Dato's Bakery Ordering System
Final Report

CSC264
Introduction to Web and Mobile Application

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GROUP: CDCS1104C

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1. PROJECT BACKGROUND

1.1 INTRODUCTION TO PROJECT

The Dato's Bakery Shop cares about the needs of our customers and the difficulties of our staff. To foster healthy competitiveness, the owner has taken the initiative to improve various aspects of the business, aiming to consistently produce high-quality goods. To make the work of the workers at Dato's Bakery Shop easier, owner and her staff have suggested to create a system that can help ease their work and further develop their business by creating an online purchase service. This system will enable customers to place orders from their current locations, eliminating the need to visit the establishment in person.

This system aligns with Dato's Bakery Shop's objective to expand its reach. Thus, a more efficient way has to be developed to manage customers, their orders and records in the shop. However, as the bakery still relies on manual methods for ordering processing, there's many inefficiencies, errors, and delays that has occurred while fulfilling customers' orders. These issues have been a burden on the staff.

Furthermore, a system to ensure efficient and effective functioning of Dato's Bakery Shop is needed as Dato's Bakery Shop also operates multiple branches. Each branch needs a group of staff members to carry out these responsibilities efficiently, ensuring smooth operations and offering customers high quality service.

Finally, in alignment with the principles of the Fourth Industrial Revolution, Dato's Bakery recognizes the importance of embracing digital technologies to stay competitive in today's market. The implementation of an automated ordering system represents a strategic move towards digital transformation, enabling the bakery to leverage technology to improve operations, enhance customer experiences, and future proof its business model.

1.2 PROBLEM STATEMENT

While the current system of Dato's Bakery Shop is functional and works well with the staff, we have identified several shortcomings that we noticed could be remedied.

The biggest issue in the system is the lack of data accessibility for the staff to use. This creates inconsistency between the orders and the details each member of staff receives. It means that specific staff must receive orders before they can be relayed to the kitchen staff. As a result, it puts a hindrance on communication within the bakery, allowing mistakes in customer service that are bound to bring negative consequences in the future.

Additionally, the staff would have to manually calculate the orders they received and enter them in their preferred system for sales analysis. This would make sales reports tedious, and mistakes and oversights are likely to occur. This can lead to instances of misplaced or incomplete records, resulting in delayed or incorrect order fulfilment.

Even though the current system is familiar to our customers since it is traditional, it adds more tasks for staff as its system is dependent on administrators who must allocate more of their time to serve the customers. Thus, suppressing the potential productivity of the staff.

1.3 OBJECTIVES OF PROJECT

- To improve the organizational capabilities of the collected customer data. With this administrator can control the quantity of incoming orders well and handle effective orders and can arrange orders in advance first.
- To develop an online ordering platform for customer engagement and satisfaction. With this, it is possible to increase customer satisfaction by using a user-friendly system, that can help customers place their orders without having to come to the store and just request delivery services.
- To establish an ordering system that makes order collection more efficient to guarantee a user-friendly ordering system to make it easier for users to understand it well so that the system can run well and can satisfy customers.

1.4 SCOPE OF PROJECT

On this project, we concentrated on two scopes, administrative and customer. Customers can choose from two dessert options that are displayed on the menu to make it easier for them to decide. After placing an order, they can change or cancel it before paying for it. The solution will also make it easier for customers to receive their desserts by streamlining order processing and tracking orders. To make cashless payments easier for customers, we now provide online payment options. In addition, customers can order things online and pick them up in-store without having to wait in line to pay for them.

