	int	11	Quantity of the sold product
price	decimal	10,2	Price of the sold product
total_amount	decimal	10,2	Total amount of sold product
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.5 Database Table of Sold Products

Receipts Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the receipt unsigned
title	varchar	191	Title of the receipt
provider_id	int	20	ID of the provider unsigned
user_id	int	20	ID of the user unsigned
finalized_at	timestamp		Date finalized
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.6 Database Table of Receipts

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 4.3.7 Database Table of Product Categories

Transactions Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the transaction unsigned
type	varchar	191	Type of the transaction
title	varchar	191	Title of the transaction
reference	varchar	191	Reference of the transaction
client_id	int	20	ID of the client unsigned
sale_id	int	20	ID of the sale unsigned
provider_id	int	20	ID of the provider unsigned
transfer_id	int	20	ID of the transfer unsigned
payment_method_id	int	20	ID of the payment method unsigned
amount	decimal	10,2	Amount of transaction
user_id	int	20	ID of the user unsigned
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.8 Database Table of Transactions

Transfers Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the transfer unsigned
title	varchar	191	Title of the transfer
sender_method_id	int	20	Sender method of transfer unsigned
reciever_method_id	int	20	Receiver method of transfer unsigned
sended_amount	decimal	10,2	Amount send for transfer
received_amount	decimal	10,2	Amount received for transfer
reference	varchar	191	Reference of the transfer
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.9 Database Table of Transfers

Received Products Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the received product unsigned
receipt_id	int	20	Receipt 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 4.3.10 Database Table of Received Products

Sales Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the sales unsigned
user_id	int	20	ID of the user unsigned
client_id	int	20	ID of the client unsigned
total_amount	decimal	10,2	Total amount of the sales
finalized_at	timestamp		Date finalized
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.11 Database Table of Sales

Oauth Clients Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the oauth client unsigned
user_id	int	20	ID of the user unsigned
name	varchar	191	Name of the oauth client unsigned
provider	varchar	191	Provider of the oauth client

redirect	text		Redirect the oauth client
personal_access_client	int	1	Personal access of the oauth client
password_client	int	1	Password of the client
revoked	int	1	Oath client revoked
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.12 Database Table of Oauth Clients

Oauth Auth Codes Table			
Field Name	Data Type	Length	Description
id	varchar	100	ID of the oauth auth code
user_id	int	20	ID of the user unsigned
client_id	int	20	ID of the client unsigned
scopes	text		Scopes of the oauth auth code
revoked	int	1	Oath auth code revoked
expires_at	timestamp		Date created

Table 4.3.13 Database Table of Oauth Auth Codes

Payment Methods Table			
Field Name	Data Type	Length	Description
id	int	20	ID of the payment method unsigned
name	varchar	191	Name of payment method
decription	text		Description of the payment method
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.14 Database Table of Payment Methods

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 4.3.15 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 4.3.16 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 4.3.17 Database Table of Sliders

Items Table			
Field Name	Data Type	Length	Description
id	int	10	ID of the item unsigned
category_id	int	10	Category id of the item unsigned
name	varchar	191	Name of the item
description	text		Description of the item
price	int	11	Price of the item
image	varchar	191	Image of the item
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.18 Database Table of Items

Categories Table			
Field Name	Data Type	Length	Description
id	int	10	ID of the category unsigned
name	varchar	191	Category name
slug	varchar	191	Slug of the category
created_at	timestamp		Date created
updated_at	timestamp		Date updated

Table 4.3.19 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 4.3.20 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

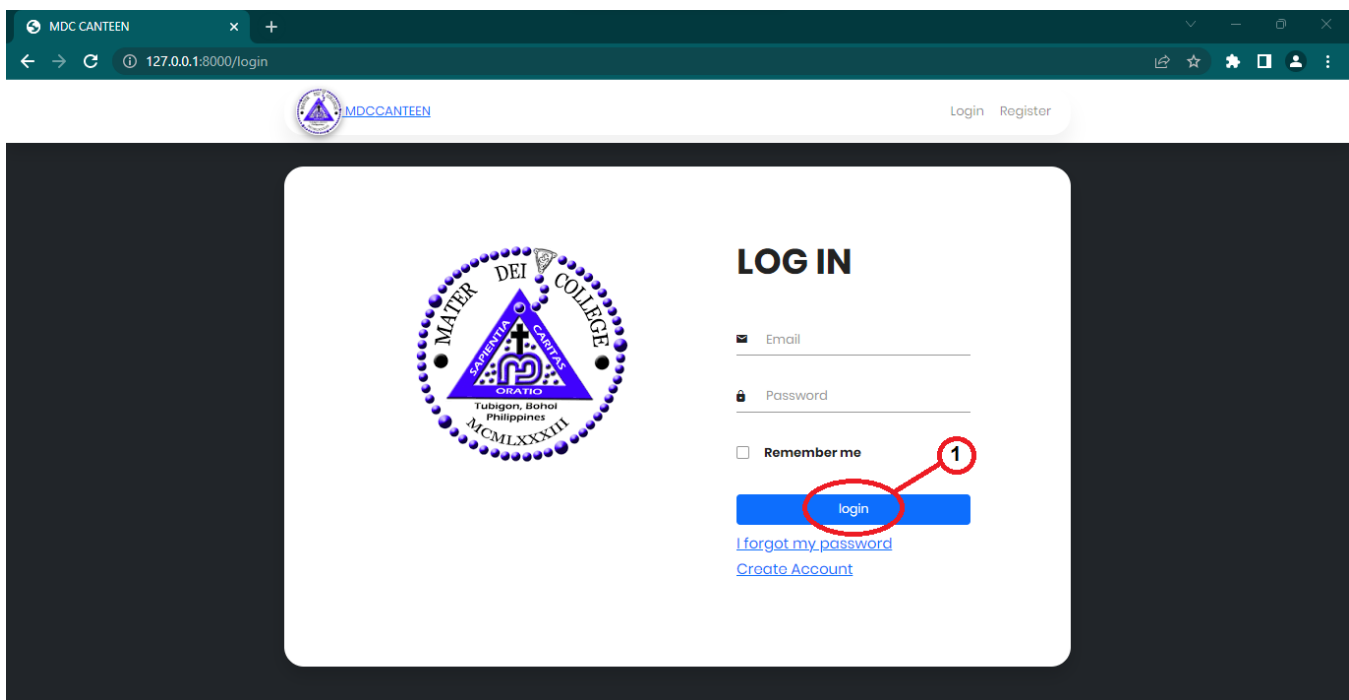


Figure 5.1 Log in Window

Figure 5.1 is the interface of logging in the system. There are two types of user 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.

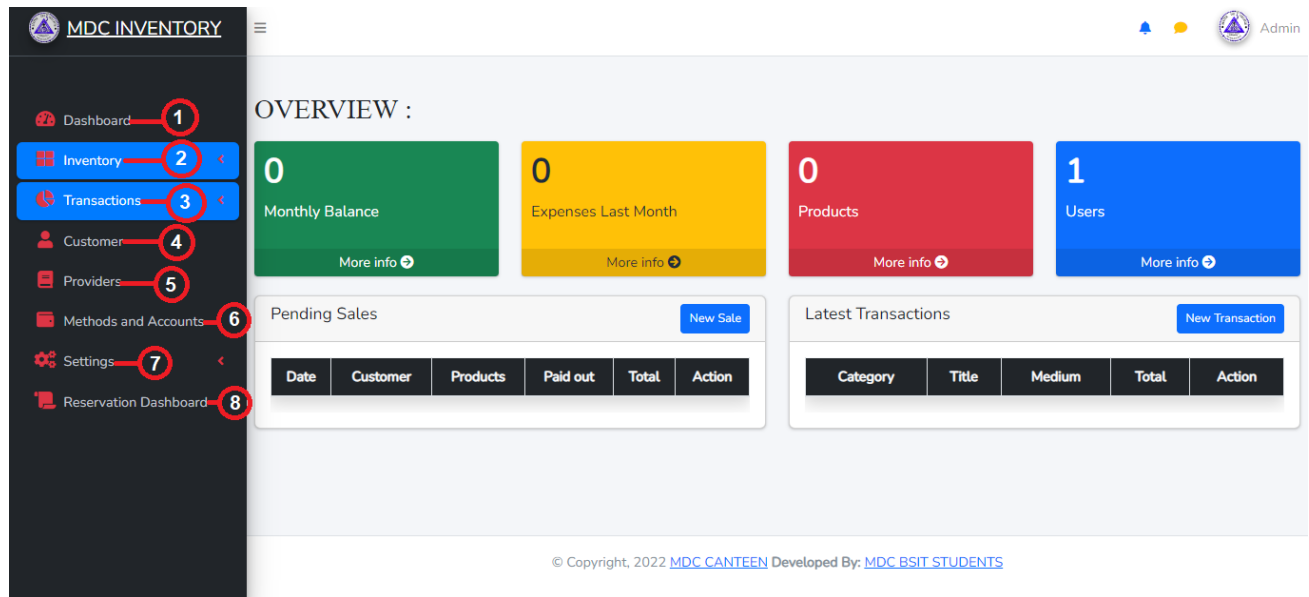


Figure 5.2 Dashboard View

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 Transactions Interface.
4. This function shows the Customer Interface.
5. This function shows the Providers Interface.
6. This function shows the Methods and Accounts Interface.
7. This function shows the Settings Interface.
8. This function shows the Reservation Dashboard Interface.

