



**WAREHOUSE SYSTEM WITH GOODS STOCK
ON A WEBSITE – BASED PLATFORM**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Komputer (S.Kom.)**

By

ANIS FUJI YANTI

012202000035

FACULTY OF INFORMATICS

INFORMATION SYSTEM STUDY PROGRAM

CIKARANG

August, 2023

PANEL OF EXAMINER APPROVAL


The Panel of Examiners declare that the undergraduate thesis entitled **WAREHOUSE SYSTEM WITH GOODS STOCK ON A WEBSITE – BASED PLATFORM** that was submitted by **ANIS FUJI YANTI** majoring in Information System from the Faculty of Informatics was assessed and approved to have passed the Oral Examination on 28 August 2023

Panel of Examiner



.....

Rosalina, S.Kom., M.Kom.



.....

Asst. Prof. Dr. Hasanul Fahmi, M.Kom.

STATEMENT OF ORIGINALITY

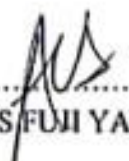
In my capacity as an active student of President University and as the author of the undergraduate thesis/final project/business plan (underline that applies) stated below:

Name : ANIS FUJI YANTI
Student ID number : 012202000035
Study Program : Information System
Faculty : Informatics

I hereby declare that my undergraduate thesis/final project/business plan entitled **"WAREHOUSE SYSTEM WITH GOODS STOCK ON A WEBSITE – BASED PLATFORM"** is, to the best of my knowledge and belief, an original piece of work based on sound academic principles. If there is any plagiarism, including but not limited to Artificial Intelligence plagiarism, is detected in this undergraduate thesis/final project/business plan, I am willing to be personally responsible for the consequences of these acts of plagiarism, and accept the sanctions against these acts in accordance with the rules and policies of President University.

I also declare that this work, either in whole or in part, has not been submitted to another university to obtain a degree.

Cikarang, 28 August 2023

()
ANIS FUJI YANTI

SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST

As a student of the President University, I, the undersigned:

Name : ANIS FUJI YANTI
Student ID number : 012202000035
Study program : Information System

for the purpose of development of science and technology, certify, and approve to give President University a non-exclusive royalty-free right upon my final report with the title:

WAREHOUSE SYSTEM WITH GOODS STOCK ON A WEBSITE – BASED PLATFORM

With this non-exclusive royalty-free right, President University is entitled to converse, to convert, to manage in a database, to maintain, and to publish my final report. There are to be done with the obligation from President University to mention my name as the copyright owner of my final report.

This statement I made in truth.

Cikarang, 28 August 2023

()
ANIS FUJI YANTI

ADVISOR'S APPROVAL FOR PUBLICATION

As a lecturer of the President University, I, the undersigned:


Advisor's Name : Cutifa Safitri, Ph.D.
NIDN : 20190900815
Study program : Information System
Faculty : Informatics

declare that following thesis:

Title of undergraduate thesis : **WAREHOUSE SYSTEM WITH GOODS STOCK
ON A WEBSITE – BASED PLATFORM**
Undergraduate Thesis author : **ANIS FUJI YANTI**
Student ID number : **012202000035**

will be published in institution's repository

Cikarang, 28 August 2023


(.....)
Cutifa Safitri, Ph.D.