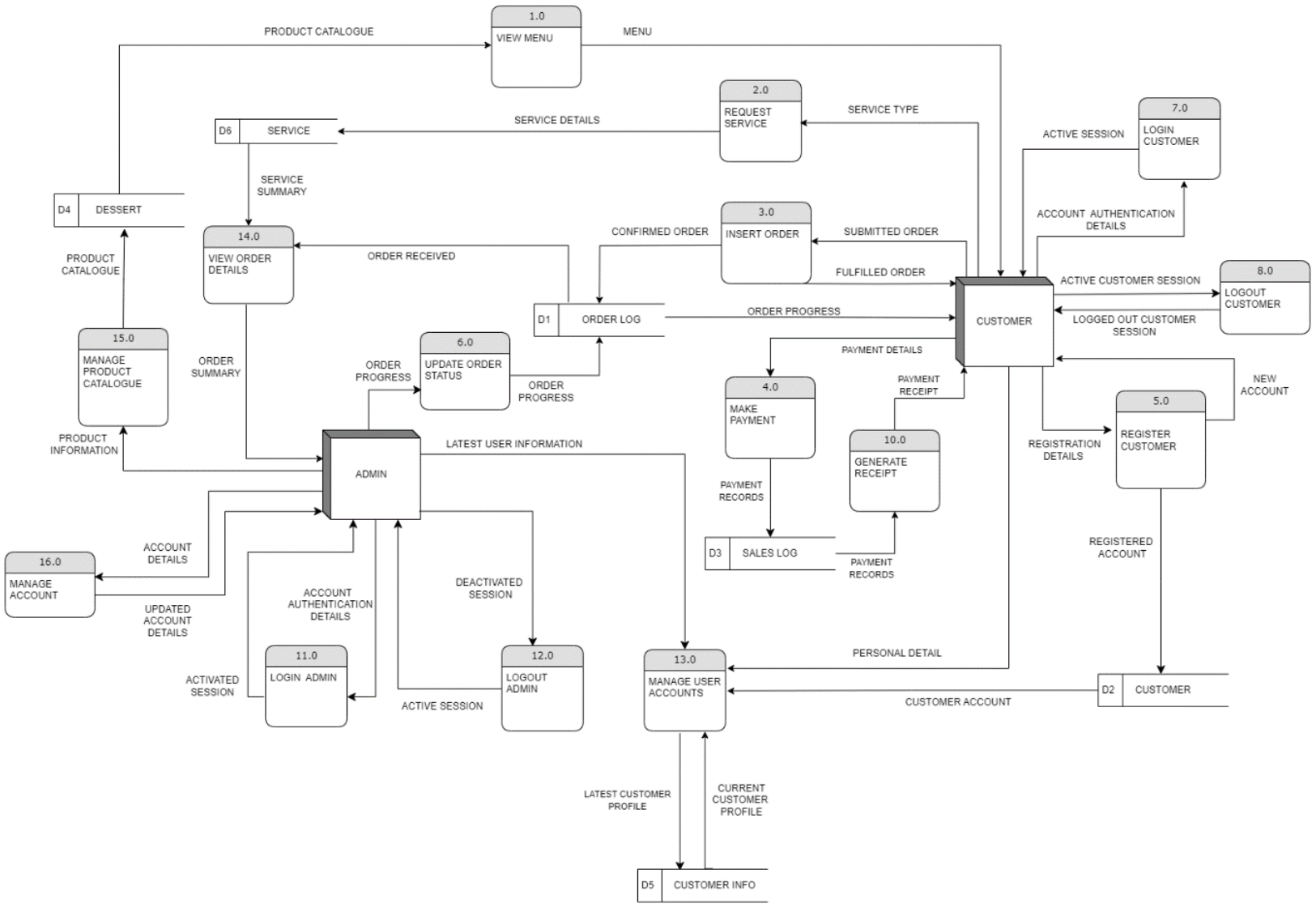
On the other hand, the administrator can add new products or update the current menu to manage the product catalogue. The administrator can modify or delete user records to manage the user account. Additionally, the admin can track customer orders, enabling them to inform customers about their orders. Admins can also keep track of customer orders with this functionality for future documentation and references. In addition, the admin can also see some of the accumulated order volumes, the products that are still available on the market and the amount of revenue collected. On the admin page will also be attached transactions that have been made by the customers and a table showing the users of our web system. After that it will display if there is any transaction.

With our system in place, it can help users better and satisfy their use. With the use of this system, it is safer and more secure in the storage of user data, and it is more efficient in its management and makes order verifications more efficient by using this online system.

