

PRINTING SERVICE ON THE GO

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Furthermore, I would like to acknowledge other lecturers and friends, who gave me their support and guiding me in finishing this report. A special thanks goes to my fellow classmates, who help me completing this report by spending their time to answer all of my questions.

ABSTRACT

Printing Service on the Go is a mobile application that is aimed for UMP student which purposes to help student find a place to print the assignments. The problems that are faced by UMP students regarding to this project are unaware the amount of the printing service shop available around UMP, insufficient time to find a place to print and have to spend most of the time just to line up in printing shop in UMP to print the assignment/s. The goal of this project is to develop a printing service on the go that is specific for UMP students. Rapid Application Development (RAD) is the methodology used for this project. Overall, this mobile application could solve the problem among UMP student to print the assignments.

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LIST OF ABBREVIATIONS

UMP	Universiti Malaysia Pahang
UML	Unified Model Language
RAD	Rapid Application Development
DFD	Data Flow Diagram
SRS	Software Requirement System
SDD	Software Design Document
UAT	User Acceptance Test

CHAPTER 1

INTRODUCTION

1.1 Introduction

There are many courses offered in this university and for each courses there will be an average like 5 subjects taken by UMP students. Each subject will definitely have different type of assignments assigned to it by lecturers like it could be one or more. In order to complete the assignments, some of the subject required hardcopy submission which means it needs to print. Mostly UMP students tend to finish the assignment on last minute which results in facing difficulties to find place to print it in such short amount of time. Plus, there are still many students who are in fact unaware of the actual number of shops that are available in UMP that runs the printing service. For example, in a case where students who took Final Year Project (FYP) subject which the printing is crucial for them because they have to print out the report and it needs more than one copy.

So a mobile application called Printing Service on the Go could be immensely a great solution for the situation above. Additionally, most of people in the world including students are using smartphone for literally everything from business to educational purposes. It is better to utilize the opportunity by developing a helpful application like this on mobile platform for students to print out their assignment efficiently. With this application, they have options to choose shops around UMP that they never heard of before, fill the assignment details, select printing details and pick time to collect it. This way is more convenient rather than print the assignments on the spot.

1.2 Problem Statement

The problems that are faced by UMP students regarding to this project are including:

- i. Unaware the amount of the printing service shop available around UMP.
- ii. Insufficient time to find a place to print.
- iii. Have to spend most of the time just to line up in printing shop in UMP to print the assignment/s.

1.3 Objective

The goal of this project is to develop a printing service on the go that is specific for UMP students. In order to achieve the objective, this is following sub objectives need to be fulfilled:

- i. To design a mobile application system for Printing Service on the Go.
- ii. To develop a mobile application system for Printing Service on the Go.
- iii. To evaluate a mobile application system for Printing Service on the Go

1.4 Scope

The application will focus on mobile application development which will be available only on Android.

1.5 Thesis Organization

There are five total chapter in this thesis:

- i. **Chapter 1** discusses about printing services on the go system background. This chapter also explain about the reason this system need to be develop by discover the problem statement. From the problem statement, objective and scope for this system can be archive in this chapter.
- ii. **Chapter 2** discusses about the literature review of Printing Service on the Go. This chapter also discuss about comparison the existing system printing services by state the advantage and disadvantage the existing system.
- iii. **Chapter 3** discusses about the usage of methodology in Printing Service on the Go. This chapter cover the UML diagram that use to develop printing services on the go such as use case, context diagram, activity diagram and class diagram.
- iv. **Chapter 4** discusses about the development and testing of Printing Service on the Go. This chapter also mentioned whether the objectives are achieved.
- v. **Chapter 5** discusses about conclusion of this project and also the limitation and future works.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Almost everything these days uses online application and most of have its own version on mobile platform. Booking service is the most popular because the user only have to register an account and proceed with the booking process. The same thing could relate with printing service on the go because user have to register an account, upload the document that they want to print, choose any shop they want from the list given and proceed with filling in the printing details.

This chapter basically comprises on how printing service on the go application can be compared with the system that already available in the market based on functions, features, hardware and technology used. This chapter will also be an introduction to the next chapter which consists of various methodology that will be used for this mobile application.

2.2 Review of Existing System

2.2.1 Excard Go

EXCARD is an organization that offer printing service with their combined knowledge of it for 15 years. This organization aims to bridge the gap between conventional offset printing and new age convenience. This is happening because the need of efficient printing service to suit with the trend of business nowadays. The performance of the service offered is satisfying due to its affordable and efficient with top grade printing. This helps to ease the burden of customers especially the B2B's.



Figure 2.1 Login/Register of Excard Go

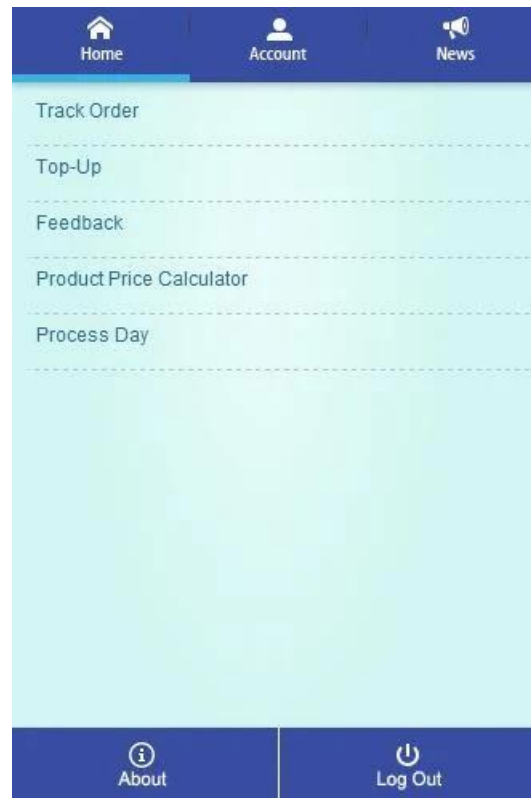


Figure 2.2 Menu of Excard Go

2.2.2 e-print

e-print is a collaboration project with e-print Hong Kong which already established there and also the largest online printing company. Here, e-print has grown to become the largest online printing company in Malaysia. There are so much print products and services that has been offered including Name Card, Leaflet, Booklet and etc. One of their work product also helped them to win Best System Award at the prestigious 2008 Hong Kong ICT Awards. Basically, this system allows customer to visit their online order platform 24 hours a day 7 days a week to make order. They also provided a SMS notifications to notify about their order and delivery.

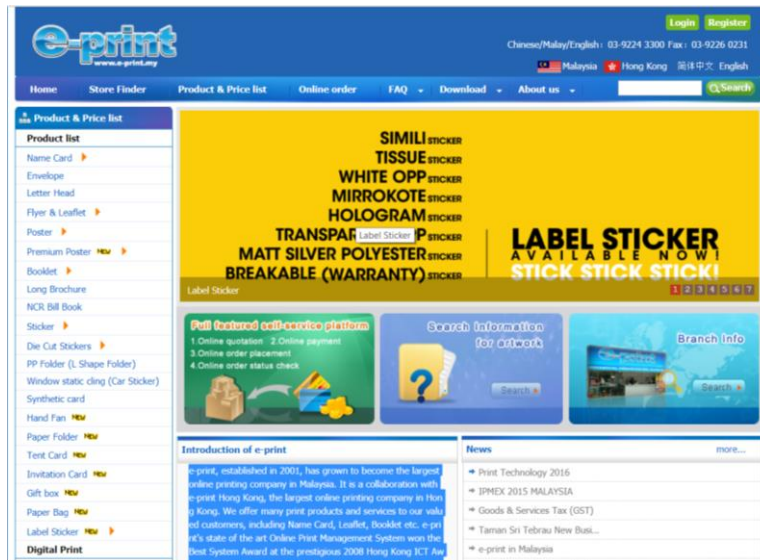


Figure 2.3 Main Page of e-print

2.2.3 xPrint

xPrint is another online printing company that already became a major player in the industry. It has clear approach to help small business to grow. This is the only company in Malaysia that provide printing services to have ISO 9001:2008 and ISO 14001:2004 certified. So the services provided by this company usually reach thousands of demands daily. Those demanded services are business printing and graphic printing order online with high quality press printing, considers robust and simplicity for online ordering system. All these great quality lead to high-end printing services and reliable color printing with convenience value also grant themselves bunch of loyal customers.



Figure 2.4 Main Page of xPrint

2.3 Comparison Existing System

Table 2.1 Comparison Existing System

System	Excard Go –	e-print	xPrint
Download	Need to sign up as one of Excard members before downloading the sample	Can directly download the sample without request or become a member	Need to request by fill in dealer information before downloading a sample
Payment method	Payment using the funds in Excard account	Payment can be done by deposit to bank account provided	Payment is done using prepaid system which called e-printing account
Search	Does not have search bar	Does not have search bar	Provide search bar to search printing services
Menu	Have a simple menu about type of service provided	A little bit confusing menu about type of service available	Have a simple menu about type of service provided
Availability	Available on desktop and mobile platform	Available on desktop and mobile platform	Available on desktop platform
Advantages	Navigation bar contain order track, complain, topup and feedback at right side of page	Have side navigation bar for mobile platform	Show current date and time on their website
Disadvantages	Need to sign up/login to check price	No current date and time on their website	Need to sign up/login to check price

CHAPTER 3

METHODOLOGY

3.1 Introduction

There are so many different models of methodology that can be used to develop an application such as Agile model, Spiral model and Rapid Application Development (RAD). Methodology can be define as the flow of the process for any application development. For this printing service on the go case, RAD model is the most suitable methodology to date. The decision on choosing this model are most likely because it can manage the development process without being too sophisticated and also improve the quality of development project flow.

3.2 Rapid Application Development (RAD) Methodology

The methodology of Printing Service on the Go is Rapid Application Development model. There are four phase diagram for this model which are requirement planning, user design (system design), construction (development) and testing (cutover). This model is an incremental model type. This model use prototypes as functional modules so that the development time for the project can be more convenient. RAD model suitable with the short time period project. RAD model can adapt to requirement changes so that it easier to incorporate the changes within the development process because there is no specific planning in the first place.