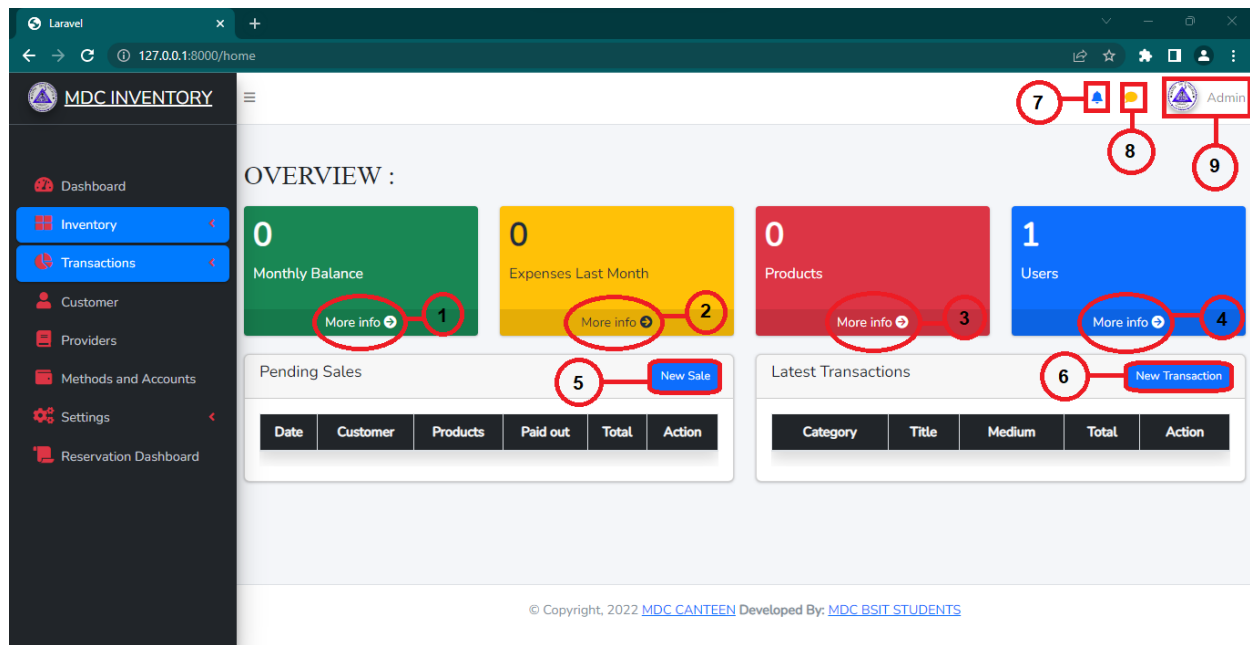


Figure 5.3 Dashboard View

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

1. This will redirect to the transaction statistics that shows seven features such as statistic, all tables, sales, expenses, income, transfers, and payments.
2. This will redirect to the expense module where the admin can add new expense information.
3. This will redirect to products module where the admin can add, view, edit and delete products information.
4. This will redirect to users interface where the admin can add, edit users name, email and password.
5. This button will redirect to sales module where the admin can use this to register client sales.
6. This button will create new transaction such as payment, income, expense, sale and transfer.
7. This will show the system notifications for reservations and to confirm reservations.

8. This will show the clients concerns and messages.
9. This will link to users profile.

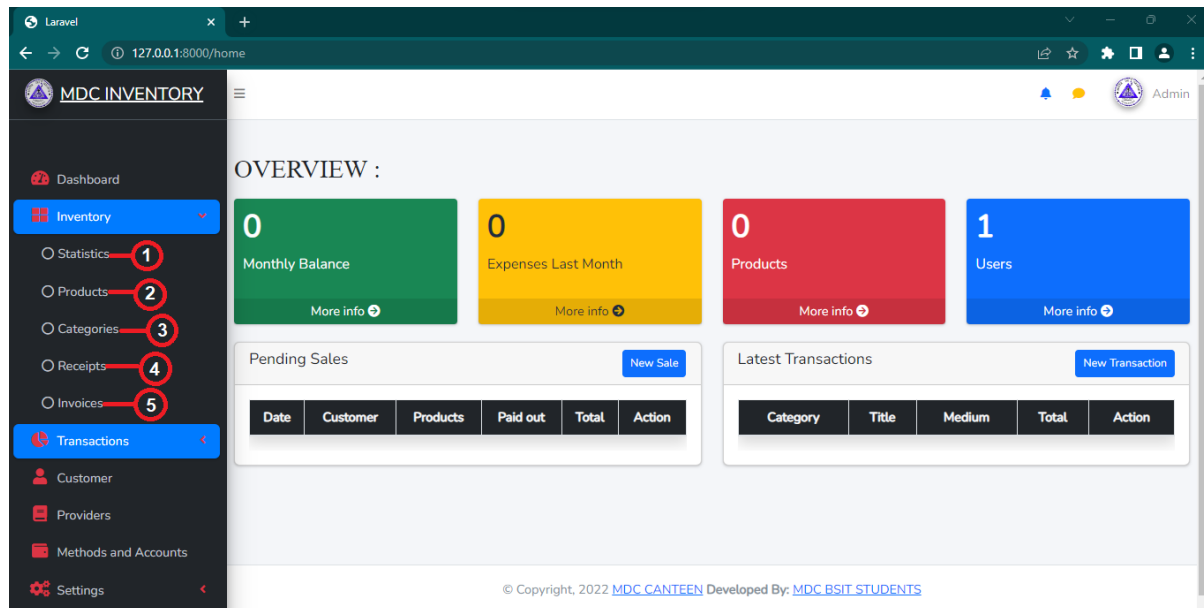
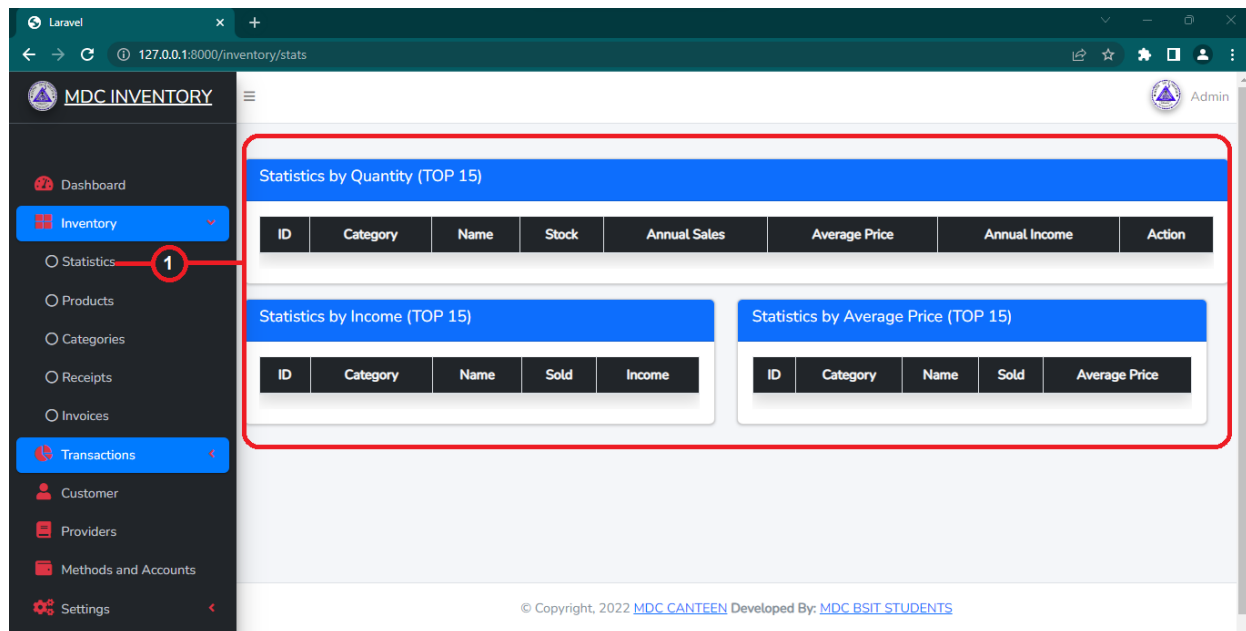