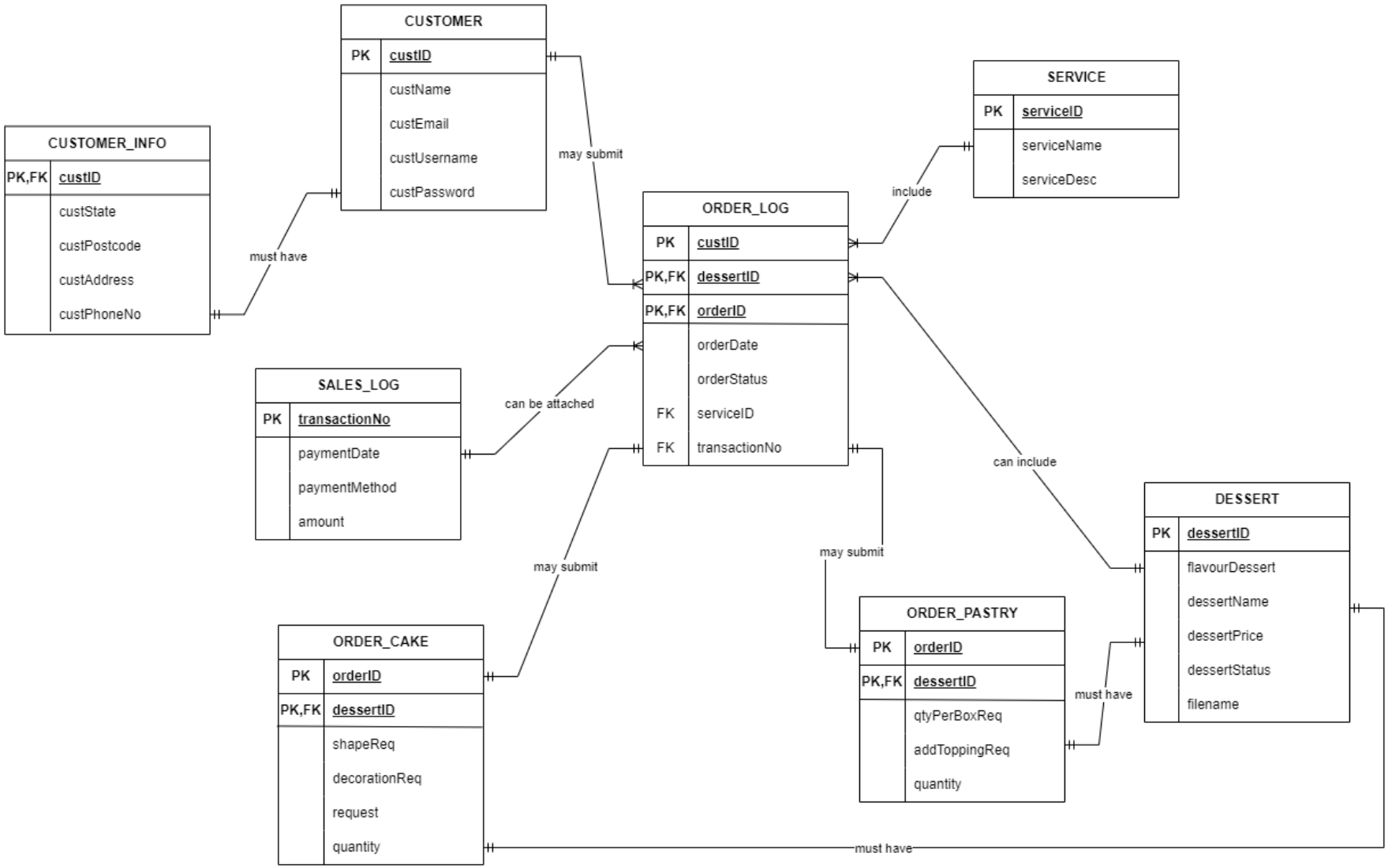
1.5 IMPACT OR SIGNIFICANT OF WEB APPLICATION TOWARDS AUDIENCE

- Providing higher quality usage services for users who can process data more quickly, accurately, and efficiently, thereby making usage easier and reducing the possibility of errors.
- With our bakery system, customers can place orders from anywhere at any time, which allows them to expedite their orders. Customers no longer need to physically visit the store, saving them time and effort when purchasing sweets from our bakery.
- Queue management becomes easier because it can be handled by this online bakery ordering system that can reduce the amount of time customers have to wait to make an order and pay for it. This can prevent congestion in the store. By doing this, can enhance and simplify the process for administrators to compute their orders