The reason RAD is a methodology of this project is:

- i. Printing Service on the Go need to be develop rapidly.
- ii. Involvement of the user in the design and construction phase.
- iii. Possible to have requirement changes during development.

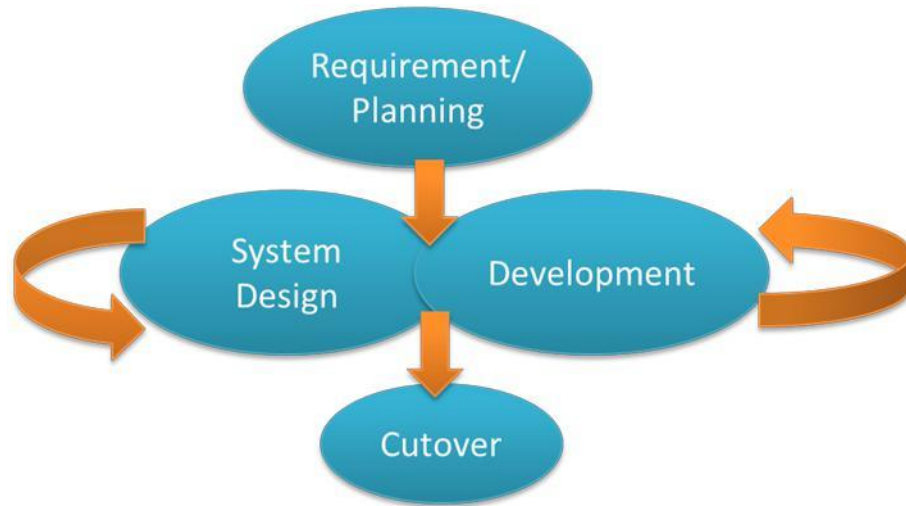


Figure 3.1 Rapid Application Development Phase

3.3 Requirement Planning Phase

This phase are a combination of system planning and system analysis if it were to relate with Software Development and Life Cycle (SDLC) model. The purpose of this phase is to establish the core understanding of the problems that happens within the development and real life scenario when the application has been fully developed which contributing the needs to gather the supposed requirements.

In this phase, developers and users had a meeting to discuss for the requirements needed for the application so that the next phase can begin.

3.4 User Design Phase

This phase emphasized on how the system architecture is determined using various techniques such as context diagram, data flow diagram and requirements that has been collected. This phase also where transition in the system happened anytime due to the changes in requirements. In order to prepare for that situation to happen, a proper work plan defining the steps is necessary. In order to explain of the design of the system, please refer to the Software Requirement Specification (SRS) document in **Appendix A** and Software Design Document (SDD) in **Appendix B**.

3.5 Construction Phase

This phase is basically where the implementation have occurred and the construction of the Printing Service on the Go mobile application had begun. In RAD model, users continue to participate and can still give suggestion to changes or improvements as actual screens or reports are developed. The tasks are programming and application development, coding, unit-integration and system testing.

3.6 Cutover Phase

After the application has been implemented, there will be cutover phase. This phase basically to test the printing service on the go application whether it will work properly. During this phase, it resembles the final task in the SDLC implementation phase, including data conversion, testing, changeover to the new system, and user training. User Acceptance Testing are very helpful for this case. It helps to point out the error in the testing using the table.

3.7 Hardware/Software

Table 3.1 List of Software and Hardware

Printing Service on the Go			
Tools	Design	Implementation	Description
Visio 2013	✓		A software that allow user to create UML diagrams.
Android Studio		✓	A tool to implement a mobile application on Android.

CHAPTER 4

IMPLEMENTATION, TESTING AND RESULT DISCUSSION

4.1 Introduction

For an application to exist, it needs to go through various stages of development process. This chapter will immerse thoroughly into the implementation of Printing Service on the Go. All forms of source code that will be used for this application development will be mentioned here. By following the RAD methodology, implementation and testing phase will be done by module. This system interface also will be discussing in detail. Result of the testing and discussion will be justified at the end of this chapter.

4.2 Implementation

Printing Service on the Go is developed using Android Studio which is a free software to build a mobile application without using internet connection. An android phone is used to run the activity that has been created. In order to see how each of this activity will work, it will run as a full system. An emulator will took so much time to work so by using a real phone to run it is one of the way to save time in order to ensure the efficiency of work flow.

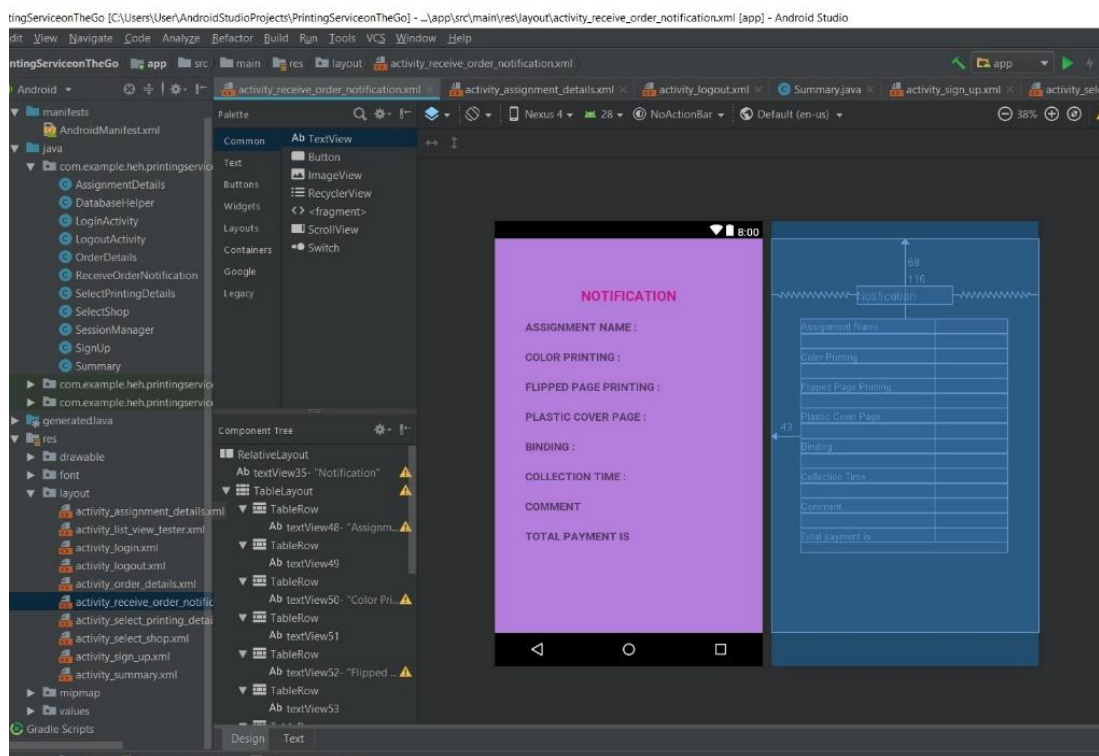


Figure 4.1 Using Android Studio

The picture above shows a development in Android Studio which is taking from receive order notification activity. As it showed above, every activity has its own class with one additional class for database. The layout for activity are using xml files. All of the activities are using relative layout.

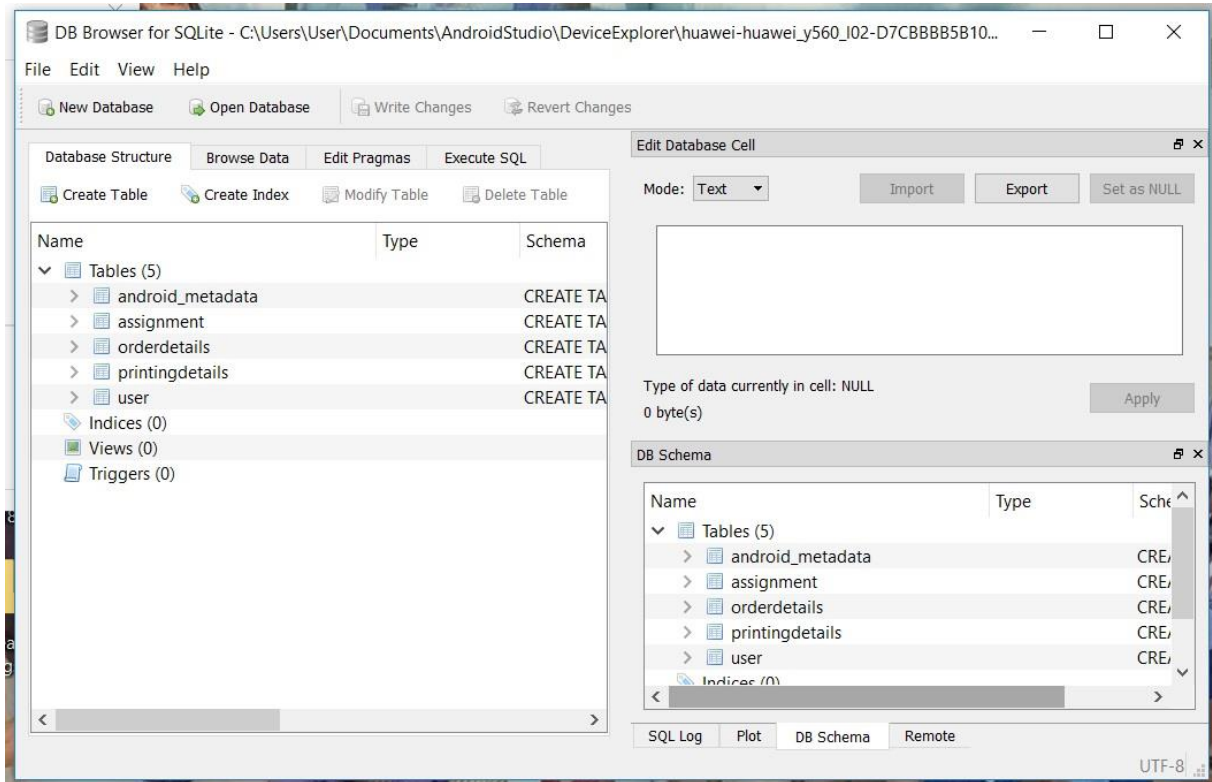


Figure 4.2 Using DB Browser to open SQLite

This picture above shows a database software to view the SQLite database where all of the information such as assignment details, order details, printing details and login is recorded.