PLAGIARISM CHECK RESULT

Revision Draft

ORIGINALITY REPORT

9%

SIMILARITY INDEX

5%

INTERNET SOURCES

1%

PUBLICATIONS

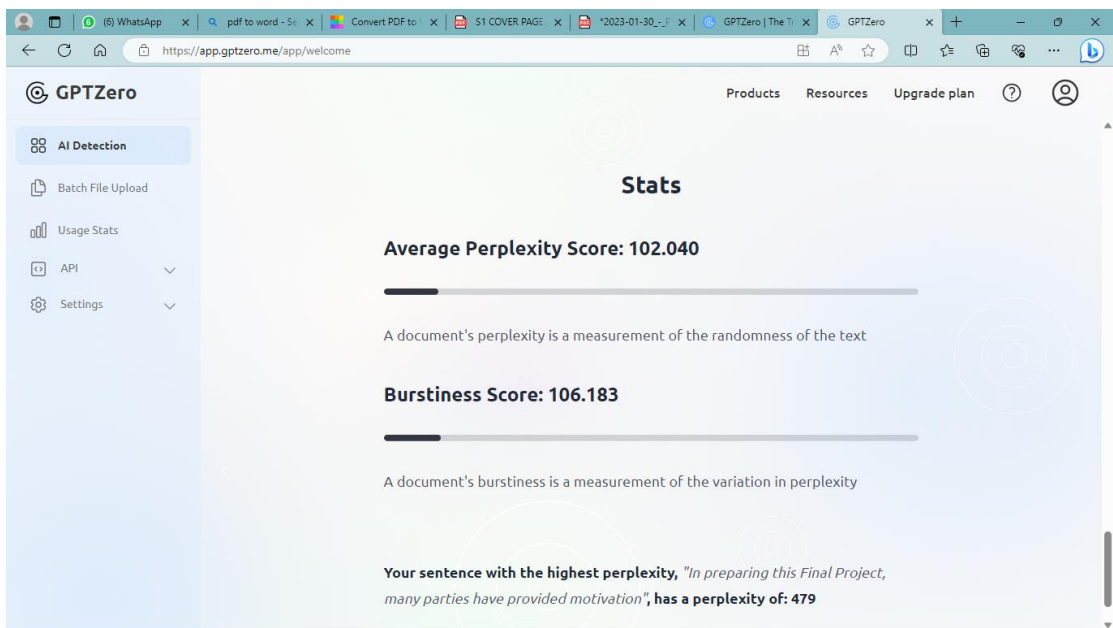
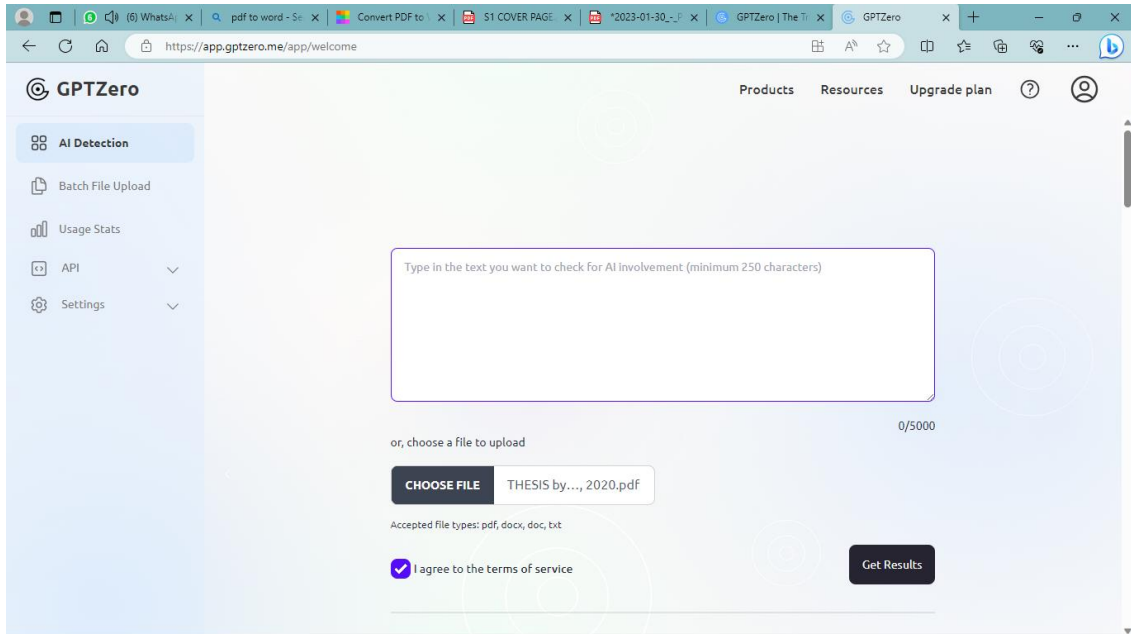
7%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Bellevue Public School Student Paper	2%
2	Submitted to Laureate Education Inc. Student Paper	1%
3	repository.untag-sby.ac.id Internet Source	1%
4	Submitted to University of Colombo Student Paper	1%
5	dspace.daffodilvarsity.edu.bd:8080 Internet Source	<1%
6	Submitted to Heriot-Watt University Student Paper	<1%
7	www.bigbanktheories.com Internet Source	<1%
8	Submitted to University of Nevada Reno Student Paper	<1%
9	repository.umnaw.ac.id Internet Source	<1%