2. UPDATED ANALYSIS AND DESIGN – PROCESS



3. UPDATED ANALYSIS AND DESIGN – DATABASE



4. SAMPLE INTERFACE AND OUTPUT

4.1 SAMPLE INTERFACE

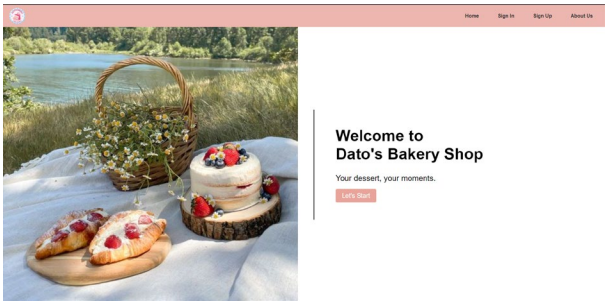


Figure 4.1.1: Homepage

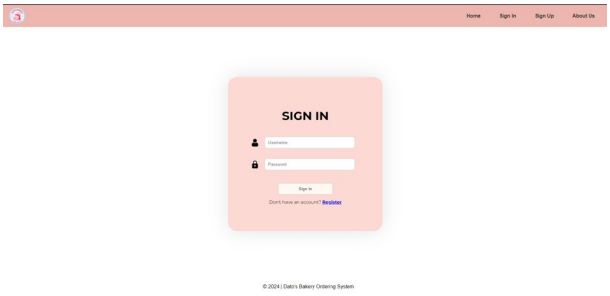


Figure 4.1.2: Sign In

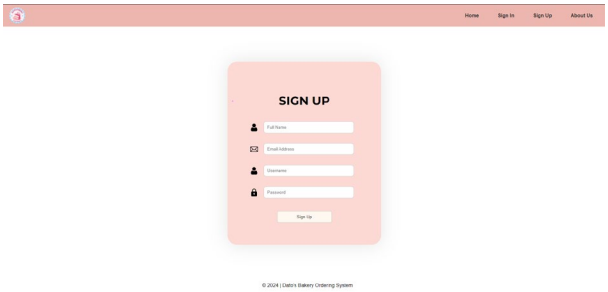


Figure 4.1.3: Sign Up

Figure 4.1.4: About Company

Figure 4.1.5: Dashboard Customer

Figure 4.1.6: Lists of Menu

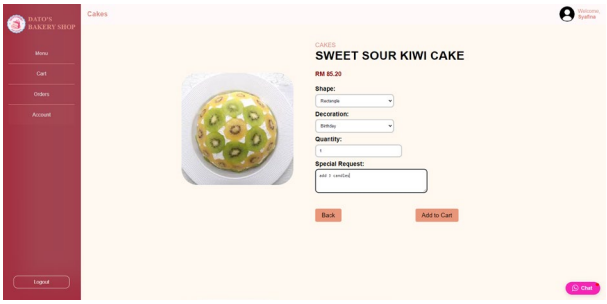


Figure 4.1.7: Menu Details and Requirements

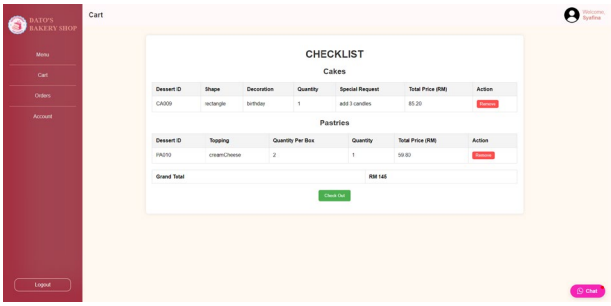


Figure 4.1.8: Add to Cart

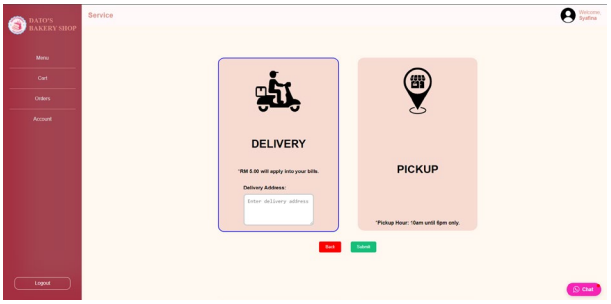


Figure 4.1.9: Types of Service

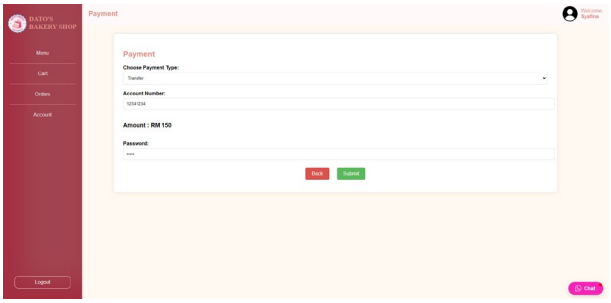


Figure 4.1.10: Types of Payment

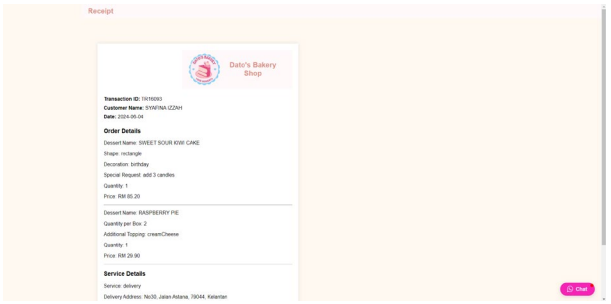


Figure 4.1.11: Receipt of Order

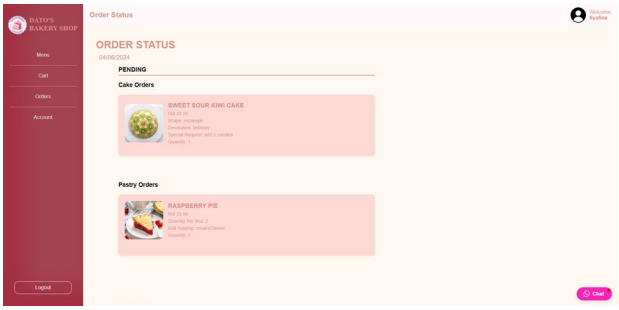


Figure 4.1.12: Order Status

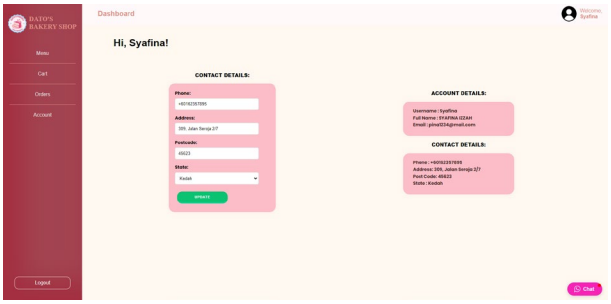


Figure 4.1.13: Account Information Update

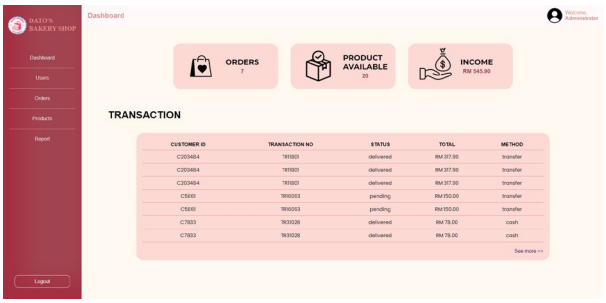