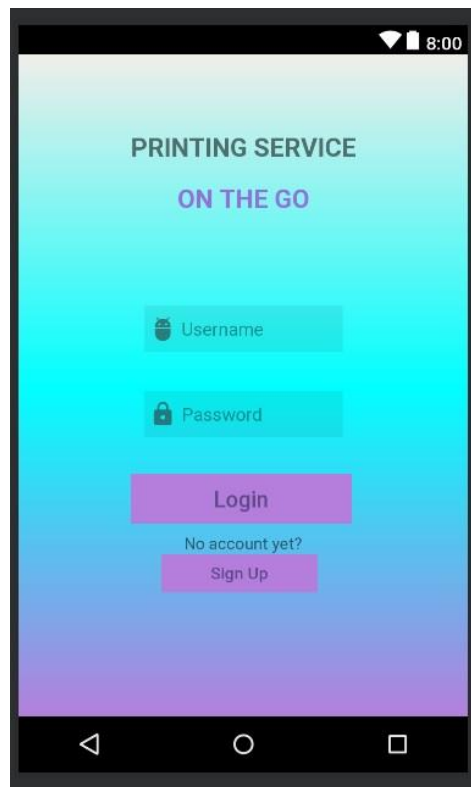


Figure 4.3 Login Interface

The picture above shows the interface for login. In order to log in, the UMP student has to sign up first. This interface is created with 2 button, 2 edittext and 2 textview.

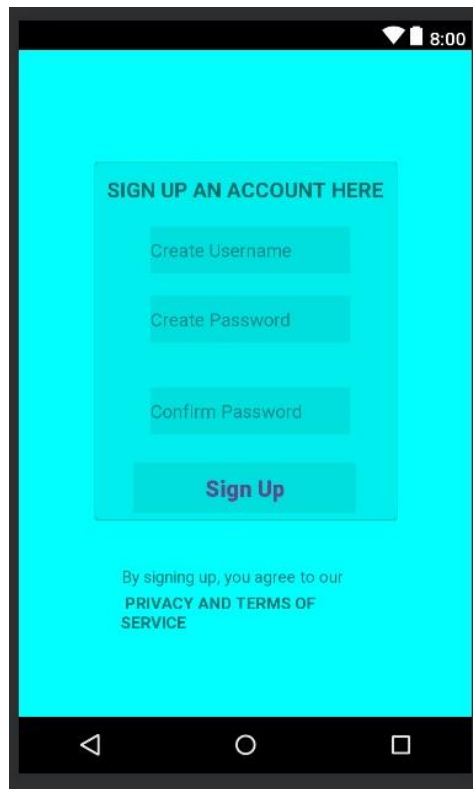


Figure 4.4 Sign up Interface

This picture shows the interface of sign up. Before log in, UMP student have to sign up an account on this interface by clicking sign up button on login interface. This interface is created with 3 edittext, one button and one cardview.

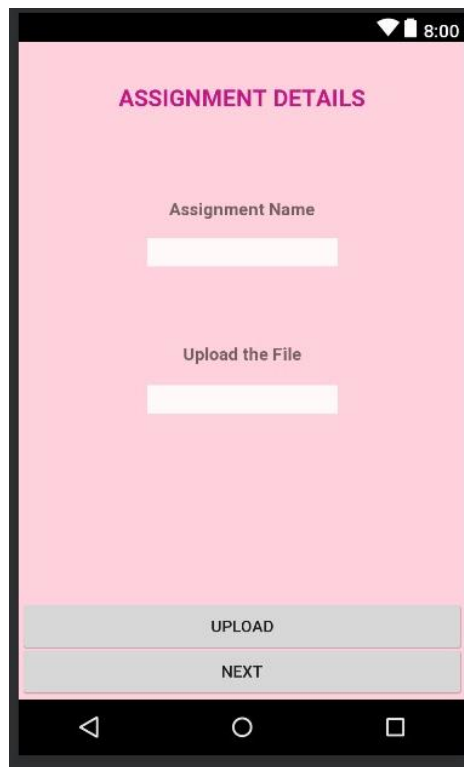


Figure 4.5 Assignment Details Interface

This picture shows the interface of assignment details. This interface is used to fill in assignment detail such as assignment name and upload assignment file. This interface created with 2 edittext, 3 textview and 2 button.

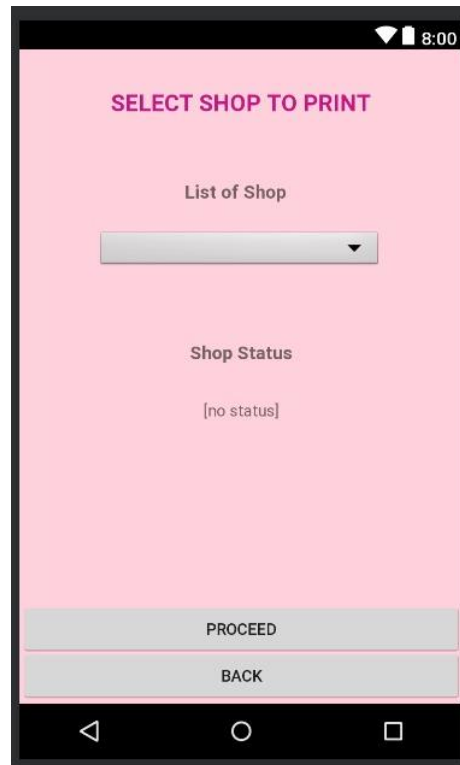


Figure 4.6 Select Shop to Print

This picture shows the interface of select shop. This interface is used to choose shop that will print the assignment. This interface created with 4 textview, a spinner and 2 button.

SELECT PRINTING DETAILS.	
COLOR PRINTING	<input type="radio"/> YES <input type="radio"/> NO
FLIPPED PAGE PRINTING	<input type="radio"/> YES <input type="radio"/> NO
PLASTIC COVER PAGE	<input type="radio"/> YES <input type="radio"/> NO
BINDING	<input type="radio"/> COMB <input type="radio"/> TAPE
COLLECTION TIME	<input type="text"/>

NEXT

BACK

Figure 4.7 Select Printing Details

This picture shows the interface of printing details. This interface is used to select printing details such as color printing, flipped page printing, plastic cover page, binding by clicking the radio buttons and insert time to collect the assignment. This interface created with 1 textview, 1 edittext, 4 radiogroup, 8 radiobutton and 2 button.

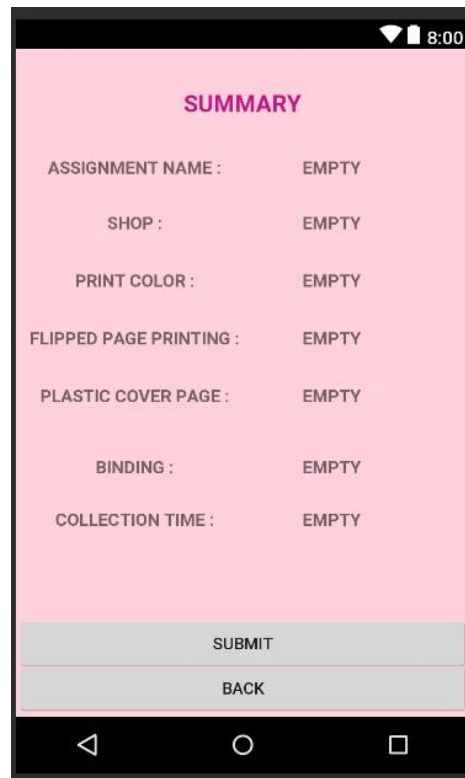


Figure 4.8 Summary Interface

This picture shows the interface of summary. This interface is used to display the summary of the selected printing detail and assignment detail before submit to the shop owner based on the selected shop in select shop interface. This interface created with 11 textview and 2 button.

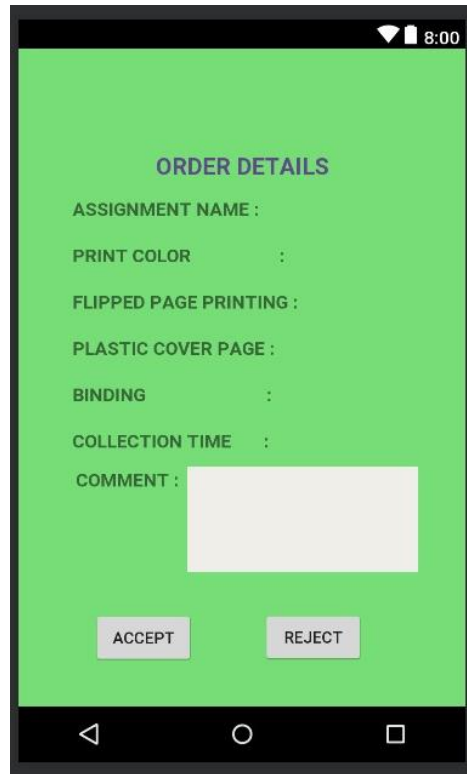


Figure 4.9 Order Details Interface

This picture shows the interface of order details. This interface is for shop owner to receive order details from UMP student. This interface created with 11 tablerow, 1 edittext, 8 textview and 2 button.

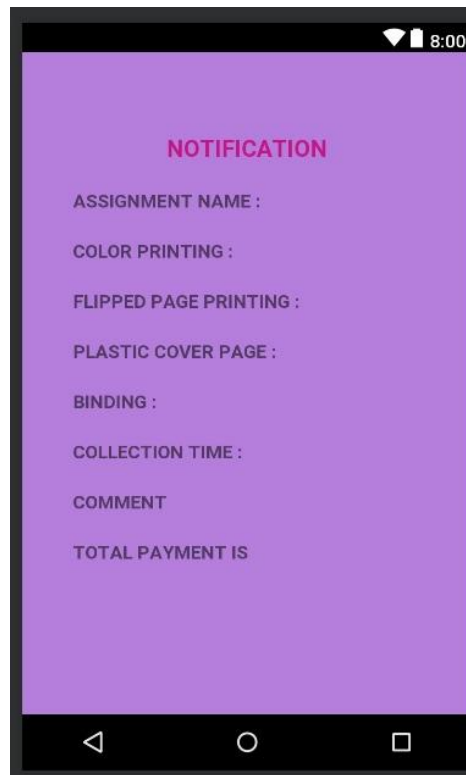


Figure 4.10 Receive Order Notification

This picture shows the interface of receive order notification. This interface is used to receive order notification from shop owner. It might be accepted or rejected by them. This interface created with 9 textview.

