Dato's Bakery Ordering System
Proposal

CSC264
Introduction to Web and Mobile Application

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GROUP: CDCS1104C

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1.   INTRODUCTION TO COMPANY AND TEAM

1.1   Company Introduction

Dato's Bakery Shop is a highly prestigious company that is well-known throughout Malaysia. This company has four shareholders, and they are also the main leaders of this company. This company was first established in 2016 when one of the owners of this company began to dabble in the field of entrepreneurship. Now, Dato's Bakery Shop has already 30 branches throughout Malaysia. Dato's Bakery Shop is famous for selling delicious and cheap desserts. The company's headquarters is located in Bandar Seri Kesuma, Selangor because that is where the company started and the population around the area is developing and stimulating to increase the company's economy. Not only that, but they also have such a classic and elegant shop decoration that attracts the attention of people to come to this shop.
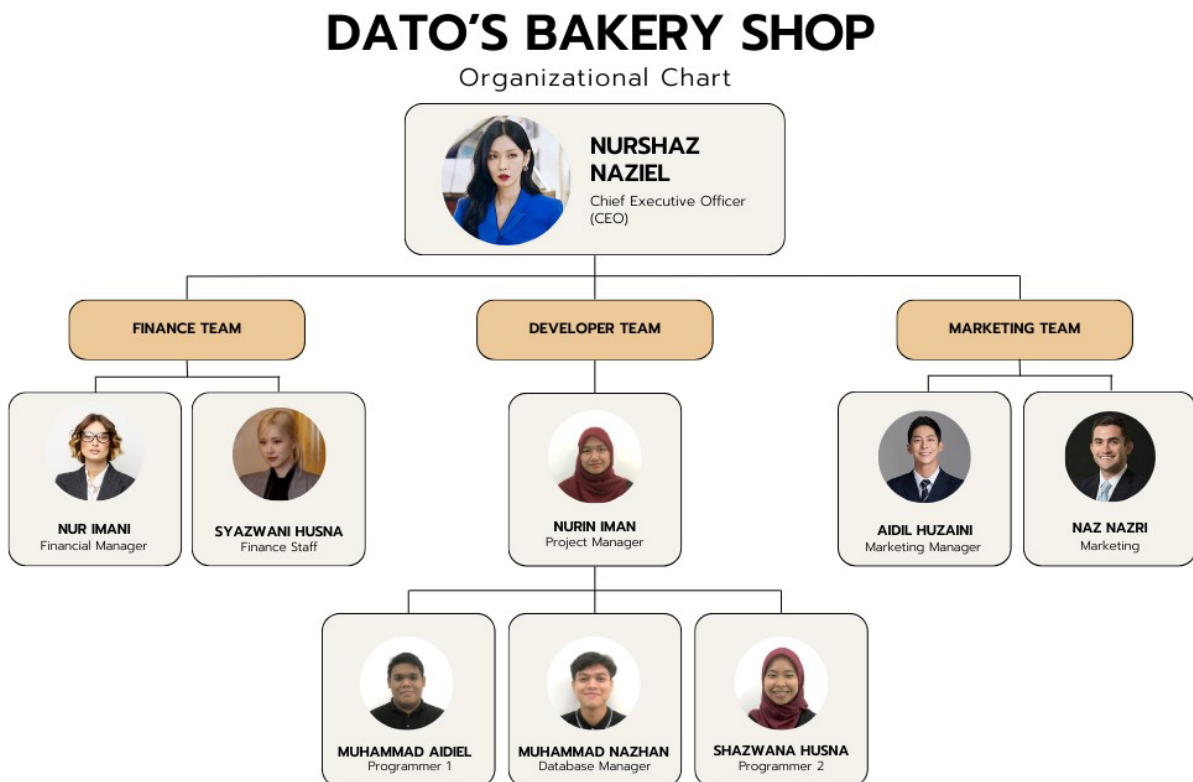
Their vision is to expand the company's legacy to the world level where all countries will recognize this company by giving good performance, producing quality products and becoming the first choice of the world community. Their mission is to serve desserts that use premium ingredients that all sections of society can afford and study new dessert preparations so that all walks of life can get our products according to their tastes nowadays.

