



FIRST SEMESTER SESSION 2020/2021
SCSD2613 SYSTEM ANALYSIS AND DESIGN
FINAL REPORT PROJECT SADM

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(SECTION 08)

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Table of Contents

1.0 Introduction	3-4
1.1Background Study.....	3
1.2 Problem Statement.....	3
1.3 Proposed Solution	3
1.4 Objective	4
1.5 Scope.....	4
2.0 Project Planning.....	5-7
2.1 Human Resource.....	5
2.2 Work BreakDown Structure(WBS).....	6
2.3 PERT Chart.....	7
2.4 Gantt Chart.....	7
3.0 Conceptual Database Design.....	7-9
3.1 Entity Relationship Design.....	7
3.2 Data Dictionary for Conceptual Design.....	8-9
4.0 Benefit and Summary Proposes System.....	9
5.0 Information Gathering Process.....	9-13
5.1 Method used.....	9
5.2 Example Interview/Questionnaire/Observation.....	10-14
6.0 Requirement Analysis	15-17
6.1 Current business process	15
6.2 Functional Requirement	15
6.3 Non-functional Requirement	16
6.4 Data requirement.....	17
7.0 System Analysis and Specification	18-24
7.1 Logical DFD of the To-Be system.....	18-20
7.2 ERD.....	21
7.3 Data Dictionary.....	21-22
7.4 Process Specification.....	23-24
8.0 System Design.....	25-31
8.1 Physical DFD of the To-Be system.....	25-27
8.2 Interface Design (GUI).....	28-31
Appendix	32-35
Meeting Logs for Phase A1	32

Meeting Logs for Phase A2	33
Meeting Logs for Phase A3	34
Meeting Logs for Phase A4	35

1.0 Introduction

1.1 Background Study

The Thesis Binding UTM is facing problems of handling the data of their customers' information, product, order and payment detail. In the current system, they accept orders online through WhatsApp, then they record all the order details into Microsoft Excel through the computer. Hence, the shop purchased more products, and the sort of product increased. This data handling system lacks control and security. It is because the staff might miss some of the order from WhatsApp when there is a huge amount of order in a day and Microsoft Excel programs run very slowly when the data file is too large. Moreover, the shop has changed the phone number in the last few months, the old customers might not notice it and lost contact with the shop.

1.2 Problem Statement

1. The shop owner can only handle a maximum of 15 orders per day even if there are more than 30 orders on that day.
2. The staff takes a long time to search the previous record of the customer as reference when the customer wants to print or burn the same file.
3. The current system does not classify the order type and the customer's document accurately.
4. The staff takes time to record the customer's information and their order detail.
5. The current system needs the staff to update manually with the customer and tracing the order process.

1.3 Proposed Solution

1. To design an online transaction system for the printing shop and the customers to smoothen the order process and enable the customers to trace their order process.
2. To provide the order list follows the order sequence to make it clear to the shop owner and the staff.
3. To implement online payment and QR code payment for the customers to reduce the contact between the staff and the customers.

1.4 Objective

1. Makes it easy for admins to store customer and order data
2. To reduce redundant customer data of order.
3. To improve the system order (order, payment, delivery and process).
4. To improve a more systematic and easy ordering system
5. To facilitate customer order review

1.5 Scope

The system will cover and include the order procedure such as payment methods in this application such as by cash or transfer, the system also will track the order so that the customer can view the order process by application. Next is a notification of an order, this will be updated by an admin to inform the customer that their documents are ready. This system also provides a way to view, edit and search for customer orders and admin.

CBA (Cost Benefit Analysis)

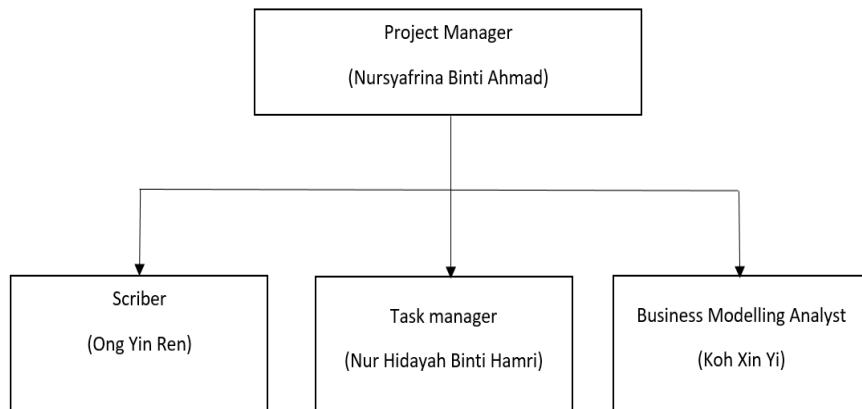
Estimated Cost	Column1	Assumption	Column1
Hardware	RM 40000	Discount rate	10%
Software	RM 5000	Sensitivity factor (cost)	0.8
Supplies	RM 3000 per year	Sensitivity factor(benefits)	0.9
IS Support	RM 18000 per year	Annual Change in production costs	5%
Maintenance	RM 2500 per year	Annual Change in benefits	7%
Salary of Staff	RM 79200 per year (2200*3*12)		
Estimated Benefits	Column1		
Savings	RM 5600 per week		
Increase Sales	RM 1400 per week		

Costs	Year 0	Year 1	Year 2	Year 3
Development Cost				
Hardware	40000			
Software	5000			
Total	45000			
Production Cost				
Supplies		2400	2520	2646
Network		14400	15120	15876
Maintenance		2000	2100	2205
Salary		63360	66528	69854
Annual Production Costs (Present Value)		82160	86268	90581
Accumulated Costs		74691	71296	68055
		119691	190987	259042
Benefits	Year 0	Year 1	Year 2	Year 3
Savings		262080	280426	300056
Increase Sales		65520	70106	75013
Annual Prod. Benefits (Present Value)		327600	350532	375069
Accumulated Benefits		297818	289696	281795
Gain or Loss		178127	396527	610267
Profitability Index	13.561			

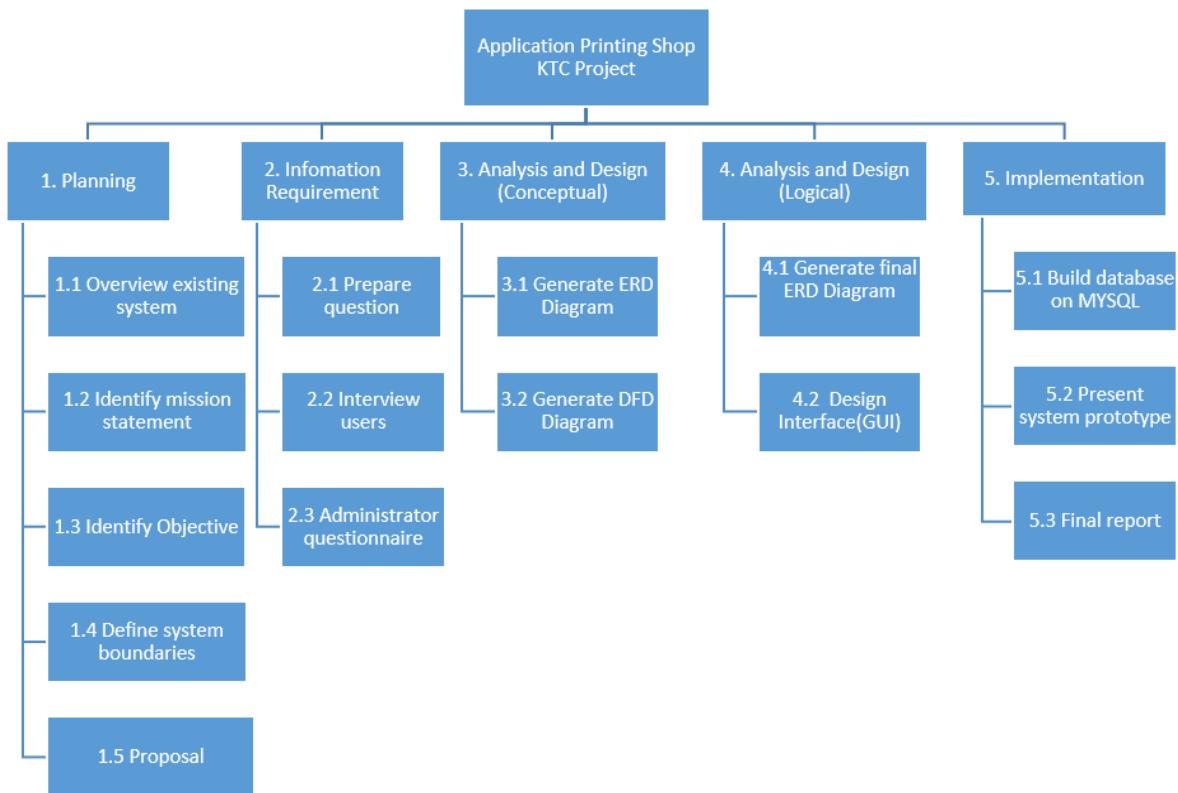
Profitability Index is 13.561, showing that it is a good investment because of its index is more than one.