4.3 Testing and Result Discussion

After the development phase is complete, the testing should begin afterwards. There are some methods that can be used to test a system. For this system, Printing Service on the Go has been tested using User Acceptance Test (UAT) testing method. UAT is an application testing by running the system. UAT should be done by end user of this system which is UMP student. These UMP student are required to write the result of the testing on UAT form. Please refer to **Appendix D** to see User Acceptance Test (UAT).

Result of implementing this mobile application has met the objectives. The student are able to sign up an account, log in into the application, fill in the assignment detail such as insert assignment name, upload the assignment file, select shop and display the status of the shop, select printing details and submit all of it so that the shop owner can receive the order details. Then, the shop owner can either accept or reject the order. Overall, this mobile application reduce the time for the student to find a printing shop to print out their assignment.

CHAPTER 5

CONCLUSION

5.1 Introduction

The purpose of this chapter is to conclude Printing Service on the Go finding result. The conclusion will be concluding base on the problem statement, objective, methodology and implementation of project. This chapter also prepare the project constraint for the system limitation and the future work for improving this system.

5.2 Project Constraint

The project constraint is identified throughout the development of this mobile application. The constraints are:

- i. The assignment name should be insert before uploading the assignment file.
- ii. The printing details successfully display on summary interface but not for assignment name and shop name because both came from different interface so it has to retrieve via database.

5.3 Future Work

A few improvement can be done by by having better database management especially when it comes to user and their printing details. The design of the interface should be the latest one in order to cater to current trend that is more user friendly. This is to ensure that in the future UMP student can use Printing Service on the Go as the tool to print their assignment without having to search or line up in the shop.

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APPENDICES

APPENDIX A: SOFTWARE REQUIREMENT SYSTEM (SRS)

2018

SOFTWARE REQUIREMENT SPECIFICATION (SRS)

PRINTING SERVICE ON THE GO

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CB15149

To be submitted to the Undergraduate Project 2
Bachelor of Computer Science (Software Engineering)