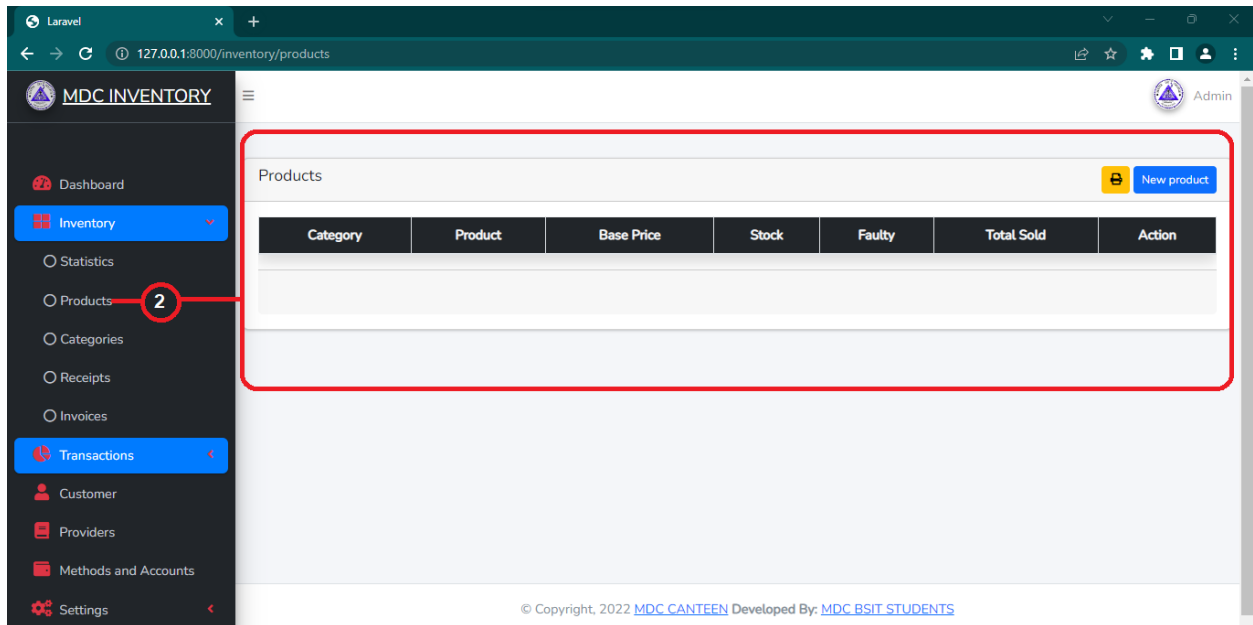
Figure 5.4 Inventory Slider

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

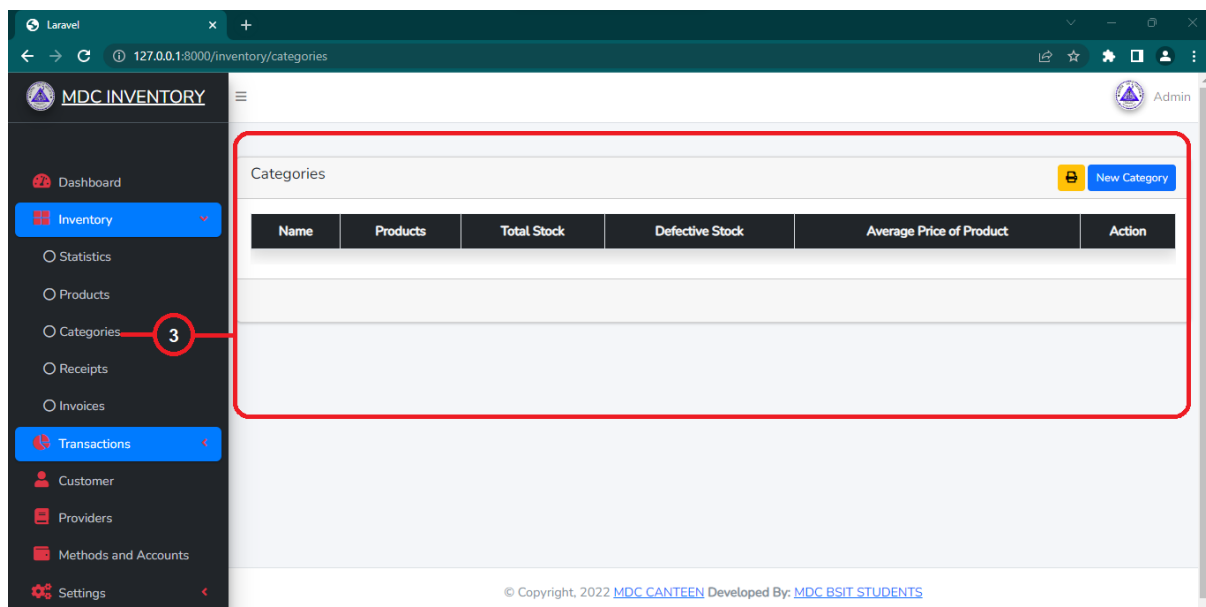
1. This function will redirect to statistics field.



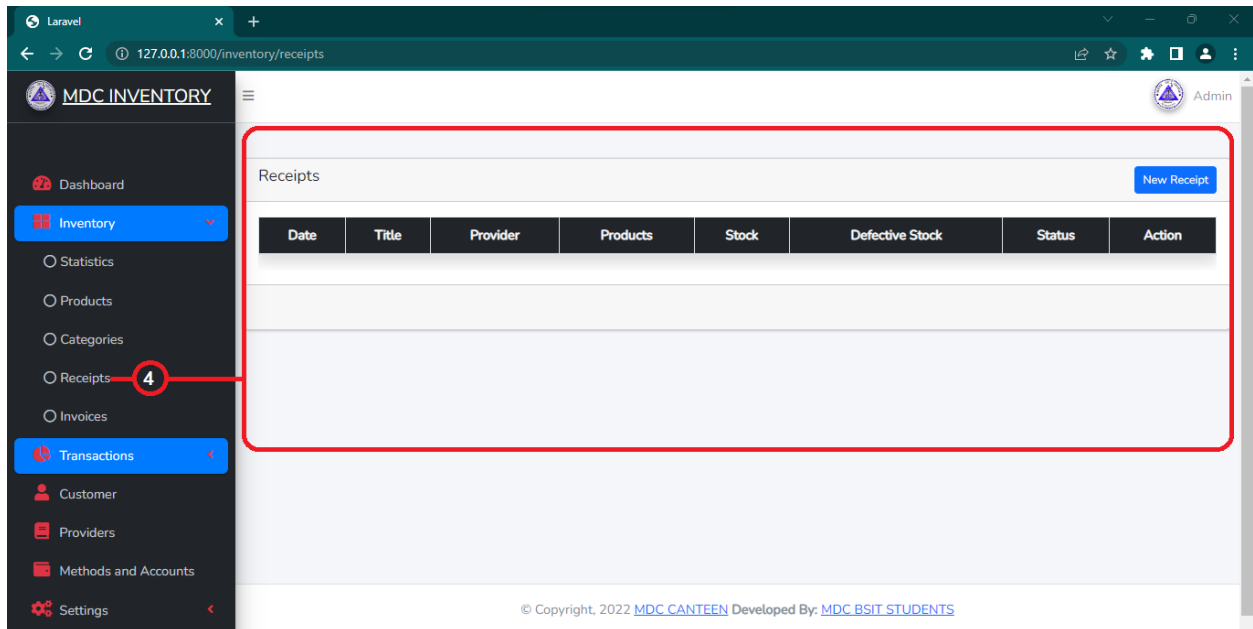
2. This function will redirect to products module where the admin can add, view, edit, delete and print a products information.



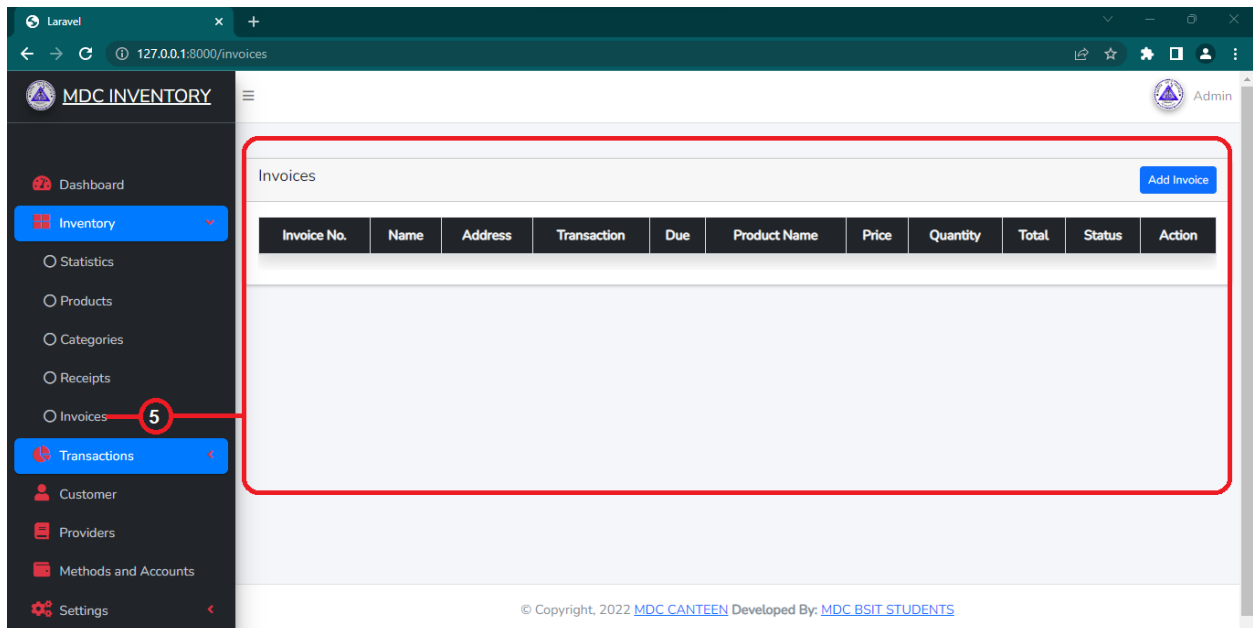
3. This function will redirect to categories module where the admin can add, view, edit, delete and print category details.



4. This function will redirect to receipts module where the admin can add, view, edit and delete receipts information.



5. This function will redirect to invoices module where the admin can add, view, edit and delete invoices information.



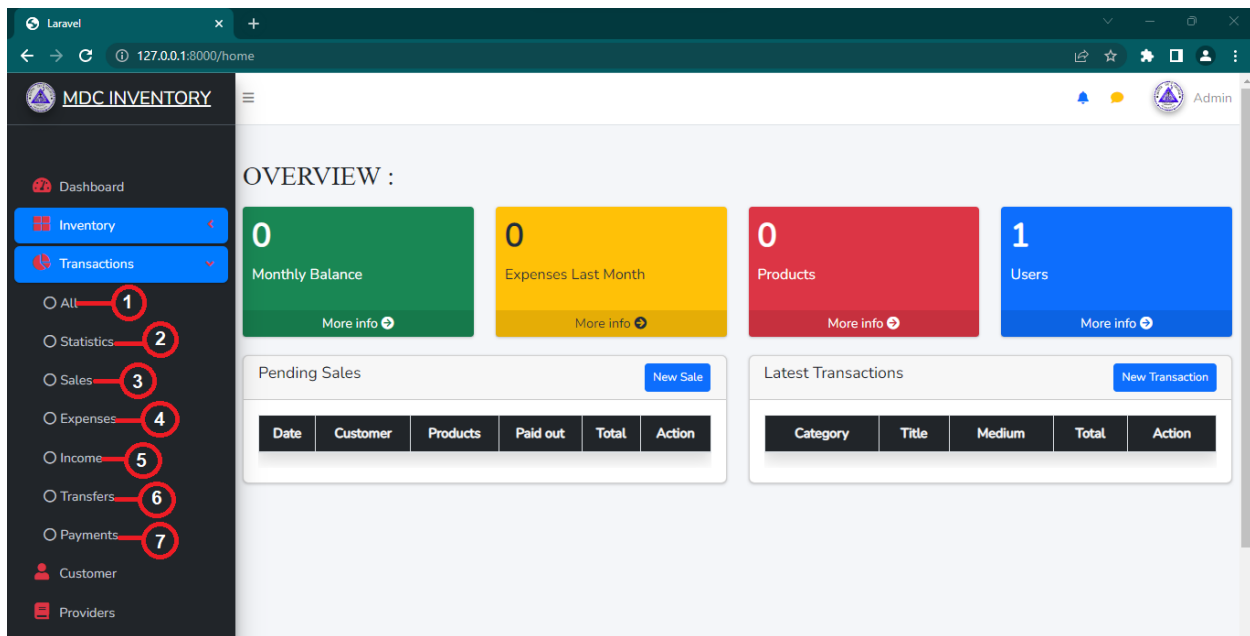
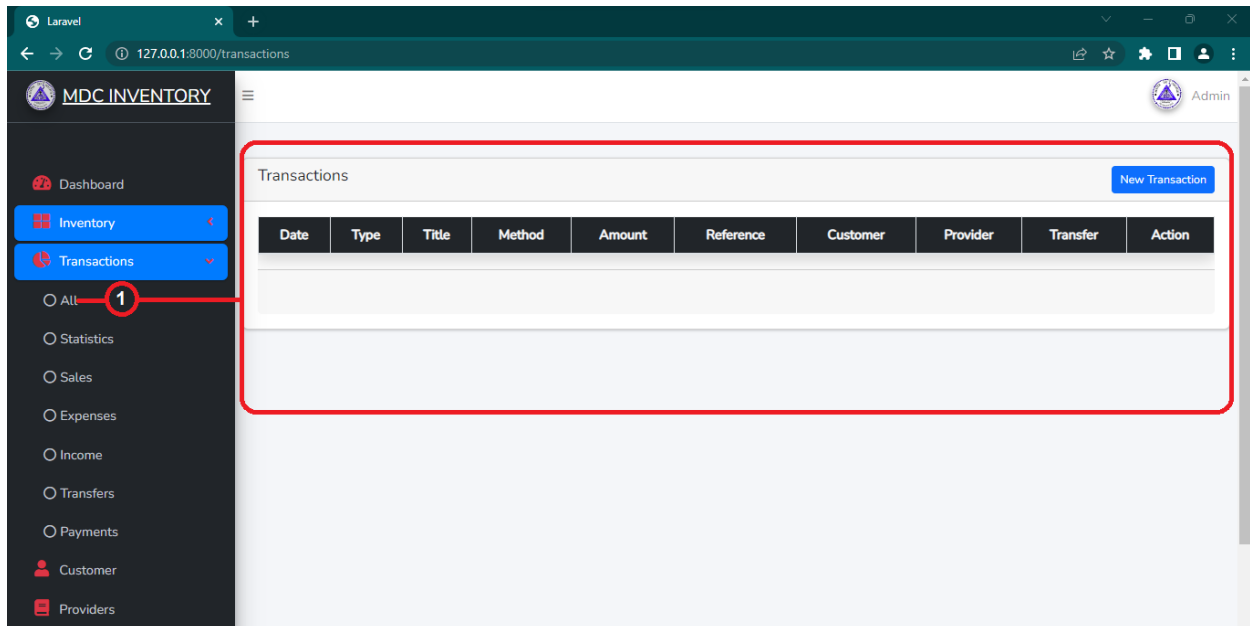