Their objective is to mediate and promote all dessert innovations that are healthy and can be enjoyed by all ages. In addition, it ensures that the products sold can be exported to the whole country with the best quality so that all communities can enjoy our products wherever they are.

1.2 Logo of Company

1.3 Company Organizational Chart

DATO'S BAKERY SHOP
Organizational Chart

NURSHAZ NAZIEL
Chief Executive Officer (CEO)

FINANCE TEAM

NUR IMANI
Financial Manager

SYAZWANI HUSNA
Finance Staff

DEVELOPER TEAM

NURIN IMAN
Project Manager

MUHAMMAD AIDIEL
Programmer 1

MUHAMMAD NAZHAN
Database Manager

SHAZWANA HUSNA
Programmer 2

MARKETING TEAM

AIDIL HUZAINI
Marketing Manager

NAZ NAZRI
Marketing

1.4 Distribution of Work Between Team Members

	Name	Distribution of works
1.	Nurin Iman binti Masngot (Project Manager)	• Define project scope, objectives, timeline, and milestone. • Identify potential risks and develop mitigation strategies. • Help each member to complete their task by giving an opinion and fix some error while programmed the codes.
2.	Shazwana Husna binti Saari (Programmer 2)	• Apply the codes for Dato's Bakery System websites. • Handle the writing and execute test cases to ensure readability, security, and performance of the websites. • Make comments for each coding to make it easier to understand and make the system look more efficient.
3.	Muhammad Aidiel bin Mohamad Hussin (Programmer 1)	• Apply the codes for Dato's Bakery System websites. • Handle the writing and execute test cases to ensure readability, security, and performance of the website. • Make comments for each coding to make it easier to understand and make the system look more efficient. • In charge for the interface design for website,
4.	Muhammad Nazhan bin Rozaini (Database Design)	• Create the database and linked into system. • Make sure all the data have been inserted into database from website. • Create the normalization techniques to prevent data redundancy and boots database performances.

2.   PROJECT BACKGROUND

2.1   Introduction to Project

The Dato's Bakery Shop cares about the needs of our customers and the difficulties of our staff. Not only that, to achieve healthy competitiveness, but the owner of Dato's Bakery Shop has also taken the initiative to improve all kinds of weaknesses in this business, whether physical or mental, in order 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. With this, their customers don't have to bother going to their bakery instead, they could visit Dato's Bakery Shop website and order online.

This system was created because Dato's Bakery Shop still relies on manual methods for ordering processing. The manual methods lead to inefficiencies, errors, and delays in order fulfillment, and it might put more pressure on staff. Furthermore, Dato's Bakery Shop also operates multiple branches, requiring a significant number of staff throughout the entire location. Each branch needs a group of staff members to carry out these responsibilities efficiently, ensuring smooth operations and offering customers high-quality service. However, the ordering system will also allow for the real-time tracking of stock levels at every branch. The automated ordering system will facilitate accurate and timely stock monitoring, allowing the bakery to optimize inventory management and prevent stockouts or overstocking. It's to ensure efficient and effective functioning of Dato's Bakery Shop. 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.

2.2 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.

2.3 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.

2.4   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.