1. PRODUCT SPECIFICATIONS

1.1 Context Diagram

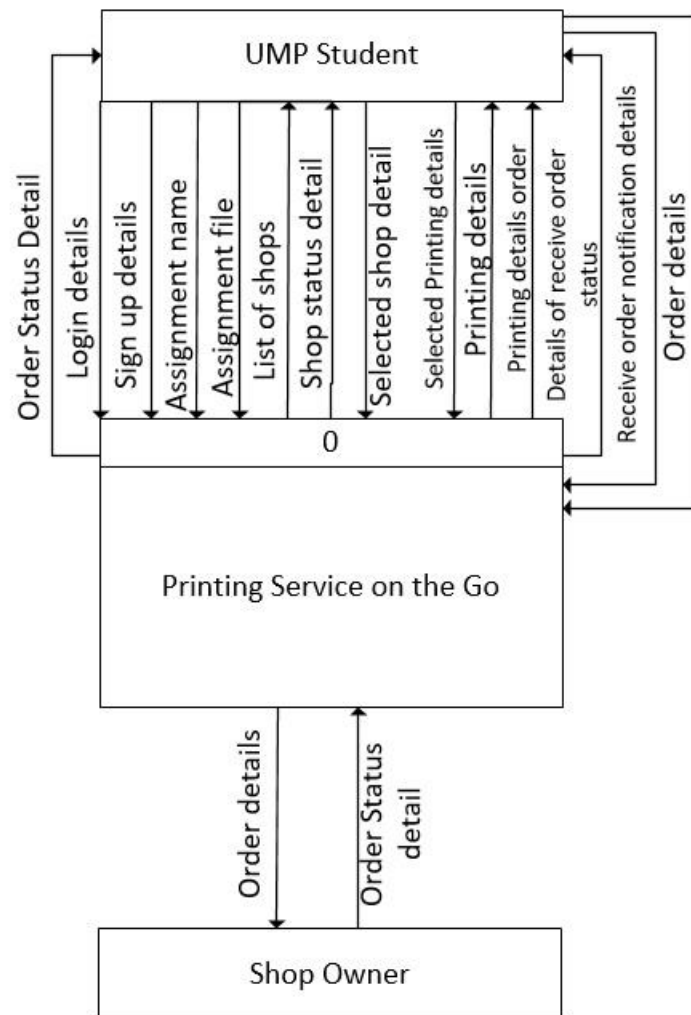


Figure 1.1: Context diagram for Printing Service on the Go

1.2 Data Flow Diagram

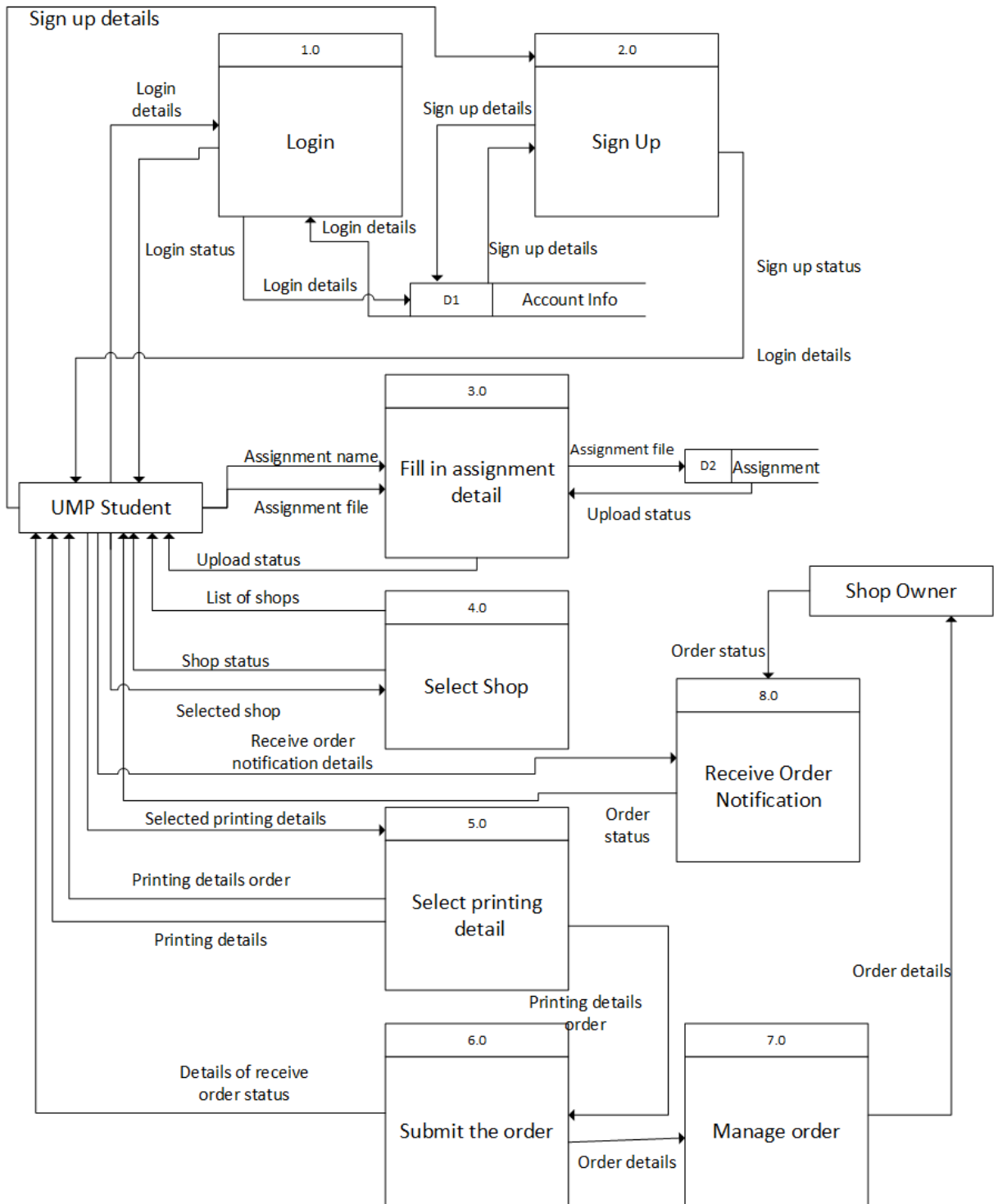


Figure 1.2 Level 0 Data flow diagram for Printing Service on the Go

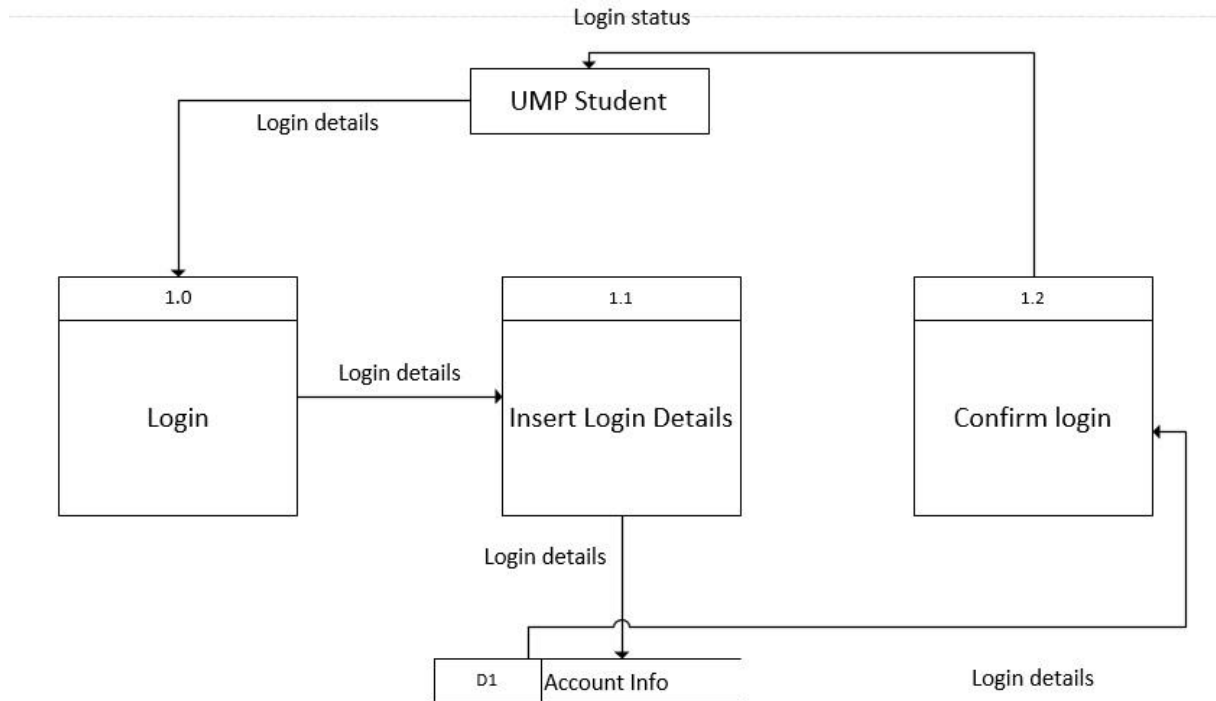


Figure 1.3 Level 1 Data flow diagram for Login

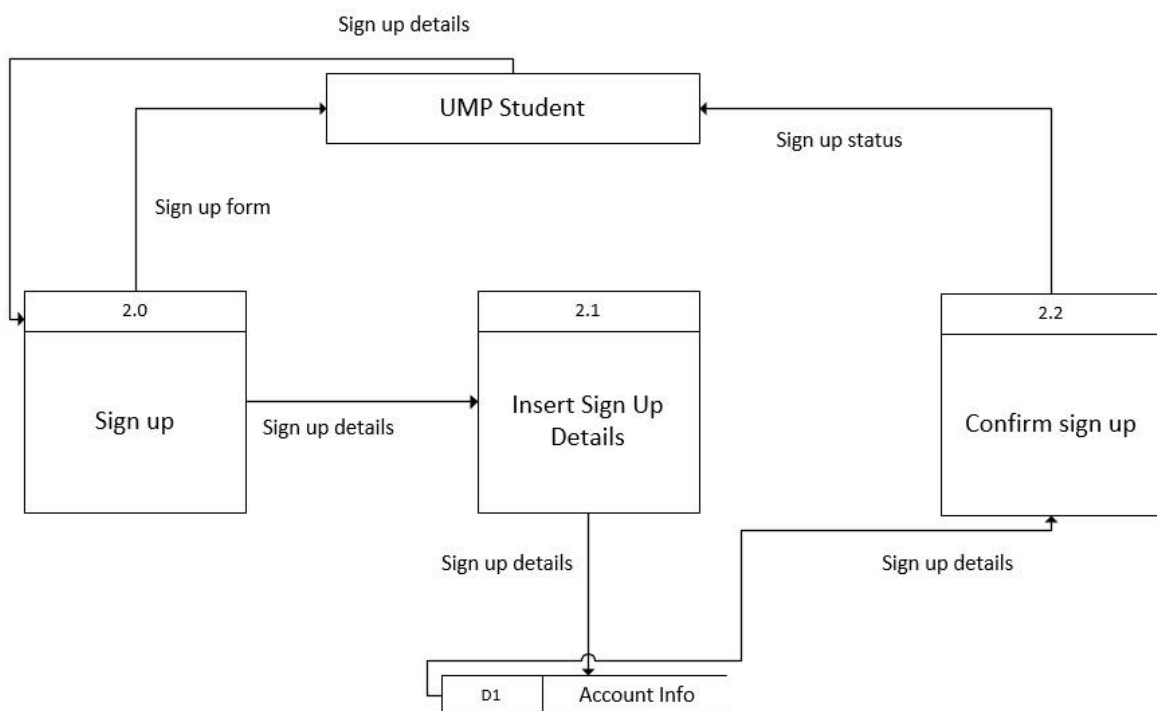


Figure 1.4 Level 1 Data flow diagram for Sign Up

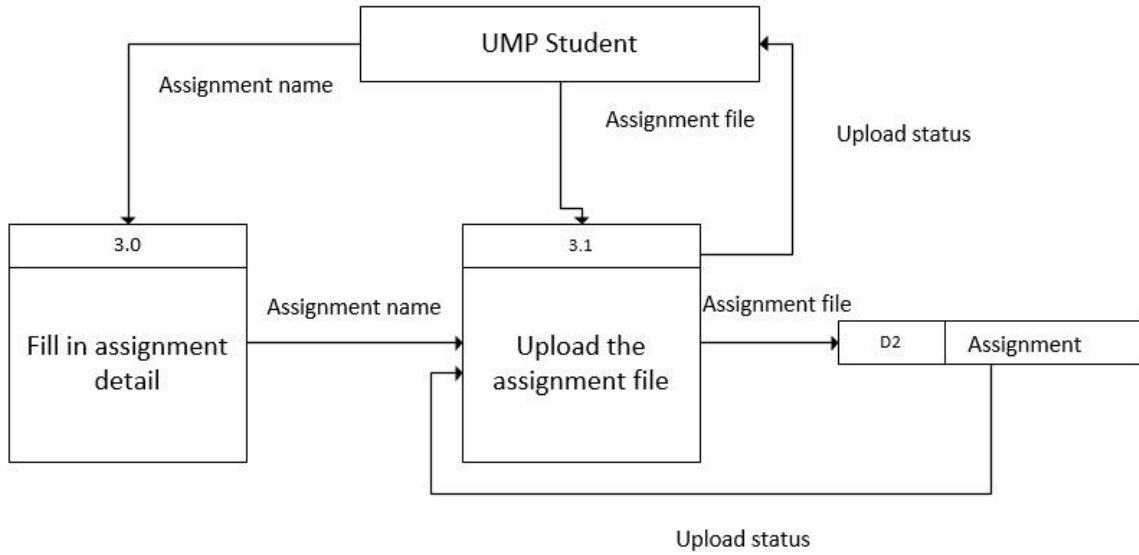


Figure 1.5 Level 1 Data flow diagram for Fill in Assignment Detail

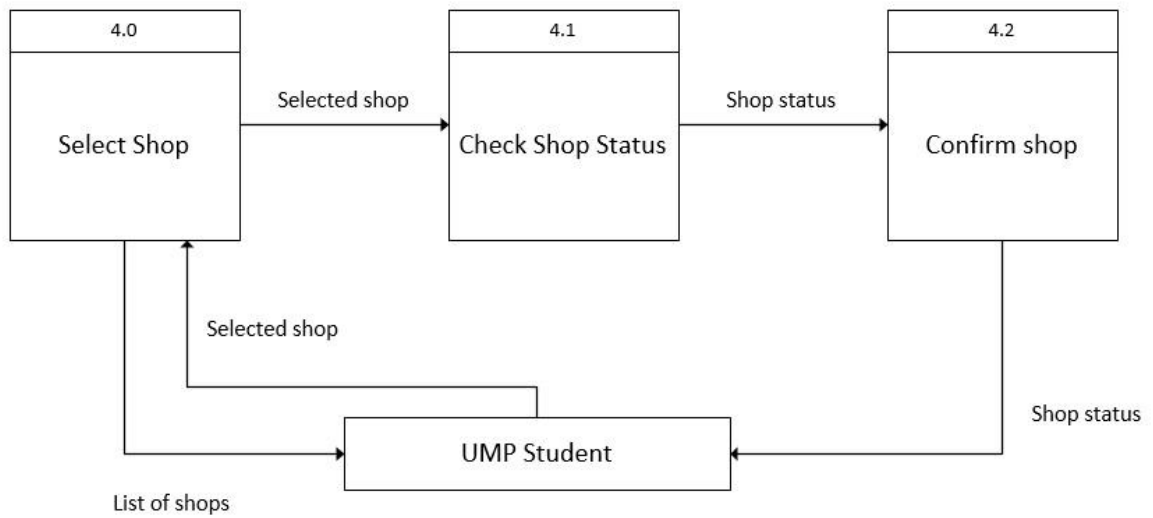


Figure 1.6 Level 1 Data flow diagram for Select Shop

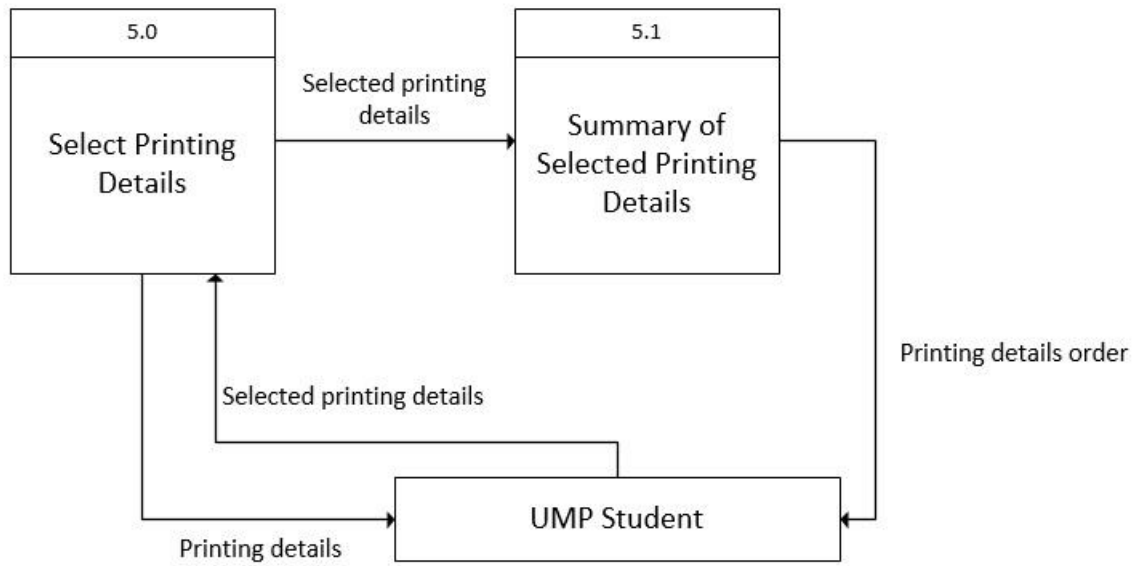


Figure 1.7 Level 1 Data flow diagram for Select Printing Details

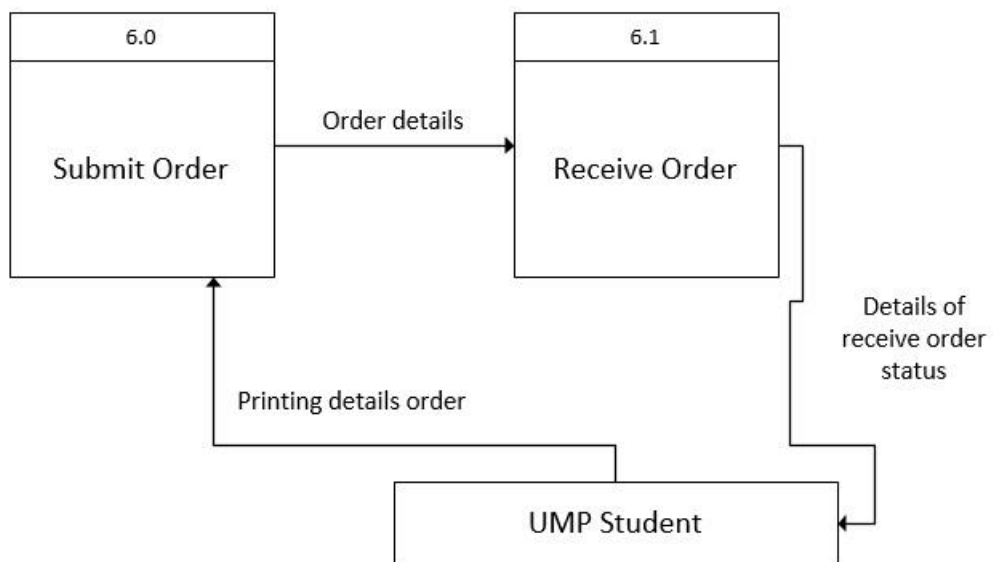


Figure 1.8 Level 1 Data flow diagram for Submit Order

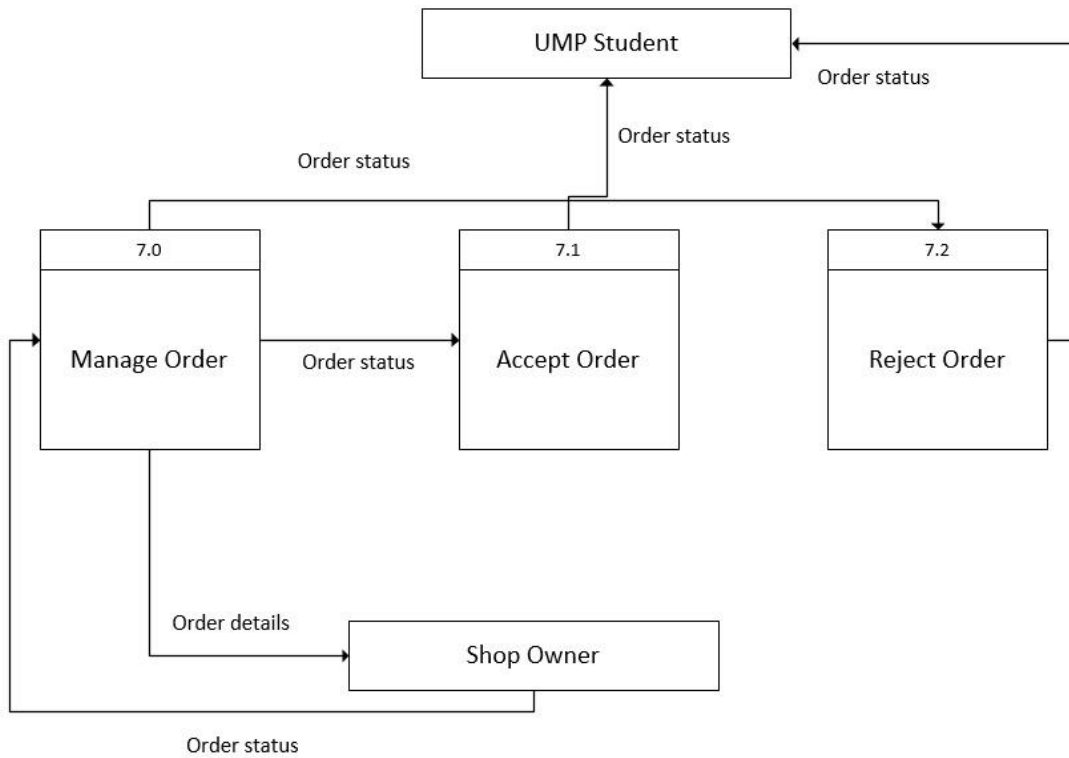


Figure 1.8 Level 1 Data flow diagram for Manage Order

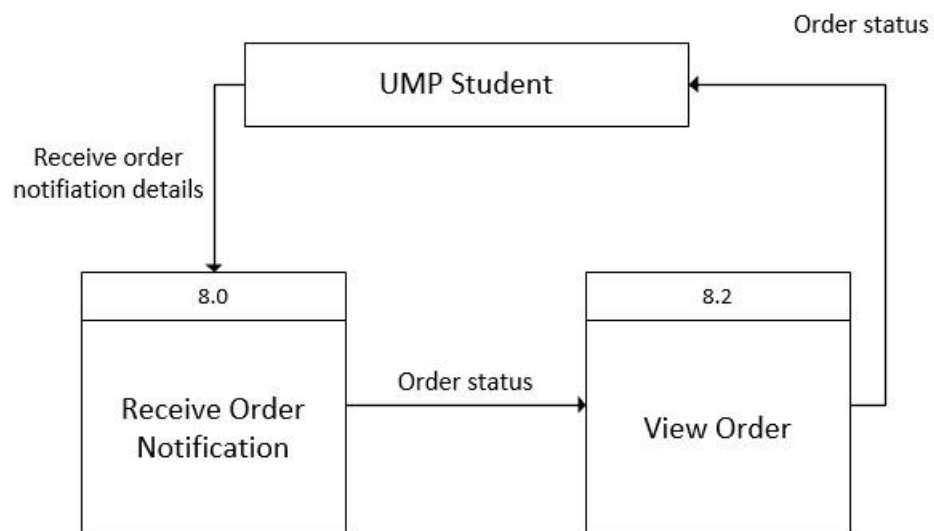


Figure 1.9 Level 1 Data flow diagram for Receive Order Notification

2. SPECIFIC REQUIREMENT

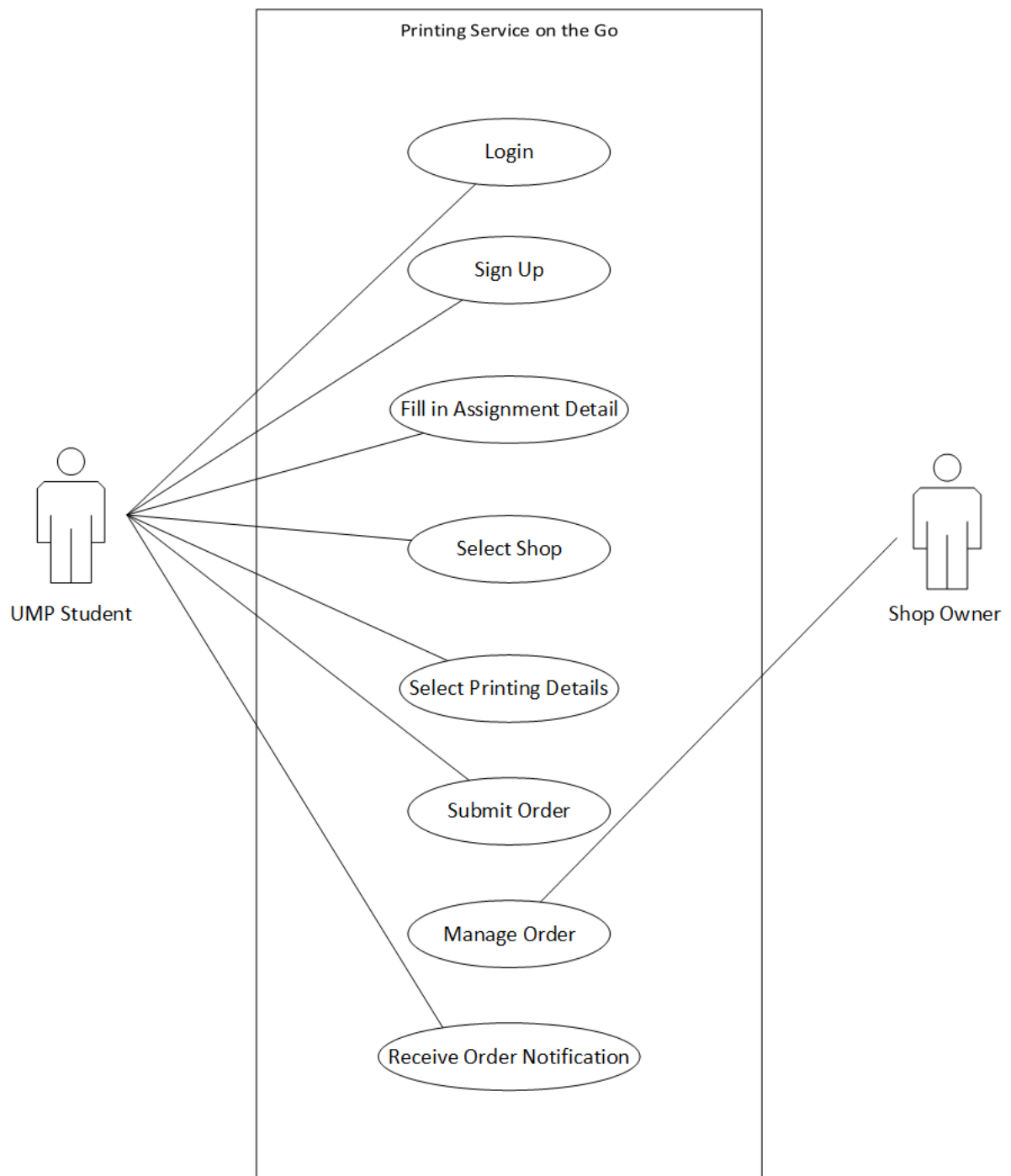


Figure 2.1 Use case diagram for Printing Service on the Go

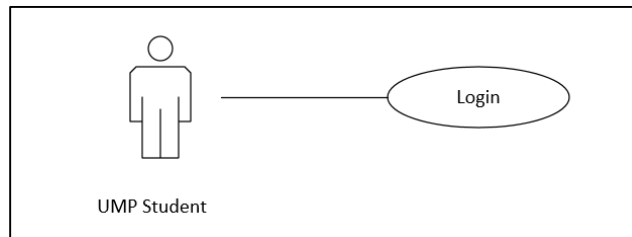


Figure 2.2 Use Case Login

Table 2.1 Description Login

Use Case ID	UC-P01
Brief Description	This use case describes login.
Actor	UMP Student
Pre-Conditions	The user have been registered into the system.
Basic Flow	<ol style="list-style-type: none"> 1. User access the Printing Service on the Go application. 2. User enter the login page. 3. User enters registered username. 4. User enters password that have been set. 5. User click “login” button. [A1] [E1] 6. The system go to the “Fill in assignment detail” interface. 7. Use case end.
Alternative Flow	<p>A1. User click remember username.</p> <ol style="list-style-type: none"> 1. User check on the “remember me” check box. 2. The system will store the username and password for next login in the future. 3. Proceed step 6.
Exception Flow	<p>E1. Invalid username or password.</p> <ol style="list-style-type: none"> 1. The system displays an error message. 2. The system will inform user to try enter login data again. 3. Proceed step 3.