Figure 5.5 Transaction Slider

Figure 5.5 is the transaction slider. It follows how the parts work:

1. This function will redirect to all transaction module that will create new transaction such as payment, income, expense, sale and transfer.



- This function will redirect to the transaction statistics that shows seven features such as statistic, all tables, sales, expenses, income, transfers, and payments.

The screenshot shows the 'Transaction Statistics' page in the MDC INVENTORY application. The left sidebar has a red circle with the number 2 next to the 'Statistics' menu item. The main content area is titled 'Transaction Statistics' and contains a table with columns: Period, Transactions, Income, Expenses, Payments, Cash Balance, and Total balance. The table lists data for Day, Yesterday, Week, Month, Trimester, and Year, all showing zero values. Below the table are sections for 'Pending Balances' and 'Statistics by Methods'.

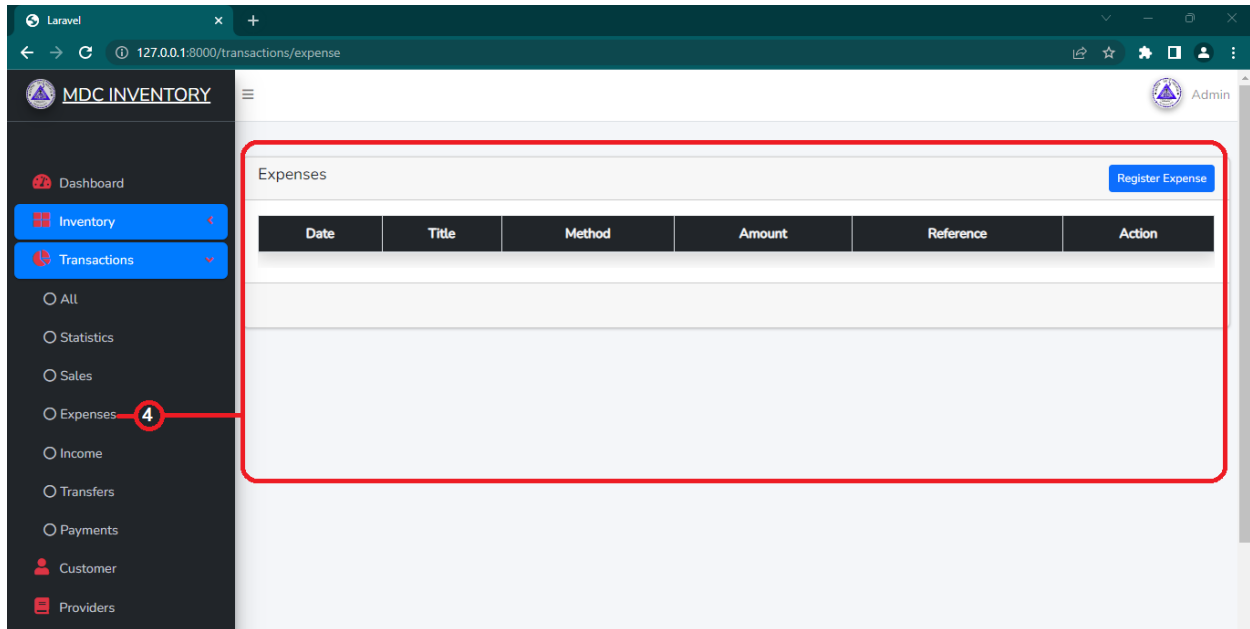
Period	Transactions	Income	Expenses	Payments	Cash Balance	Total balance
Day	0	0	0	0	0	0
Yesterday	0	0	0	0	0	0
Week	0	0	0	0	0	0
Month	0	0	0	0	0	0
Trimester	0	0	0	0	0	0
Year	0	0	0	0	0	0

- This function will redirect to sales module where the admin can use this to register new client sales.

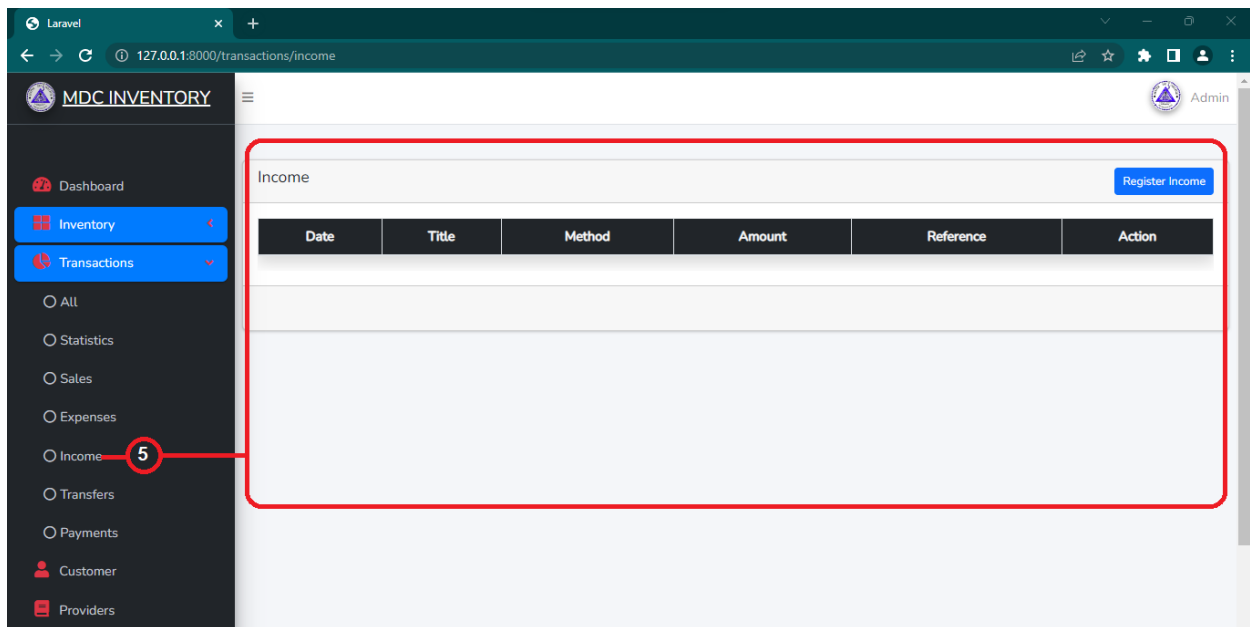
The screenshot shows the 'Sales' page in the MDC INVENTORY application. The left sidebar has a red circle with the number 3 next to the 'Sales' menu item. The main content area is titled 'Sales' and contains a table with columns: Date, Customer, User, Products, Total Stock, Total Amount, Status, and Action. The table is currently empty.

Date	Customer	User	Products	Total Stock	Total Amount	Status	Action
------	----------	------	----------	-------------	--------------	--------	--------

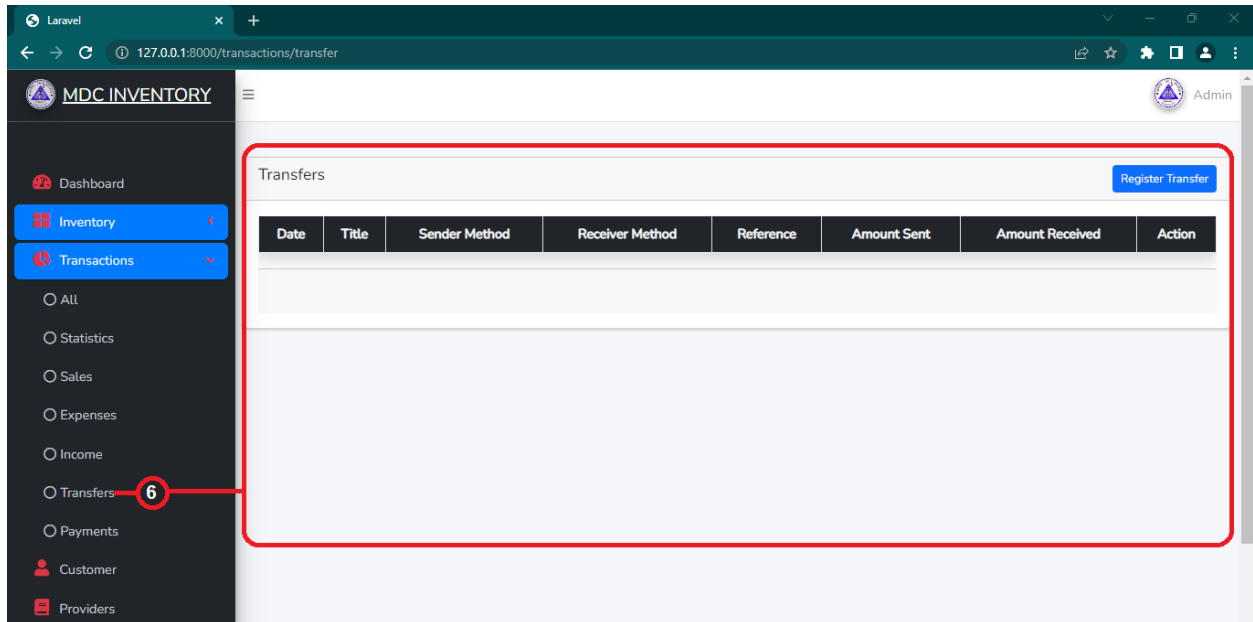
4. This function will redirect to the expenses module where the admin can register new expense information.



