

Online System for Student's Personal Property, e-College Property

Sharifah Nur Aimi Binti Syed Ali Hakim

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SHARIFAH NUR AIMI BINTI SYED ALI HAKIM

This project is submitted in partial fulfilment of the requirements of the degree of
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Sistem Dalam Talian untuk Barangan Peribadi Pelajar, e-College Property

SHARIFAH NUR AIMI BINTI SYED ALI HAKIM

Projek ini merupakan salah satu keperluan untuk
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2019

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.....*Sharifah*.....

(SHARIFAH NUR AIMI BINTI SYED ALI HAKIM)

(12/12/2019)

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Table of Contents

Declaration	I
Acknowledgement	II
Abstract	X
Abstrak	XI
Chapter 1: Introduction	1
1.1 Problem Statements	2
1.2 Project Scope	3
1.3 Objectives	3
1.4 Methodology	3
1.4.1 Requirements and Planning Phase	4
1.4.2 Design and Development phase	5
1.4.3 Cutover	5
1.5 Project Significance	6
1.6 Project Schedule	7
1.7 Expected Outcomes	8
Chapter 2: Literature Review	9
2.1 Review on Existing System	10
2.1.1 Air Asia Airlines Self Bag Tag Print	10
2.1.2 Incheon International Airport self-service bag drop	12
2.1.3 Avianca Airlines print luggage tag at home	13
2.2 The Comparisons of Features in Similar System	16
2.3 Review of the Features in the System	17
Conclusion	19
Chapter 3: Requirement Analysis and System Design	20
3.1 The Existing System used in e-College Property System	21
3.2 Methodology	21
3.3 Requirement Planning	23
3.4 System Design	33
3.4.1 Use Case Scenario	34
3.4.2 Sequence Diagram	39
3.5 Design Interface	42

3.6 The Prototype	47
Chapter 4: System Implementation	50
4.1 Introduction	50
4.2 Software requirements.....	50
4.3 Development of an online system for student’s personal property, eCollege Property System	51
4.3.1 Login page for staff and student	52
4.3.2 Register page for new user	53
4.3.3 Main page for admin.....	54
4.3.4 Main page for student.....	55
4.3.5 Room validity page for admin.....	55
4.3.6 Category page for admin	56
4.3.7 Item page for admin.....	56
4.3.8 Add order page for admin and student.....	57
4.3.9 Manage order page for admin.....	58
4.3.10 Print receipt for admin and student	58
4.3.11 Print bag tag page for admin and user.....	59
4.3.12 View report for admin	60
4.3.13 Print report for admin	60
4.3.14 Password and username setting page for admin	61
4.3.15 manage user page for admin	62
4.3.16 add user page for admin.....	62
4.3.17 Validation.....	63
4.3.18 Database implementation	65
4.4 Summary.....	67
Chapter 5: Testing and Evaluation	68
5.1 Introduction	68
5.2 Functional testing	68
5.3 User testing	74
5.3.1 Acceptance testing.....	75
5.4 User acceptance analysis.....	75
5.5 Summary.....	79
Chapter 6: Conclusion and Future Works	80

6.1 Introduction	80
6.2 Objectives and achievements	80
6.3 Limitations	80
6.4 Future Work	81
6.5 Conclusion	81
Appendix A	82
Appendix B	89
References	93

List of figure

Figure 1.1 The project schedule for FYP1 semester 1 2019/2020.....	7
Figure 1.2 The project schedule for FYP2 semester 2 2019/2020.....	8
Figure 2. 1 shows on how to print baggage tag at kiosk and at home for Air Asia Airlines.....	11
Figure 2.2 show on how to self-print baggage tag in Incheon International Airport...	13
Figure 2. 3 show on how to self-print baggage tag in Avianca Airport.....	15
Figure 3.1 Rapid Application Development model	22
Figure 3.2 Percentage of How the College Collects and Records Data.....	23
Figure 3.3 Percentages of Importance of Receipt.....	24
Figure 3.4 Percentage of Bag Tag Can Help to Track Student's Belongings.....	24
Figure 3.5 Percentage of Lost Bag or Item in the Storeroom	25
Figure 3.6 Percentage to Develop and Implement the Proposed System	25
Figure 3.7 Percentage of Opinion Features by Students.....	26
Figure 3.8 The Use Case diagram for the e-College Property System	28
Figure 3.9 Class diagram for storekeeper and student.....	29
Figure 3.10 Activity diagram for storekeeper and student	30
Figure 3.11 The Sequence diagram for Register	39
Figure 3.12 The Sequence diagram for Manage Data	40
Figure 3.13 The Sequence diagram for Generate Report	40