GPTZero CHECKED



ABSTRACT

An organized and easy-to-use warehouse system is an important part of a company's processes. However, in many companies, recording stock items is still done manually using a piece of paper, which is prone to errors, loss, and difficulty in tracking stock items. In overcoming this problem, the author aims to create and implement a warehouse system that is able to manage stock items from incoming goods to used goods.

Based on the results of the analysis, this warehouse system is designed using a data entry form with the details needed by the user. In the implementation stage, the warehouse system is integrated with a detailed data form and a server computer connected to the database. Goods entering the warehouse will be inputted using the item data form to store them in the database. When the item is to be used, the process is also repeated to reduce the available stock. Thus, the stock of goods can be continuously monitored. The evaluation results show that this warehouse system is effective in managing stock items in detail and efficiently. Errors and stock loss can be minimized, while up-to-date stock information can be accessed easily by users.

With this warehouse system, the company is expected to increase operational efficiency, reduce errors, fraud committed by unscrupulous people and company data security. In addition, the creation of this application also contributes to the development of technology in the field of stock management and logistics.

ACKNOWLEDGEMENT

The author would like to thank the presence of Allah subhanahu wa ta'ala who has bestowed grace, mercy, opportunity, health, and grace so that this Final Project can be completed. Final Project entitled "WAREHOUSE SYSTEM WITH GOODS STOCK ON A WEBSITE – BASED PLATFORM" was submitted as a final requirement in achieving a bachelor's degree at the Faculty of Computing at President University.

In preparing this Final Project, many parties have provided motivation, advice, and support to the writer. In this very valuable opportunity, the author wishes to express his gratitude and appreciation to all of them. First, the author's highest appreciation goes to my beloved parents, Mrs. Rosidah for the endless love, prayers, and support, and my father, Maman Pirmansyah, who always reminds me to keep going and never give up.

The author expresses his sincere appreciation to Mr. Rila Mandala, Ph.D., as Dean of the Faculty of Computer Science at President University. Also this Final Project would not have been possible without the help, support and patience of my supervisor, Cutifa Safitri, M.Sc., Ph.D., for his supervision, advice and guidance since the beginning of the making of this Final Project and providing corrections until the completion of this Final Project.

My thanks also go to my beloved aunt Yulianah for any support in any form especially her short messages annoyed me but miraculously gave me a reason to focus on completing my studies as soon as possible.

Also to my younger siblings Raihan Firmansyah, Irdina Azizah Firmansyah, Muhammad Rumi Sijistani and Syakila Zevanya Firmansyah, who always cheer me

up with their funny behavior during the writing of this Final Project where if I start to stress and get stuck on certain parts. For that I am very grateful to have four of you in my life.

I am very grateful to have some close friends who always support me. The first appreciation goes to Nabilah Robani Ramdan and Kholifah Ilmi Fadillah, you are always a good listener for every problem I face, especially when I have to revise this Final Project and start over again and again. Your opinion also allows me to see my problem from a different angle.

I would like to thank my companion in arms Adinda Marcelya Lestari and Fuji Astuti, thank you for being a good friend who is always ready to help me, and thank you for the time to tell stories and play with us every night. Also to all friends of the Management Information System batch 2020 who cannot be mentioned here one by one.

Finally, I would like to thank everyone who was important for the successful realization of this undergraduate Final Project. This Final Project is still far from being perfect, but it is hoped that it will be useful not only for researchers, but also for readers. For this reason, suggestions and constructive criticism are most welcome.