2.0 Project Planning

2.1 Human Resource

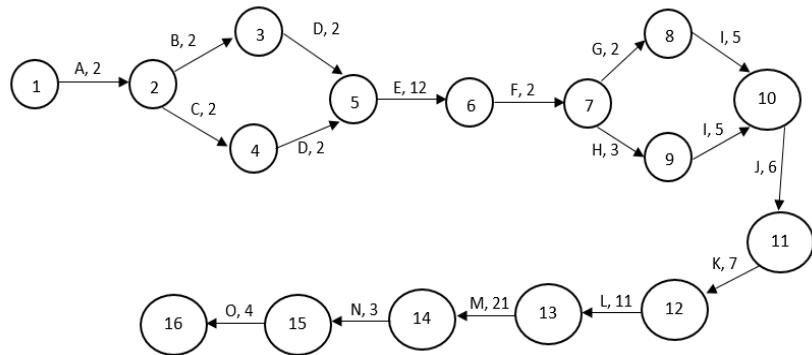


2.2 Work BreakDown Structure(WBS)



2.3 PERT Chart

Activity		Predecessor	Duration
A	Overview existing system	NONE	2
B	Identify mission statement	A	2
C	Identify objective	A	2
D	Define system boundary	B, C	2
E	Proposal	D	12
F	Prepare question	E	2
G	Interview users	F	2
H	Administer questionnaires	F	3
I	Generate ERD Diagram	G, H	5
J	Generate DFD Diagram	I	6
K	Generate final ERD Diagram	J	7
L	Design Interface(GUI)	K	11
M	Build database on MYSQL	L	21
N	Present system prototype	M	3
O	Final report	N	4

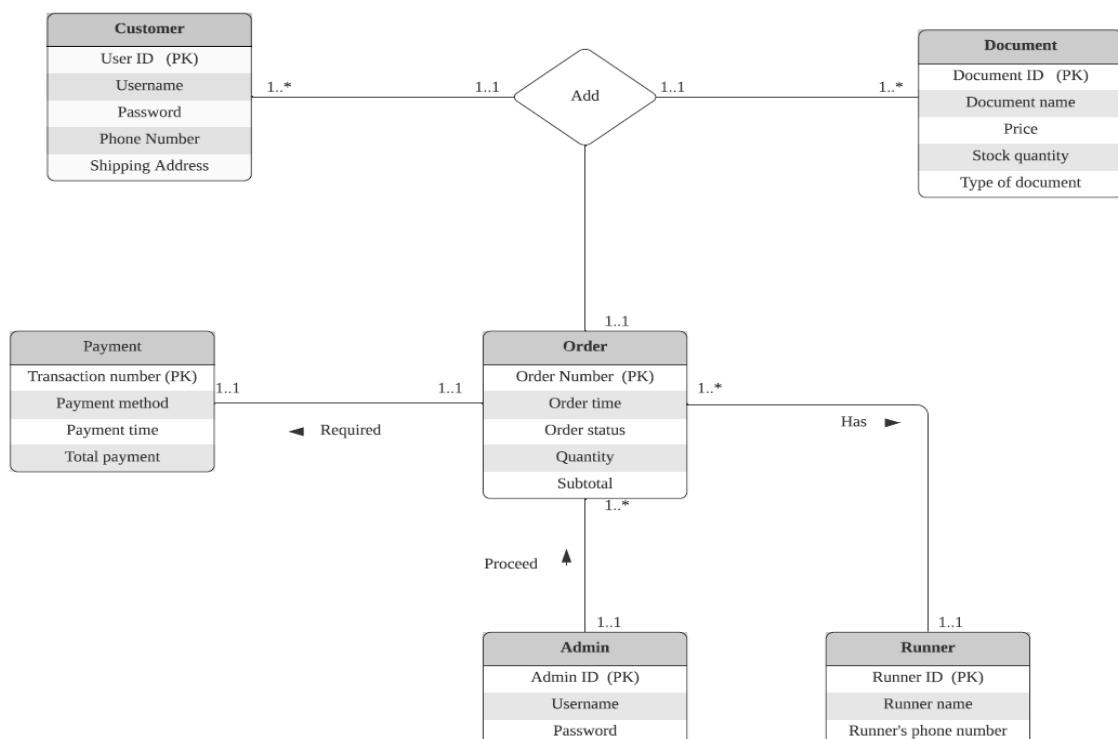


2.4 Gantt Chart

GANNT CHART

3.0 Conceptual Database Design

3.1 Entity Relationship Design



3.2 Data Dictionary for Conceptual Design

Entity Name	Attributes	Description	Data Type & Length	Nulls	Multivalued
Customer	Username	Username for customer	30 variable character	No	No
	User ID	Uniquely identify a customer	Number	No	No
	Password	Password for the username	20 variable character	No	No
	Phone number	Phone number of customer	Number	No	No
	Shipping address	Address of customer	50 variable character	No	No
Document	Document ID	Uniquely identify document	Number	No	No
	Document name	Name of document	30 variable character	No	No
	Price	Price of document	Decimal	No	No
	Stock quantity	Quantity of document customer purchase	Number	No	No
	Type of document	Type of document customer purchase	10 variable character	No	No
Order	Order number	Uniquely identify order	20 variable character	No	No
	Order time	Time of order will deliver	Timestamp	No	No
	Order status	Status of order	30 variable character	No	No
	Quantity	Quantity of document in an order	Number	No	No
	Subtotal	Total price of document in an order	Decimal	No	No
Admin	Admin ID	Uniquely identify id	Number	No	No
	Username	Name to log into the application	30 variable character	No	No
	Password	Key to login with the id successfully	20 variable character	No	No
Runner	Runner ID	Uniquely identify runner id	Number	No	No
	Runner name	Name of runner that deliver document	30 variable character	No	No
	Runner's phone number	Phone number of runner	Number	No	No

Payment	Transaction number	A reference for the customer and the shop	Number	No	No
	Payment method	Types of method to make payment	30 variable character	No	No
	Payment time	Time of making the payment	Timestamp	No	No
	Total payment	Total payment pay by the customer	Decimal	No	No

4.0 Benefit and Summary Proposes System

The benefits gained after this printing shop uses this application system are that their admin no longer needs to record every incoming order via whatsapp one by one. With this application system, the admin can see each order list clearly without overlooking the information provided by the customer as before so as not to mistype in the book. Through this system as well, customers can make reservations to buy stationery for example A4 paper, textpad, pen and so on. In addition, this application system also provides delivery services to customers either inside UTM or outside by showing the order process whether it is still in process or ready to be sent to the customers and they also can go to the store for self pickup. The last advantage of this printing shop application system is also that customers can choose the payment method they want, this application provides two payment methods either cash on delivery or via transfer.

5.0 Information Gathering Process

5.1 Method used

We decided to use a questionnaire and interview to collect the data on human and system information requirements. We did some preparation before the interview section. First, we researched the background material. After that, we determined the objectives of the interview. We decided to choose the printing shop owner as our interviewee so that we can understand the problems of the system and the features needed in the new system. Then, we discuss the questions to be asked during the interview.

5.2 Interview and Questionnaire

5.2.1 Questionnaire:

For the questionnaire section, we use google form to disseminate our questions to students who are in UTM. For this questionnaire, we have divided it into two parts. In the first part, the question given is for the current system and in the second part related to the future system.

PART 1

College

Your answer

1. If there is a printing and thesis service online, would you like to use it? *

Yes

No

2. What is your reason in No 1? *

Your answer

3. If your answer is Yes, what type of platform do you prefer to use?

Website

Mobile Application

4. How likely will you use printing service at UTM? *

Like it very much

Good

Not so much

Not like it

5. How much time do you spend to use the service in the printing shop? *

Sometimes

Rarely

Frequently

6. Currently, the Thesis Binding UTM takes their orders using WhatsApp. Do you find it easy to place an order via WhatsApp? *

Yes
 No

7. What are other problem that you face when you use the service in the printing shop besides in No 6?

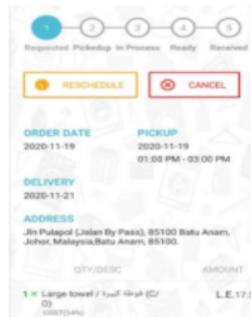
Your answer

PART 2

1. Is it better for a printing shop (Thesis Binding UTM) to provide an application? *

Yes
 No

2. Is it important to know the process of your document in the application? Either still made or ready like in the picture. (Example of delivery service process) *



Yes
 No

3. Is it important for this application to provide different payment methods? for example, cash on delivery, via transfer, or scan QR code. *

Yes
 No

4. These are the services that are in our application: did you think all these services is a must for student and need to have it in the application? *

- Printing
- Hardcover/Binding
- Binding – tape/ ring
- Booklet
- Photostat
- Thesis Formatting
- Thesis printing
- Burn file in cd
- Cd with sticker
- Meet your SV for signature
- Submit to faculty (Any Faculty in UTM)

Yes

No

5. Is it important for you to view your document history in the application? *

Yes

No

6. Will this app make your work easier and save you time? *

Yes

No

7. Will you be interested in using the printing shop application for Thesis Binding UTM after you answer the all question above? *

Yes

No

8. Any suggestion to improve our application service/interface? *

Your answer

5.2.2 Interview:

There are a total of six questions asked in the interview, which are four closed questions followed by two open-ended questions. The question structure is a pyramid structure. We choose to use the pyramid structure because it allows for more generalized responses. It is useful when the interviewees need to be warmed up to the topic or seem reluctant to address the topic.

Type of questions	Interview questions	
Introduction	Interviewer:	Good evening, Pn Alia. I am Koh Xin Yi, a second-year student from the Faculty of Engineering. My friends, Nur Hidayah, NurSyafrina, Ong Yin Ren and I currently carry out a project of course SAD and Database. We need to analyze problems of a system and design solutions to improve the current system. We decided to choose your Thesis Binding UTM shop as our case study. So, I am now representing my group members to have an interview with you. Are you free to answer some questions for me now?
	Interviewee:	Good evening, Xin Yi. Yes, sure.
CLOSED	Interviewer:	Thank you for spending your time to answer my questions. Without wasting your time, let's start the interview. The first question, do you face any problem with your current system?
	Interviewee:	No problem so far, everything is in good condition. Even if there is a problem that happened, it is not a big deal.
CLOSED	Interviewer:	Have your sales increased in the past few years?
	Interviewee:	Yes, my sales increased in the last few years.

CLOSED	Interviewer:	Which group of people are your majority customers?
	Interviewee:	My customers are mostly students from university.
CLOSED	Interviewer:	I see. Do you think your current system is efficient and safe?
	Interviewee:	I think my system is not efficient enough and safe yet. However, I will find a more proper and safe system. I hope there is a proper system for me.
OPEN-ENDED	Interviewer:	If we propose a new online system for you, what feature do you wish to have in the new online system?
	Interviewee:	I hope there is a system where the students can place their order through the system and complete the payment together. Our behalf can clearly understand the customers' request, and no problem exists until the order is completed.
OPEN-ENDED	Interviewer:	How did you think a new online system helps to reduce your cost?
	Interviewee:	If I have that system, I think the working procedure will be smoother and more efficient. I believe it can ease my working burden.
End of interview	Interviewer:	Alright. Now I get your thoughts. It has come to the end of this interview. Once again, I would like to say thank you for allowing us to carry this interview with you. Thank you for your precious time.
	Interviewee:	Alright. You are most welcome.