Figure 3.14 The Sequence diagram for View and Print Report.....	41
Figure 3.15 The Sequence diagram for Print Receipt.....	41
Figure 3.16 The Sequence diagram for Print Bag Tag	42
Figure 3.17 Mock-up design for storekeeper and student Login page	43
Figure 3.18 Mock-up design for storekeeper home page	43
Figure 3.19 Mock-up design for add property page	44
Figure 3.20 Mock-up design for e-College Property orders page	44
Figure 3.21 Mock-up design for bag tag and receipt print page.....	45
Figure 3.22 Mock-up design for report print page.....	45
Figure 3.23 Mock-up design for student form page	46
Figure 3.24 Mock-up design for student item status page.....	46
Figure 3.25 Mock-up design for student payment page	47
Figure 4.1 Login page for staff and student.....	52
Figure 4.2 register page for new user.....	53
Figure 4.3 main page for admin.....	54
Figure 4.4 student main page	55
Figure 4.5 Room validity page for admin.....	55
Figure 4.6 Category page for admin	56
Figure 4.7 Item page for admin.....	57
Figure 4.8 Add order page for admin and student	57
Figure 4.9 Manage order page for admin.....	58
Figure 4.10 Print receipt for admin and student	58
Figure 4.11 Print bag tag page for admin and user	59

Figure 4.12 View report for admin	60
Figure 4.13 Print report for admin	60
Figure 4.14 Password and username setting page for admin.....	61
Figure 4.15 manage user page for admin.....	62
Figure 4.16 add user page for admin	62
Figure 4.17 Error validation for login.....	63
Figure 4.18 wrong format of email address	64
Figure 4.19 Successful validation for register	64
Figure 4.20 Successful validation for deleting data.....	65
Figure 4.21 Add data validation for category	65
Figure 4.22 Coding for connecting the database	66
Figure 4.23 Database that consists of five tables	66
Figure 5.1 Test case 1- Login into the system	69
Figure 5.2 Users Feedback on Functionality of the System	75
Figure 5.3 Users Rating on Understanding of the System.....	76
Figure 5.4 Users Rating on the Interface and Design of the System.....	77
Figure 5.5 Users Rating on Usability of the system	78
Figure 5.6 Expected System Outcome.....	78

List of Table

Table 2.1 The comparisons of the Features in the similar system with the e-College Property.....	16
Table 3.1 Software Requirement	32
Table 3.2 Hardware Requirement.....	33
Table 3.3: Use Case Scenario for Register	34
Table 3.4: Use Case Scenario for Login	34
Table 3.5: Use case Scenario for Manage Data	35
Table 3.6: Use case Scenario for Generate Report	36
Table 3.7: Use case Scenario for View Report	36
Table 3.8: Use case Scenario for Print Report.....	37
Table 3.9: Use case Scenario for Print Receipt.....	37
Table 3.10: Use case Scenario for Print Bag Tag	38
Table 4.1 Software requirements	50
Table 5.1 Test case 2 – Make an order	70
Table 5.2 Test case 3 – update, delete and search order details.....	70
Table 5.3 Test case 4 – View report of student’s inventory	72
Table 5.4 Test case 5 – Print report of student’s inventory	72
Table 5.5 Test case 6 – Print receipt.....	73
Table 5.6 Test case 7 – Print bag tag	73
Table 5.7 Test case 8 – view, delete, and search student profile	73
Table 5.8 Details of user testing	74