Post-Conditions	User will be direct to “Fill in assignment detail” interface.
Rules	None
Constraints	None

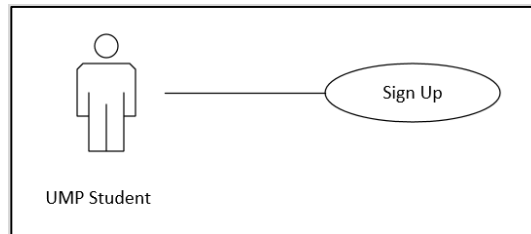


Figure 2.3 Use Case Sign Up

Table 2.2 Description Sign Up

Use Case ID	UC-P02
Brief Description	This use case is used by UMP Student
Actor	UMP Student
Pre-Conditions	None
Basic Flow	<ol style="list-style-type: none"> 1. Click the register button. 2. System will display page of register form 3. User fill the form. 4. Click button confirm.[A1][E1] 5. Use case end.
Alternative Flow	A1 Click button Sign Up <ol style="list-style-type: none"> 1. Click cancel button. 2. System will display sign up form.
Exception Flow	E1: Exception 1 validation failure network during register button. <ol style="list-style-type: none"> 1. Sign up authorization failed 2. Display an error message 3. Continue step 1 E2: Exception 2 incomplete form. <ol style="list-style-type: none"> 1. System will display error message.
Post-Conditions	User have access to the system.
Rules	R1. Password rules <ol style="list-style-type: none"> 1. Password should be at least 8 characters. 2. Password should consist numeric or special character. R2. Username rules <ol style="list-style-type: none"> 1. The username should not exceed 8 characters. 2. The username should contain alphabet and numeric characters.

Constraints	UMP student can register one account.
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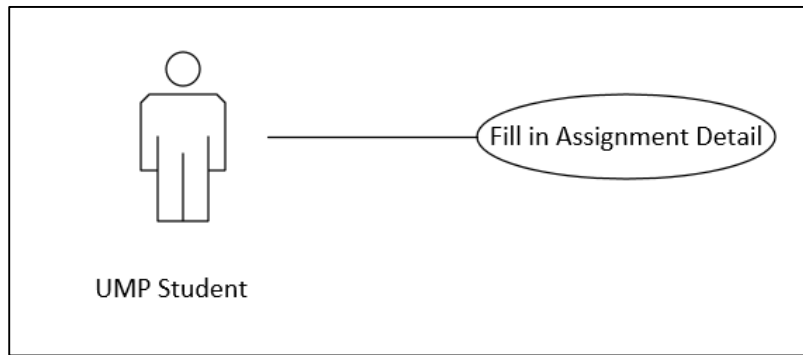


Figure 2.4 Use Case Fill in Assignment Detail

Table 2.3 Description Fill in Assignment Detail

Use Case ID	UC-P03
Brief Description	This use case function is for UMP student to fill in assignment detail
Actor	UMP Student
Pre-Conditions	1. User must have an account already
Basic Flow	<ol style="list-style-type: none"> 1. Enter the assignment name. 2. Upload the assignment file. 3. Go to the next page to select shop. 4. Use case end.
Alternative Flow	None
Exception Flow	None
Post-Conditions	The assignment file is uploaded to the database.
Rules	None
Constraints	None

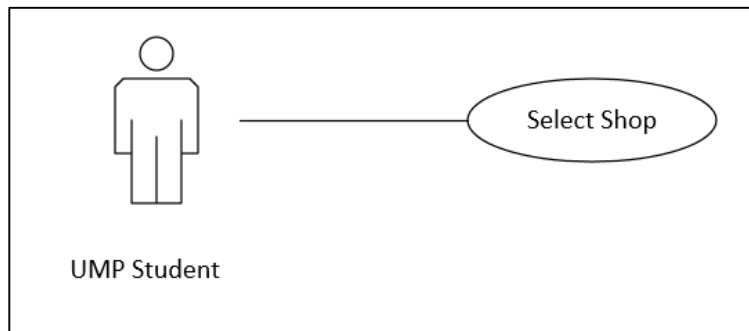


Figure 2.5 Use Case Fill in Assignment Detail

Table 2.4 Description Fill in Assignment Detail

Use Case ID	UC-P04
Brief Description	This use case function is for UMP student to select shop to print their assignment.