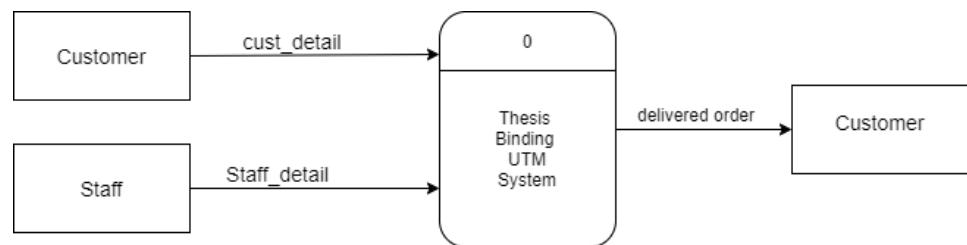
6.0 Requirement Analysis

6.1 Current business process

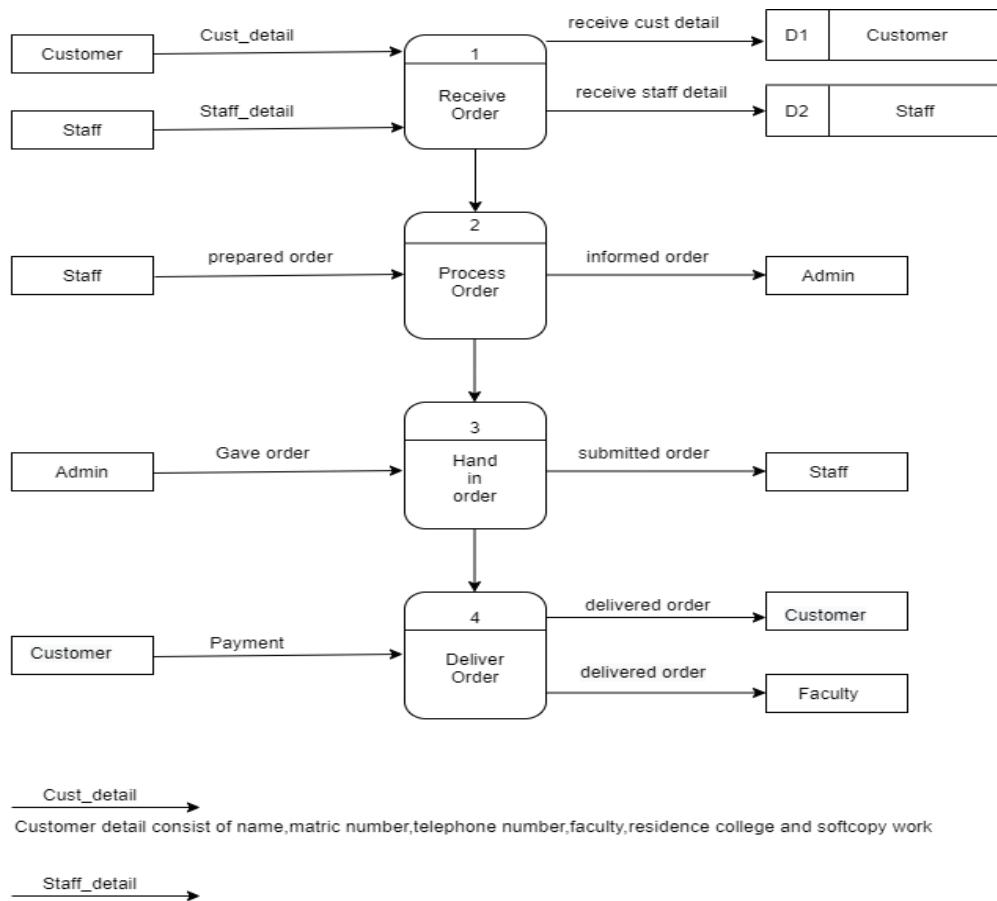
Current system customers will send their work through whatsapp. One of the printing shop's staff, which is the admin, will record details of customers in Microsoft excel. Then, the staff will process the customer's document. Admin will help staff when not receiving any document from customers. When the document is ready, staff will inform the admin to get the details of the customer to deliver. There is also a delivery service to any faculty and also to get SV signature. Customers will make payment after the staff deliver to them.

6.2 Functional Requirement

6.2.1 Context Diagram



6.2.2 O Diagram



6.3 Non-functional Requirement

Performance	<ul style="list-style-type: none">- Able to manage data of customers- Able to receive the order immediately- Able to reply customer message in a short time- Allow users to place their order simultaneously- Able to recover in a super short time when the system crashed- Allow different types of transactions such as online banking and cash..- The privacy of the user is being protected- The response time for every action must not exceed 8 seconds.
Control	<ul style="list-style-type: none">- Enable multiple languages such as English, Bahasa Melayu and Chinese to adopt the diversity of race in Malaysia- Provide the shortest placing order procedure to the users- Provide an easy access system- Restrict the user from proceeding the order when the users do not complete the order detail.

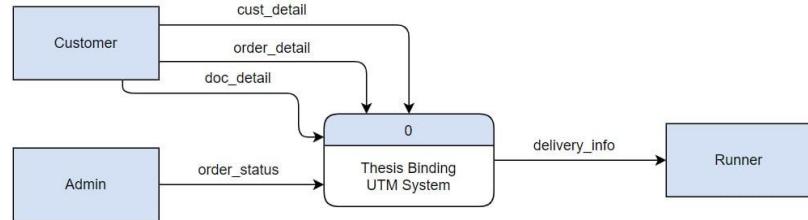
6.4 Data requirement

Entity	Data to be stored	Requirements of Data
Customer	1. Name 2. Phone number 3. Shipping address	
Document	1. Document name 2. Price 3. Stock quantity 4. Type of document 5. Characteristic of document	[3] Price shown should be included with tax GST. No further add on after that. [6] Characteristic document such as pages, color, set
Order	1. Order number 2. Order time 3. Order status 4. Quantity 5. Subtotal 6. Delivery Fee 7. Grand price	[1] Order number written by staff. [5] Subtotal = (price*quantity) whereas the price refers to the Document entity [7] Grand price = subtotal + delivery fee
Staff	1. Staff name 2. Staff ID 3. Staff's phone number 4. Order picked up 5. Order delivered	[2] Every Staff have their own ID
Payment	1. Payment method 2. Total payment	[1] Payment method is customer can choose to pay cash on delivery or via transfer