2.5   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.
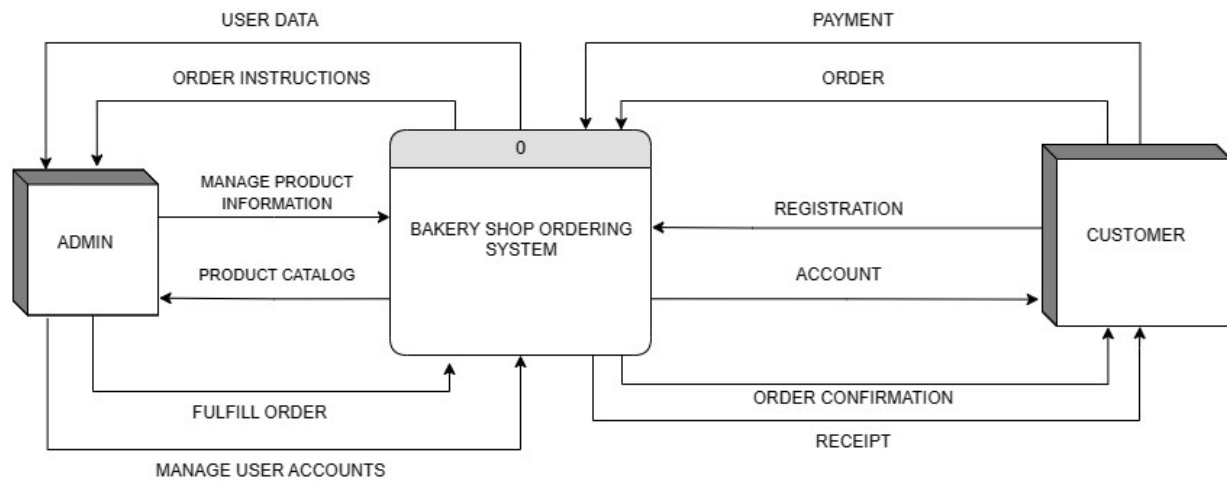
3.   STUDY OF RELATED APPLICATION

After thorough research, we found existing projects in the same field and decided to conduct a review on the selected system which is the Bakery Cottage's. The Bakery Cottage's website exhibits several notable weaknesses. There is an important safety issue associated with not having a login page, as it may reveal private customer information. Furthermore, customers could be confused by the absence of distinction between the menu on the website and that on third-party delivery services like Food Panda. The user experience is negatively impacted by the outdated and unattractive design interface, which could attract away prospective customers. Not only that, but the unusable search tool also makes browsing difficult and difficult for users, making for a less than satisfying experience.

Moreover, the product catalogue on Bakery Cottage's website has an amazing design interface. The layout is extremely well-organized, making excellent use of available space and providing information clearly. This careful planning guarantees a smooth wearing lucidity and confidence with halal merchandise. Bakery Cottage also does a great job of guaranteeing policy quality and safety, giving clients peace of mind about the validity and legality of their purchases. By displaying their participation in several events, their corporate social responsibility page further improves transparency, builds confidence, and encourages event planners to work with them.

Our website is planning a few significant improvements in order to address these shortcomings and capitalize on Bakery Cottage's strengths. To properly protect consumer data, we would first and foremost give top priority to putting strong security measures in place, such as a secure login page. After that, we would simplify the menu presentation to guarantee uniformity on all platforms and reduce customer confusion. A primary goal would be to update the design interface to better represent contemporary aesthetics and increase user engagement. Enhancing the search functionality to produce precise and effective results would also greatly enhance the user experience in general. By leveraging Bakery Cottage's advantages and resolving these shortcomings, our website seeks to offer users a seamless and delightful surfing experience while building confidence and steadfastness.

4.   SYSTEM ANALYSIS AND DESIGN

USER DATA

ORDER INSTRUCTIONS

PAYMENT

ORDER

| | 0 |
| MANAGE PRODUCT INFORMATION | BAKERY SHOP ORDERING SYSTEM |

ADMIN

REGISTRATION

CUSTOMER

PRODUCT CATALOG

ACCOUNT

FULFILL ORDER

ORDER CONFIRMATION

RECEIPT

MANAGE USER ACCOUNTS

5.   DATABASE DESIGN

CAKE

PK,FK	dessertID
	cakeDeco
	cakeShape

must contain

PASTRY

PK,FK	dessertID
	addTopping
	quantityPerBox

must contain

CUSTOMER

PK	custID
	custName
	custEmail
	custUsername
	custPassword
FK	typeID

USER_TYPE

| PK | typeID |
| | typeName |

can only have

may submit

D   dessertID

DESSERT

PK	dessertID
	flavourDessert
	dessertName
	dessertPrice

ORDER_LOG

PK,FK	custID
PK,FK	dessertID
	quantity
FK	staffID
FK	transactionNo
FK	optionID

can include

CUSTOMER_INFO

PK	CustContact
	custState
	custPostcode
	custAddress
	custPhoneNo
	custState
FK	custID