TABLE OF CONTENTS

ABSTRACT.....vi

i

DEDICATION..... **Error! Bookmark not defined.**

ACKNOWLEDGEMENT viii

TABLE OF CONTENTS.....x

LIST OF TABLESxv

LIST OF FIGURESxvii

CHAPTER I INTRODUCTION..... **Error! Bookmark not defined.**

1.1 Background **Error! Bookmark not defined.**

1.2 Problem Statement 1

1.3 Objectives..... **Error! Bookmark not defined.**

1.4 Scope and Limitations..... **Error! Bookmark not defined.**

1.5 Project Methodology **Error! Bookmark not defined.**

1.5.1 Communication..... **Error! Bookmark not defined.**

1.5.2 Planning..... **Error! Bookmark not defined.**

1.5.3 Modeling **Error! Bookmark not defined.**

1.5.4 Construction..... **Error! Bookmark not defined.**

1.5.5 Deployment, Delivery and Feedback..... **Error! Bookmark not defined.**

1.6 Project Outline..... **Error! Bookmark not defined.**

1.6.1 CHAPTER 1..... **Error! Bookmark not defined.**

1.6.2 CHAPTER 2..... **Error! Bookmark not defined.**

1.6.3 CHAPTER 3..... **Error! Bookmark not defined.**

1.6.4 CHAPTER 4..... **Error! Bookmark not defined.**

1.6.5 CHAPTER 5..... **Error! Bookmark not defined.**

1.6.6 CHAPTER 6..... **Error! Bookmark not defined.**

1.6.7	CHAPTER 7.....	Error! Bookmark not defined.
	CHAPTER II LITERATURE REVIEW	Error! Bookmark not defined.
2.1	Receiving.....	Error! Bookmark not defined.
2.2	Put - Away.....	Error! Bookmark not defined.
2.3	Picking.....	Error! Bookmark not defined.
2.4	Update Stock	Error! Bookmark not defined.
2.5	Remarks.....	Error! Bookmark not defined.
	CHAPTER III SYSTEM ANALYSIS.....	Error! Bookmark not defined.
3.1	System Overview	Error! Bookmark not defined.
3.2	Function Analysis.....	Error! Bookmark not defined.
3.3	Use Case Diagram.....	Error! Bookmark not defined.
3.4	Use Case Narrative.....	Error! Bookmark not defined.
3.5	Swim Lane Diagram.....	Error! Bookmark not defined.
3.5.1	Swim Lane Diagram for Registration Section ..	Error! Bookmark not defined.
3.5.2	Swim Lane Diagram for Login Section	Error! Bookmark not defined.
3.5.3	Swim Lane Diagram for Search Data Section ..	Error! Bookmark not defined.
3.5.4	Swim Lane Diagram for Add Stock Data ...	Error! Bookmark not defined.
3.5.5	Swim Lane Diagram for Update Detail Data Section	Error! Bookmark not defined.
3.5.6	Swim Lane Diagram for Delete Data.....	Error! Bookmark not defined.
3.5.7	Swim Lane Diagram for Filter Data.....	Error! Bookmark not defined.
3.5.8	Swim Lane Diagram for Sort Data.....	Error! Bookmark not defined.

3.5.9	Swim Lane Diagram for Add Data User	Error! Bookmark not defined.
3.5.10	Swim Lane Diagram for Print the Data.....	40
3.6	Hardware and Software Requirement	Error! Bookmark not defined.
3.6.1	Hardware Requirement	Error! Bookmark not defined.
3.6.2	Software Requirement.....	Error! Bookmark not defined.
CHAPTER IV SYSTEM DESIGN.....		Error! Bookmark not defined.
4.1	User Interface Design.....	Error! Bookmark not defined.
4.1.1	Registration Page.....	Error! Bookmark not defined.
4.1.2	Login Page.....	Error! Bookmark not defined.
4.1.3	Dashboard Page Admin.....	Error! Bookmark not defined.
4.1.4	Admin Dashboard Page in Stock Item List.	Error! Bookmark not defined.
4.1.5	Admin Menu for List Incoming Goods.....	Error! Bookmark not defined.
4.1.6	Admin Menu for Dropout Item List.....	Error! Bookmark not defined.
4.1.7	Admin List User Data	Error! Bookmark not defined.
4.1.8	Admin page for Add Data Section	Error! Bookmark not defined.
4.1.9	Admin Page for Update or Edit Item Section ...	Error! Bookmark not defined.
4.1.10	Admin Page for Delete Data Section	Error! Bookmark not defined.
4.1.11	Admin Page for Add data User Section	Error! Bookmark not defined.
4.1.12	Dashboard Page User	Error! Bookmark not defined.
4.1.13	Dashboard View on User	Error! Bookmark not defined.
4.1.14	Data Filter.....	Error! Bookmark not defined.