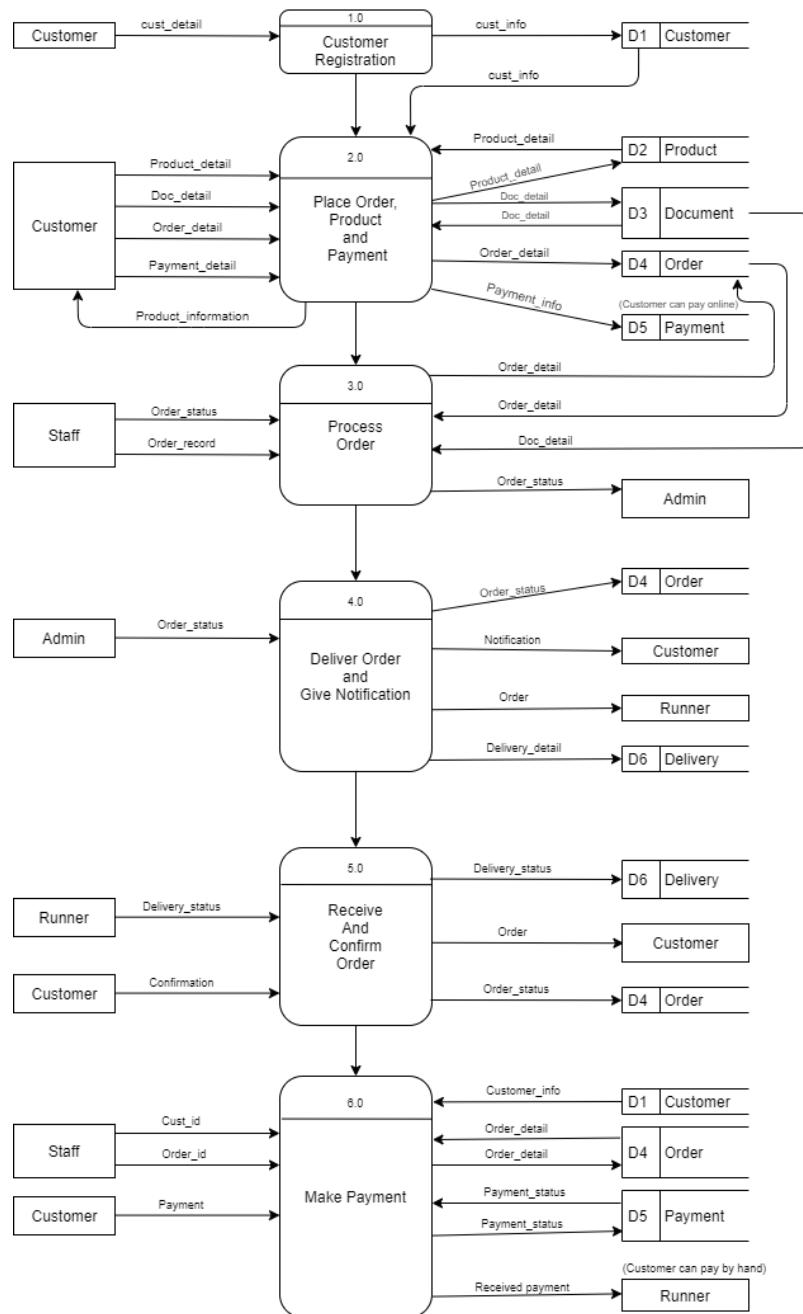
7.0 System Analysis and Specification

7.1 Logical DFD of the To-Be system

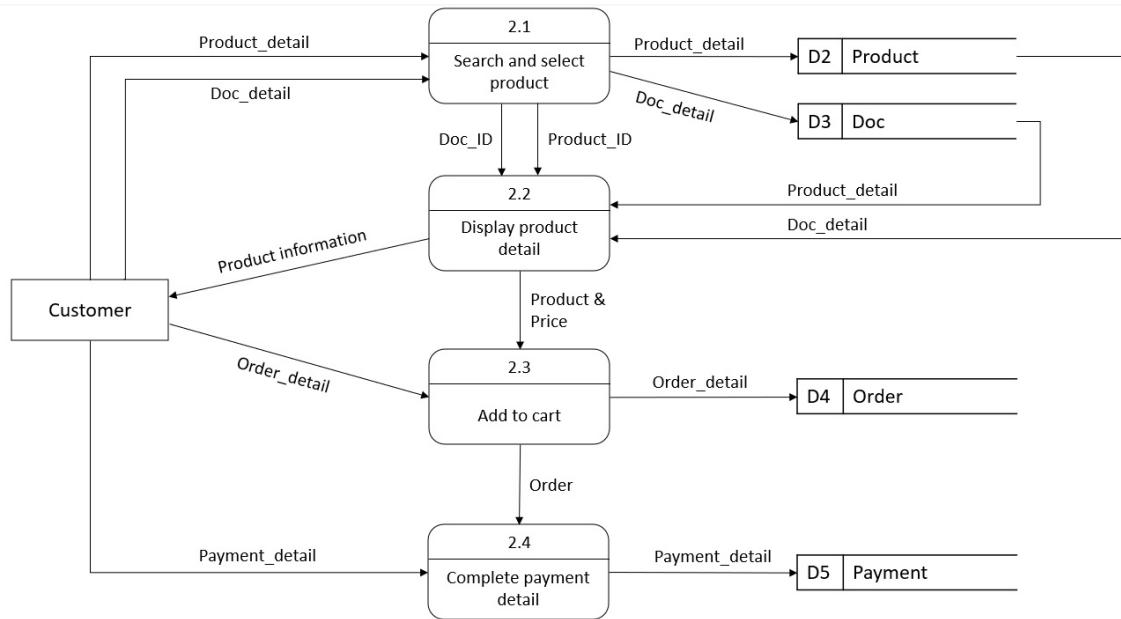
7.1.1 Context Diagram



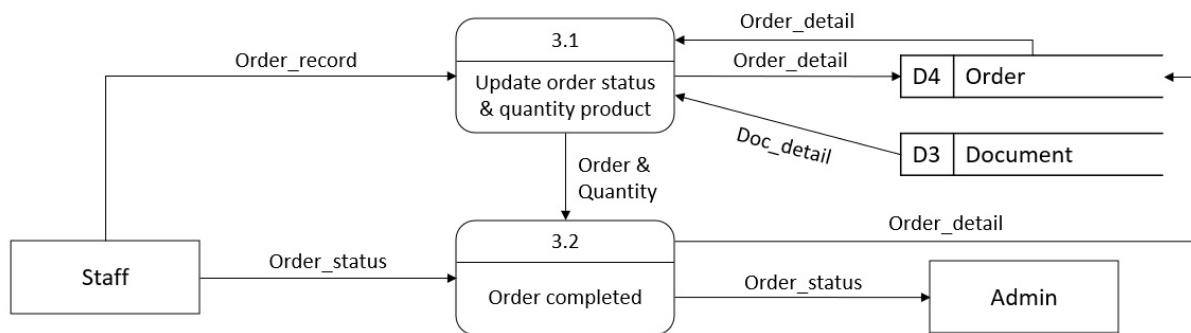
7.1.2 O Diagram



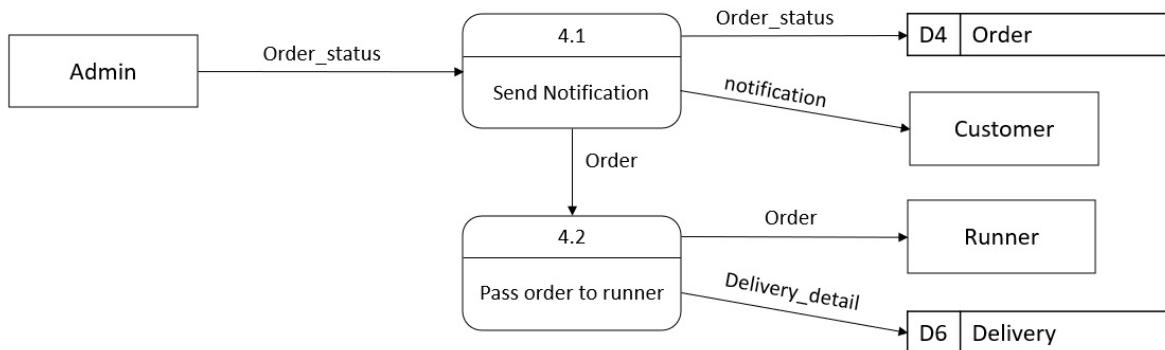
7.1.3 Child Diagram for Process 2



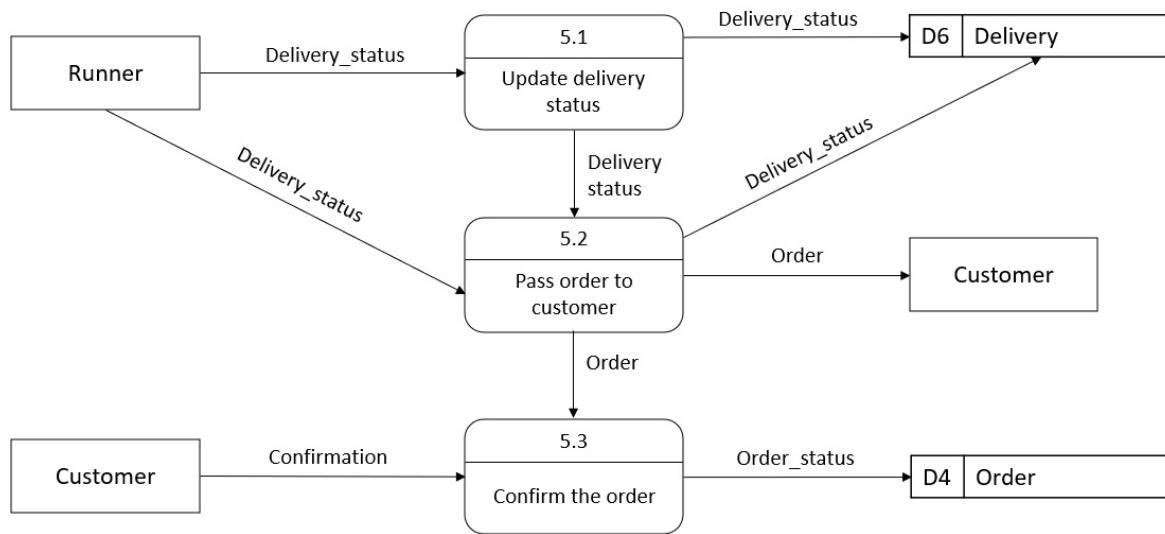
7.1.4 Child Diagram for Process 3



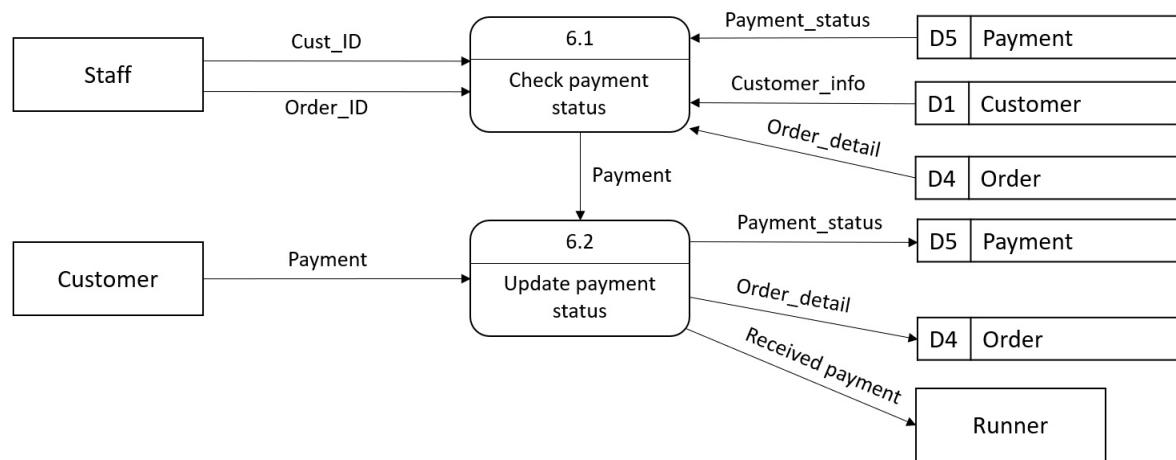
7.1.5 Child Diagram for Process 4



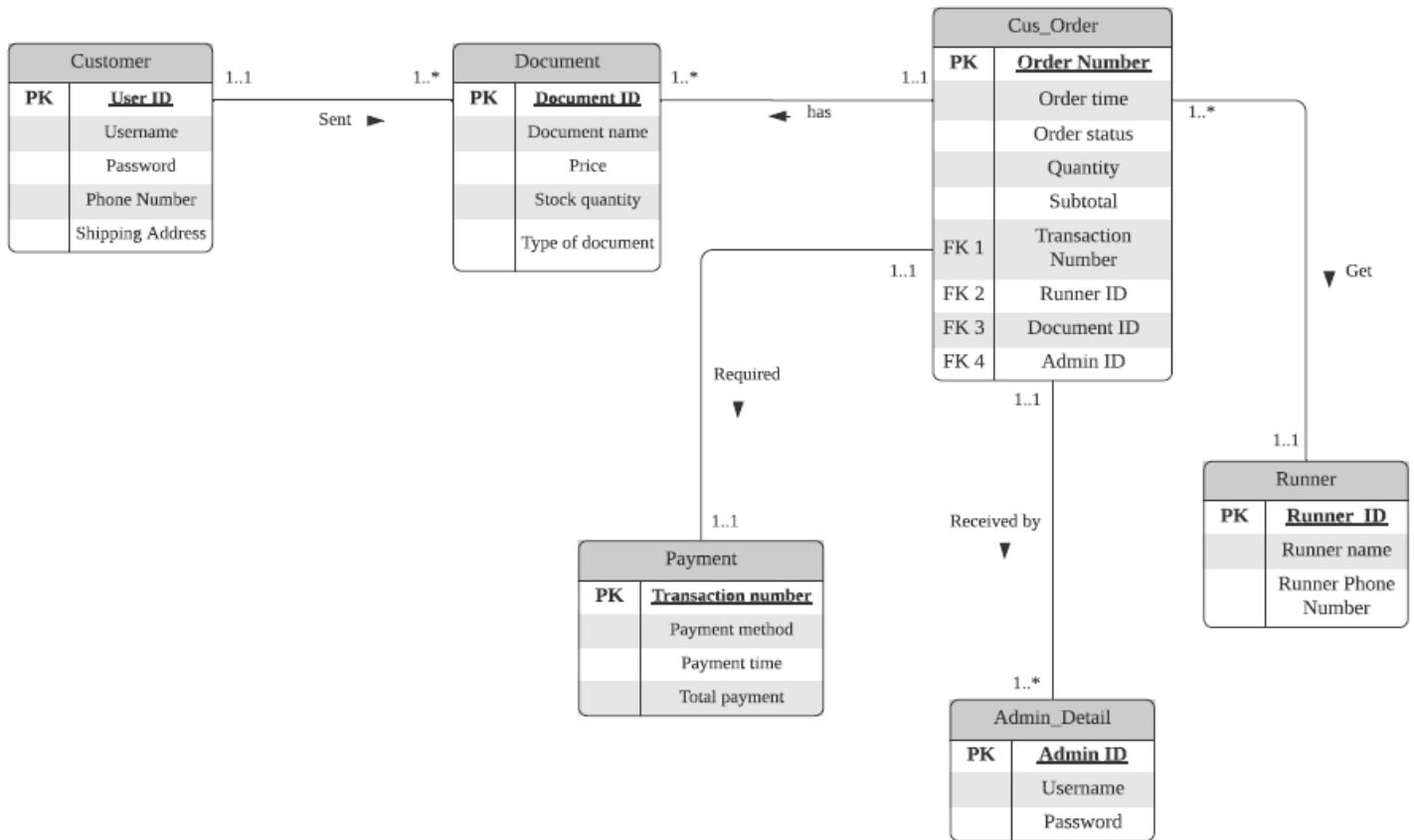
7.1.6 Child Diagram for Process 5



7.1.7 Child Diagram for Process 6



7.2 ERD



7.3 Data Dictionary

Entity Name	Attribute	Description	Data Type & Length	Nulls	Multivalued
Customer	User ID	Uniquely identify a customer	Number	No	No
	Username	Username for customer	30 variable character	No	No
	Password	Password for the customer	20 variable character	No	No
	Phone Number	Phone number of customer	Number	No	No
	Shipping Address	Address of customer	50 variable character	No	No
Document	Document ID	Uniquely identify document	Number	No	No
	Document name	Name of document	30 variable character	No	No
	Price	Price of document	Decimal	No	No
	Stock quantity	Quantity of document customer purchase	Number	No	No
	Type of document	Type of document customer purchase	10 variable character	No	No

Cus_Order	Order Number	Uniquely identify order	20 variable character	No	No
	Order time	Time of order will deliver	Timestamp	No	No
	Order status	Status of order		No	No
	Quantity	Quantity of document in an order	30 variable character	No	No
	Subtotal	Total price of document in an order	Number	No	No
	Transaction Number	Foreign key references DOCUMENT (Document ID)	Decimal	No	No
Runner	Runner ID	Foreign key references Document	Number	No	No
	Document ID	Foreign key references Runner (Runner id)	Number	No	No
	Admin ID	Foreign key references Admin_Detail (Admin ID)	Number	No	No