Actor	UMP Student
Pre-Conditions	User have already fill in assignment detail.
Basic Flow	<ol style="list-style-type: none"> 1. Click the drop down list to see list of shops that available for printing service. 2. Select the shop. 3. Check the shop status. [E1] 4. Proceed to “Select Printing Details” interface. 5. Use case end.
Alternative Flow	None
Exception Flow	E1: Exception 1 shop status is not available. <ol style="list-style-type: none"> 1. Shop status displayed not available. 2. Option to proceed for the next page is not available. 3. Repeat step 1 until shop status is available.
Post-Conditions	The shop is selected
Rules	None
Constraints	None

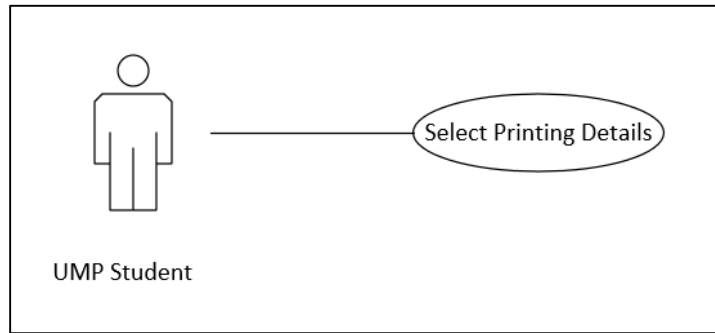


Figure 2.6 Use Case Select Printing Details

Table 2.5 Description Select Printing Details

Use Case ID	UC-P05
Brief Description	This use case function is for UMP student to select printing details
Actor	UMP student
Pre-Conditions	User have selected the shop to print.
Basic Flow	<ol style="list-style-type: none"> 1. Select the printing color. 2. Select flipped page printing. 3. Select plastic cover page. 4. Select binding. 5. Fill in the collection time. 6. Proceed to summary page. 7. Use case end.
Alternative Flow	None
Exception Flow	None
Post-Conditions	The printing details is ready to display as summary on the next interface.
Rules	None
Constraints	None

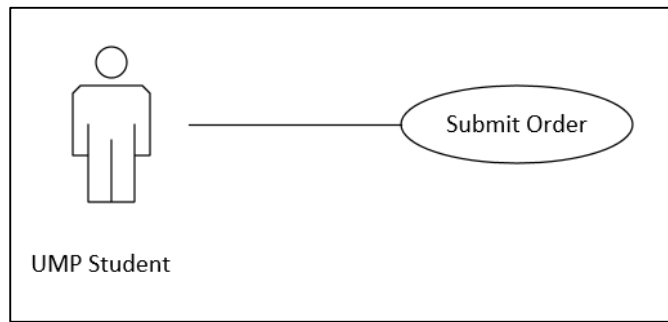


Figure 2.7 Use Case Submit Order

Table 2.6 Description Submit Order

Use Case ID	UC-P06
Brief Description	The use case is for UMP student to submit order.
Actor	UMP student
Pre-Conditions	User have fill the assignment detail, select shop and select printing details.
Basic Flow	<ol style="list-style-type: none"> 1. The interface display the summary of the order that consists of assignment detail, shop to print the assignment and printing details. 2. Confirm and submit the order. [A1] 3. Use case end.
Alternative Flow	A1 Click button Confirm & Submit <ol style="list-style-type: none"> 1. Click back button. 2. System will direct to Select Printing Details interface.
Exception Flow	None
Post-Conditions	The order is submitted to the shop owner of the selected shop.
Rules	None
Constraints	None