Figure 4.1.14: Admin Dashboard

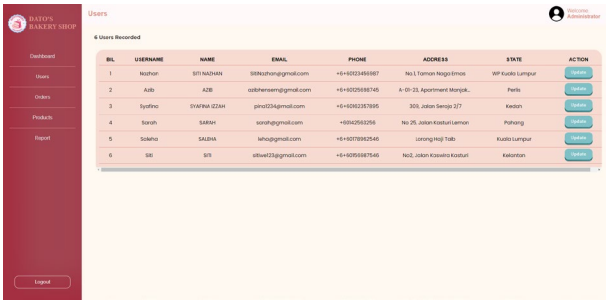


Figure 4.1.15: List of Users

Figure 4.1.16: List of Customer's Orders

Figure 4.1.17: Admin Product

Figure 4.1.18: Lists of Product

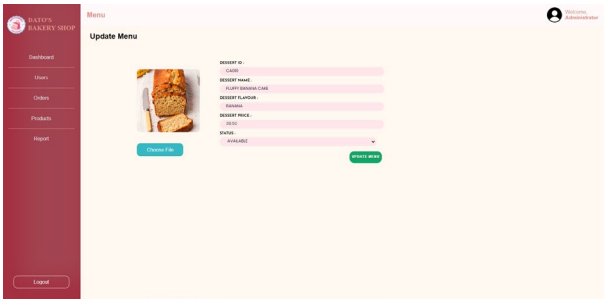


Figure 4.1.19: Product Update

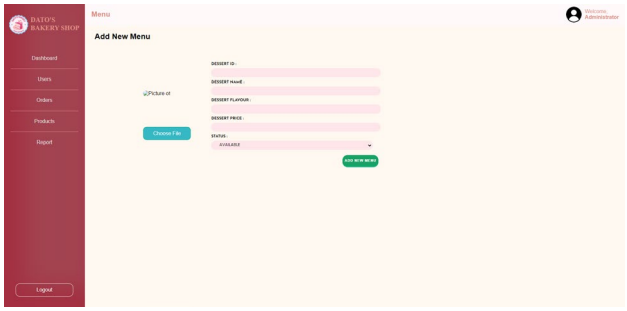


Figure 4.1.20: Add New Product

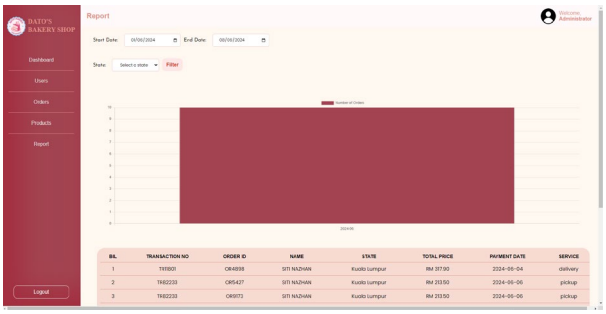


Figure 4.1.21: Report

4.2 SAMPLE OUTPUT

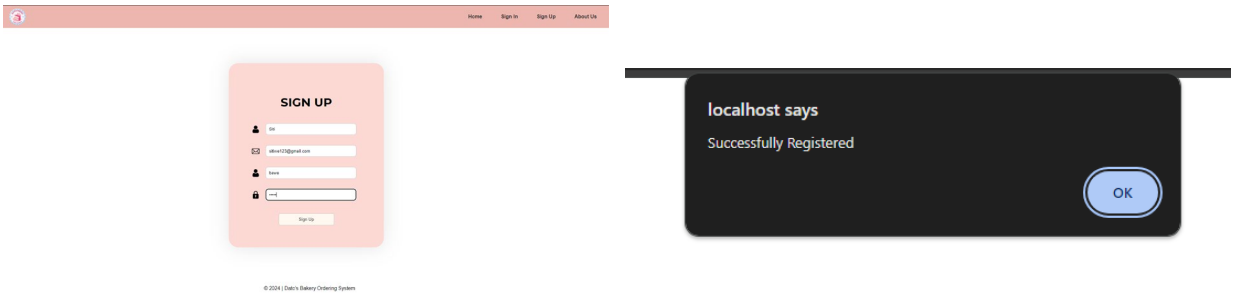


Figure 4.2.1: Register New User

Figure 4.2.1 shows the sign-up process. Sign up is where the first user wants to register an account for this system. When the user has finished filling in the required information such as Full Name, Email Address, Username and password, the user will press the "Sign Up" button and then a "Successfully Registered" popup will appear. This means that a new user account has been created and recorded in the database.

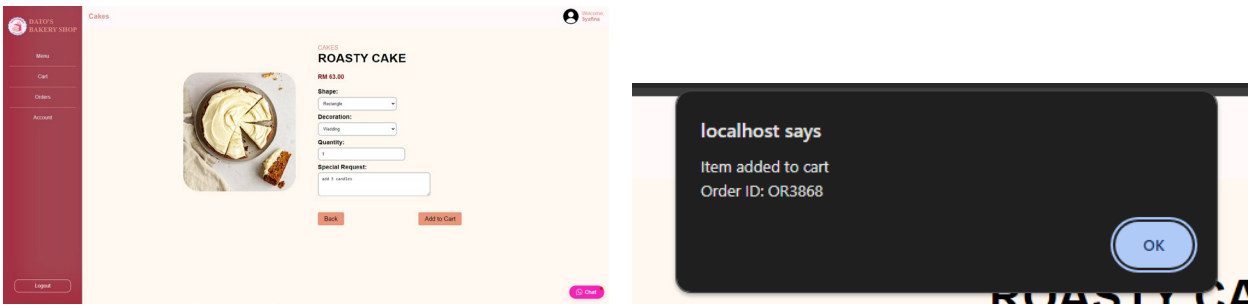


Figure 4.2.2: Adding the Orders