Admin_Detail	Runner ID	Uniquely identify runner id	Number	No	No
	Runner name	Name of runner that deliver document	30 variable character	No	No
	Runner Phone Number	Phone number of runner	Number	No	No
Payment	Admin ID	Uniquely identify admin id	Number	No	No
	Username	Name to log into the application	30 variable character	No	No
	Password	Key to login with the id successfully	20 variable character	No	No
Payment	Transaction number	A reference for the customer to the shop	Number	No	No
	Payment method	Types of method to make payment	30 variable character	No	No
	Payment time	Time of making the payment	Timestamp	No	No
	Total payment	Total payment pay by the customer	Decimal	No	No

7.4 Process Specification

Process 1 (Customer) :

Customer open Printing shop application

IF customer have an account

 Click “Login”

ELSE IF customer do not have an account

 Click “Register”

ENDIF

Process 2 (Customer):

Customer upload document

Customer input number of copy of document

IF customer want to remove document and number of copy document

 Click “Clear”

ELSE IF customer want to proceed

 Click “Submit”

ENDIF

Process 3 (Customer):

Customer view order cart

IF customer want to go back to upload document process

 Click “Back”

ELSE IF customer want to proceed to check out

 Click “Check out”

ENDIF

Process 4 (Customer):

Customer view payment part

IF customer want to go back to view order cart

 Click “Back”

ELSE IF customer want to proceed confirm order

 Click “Confirm and Proceed”

ENDIF

Process 5 (Admin):

GET Username

GET Password

Click “Login”

Process 6 (Admin):

Admin view all customers' order

IF Admin want to view customer's order in detail

 Click “Document ID” of that customer

ELSE IF Admin want to delete order of customer

 Click Document ID of that customer

 Click “Delete”

ELSE IF Admin want to Update customer's order

 Click Document ID of that customer

 Click “Edit”