4.1.15	Sort the Data.....	Error! Bookmark not defined.
4.1.16	Search Data	Error! Bookmark not defined.
4.1.17	Print Data Page.....	58
4.2	Class Diagram	Error! Bookmark not defined.
CHAPTER V SYSTEM IMPLEMENTATION		Error! Bookmark not defined.
5.1	User Interface	Error! Bookmark not defined.
5.1.1	Registration	Error! Bookmark not defined.
5.1.2	Login	Error! Bookmark not defined.
5.1.3	Dashboard Page for Admin	Error! Bookmark not defined.
5.1.4	Page for Stock Item Section	Error! Bookmark not defined.
5.1.5	Page for Incoming Goods Section	Error! Bookmark not defined.
5.1.6	Dropout Item Page	Error! Bookmark not defined.
5.1.7	Page for User Data	Error! Bookmark not defined.
5.1.8	Page for Form Add Item.....	Error! Bookmark not defined.
5.1.9	Page for Edit the Detail	Error! Bookmark not defined.
5.1.10	Delete Page Section.....	Error! Bookmark not defined.
5.1.11	Add User Page.....	Error! Bookmark not defined.
5.1.12	Dashboard Pager for User	Error! Bookmark not defined.
5.1.13	System View on Users	Error! Bookmark not defined.
5.1.14	Filter Data Section.....	Error! Bookmark not defined.
5.1.15	Sort the Data.....	Error! Bookmark not defined.
5.1.16	Search Data	Error! Bookmark not defined.
5.1.17	Print the Data.....	70
5.2	Application Details.....	Error! Bookmark not defined.
5.2.1	Registration	Error! Bookmark not defined.
5.2.2	Login	Error! Bookmark not defined.

5.2.3	Dashboard Page for Admin	Error! Bookmark not defined.
5.2.4	Stock Item Page.....	Error! Bookmark not defined.
5.2.5	Incoming Goods Page	Error! Bookmark not defined.
5.2.6	Dropout Item Page	Error! Bookmark not defined.
5.2.7	List Data User.....	Error! Bookmark not defined.
5.2.8	Add Item Form	Error! Bookmark not defined.
5.2.9	Edit Data Section.....	Error! Bookmark not defined.
5.2.10	Delete the Data	Error! Bookmark not defined.
5.2.11	Add New User.....	Error! Bookmark not defined.
5.2.12	Dashboard Page for User.....	Error! Bookmark not defined.
5.2.13	System Displayed for User.....	Error! Bookmark not defined.
5.2.14	Filter the Data Section.....	Error! Bookmark not defined.
5.2.15	Sort Data Section.....	Error! Bookmark not defined.
5.2.16	Search Data	Error! Bookmark not defined.
5.2.17	Print the Data.....	87
CHAPTER VI SYSTEM TESTING.....		Error! Bookmark not defined.
6.1	Testing Environment.....	Error! Bookmark not defined.
6.2	Testing Scenario	Error! Bookmark not defined.
6.2.1	Registration Interface Testing Scenario	Error! Bookmark not defined.
6.2.2	Login Interface Testing Scenario .	Error! Bookmark not defined.
6.2.3	Dashboard Page for Admin Interface Testing Scenario.....	Error! Bookmark not defined.
6.2.4	Stock Item Interface Testing Scenario	Error! Bookmark not defined.
6.2.5	Incoming Goods Interface Testing Scenario	Error! Bookmark not defined.