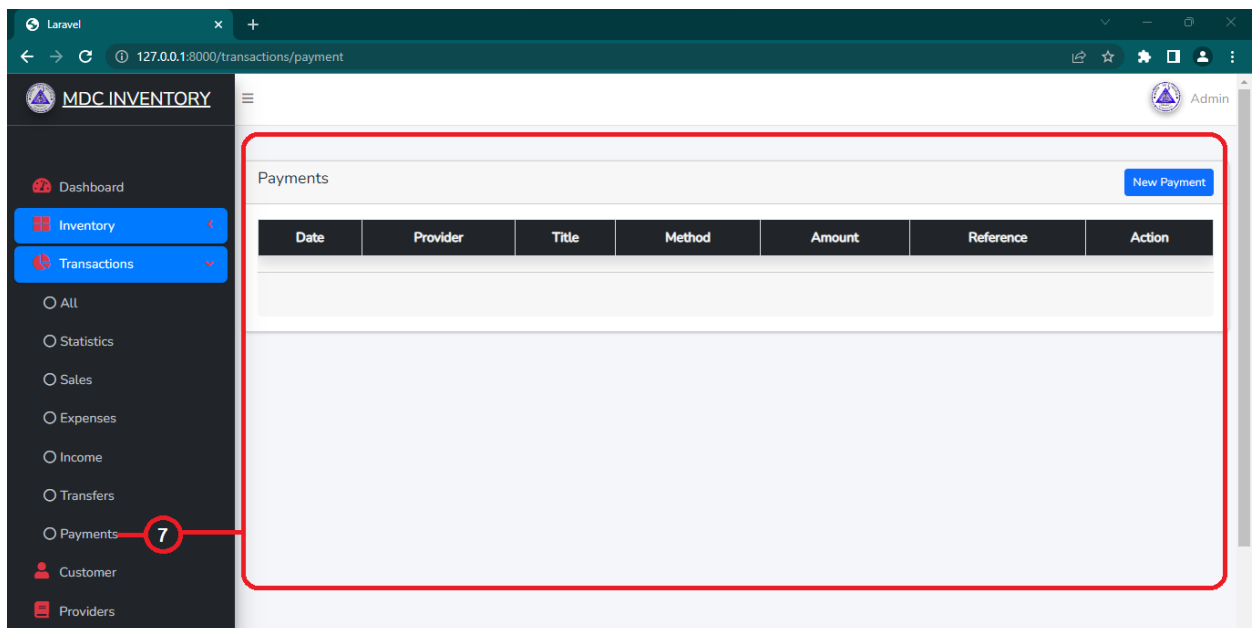
5. This function will redirect to income module where the admin can use this to register new income information.



6. This function will redirect to transfers module where the admin can use this to transfer new amount to the client.



7. This function will redirect to payments module where the admin can use this to add new payments information.



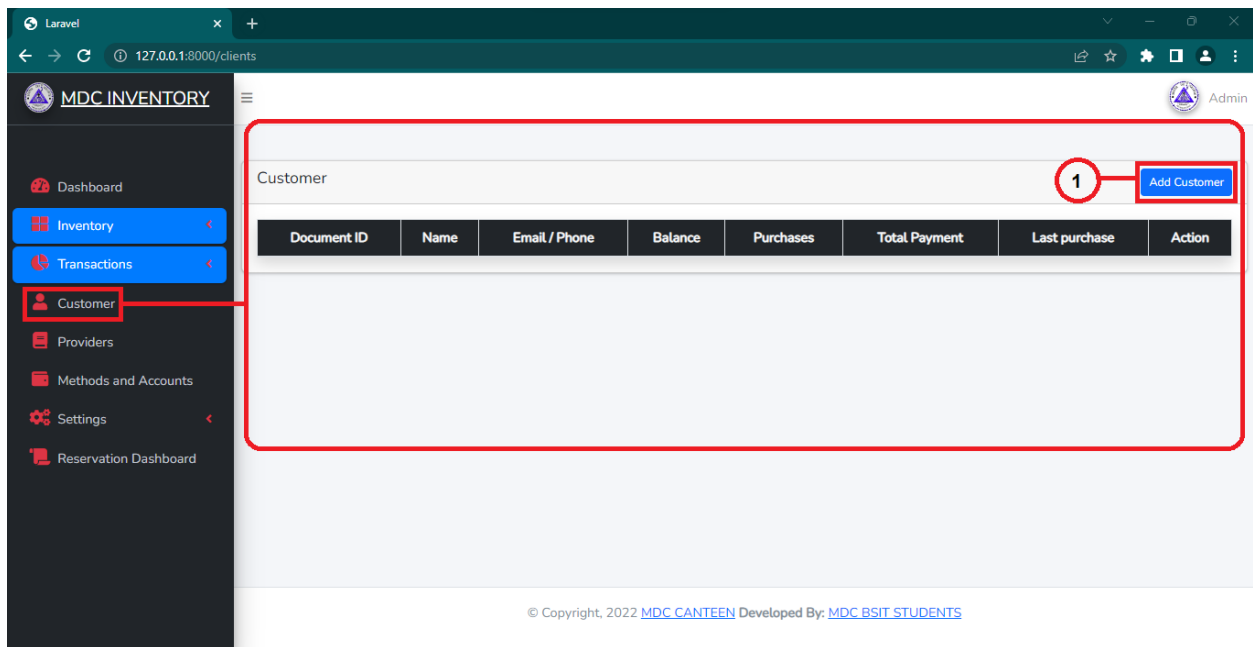


Figure 5.6 Customer View

Figure 5.6 is the customers interface. It follows how the parts work:

1. This button will link to customers interface where the admin can use this to register new customers information.

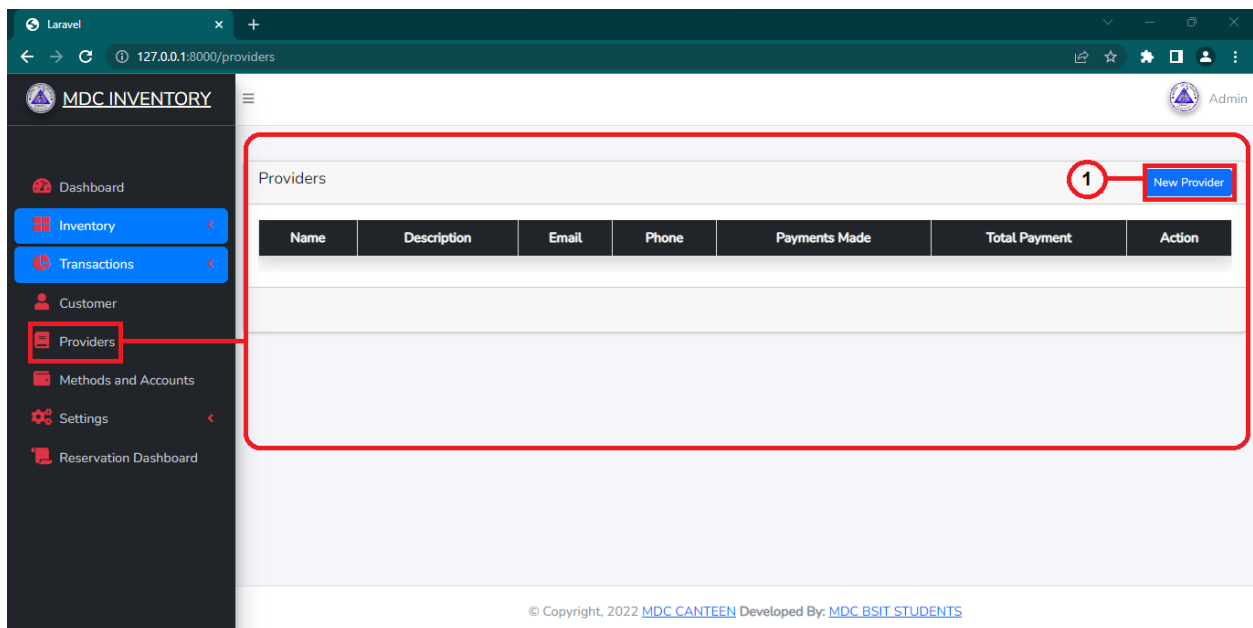


Figure 5.7 Providers View

Figure 5.7 is the providers interface. It follows how the parts work:

1. This button will link to providers interface where the admin can use this to register new providers information.

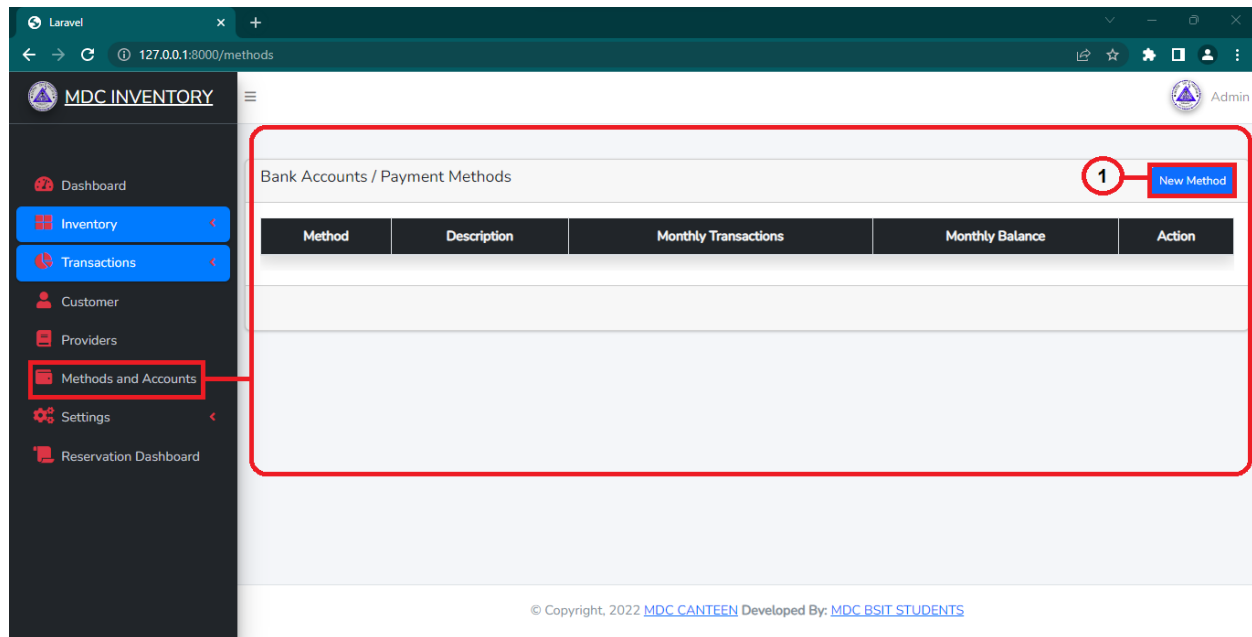


Figure 5.8 Methods and Accounts View

Figure 5.8 is the methods and accounts interface. It follows how the parts work:

1. This button will link to bank accounts/payment methods interface where the admin can use these methods and accounts module to add, view, edit and delete methods information.