must have

SALES_LOG

PK	transactionNo
	paymentDate
	paymentMethod

can be attached

include

OPTION

PK	optionID
	optionDescription
	optionCharge
	optionStatus

optionID   D

include

DELIVERY

| PK,FK | optionID |
| | deliveryAddress |

include

PICKUP

| PK,FK | optionID |
| | pickUpTime |

6. PROPOSED INTERFACE DESIGN

6.1 Log In, Sign Up and Home Page
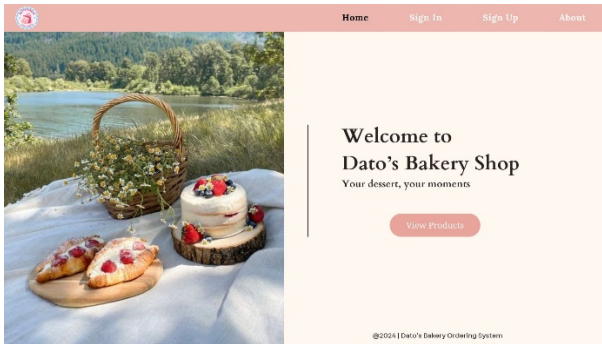
Figure 1: Home Page

Figure 2: Sign In Page
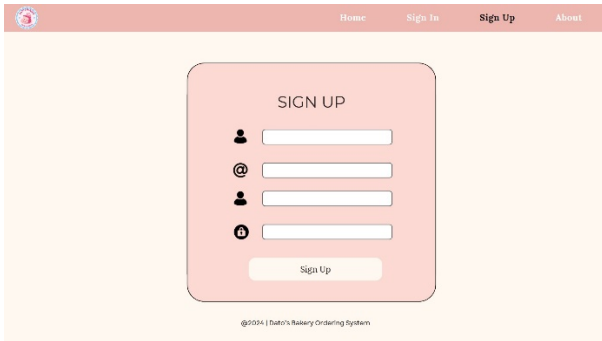
Figure 3: Sign Up Page
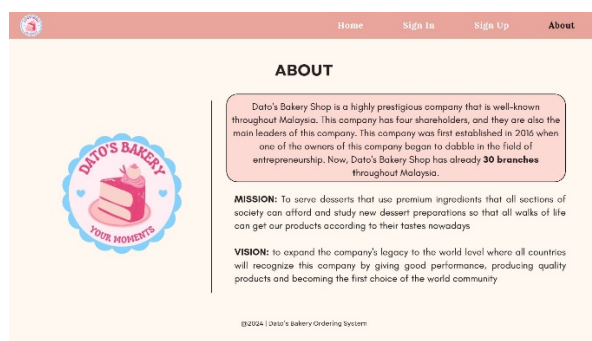
Figure 4: About Company Page