Figure 4.2.2 shows the process of adding the product. Users need to enter information about the product they want to buy such as Shape, Decoration, Quantity and Special Request for product cakes while Quantity Per Box, Topping and Quantity for product pastries. When the user has finished filling in the required information, the user needs to press the "Add to Cart" button and the system will issue an "Item added to cart" popup and order ID for each order placed. Orders made will be recorded in Cart.

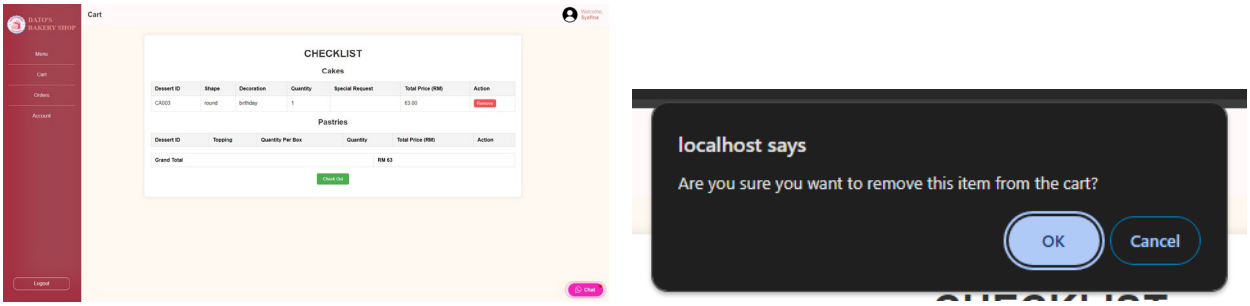


Figure 4.2.3: Remove Product from Add to Cart

Figure 4.2.3 shows the process of deleting menu items found in Cart if the user wants to cancel a few orders made. The user needs to press the "Remove" button and the system will issue a confirmation popup to confirm whether the user wants to delete the order or not. If the user presses the "OK" button, the selected order will be deleted from the Cart list, while if the user selects "Cancel", the selected order will remain in the order list.