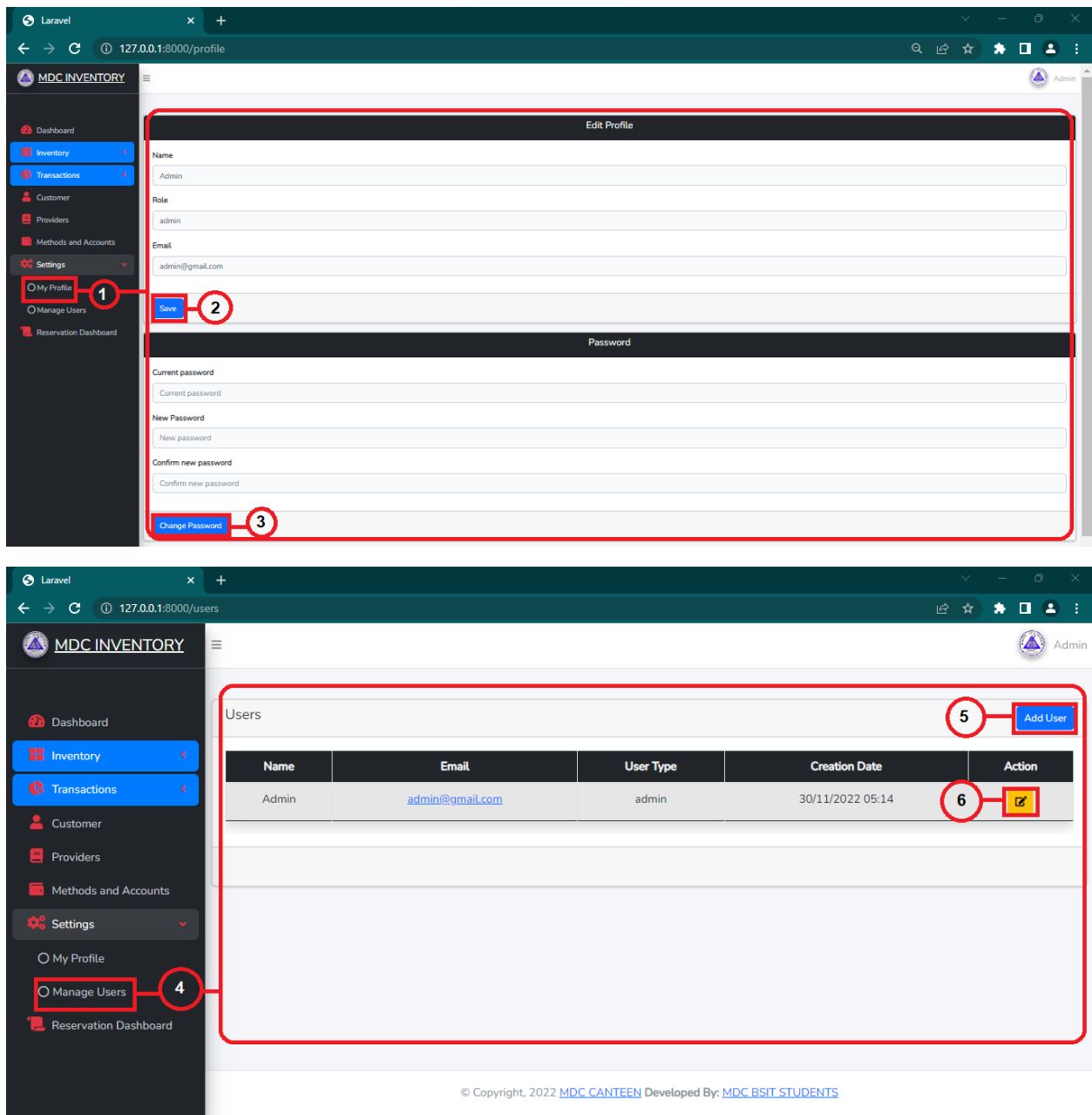


Figure 5.9 Settings View

Figure 5.9 is the settings interface. It follows how the parts work:

1. This function will redirect to my profile module where the admin can edit profile user information.
2. This button will save the user information such as name, role and email.
3. This button will change the user new password.
4. This function will redirect to manage users module where the admin can add, view and edit users

5. This button will redirect to user management interface where the admin can add a user information.
6. This button can edit user information.

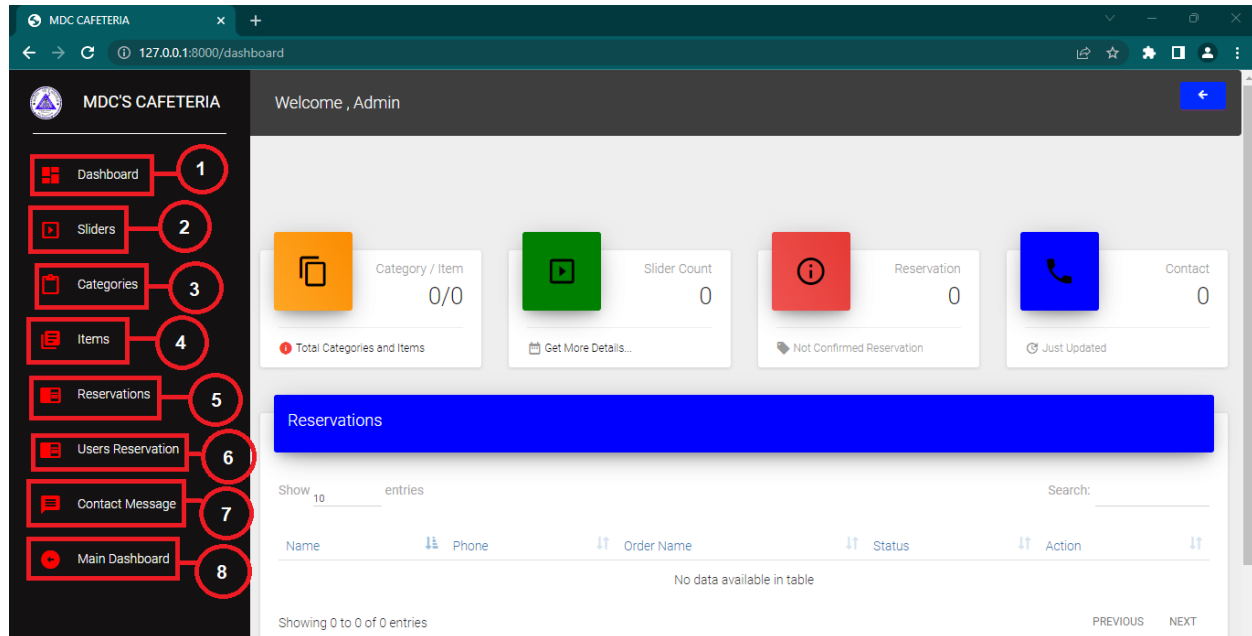


Figure 5.10 Reservation Dashboard View

Figure 5.10 depicts the reservation dashboard UI. The workings of the pieces are as follows:

1. This function shows the Dashboard Interface.
2. This function shows the Sliders Interface.
3. This function shows the Categories Interface
4. This function shows the Items Interface
5. This function shows the Reservations Interface
6. This function shows the Users Reservations Interface
7. This function shows the Contact Message Interface
8. This function shows the Main Dashboard Interface

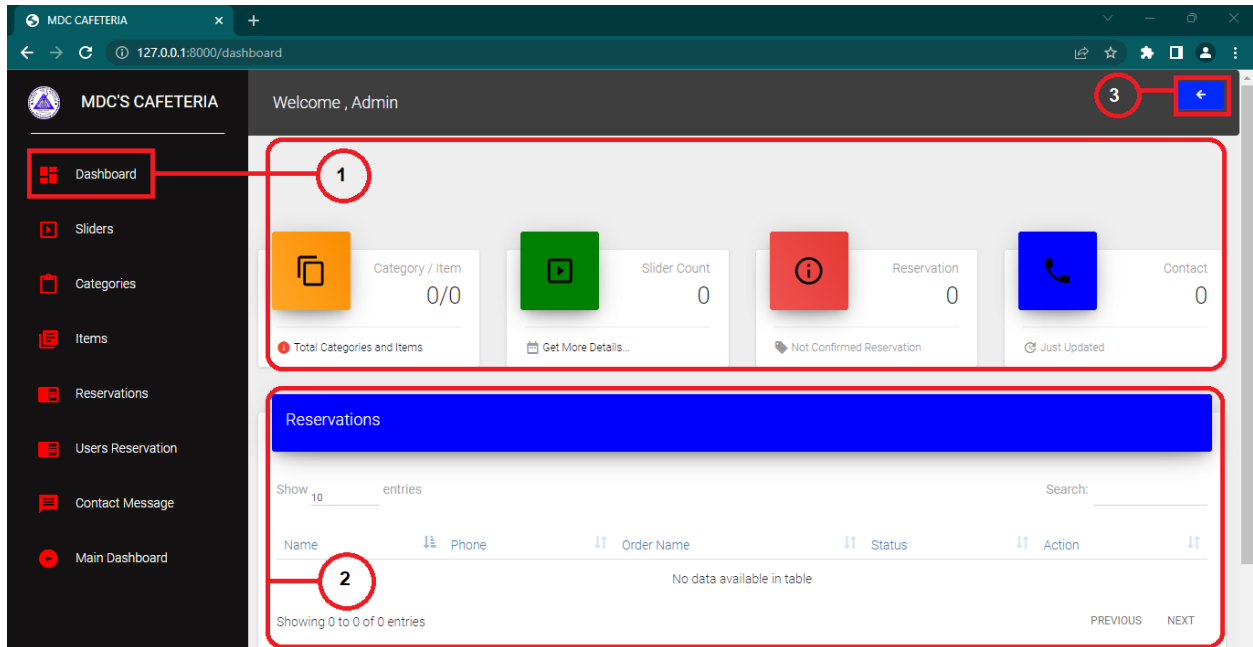


Figure 5.11 Dashboard Interface

Figure 5.11 is the dashboard Interface. It follows how the parts work:

1. This field shows the category/items, slider count, reservation, and contact.
2. This field shows the reservations information such as name, phone, order name, status and action.
3. This back button will redirect to the inventory system dashboard.