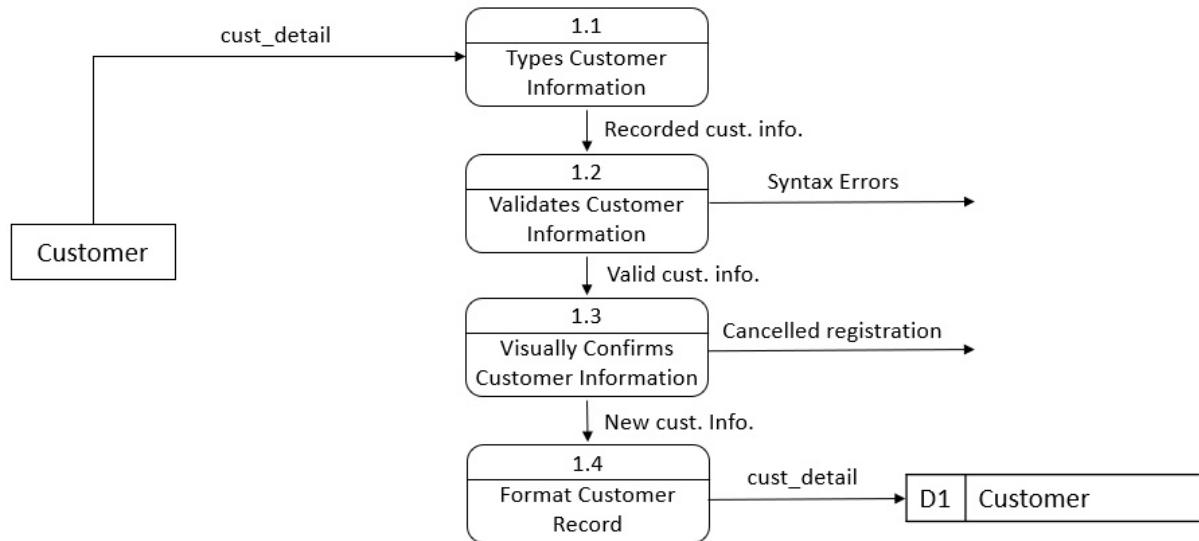
 Fill in form

ENDIF

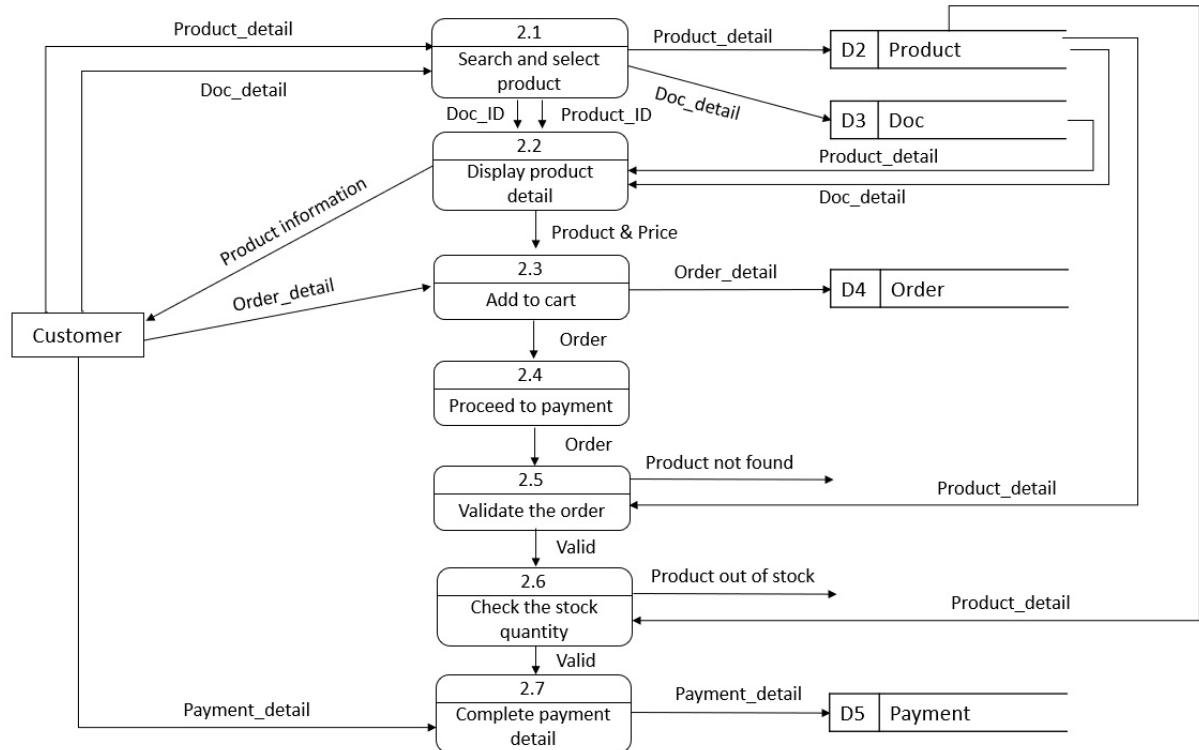
8.0 System Design

8.1 Physical DFD of the To-Be system

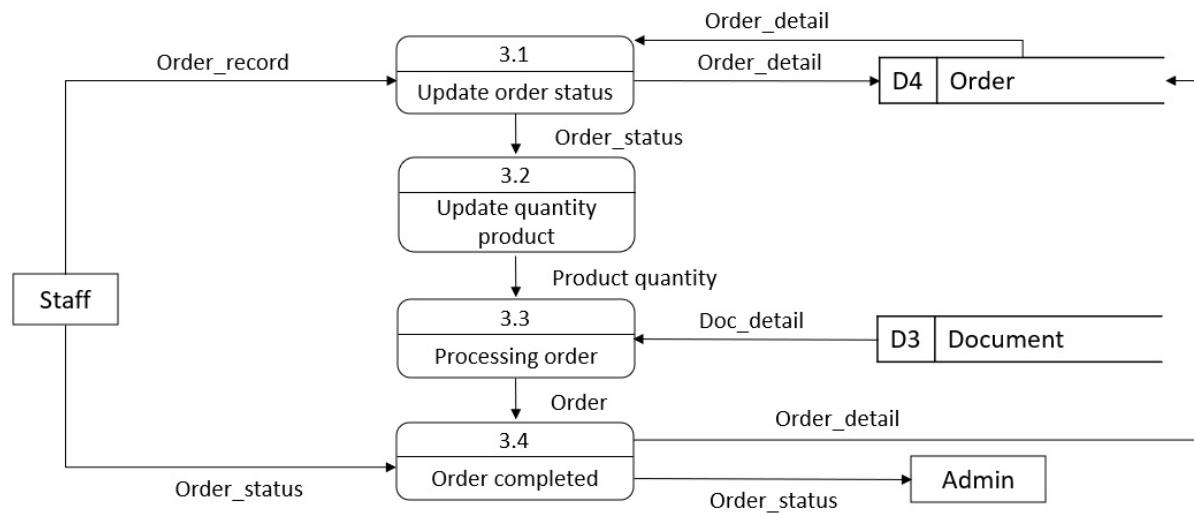
8.1.1 Child Diagram for Process 1



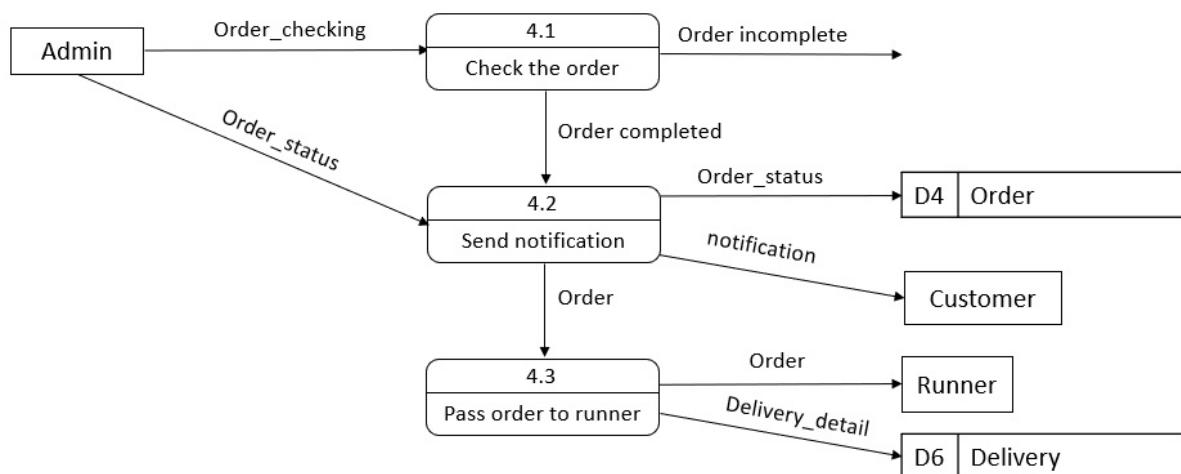
8.1.2 Child Diagram for Process 2



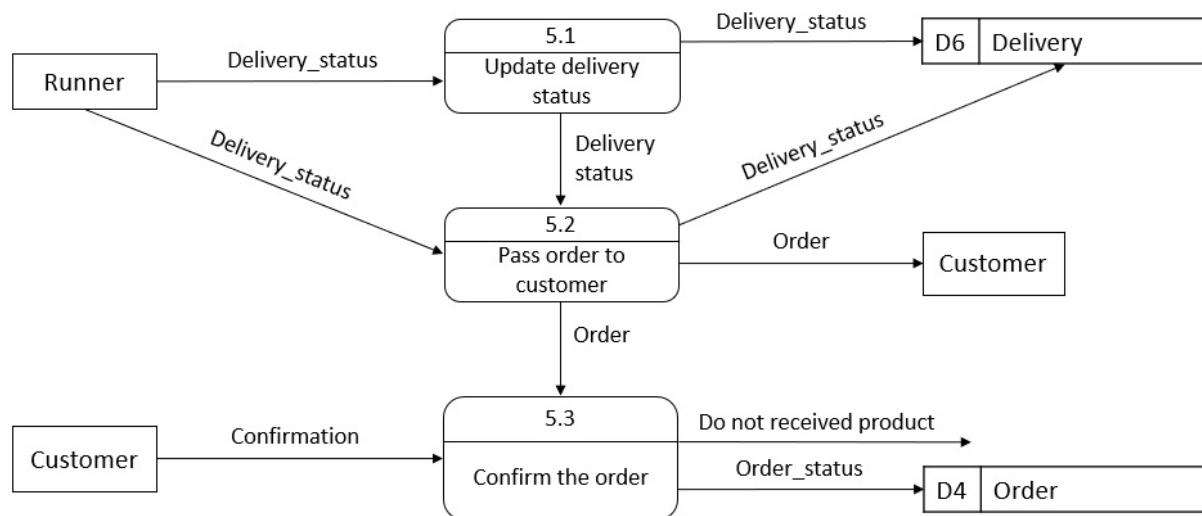
8.1.3 Child Diagram for Process 3



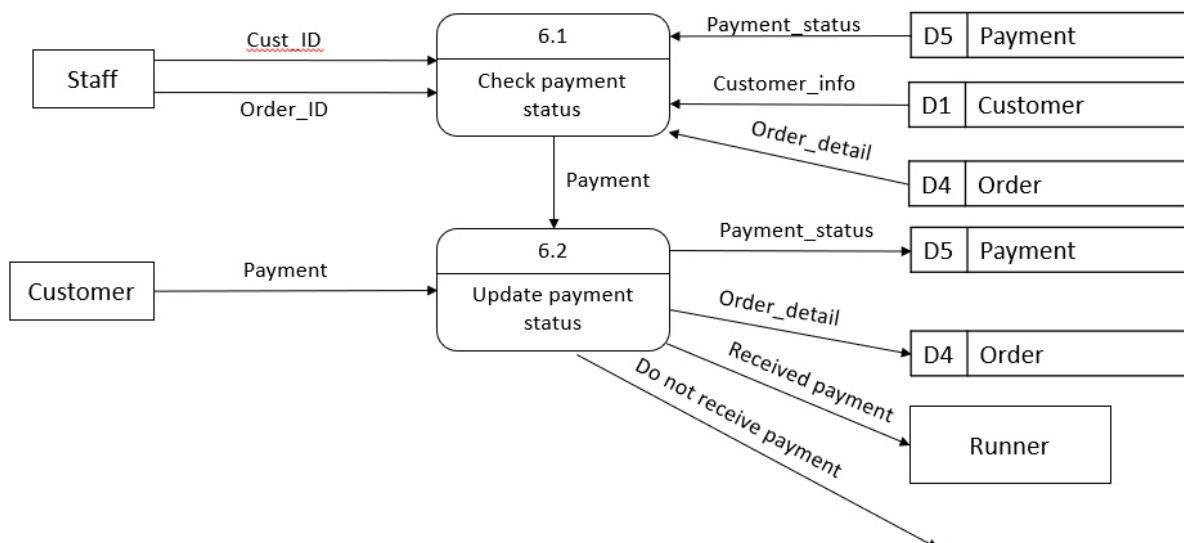
8.1.4 Child Diagram for Process 4



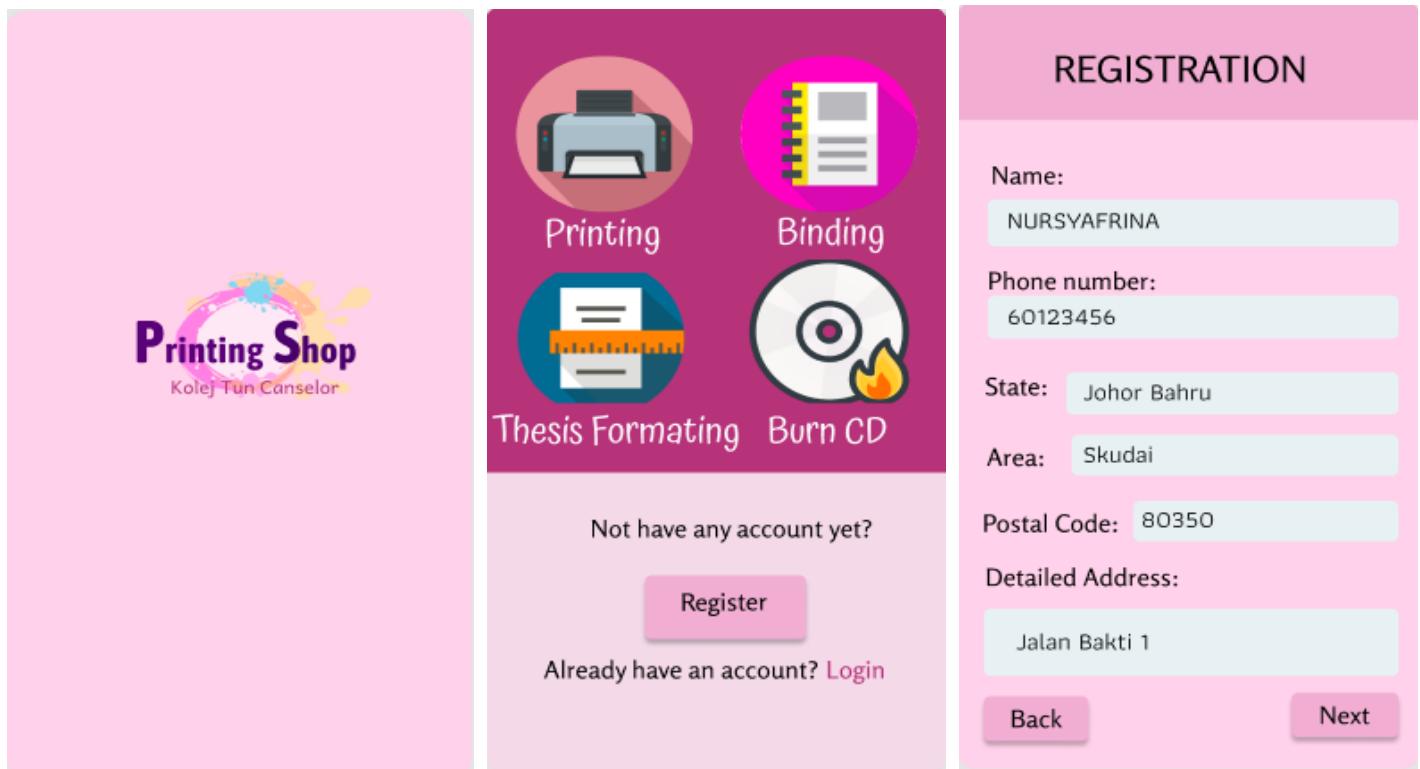
8.1.5 Child Diagram for Process 5



8.1.6 Child Diagram for Process 6

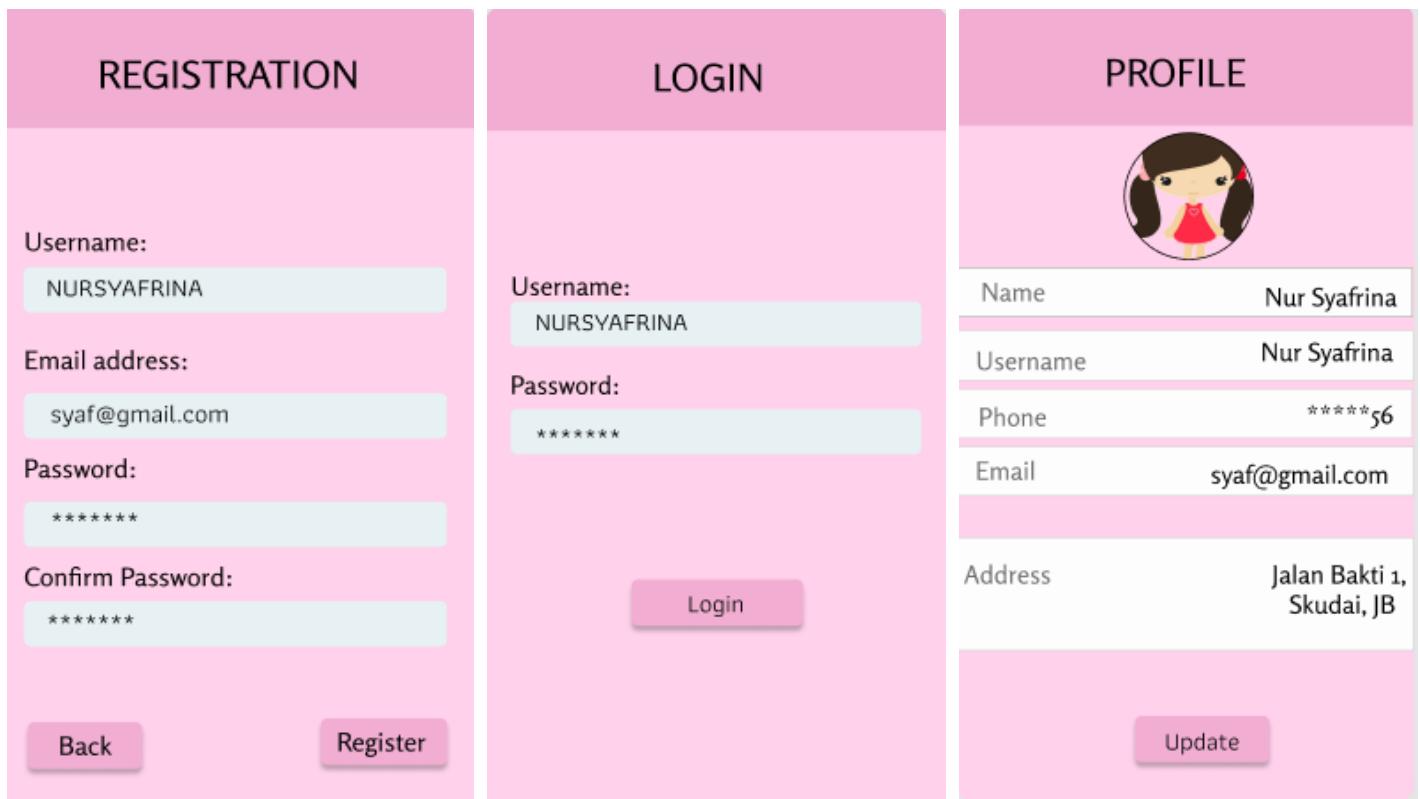


8.2 Interface Design (GUI)



The main interface features a logo for 'Printing Shop Kolej Tun Canselor' on the left. In the center, there are four service icons: 'Printing' (printer), 