6.2.6 Dropout Items Interface Testing Scenario ..**Error! Bookmark not defined.**

6.2.7 Page for List Data User Interface Testing Scenario.....**Error! Bookmark not defined.**

6.2.8 Add Data Interface Testing Scenario**Error! Bookmark not defined.**

6.2.9 Edit Data Interface Testing Scenario**Error! Bookmark not defined.**

6.2.10 Delete Data Interface Testing Scenario.....**Error! Bookmark not defined.**

6.2.11 Add User Interface Testing Scenario**Error! Bookmark not defined.**

6.2.12 Dashboard Page for User Interface Testing Scenario**Error! Bookmark not defined.**

6.2.13 System View on User Interface Testing Scenario.....**Error! Bookmark not defined.**

6.2.14 Filter Data Interface Testing Scenario**Error! Bookmark not defined.**

6.2.15 Sort Data Interface Testing Scenario**Error! Bookmark not defined.**

6.2.16 Search Data Interface Testing Scenario**Error! Bookmark not defined.**

6.2.17 Print the Data Interface Testing Scenario95

6.3 Testing Summary**Error! Bookmark not defined.**

CHAPTER VII CONCLUSION AND FUTURE WORKS . **Error! Bookmark not defined.**

7.1 Conclusion.....**Error! Bookmark not defined.**

7.2 Future Works.....**Error! Bookmark not defined.**

REFERENCES**Error! Bookmark not defined.**

LIST OF TABLES

Table 2.1 Comparison	11
Table 3.1 Function Description.....	13
Table 3.2 Use Case Narrative for Registration Use Case	15
Table 3.3 Use Case Narrative for Access Dashboard Use Case	16
Table 3.4 Use Case Narrative for Search Data Use Case	18
Table 3.5 Use Case Narrative for Add Data Use Case	19
Table 3.6 Use Case Narrative for Update Data Use Case.....	21
Table 3.7 Use Case Narrative for Delete Data Use Case.....	23
Table 3.8 Use Case Narrative for Filter Data Use Case	25
Table 3.9 Use Case Narrative for Sort Data Use Case	26
Table 3.10 Use Case Narrative for Add Data User Use Case.....	27
Table 3.11 Use Case Narrative for Print the Data Use Case	28
Table 4.1 Label Description from Figure 4.1	42
Table 4.2 Label Description from Figure 4.2	43
Table 4.3 Label Description from Figure 4.3	44
Table 4.4 Label Description from Figure 4.4	45
Table 4.5 Label Description from Figure 4.5	46
Table 4.6 Label Description from Figure 4.6	47
Table 4.7 Label Description from Figure 4.7	48
Table 4.8 Label Description from Figure 4.8	49
Table 4.9 Label Description from Figure 4.9	50
Table 4.10 Label Description from Figure 4.10	51

Table 4.11 Label Description from Figure 4.11	52
Table 4.12 Label Description from Figure 4.12	53
Table 4.13 Label Description from Figure 4.13	54
Table 4.14 Label Description from Figure 4.14	55
Table 4.15 Label Description from Figure 4.15	56
Table 4.16 Label Description from Figure 4.15	57
Table 4.17 Label Description from Figure 4.15	58
Table 6.2.1 Registration Interface Testing Scenario.....	88
Table 6.2.2 Login Interface Testing Scenario.....	89
Table 6.2.3 Dashboard Page for Admin Interface Testing Scenario	89
Table 6.2.4 Stock Item Interface Testing Scenario.....	90
Table 6.2.5 Incoming Goods Interface Testing Scenario	90
Table 6.2.6 Dropout Items Interface Testing Scenario	91
Table 6.2.7 Page for List Data User Interface Testing Scenario	91
Table 6.2.8 Add Data Interface Testing Scenario.....	91
Table 6.2.9 Edit Data Interface Testing Scenario	92
Table 6.2.10 Delete Data Interface Testing Scenario	92
Table 6.2.11 Add User Interface Testing Scenario.....	93
Table 6.2.12 Dashboard Page for User Interface Testing Scenario.....	93
Table 6.2.13 System View on User Interface Testing Scenario	94
Table 6.2.14 Filter Data Interface Testing Scenario	94
Table 6.2.15 Sort Data Interface Testing Scenario	95
Table 6.2.16 Search Data Interface Testing Scenario.....	95
Table 6.2.17 Print the Data Interface Testing Scenario	95