6.2   Users
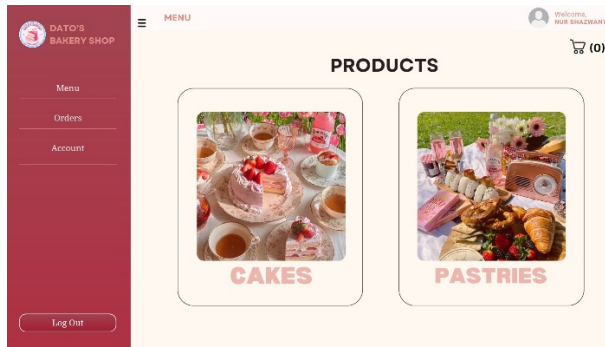
Figure 5: Menu Category Page

Figure 6: Cake Menu Page

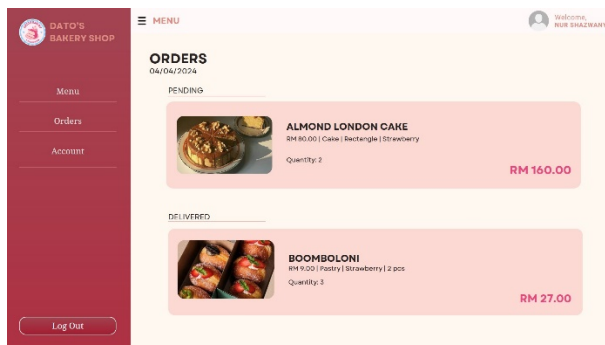*Figure 7: Pastries Menu Page*
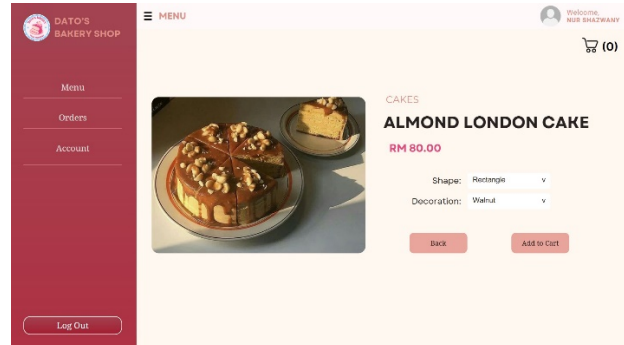
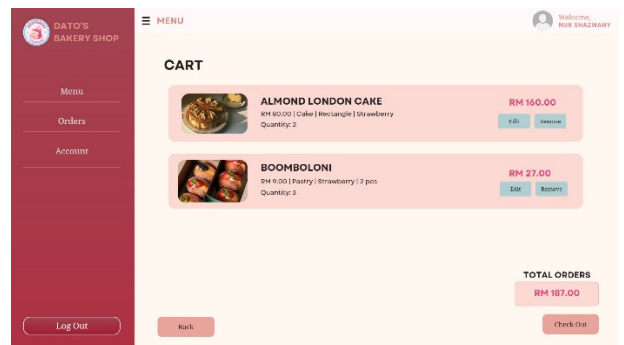*Figure 8: Cake Details Page*

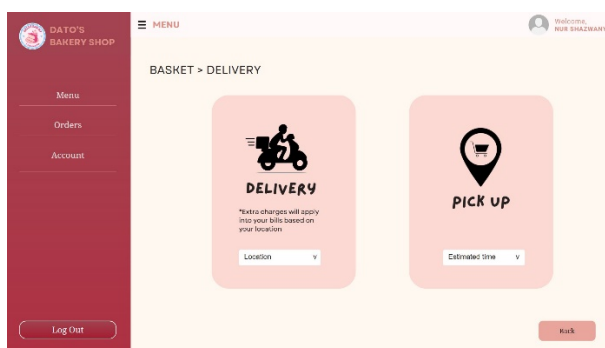*Figure 9: Orders Status Page*

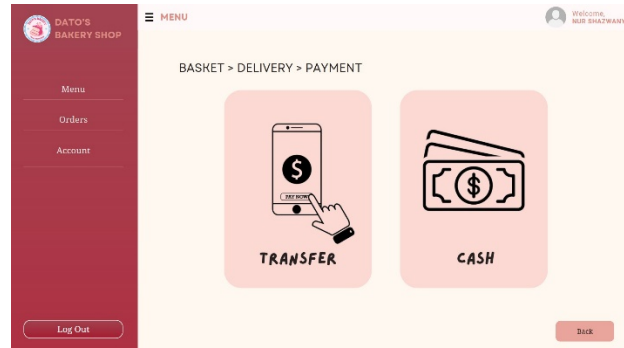*Figure 10: Add to Cart Page*

Figure 11: Delivery Page

Figure 12: Payment Page

Figure 13: Update Account Page

Figure 14: Pastries Details Page

6.3 Admin

Figure 15: Dashboard Admin Page

Figure 16: Users Account Page

Figure 17: Update Status Order Page

Figure 18: Update Pastries Menu Page

Figure 19: Update Cake Menu Page

Figure 20: Cake & Pastries Adding Page

Figure 21: Report Sales Page

Figure 22: Update Account Page

7. GANTT CHART

PROCESS	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13
Working on and preparing project proposal	■	■											
Design Web Storyboard		■	■	■									
Develop the Web Project System				■	■	■							
Testing and Finalize Web Project System						■	■	■					
Presentation and submit project									■				

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