'Binding' (stack of papers), 'Thesis Formating' (thesis and ruler), and 'Burn CD' (CD with flame). Below these icons are two buttons: 'Not have any account yet?' (pink background) and 'Already have an account? Login' (light blue background). To the right is a 'REGISTRATION' form with fields for Name (NURSYAFRINA), Phone number (60123456), State (Johor Bahru), Area (Skudai), Postal Code (80350), and Detailed Address (Jalan Bakti 1). Navigation buttons 'Back' and 'Next' are at the bottom.

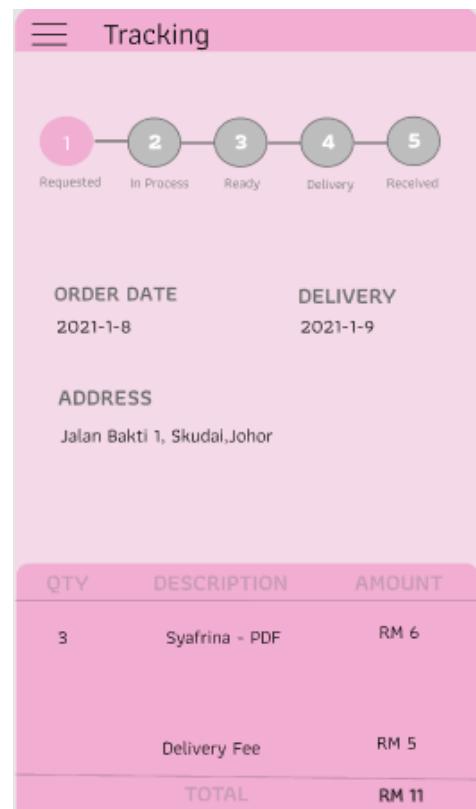
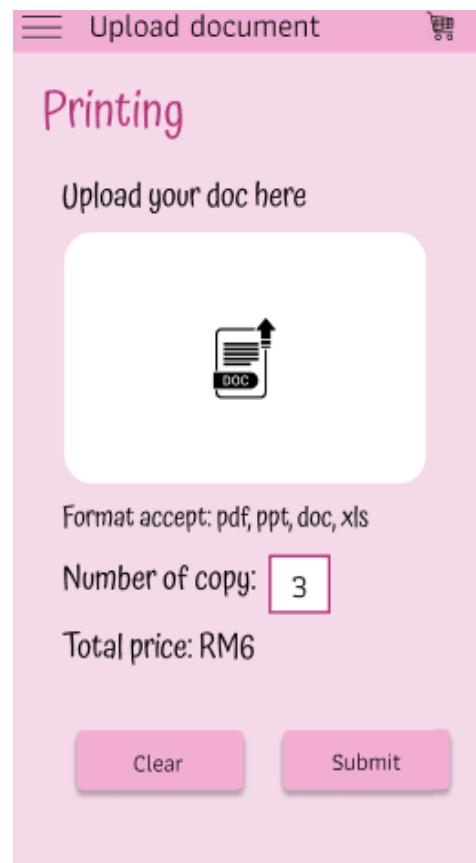
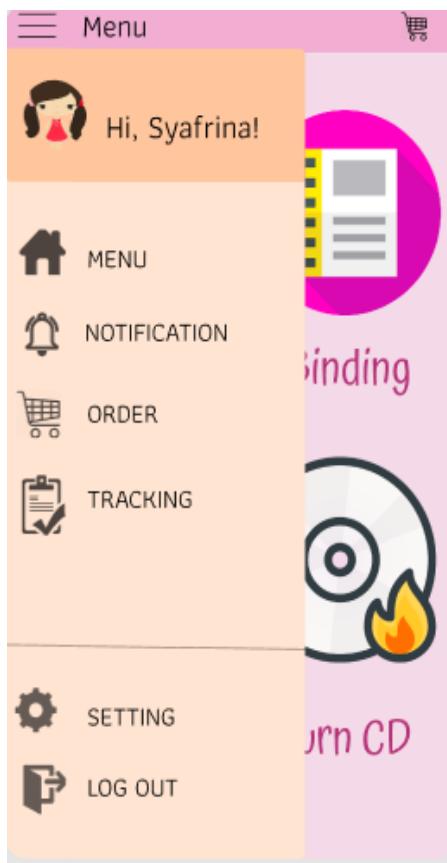
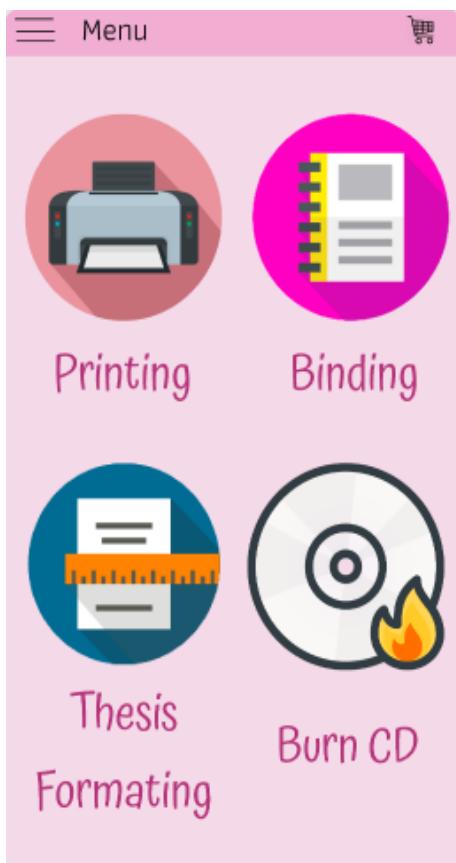
REGISTRATION
Name: NURSYAFRINA
Phone number: 60123456
State: Johor Bahru
Area: Skudai
Postal Code: 80350
Detailed Address: Jalan Bakti 1
Back
Next