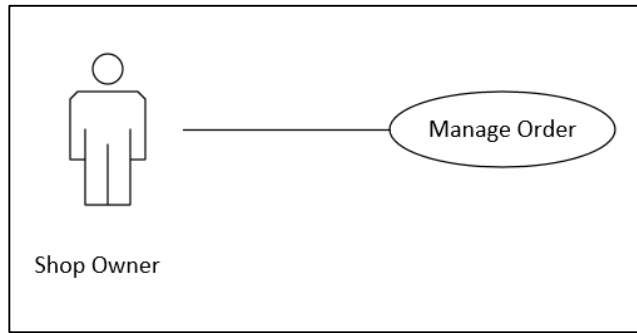
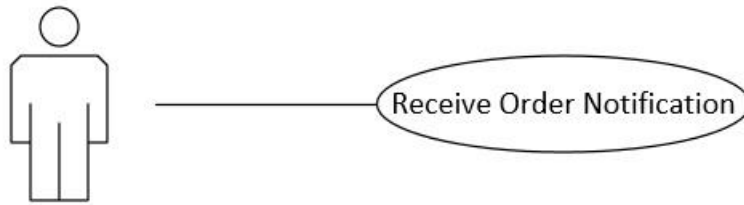


Figure 2.7 Use Case Manage Order

Table 2.6 Description Manage Order

Use Case ID	UC-P07
Brief Description	The use case is for shop owner to manage order.
Actor	Shop owner
Pre-Conditions	Shop owner must have receive the order.
Basic Flow	<ol style="list-style-type: none"> 1. Shop owner receives the order details. 2. Shop owner reviews the order details. 3. Shop owner fill in the comment. 4. Shop owner will accept and notify user. [A1] 5. The notifications of the status send to user that submitted the order. 6. Use case end.
Alternative Flow	<p>A1 Click button Accept & Notify</p> <ol style="list-style-type: none"> 1. Click “Reject & Notify User” button to reject the order. 2. Notify the user about the reject. 3. Continue step 5.
Exception Flow	None
Post-Conditions	User will receive the notifications of the order status.
Rules	None
Constraints	None



UMP Student

Figure 2.8 Use Case Receive Order Notification

Table 2.7 Description Receive Order Notification

Use Case ID	UC-P08
Brief Description	The use case is for UMP Student to receive notifications about their order.
Actor	UMP Student
Pre-Conditions	Shop owner send the notifications to user account about the order status.
Basic Flow	<ol style="list-style-type: none"> 1. User receives the notification from the shop owner. 2. User views the notification to see the order status. 3. User receive the order status. 4. Use case end.
Alternative Flow	None
Exception Flow	None
Post-Conditions	User will receive the order status.
Rules	None
Constraints	None

APPENDIX B: SOFTWARE DESIGN DOCUMENT (SDD)

SOFTWARE DESIGN DOCUMENT
(SDD)

PRINTING SERVICE ON THE GO

Generated By:

NURUL HUSNA TASNIM BT MOHAMAD ZAMRI
CB15149

DATA DICTIONARY

1.1 Sign Up Interface

Table 1.1: Data dictionary of Sign Up Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
CreateUser	text	Create username	13	-
CreatePass	text	Create password for the user	10	-
ConfPass	text	Confirm the password	10	-

1.2 Login Interface

Table 1.2: Data dictionary of Login Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
username	text	Name for the user	13	-
password	text	Password for the user	10	-

1.3 Assignment Details Interface

Table 1.3: Data dictionary of Assignment Details Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
AssignmentName	text	Name for the assignment that want to submit	20	-
assignmentPFile	blob	The uploaded assignment file	-	-

1.4 Select Shop Interface

Table 1.3: Data dictionary of Assignment Details Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
SpListofShop	text	Name of the shop	20	-
TVShopStatus	text	The status of the shop	20	-

1.5 Select Printing Details Interface

Table 1.3: Data dictionary of Select Printing Details Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
rbCPYes	text	Option 'Yes' for color printing	-	-
rbCPNo	text	Option 'No' for color printing	-	-
rbFPYes	text	Option 'Yes' for flipped page printing	-	-
rbFPNo	text	Option 'No' for flipped page printing	-	-
rbPCYes	text	Option 'Yes' for plastic cover	-	-
rbPCNo	text	Option 'No' for plastic cover	-	-
rbComb	text	Option 'Comb' for binding	-	-
rbTape	text	Option 'Tape' for binding	-	-
etCT	text	The collection time for the assignment	-	-

1.6 Summary Interface

Table 1.6: Data dictionary of Summary Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
viewAN	text	Display the assignment name	-	-
viewShop	text	Display the selected shop	-	-
viewCP	text	Display the selected color printing	-	-
viewFP	text	Display the selected flipped page printing	-	-
viewPC	text	Display the selected plastic cover option	-	-
viewBind	text	Display the selected binding option	-	-
viewCT	text	Display the collection for the assignment	-	-

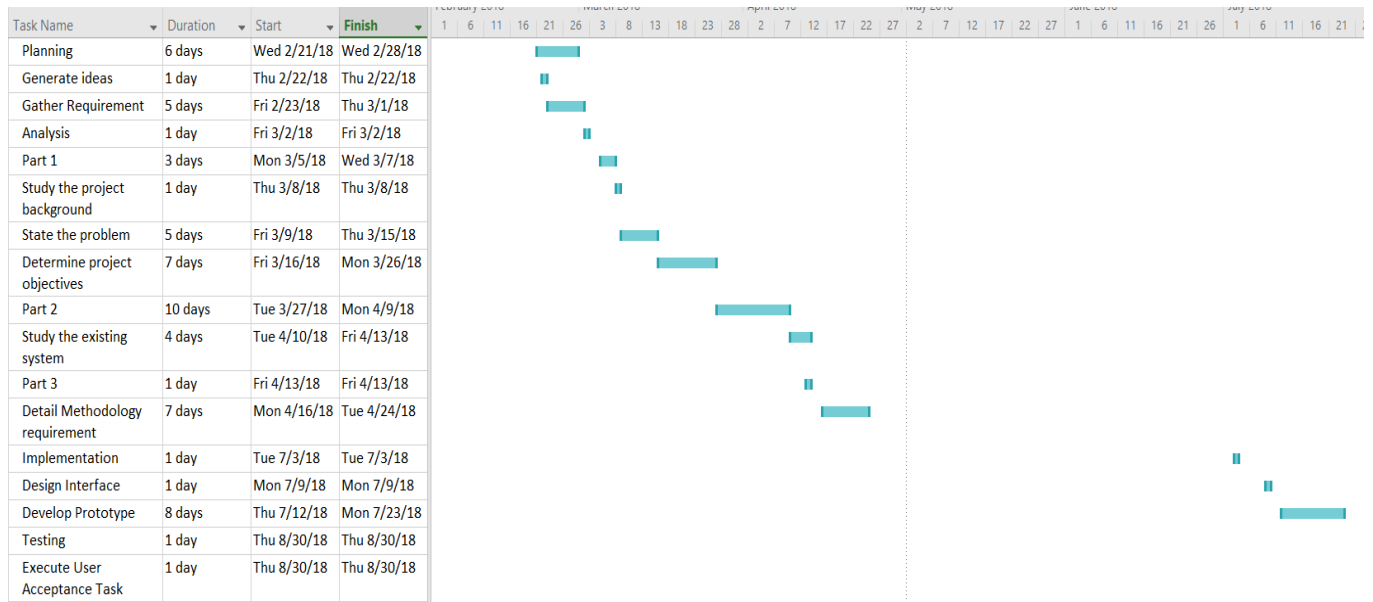
1.7 Order Details Interface

Table 1.7: Data dictionary of Order Details Interface

Attribute Name	Attribute Type	Attribute Description	Size	Primary key/ Foreign key
odAN	text	Display the submitted assignment name	-	-
odPC	text	Display the submitted selected color printing	-	-
odFP	text	Display the submitted selected flipped page printing	-	-
odCover	text	Display the submitted selected plastic cover option	-	-
odBind	text	Display the submitted selected binding option	-	-
odCT	text	Display the submitted collection time	-	-
etC	text	The comment for the order details	-	-

APPENDIX C: GANTT CHART

APPENDIX A-1



APPENDIX D: USER ACCEPTANCE TEST (UAT)

Version

1

PRINTING SERVICE ON THE GO

Faculty of Computer Systems & Software Engineering

User Acceptance Test (UAT)

1. TESTING REPORT

The purpose of this section is to outline the User Acceptance Test (UAT) process for Printing Service on the Go.

User Type: UMP Student

Event	Test Data	Expected Result	Actual Result	Pass/Fail
Login interface	UMP Student able to view login interface	Able to view login interface	Same as expected result	Pass
Login with wrong username and password	UMP Student insert incorrect username and password	UMP Student cannot login into the system	Same as expected result	Pass
Login with correct username and password	UMP Student insert correct username and password	UMP Student can login into the system	Same as expected result	Pass

Sign up interface	UMP Student able to view sign up interface	Able to view	Same as expected result	Pass
Sign up with existing username	UMP Student insert existing username	Username is available and cannot sign up	Same as expected result	Pass
Fill in assignment name	UMP Student fill in assignment name	Proceed to next interface	Same as expected result	Pass
Not fill in assignment name	UMP Student not fill in assignment name	Field is empty	Same as expected result	Pass
Upload assignment file to database	UMP Student upload assignment file	Able to upload assignment file	Not be able to upload to database	Fail
Receive order notification	UMP Student receive order notification	Able to receive order notification	Not able to receive order notification	Fail

Select Shop	UMP Student are able to select shop	Shop is selected	Same as expected result	Pass
View shop status	UMP Student are able to view shop status	Shop status is displayed	Same as expected result	Pass
Select Printing Details	UMP Student are able to select printing details	-Radio button is selected one only among two option -can write time	Same as expected result	Pass
Printing details display on Summary interface	UMP Student are able to view printing details on Summary interface	Printing details displayed on Summary interface	Same as expected result	Pass
Submit order details to shop owner	UMP Student submit printing details to shop owner	Shop owner receive the order details	Shop owner did not receive order details	Fail

User Type: Shop Owner

Event	Test Data	Expected Result	Actual Result	Pass/Fail
Receive the order details	Shop owner receive the order details	Able to receive the order details	Does not receive order details	Fail
Accept the order	Shop owner send the price detail	UMP Student receive the notification	Did not receive notification	Fail
Reject the order	Shop owner send that order is rejected	UMP Student receive the notification	Did not receive notification	Fail

2. SYSTEM TESTING APPROVAL

	Name	Date
Verified by <hr/>	Nurul Husna Tasnim bt Mohamad Zamri	
Developer		
Approved by: <hr/>		
Client		