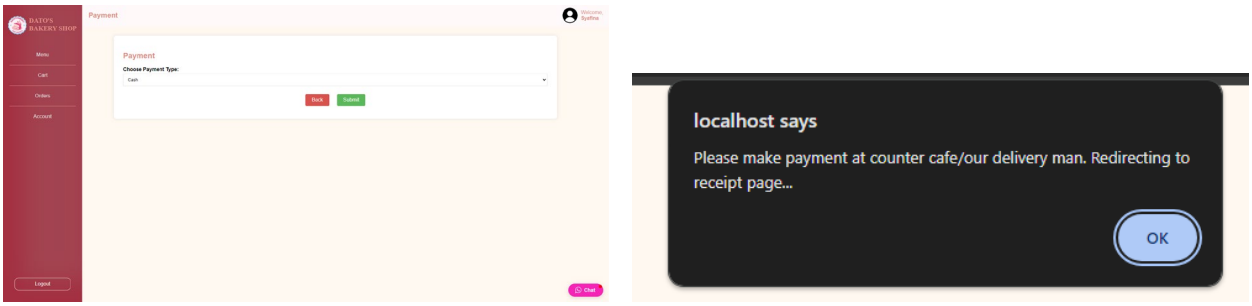


Figure 4.2.4: Payment

Figure 4.2.4 shows the payment process where the user needs to choose either transfer or cash. If the user chooses to pay by transfer, the user needs to enter their bank account number along with their bank password. Then the "Transaction Successfully. Redirecting to receipt page..." popup shows a successful transaction. If the user chooses to pay in cash, the popup "Please make payment at counter cafe/our delivery man. Redirecting to receipt page..." shows that the user needs to make payment at the cafe counter or at the delivery man and then the order will be made.

Figure 4.2.5: Receipt

Figure 4.2.5 shows the process of printing the receipt after the user has finished making the payment. There are two buttons on the receipt, namely the "Print this page" and "Done" buttons. If the user presses the "Print this page" button, the receipt will be generated into the printing layout. Users can print the receipt or save the receipt in .pdf format. If the user presses the "Done" button, the user will be taken back to the main page.

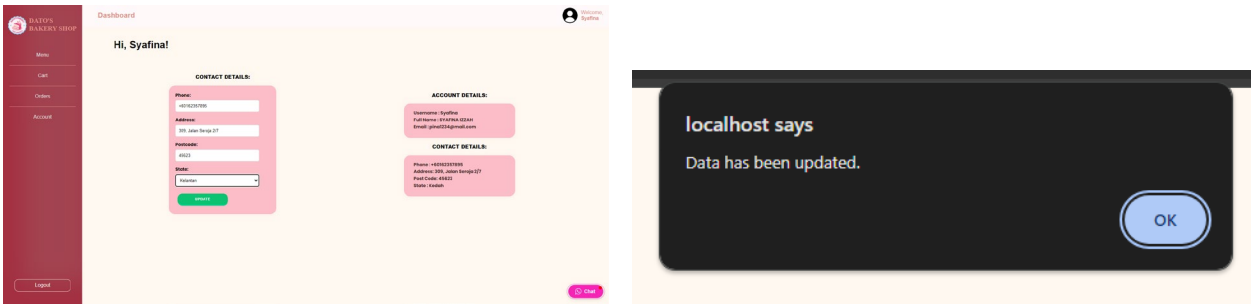


Figure 4.2.6: Update User Information

Figure 4.2.6 shows the user information update process. If the user logs into this system for the first time, the user's information will be blank. So, the user needs to fill in the following information and the information will be stored in the database. When the user presses the "Update" button, a popup message "Data has been updated." will go out. This shows that the user information update process has been successful.