LIST OF FIGURES

University Logo	
Figure 1.1 Sheet of Data Detail Paper	2
Figure 1.2 Prototype Model	4
Figure 3.1 Use Case Diagram	14
Figure 3.2 Swim Lane Diagram of Registration Page	31
Figure 3.2 Swim Lane Diagram of Access Dashboard Page	32
Figure 3.3 Swim Lane Diagram of Search Data Page	33
Figure 3.4 Swim Lane Diagram of Add Stock Data Page	34
Figure 3.5 Swim Lane Diagram of Update Page	35
Figure 3.6 Swim Lane Diagram of Delete Data Section	36
Figure 3.7 Swim Lane Diagram of Filter Data Section	37
Figure 3.8 Swim Lane Diagram of Sort Data Section	38
Figure 3.9 Swim Lane Diagram of Add Data User Section	39
Figure 3.10 Swim Lane Diagram of Add Data User Section	40
Figure Label Description from Figure 4.1	42
Figure Label Description from Figure 4.2	43
Figure Label Description from Figure 4.3	44
Figure Label Description from Figure 4.4	45
Figure Label Description from Figure 4.5	46
Figure Label Description from Figure 4.6	47
Figure Label Description from Figure 4.7	48
Figure Label Description from Figure 4.8	49
Figure Label Description from Figure 4.9	50
Figure Label Description from Figure 4.10	51

Figure Label Description from Figure 4.11	52
Figure Label Description from Figure 4.12	53
Figure Label Description from Figure 4.13	54
Figure Label Description from Figure 4.14	55
Figure Label Description from Figure 4.15	56
Figure Label Description from Figure 4.16	57
Figure Label Description from Figure 4.17	58
Figure 4.18 Class Diagram of The Application	59
Figure 5.1 Registration Page	60
Figure 5.2 Login Page	61
Figure 5.3 Dashboard Page	62
Figure 5.4 Stock Item Section	62
Figure 5.5 Incoming Page	63
Figure 5.6 Dropout Page	63
Figure 5.7 User Data Page	64
Figure 5.8 Add Data Page	65
Figure 5.9 Edit Data Page	65
Figure 5.10 Delete Data Page	66
Figure 5.11 Add User Data Page	66
Figure 5.12 Dashboard Page	67
Figure 5.13 System Display for User	68
Figure 5.14 Data Filter	68
Figure 5.15 Sort Data Section	69
Figure 5.16 Search Data Section	70
Figure 5.17 Print Data Page	70

Figure 5.18 Registration Data	71
Figure 5.19 Login Validation.....	72
Figure 5.20 Year Category List	72
Figure 5.21 Data Incoming in the Form of a BarChart.....	73
Figure 5.22 Data Incoming Collection for Details.....	73
Figure 5.23 Data Dropout in the Form of a BarChart.....	74
Figure 5.24 Data Dropout Collection for Details.....	74
Figure 5.25 Data Stock Item in the Form of a BarChart.....	74
Figure 5.26 Data Stock Item Collection for Details	74
Figure 5.27 Data Details in BarChart	75
Figure 5.28 List Data Stock Item.....	75
Figure 5.29 List Data for Incoming Goods.....	76
Figure 5.30 Dropout Item List Data.....	76
Figure 5.31 List Data User.....	77
Figure 5.32 Add Stock Item.....	77
Figure 5.33 Add Incoming Goods	78
Figure 5.34 Add Dropout Items	78
Figure 5.35 Edit Stock Item.....	79
Figure 5.36 Edit Incoming Goods Data	79
Figure 5.37 Edit User.....	80
Figure 5.38 Delete Stock Item	80
Figure 5.39 Delete Incoming Section	81
Figure 5.40 User Delete	81
Figure 5.41 Add New User	82
Figure 5.42 Year Category List	82

Figure 5.43 Data Incoming in the Form of a BarChart.....	83
Figure 5.44 Data Incoming Collection for Details.....	84
Figure 5.45 Data Dropout in the Form of a BarChart.....	84
Figure 5.46 Data Dropout Collection for Details.....	84
Figure 5.47 Data Stock Item in the Form of a BarChart.....	84
Figure 5.48 Data Stock Item Collection for Details	84
Figure 5.49 Data Details in BarChart	85
Figure 5.50 Item Page Stock Limit	85
Figure 5.51 Incoming Page Limit	85
Figure 5.52 Use Data Access	85
Figure 5.53 Filter Data.....	86
Figure 5.54 Sort Data with Multiple Section.....	86
Figure 5.55 Search Data Section.....	87
Figure 5.56 Print Data Section.....	87