The interface shows a three-step registration process:

- REGISTRATION:** Fields for Username (NURSYAFRINA), Email address (syaf@gmail.com), Password (*****), and Confirm Password (*****). Navigation buttons 'Back' and 'Register' are at the bottom.
- LOGIN:** Fields for Username (NURSYAFRINA) and Password (*****). A 'Login' button is at the bottom.
- PROFILE:** Displays a user profile picture of a girl in a red dress. Below it is a table with user information: Name (Nur Syafrina), Username (Nur Syafrina), Phone (*****56), Email (syaf@gmail.com), and Address (Jalan Bakti 1, Skudai, JB). An 'Update' button is at the bottom.

Name	Nur Syafrina
Username	Nur Syafrina
Phone	*****56
Email	syaf@gmail.com
Address	Jalan Bakti 1, Skudai, JB
Update	



LOGIN

Username: **JIAKO**

Password: *********

Login

CUSTOMER ORDER

Order ID	Order Time	Order Status	Quantity	Subtotal	Document ID	Transaction Number	Runner
A001	01-JAN-20 11.30.31.000000 AM	YES	2	2.00	18690	18523	165498
A230	01-JAN-20 05.30.31.000000 PM	NO	6	6.00	17745	18596	165500
A485	02-JAN-20 06.00.31.000000 PM	YES	5	5.00	16580	18790	166700
A500	02-JAN-20 10.00.31.000000 AM	NO	1	1.00	15000	19780	17600
A003	02-JAN-20 04.00.31.000000 PM	NO	4	4.00	14500	17000	18690

Delete **Edit** **Notify Runner**

DOCUMENT

User ID	Document ID	Document Name	Document Type	Quantity	Subtotal	Order Status	Runner	Order Time
1670	18690	Syafrina	PDF	2	2.00	YES	165498	01-JAN-20 11.30.31.000000 AM

Back

CUSTOMER ORDER

Order ID	Order Time	Order Status	Quantity	Subtotal	Document ID	Transaction Number	Runner
A001	01-JAN-20 11.30.31.000000 AM	YES	2	2.00	18690	18523	165498
A230	01-JAN-20 05.30.31.000000 PM	NO	6	6.00	17745	18596	165500
A485	02-JAN-20 06.00.31.000000 PM	YES	5	5.00	16580	18790	166700
A500	02-JAN-20 10.00.31.000000 AM	NO	1	1.00	15000	19780	17600

Delete **Edit** **Notify Runner**

DELETE ORDER

Order ID	A003
Quantity	2
Document ID	14500
Subtotal	RM 2.00
Runner	18690

Delete

EDIT ORDER

Order ID A230

Quantity 2

Document ID 14500

Subtotal RM 2.00

Order Status Yes

Runner 18690

Update

CUSTOMER ORDER

Order ID	Order Time	Order Status	Quantity	Subtotal	Document ID	Transaction Number	Runner
A001	01-JAN-20 11.30.31.000000 AM	YES	2	2.00	18690	18523	165498
A230	01-JAN-20 05.30.31.000000 PM	YES	6	6.00	17745	18596	165500
A485	02-JAN-20 06.00.31.000000 PM	YES	5	5.00	16580	18790	166700
A500	02-JAN-20 10.00.31.000000 AM	NO	1	1.00	15000	19780	17600

Delete

Edit

Notify Runner

Appendix

Meeting Logs for Phase A1

Date: 17th November 2020

Attendance:

Team-mate name	Signatures
1. NURSYAFRINA BINTI AHMAD	
2. ONG YIN REN	
3. KOH XIN YI	
4. NUR HIDAYAH BINTI HAMRI	

Discussion Results/Findings:

We discuss the cost and benefit of the system, and we calculate the profitability index and find out that it is greater to 1. After that, Syafrina assigned the role of each member, and everyone agreed with their position. Besides that, we identify the timeline and evaluation of the system, then we complete the Pert Chart and Gantt Chart. We also discuss the benefit of the system and do summarization of the system.

Contributions/Ideas:

Team-mate name	Contributions/Ideas
1. NURSYAFRINA BINTI AHMAD	<ul style="list-style-type: none">- Proposes some idea during the discussion.- Complete the Gantt Chart and Human Resource.
2. ONG YIN REN	<ul style="list-style-type: none">- Proposes some idea during the discussion.- Complete the cost benefit analysis.
3. KOH XIN YI	<ul style="list-style-type: none">- Proposes some idea during the discussion.- Complete the cost benefit analysis, benefit and summarization.
4. NUR HIDAYAH BINTI HAMRI	<ul style="list-style-type: none">- Proposes some idea during the discussion.- Complete the Gantt Chart, Pert Chart and WBS.

Meeting Logs for Phase A2

Date: 7th December 2020

Attendance:

Team-mate name	Signatures
1. NURSYAFRINA BINTI AHMAD	
2. ONG YIN REN	
3. KOH XIN YI	
4. NUR HIDAYAH BINTI HAMRI	

Discussion Results/Findings:

We divided the tasks into 2 which are Hidayah and Xin Yi handle questionnaires and Syafrina and Yin Ren handle DFD diagrams. We use google form as a platform to ask opinion from the target user which is a student from any college in UTM. We also decide to have an interview with the owner of the shop.

Contribution/Ideas:

Team-mate name	Contribution/Ideas
1)NURSYAFRINA BINTI AHMAD	-Propose rough idea for DFD Diagram.
2)ONG YIN REN	-Give some idea to improve context and O diagram.
3)KOH XIN YI	-Propose some question. -Identify whether to use funnel, pyramid or diamond based on the question.
4)NUR HIDAYAH BINTI HAMRI	-Propose some question -Make google form to blast the question.

Meeting Logs for Phase A3

Date: 10th January 2021

Attendance:

Team-mate name	Signatures
1. NURSYAFRINA BINTI AHMAD	
2. ONG YIN REN	
3. KOH XIN YI	
4. NUR HIDAYAH BINTI HAMRI	

Discussion Results/Findings:

We discuss the conceptual entity relational diagram by determining the relationship between every entity in the system. We also revise the logical entity relational diagram after receiving our lecturer's feedback on Trello. Besides, we identify the data type and length of each attribute. The present of null value and multivalued also identified. We also do our interface design (GUI) by using figma.

Contribution/Ideas:

Team-mate name	Contributions/Ideas
1. NURSYAFRINA BINTI AHMAD	<ul style="list-style-type: none">- Complete the logical diagram 0.- Complete the Data Dictionary.- Complete the Process Specification.- Do screen-design mock-up.
2. ONG YIN REN	<ul style="list-style-type: none">- Complete the logical ERD.- Do screen-design mock-up.
3. KOH XIN YI	<ul style="list-style-type: none">- Complete the logical context diagram.- Complete the logical child diagram.- Complete the physical child diagram.- Do screen-design mock-up.
4. NUR HIDAYAH BINTI HAMRI	<ul style="list-style-type: none">- Complete the conceptual ERD.- Revise the logical ERD.- Do screen-design mock-up and design interface for system.

Meeting Logs for Phase A4

Date: 25th January 2021

Attendance:

Team-mate name	Signatures
1. NURSYAFRINA BINTI AHMAD	
2. ONG YIN REN	
3. KOH XIN YI	
4. NUR HIDAYAH BINTI HAMRI	

Discussion Results/Findings:

We complete our final report and assign video parts for each member. After that, we record the video presentation and compile all members' videos together.

Contribution/Ideas:

Team-mate name	Contributions/Ideas
1. NURSYAFRINA BINTI AHMAD	- Finalise the report. - Record the video presentation.
2. ONG YIN REN	- Finalise the report. - Record the video presentation.
3. KOH XIN YI	- Finalise the report. - Record the video presentation.
4. NUR HIDAYAH BINTI HAMRI	- Finalise the report. - Record the video presentation.