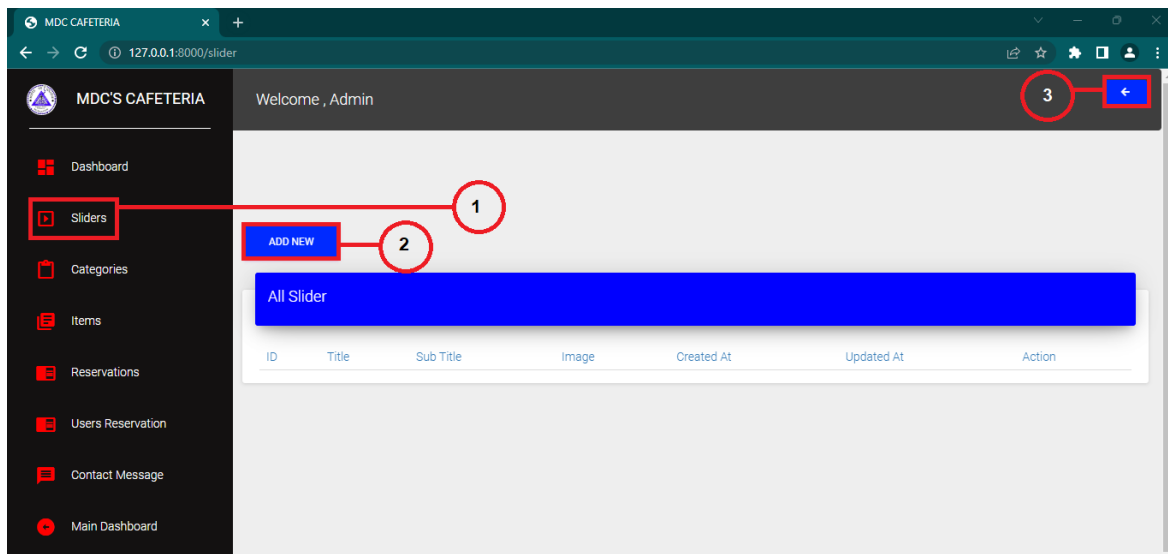


Figure 5.12 Sliders Interface

Figure 5.12 is the sliders Interface. It follows how the parts work:

1. This function shows the sliders field where the admin can add new slider information.
2. This button is used to add a new slider.
3. This back button will redirect to the inventory system dashboard.

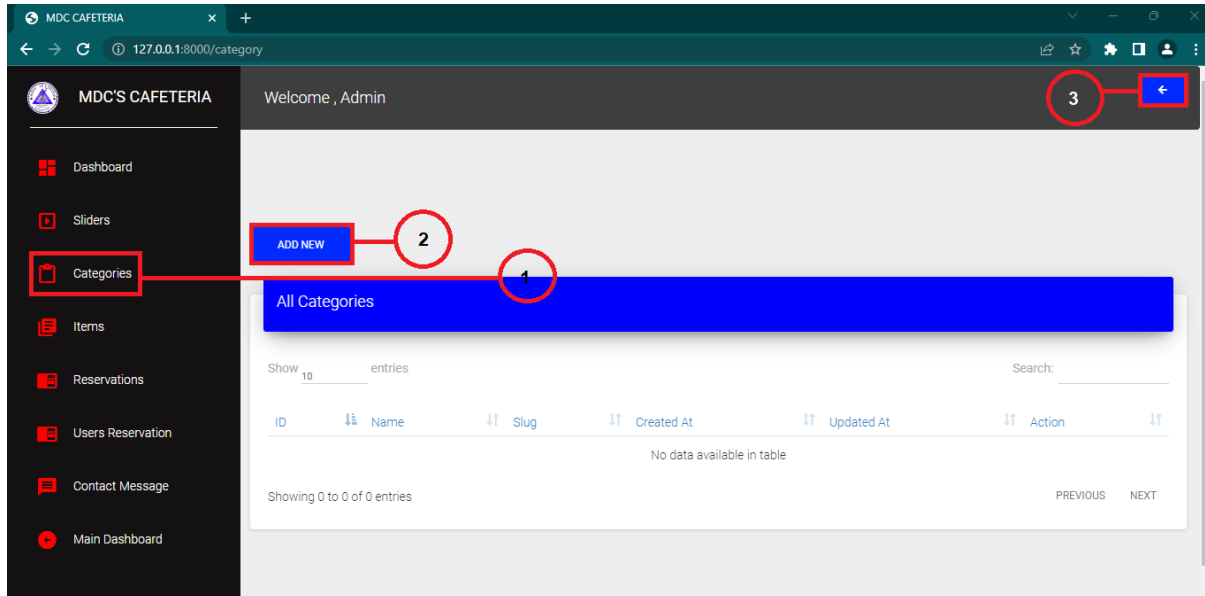


Figure 5.13 Categories Interface

Figure 5.13 is the categories Interface. It follows how the parts work:

1. This function shows the categories field where the admin can add new categories information such as id, name, slug, date created, date updated, and action.
2. This button is used to add a new category.
3. This back button will redirect to the inventory system dashboard.

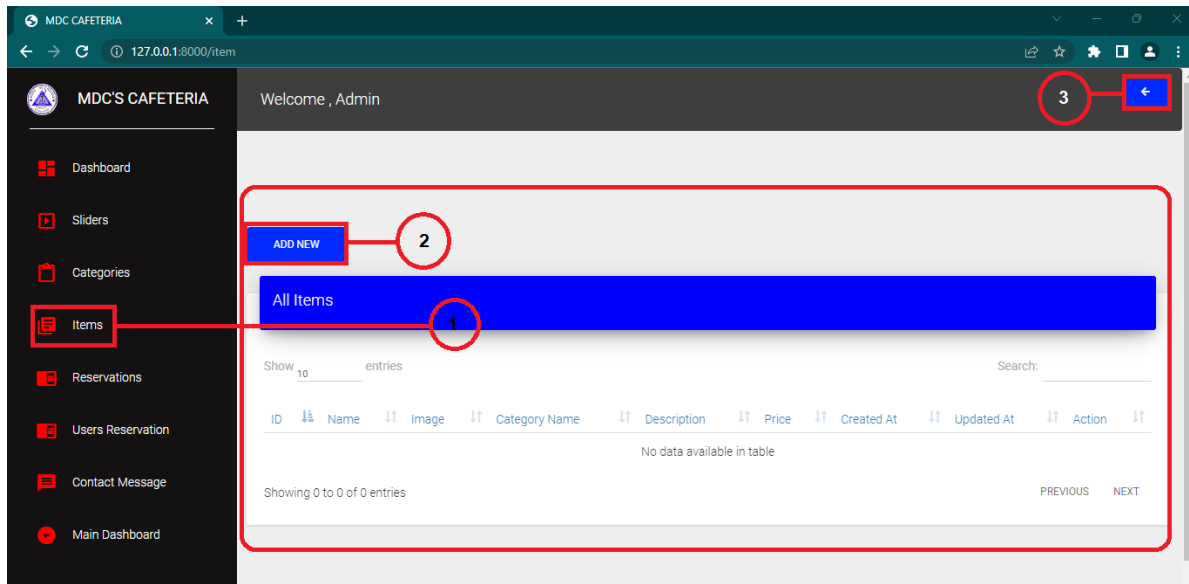


Figure 5.14 Items Interface

Figure 5.14 is the categories Interface. It follows how the parts work:

1. This function shows the Items field where the admin can add new items information such as id, name, image, category name, description, price, date created, date updated, and action.
2. This button is used to add a new item.
3. This back button will redirect to the inventory system dashboard.

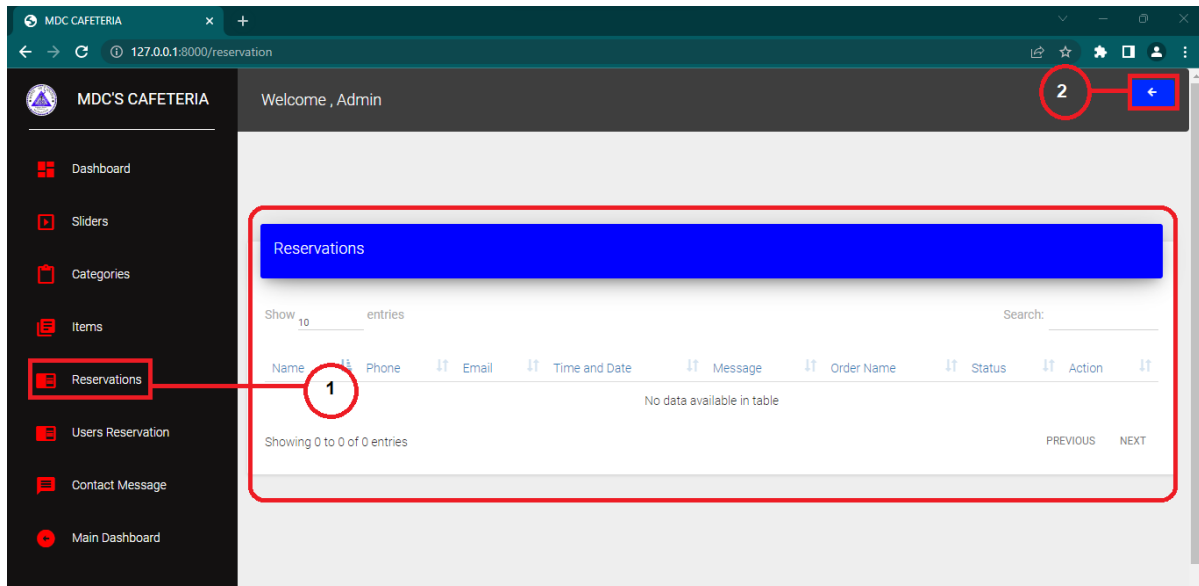


Figure 5.15 Reservation Interface

Figure 5.15 is the reservation Interface. It follows how the parts work:

1. This function shows all the clients reservation information such as name, phone, email, time and date reserved, message, order name, status and action.
2. This back button will redirect to the inventory system dashboard.