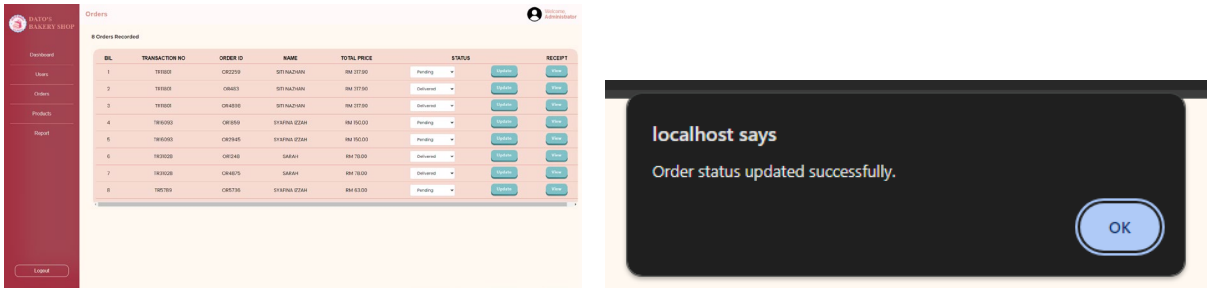


Figure 4.2.7: Admin Update Order Status

Figure 4.2.7 shows the order status update process in account admin. There are three types of status updates, namely "In progress", "Pending", and "Delivered". If admin has finished selecting and pressing the "Update" button popup "Order status updated successfully." shows the order status has been updated.

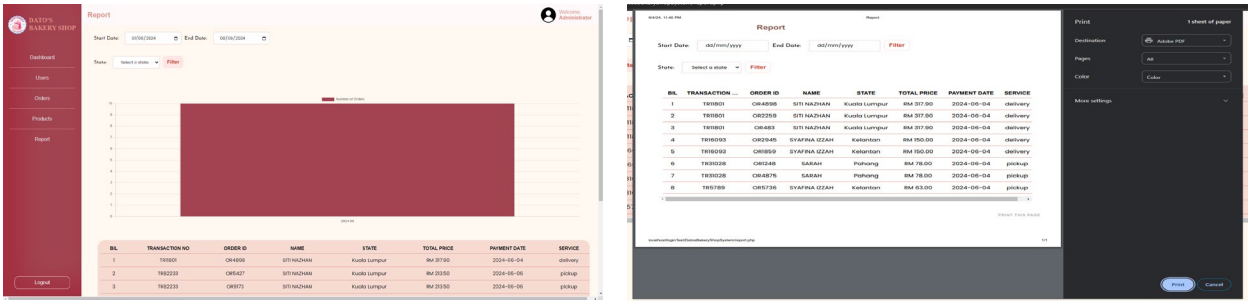


Figure 4.2.8: Admin Report

Figure 4.2.8 shows the process of printing sales records. Admin can choose whether to display order records filtered by date, filtered by state or both. After the report is filtered according to the admin's wishes, the admin needs to press the "Print this page" button where the admin will be taken to the record print view. Admin can print the record or save it as a .pdf file.

5. CONCLUSION

Our goal in doing this assignment is to obtain an improved understanding of the web development industry and be able to use what we learn in our everyday lives. We believe the understanding and skills we have gained will help us in our positions and improve our productivity and efficiency.

In this project, our focus is on mastering PHP for web development with the goal of effectively interpreting and implementing functional features. This increases output and decreases development time as we create interactive websites and sharpen our critical-thinking abilities to solve technological problems. Developing flexible web pages, complex forms, and secure online ordering system puts our abilities to the test. Planning, designing with HTML and CSS, coding with PHP, testing, and deploying are all steps in the process. We guarantee to keep to best web development practices, such as responsiveness, user-friendliness, and clear navigation, since we think these will improve our knowledge of PHP and website development. The critical thinking skills developed in web development help us identify and resolve technical challenges throughout the system development lifecycle.

Finally, we are dedicated to making sure that our system gives customers outstanding satisfaction. Our main objective is to streamline the ordering procedure for their beloved desserts so that they may select their favourites more easily and enjoyably. Through improving the user experience, we hope to provide a smooth, effective, and enjoyable ordering procedure. This means providing each dessert with visually appealing photographs, descriptive text, and an easy-to-use navigation system. With these enhancements, we aim to not only meet but also surpass the demands of our customers and give them an exciting and smooth ordering experience every time they use our system.

6. REFERENCES

Book:

- J. Hernandez M. (2014). Database Design for Mere Mortals 3rd ed.: A Hands-On Guide to Relational Database Design. Addison-Wesley.
- R. Groff J., N. Weinberg P, & J. Oppel A. (2010). The Complete Reference SQL 3rd ed. McGraw Hill Companies.
- Deutsch D., Shaw P., Melton J. & Gallagher L. (1991). Database Management Systems: Understanding and Applying Database Technology. Butterworth-Heinemann Ltd.
- Coronel C. & Morris S. (2016). Database System: Design, Implementation, and Management. 12th. ed. Course Technology, CENGAGE Learning.

Interview:

- Sir Nurshaz Naziel binti Ammar, personal communication, October 1st, 2023.