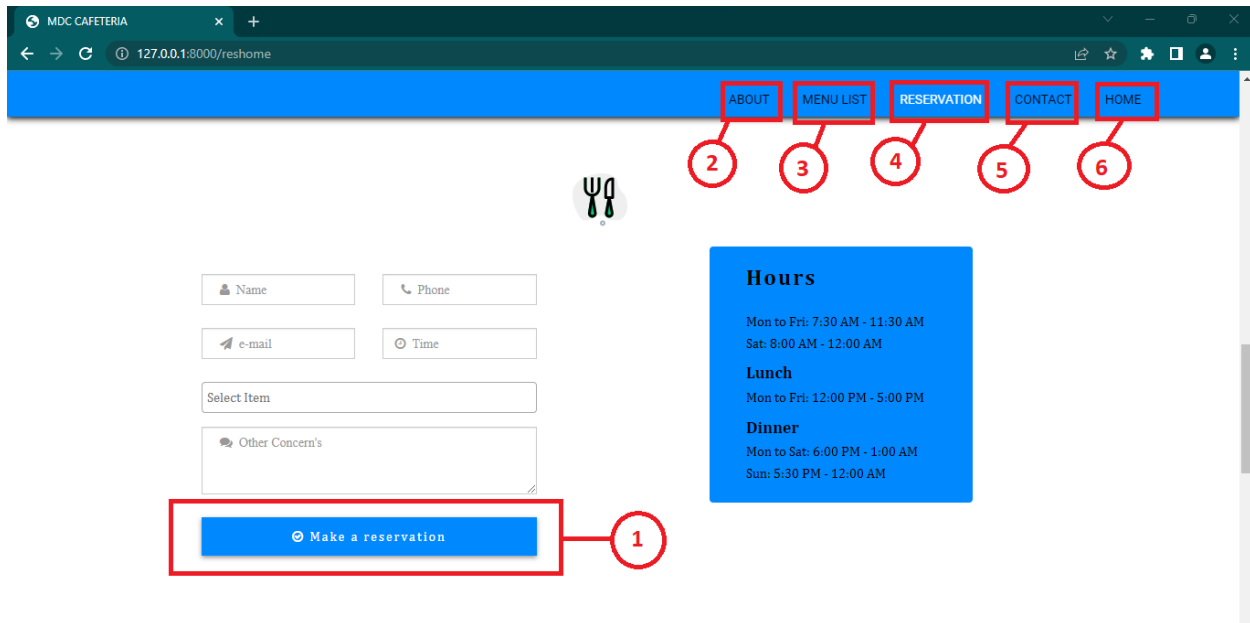


Figure 5.16 User Reservation Interface

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 clients reservation information.
5. This will show the all the contacts information.
6. This function will redirect to inventory system dashboard.

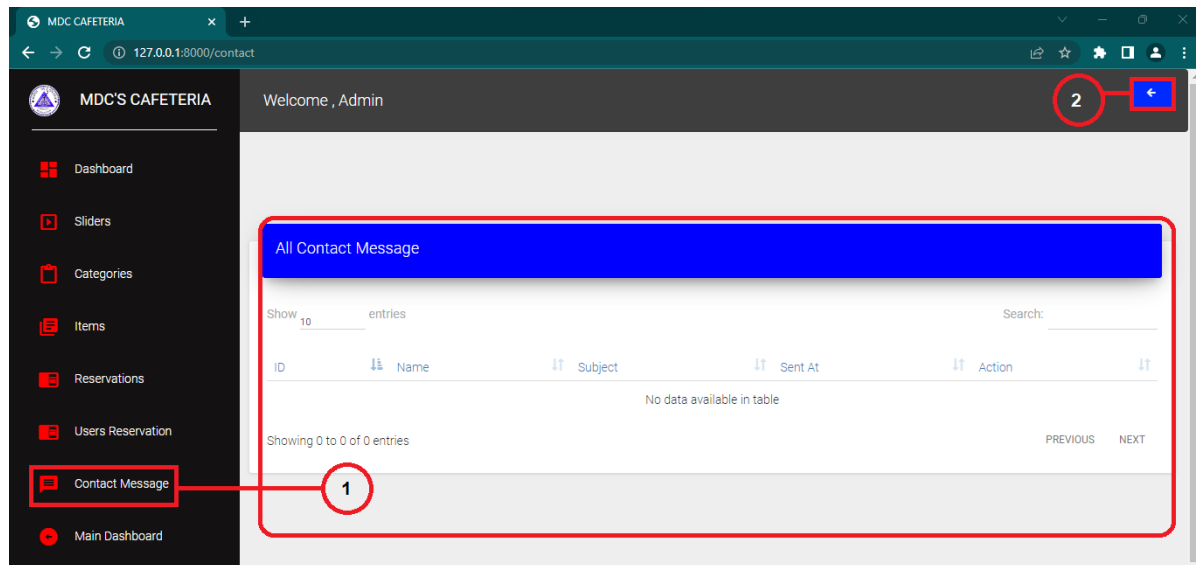


Figure 5.17 Contact Message Interface

Figure 5.17 is the contact message Interface. It follows how the parts work:

1. This function shows all the contact message information such as id, name, slug, subject, date sent, and action.
2. This back button will redirect to the 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

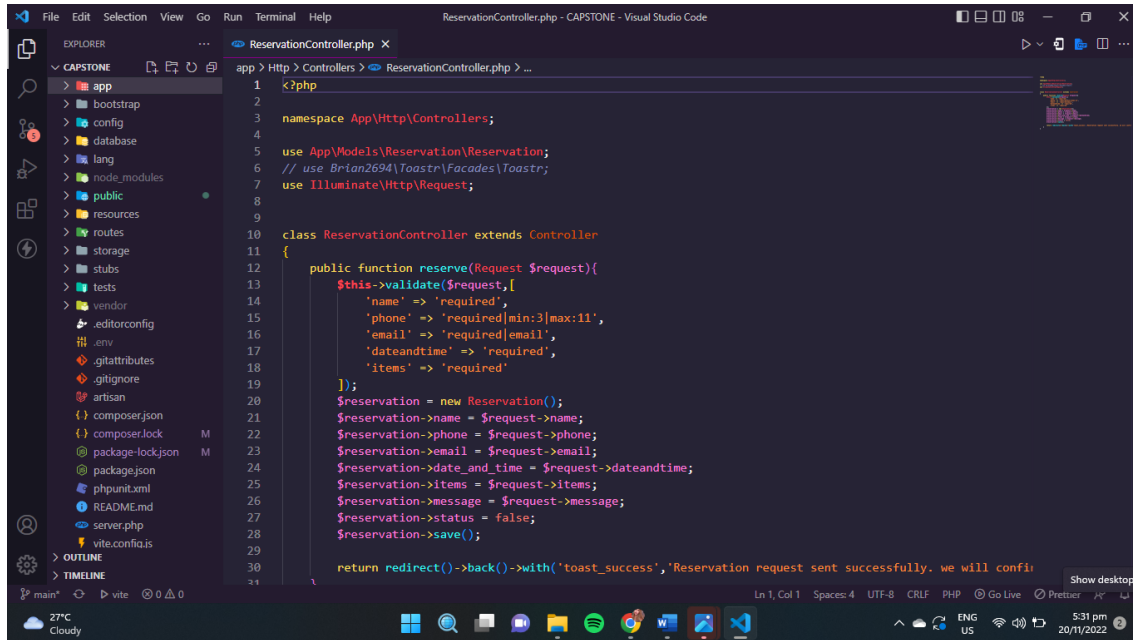
The researchers strongly recommended the implementation of the MDC Canteen Customer Management System with Online Reservations and Inventory System on Web based system. In addition, the following are recommended.

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



```
1 <?php
2
3 namespace App\Http\Controllers;
4
5 use App\Models\Reservation;
6 // use Brian2694\Toastr\Facades\Toastr;
7 use Illuminate\Http\Request;
8
9
10 class ReservationController extends Controller
11 {
12     public function reserve(Request $request){
13         $this->validate($request,[
14             'name' => 'required',
15             'phone' => 'required|min:3|max:11',
16             'email' => 'required|email',
17             'dateandtime' => 'required',
18             'items' => 'required'
19         ]);
20         $reservation = new Reservation();
21         $reservation->name = $request->name;
22         $reservation->phone = $request->phone;
23         $reservation->email = $request->email;
24         $reservation->date_and_time = $request->dateandtime;
25         $reservation->items = $request->items;
26         $reservation->message = $request->message;
27         $reservation->status = false;
28         $reservation->save();
29
30         return redirect()->back()->with('toast_success','Reservation request sent successfully. we will confi
```

Pictures of showcasing data gathering



CURRICULUM VITAE

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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

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Sex: Male

Civil Status: Single

Height: 5'6"

Weight: 60kls.

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	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Senior High School	2017-2019
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-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:

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-----------------	--

Secondary	Holy Cross Academy Pooc Oriental, Tubigon, Bohol Junior High School	2013-2017
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PROGRAMMING
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PERSONAL DATA:

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

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Holy Cross Academy 2017-2019
Pooc Oriental, Tubigon, Bohol
Senior High School

Work Immersion Municipality of Tubigon- LGU

Primary Tubigon West Central Elementary School 2012-2013
Pooc Oriental, Tubigon, Bohol

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PROGRAMMING

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PERSONAL DATA:

Birthday: March 03, 2000

Citizenship: Filipino

Sex: Male

Civil Status: Single

Height: 5'5"

Weight: 46kls.

EDUCATIONAL ATTAINMENT:

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-using HTML, CSS, Bootstrap, Laravel, Vue, Flutter,
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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.

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-----------------	--

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	Calape National High School Sta. Cruz, Calape, Bohol Senior High School With Honors	2017-2019
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Elementary	Mandaug Elementary School Abucayan Sur, Calape, Bohol	2012-2013

ACHIEVEMENT:

NCII holder of Computer Systems Servicing	October 2018
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