Abstract

Online System for Student's Personal Property, e-College Property is a web-based system that is going to be used in UNIMAS's colleges. This system enables students to register their personal property by filling the online form in this system. The data entered by the student and storekeeper will be stored in the database and more secure than a manual system. Thus, storekeeper can generate reports, view and print the inventory report. Storekeeper will be the admin of this system. As for the current system, most of the UNIMAS colleges use manual for inventory. The students' details will be kept in a file and difficult to find if the student wants to take back their baggage or items. In addition, the student details will not safe if just keep in the file. It might be lost and difficult to check back the details of inventory. Bag tagging is being proposed for this project as it will help students and the storekeeper to find the item in a huge storeroom. The tendency of losing their items is high if they do not properly put the label or tag. Bag tagging should be a good and effective way to keep baggage or item safe and easy to find. The methodology used in developing the system is Rapid Application Development (RAD). While for data requirements, questionnaires and interview are been conducted to gather information and specify the user's needs.

Abstrak

Sistem Dalam Talian untuk Barangan Peribadi Pelajar, e-College Property adalah sistem berasaskan web yang akan digunakan di kolej-kolej UNIMAS. Sistem ini membolehkan pelajar mendaftar barangan peribadi mereka dengan mengisi borang dalam talian dalam sistem ini. Data yang dimasukkan oleh pelajar dan penjaga stor akan disimpan dalam pangkalan data dan lebih selamat daripada sistem manual. Selain itu, penjaga stor boleh menghasilkan laporan, melihat dan mencetak laporan inventori. Penjaga stor akan menjadi pentadbir untuk system ini. Bagi sistem semasa, kebanyakan kolej-kolej di UNIMAS menggunakan sistem manual untuk inventori. Butiran pelajar akan disimpan dalam fail dan sukar untuk mencari jika pelajar ingin membawa balik bagasi atau barang mereka. Di samping itu, butiran pelajar tidak akan selamat jika hanya menyimpan di dalam fail tersebut. Ia mungkin hilang dan sukar untuk menyemak semula butiran inventori. Penandaan beg dicadangkan untuk projek ini kerana ia akan membantu pelajar dan penjaga stor untuk mencari item di dalam bilik stor yang besar. Kecenderungan untuk kehilangan barang-barang mereka adalah tinggi jika mereka tidak meletakkan label atau tag dengan betul. Penandaan beg harus menjadi cara yang baik dan berkesan untuk menyimpan bagasi atau item yang disimpan dan mudah dicari. Metodologi yang digunakan dalam membangunkan sistem adalah Pembangunan Aplikasi Rapid (RAD). Untuk keperluan data, soal selidik dan wawancara telah dijalankan untuk mengumpulkan maklumat dan menentukan keperluan pengguna.

Chapter 1: Introduction

Inventory management refers to the process of ordering, storing, and using a company's inventory. These include the management of raw materials, components, and finished products, as well as warehousing and processing such items. As this proposed system, an online system for student's personal property which named e-College Property is design by our routine problem by using inventory management ideas. This online system can easily access through any devices like a smartphone, tablets, and laptops. This system really can help students to list down their properties or stuff that need to be kept in college or hostel's store.

An online system is more user-friendly than queue up for a long time and the storekeeper needs to register the things manually. Admin and user page will easily track which item can be stored by checking the item status. This effective solution to cut down the queue so that the storekeeper just can check on the website and print the receipt after the user or students make payment.

Thus, the e-College Property system makes things easier than using a manual when updating data. The storekeeper or admin also can update, delete, and add the things that can be stored from time to time by using this e-College Property. Hence, this system will propose new features which can print receipt and tag. The receipt can be the evidence that the student had paid the number of fees and the bag tag can be attached to the item to avoid lost items.

1.1 Problem Statements

Currently, all hostel used the manual property registration form. This makes a problem in which students have to queue for a long time and the storekeeper needs to do many tasks, check the student's stuff, calculate them and to check the student's form as well. So, this will make other students feel impatient to wait. This situation can make student angry especially they have a final exam during that weekend as the time for keeping the student's stuff in the store is always in the final exam week.

The first problem is existing of a manual registration form can be said insecure and insufficient than using a system. It can cause data loss because the student's inventory form only put in one file and might be lost or difficult to search for the student's form if needed. If using a system, the data will be stored in the database and not cause data loss.

The second problem, this manual system is difficult to be used if the storekeeper or the staff want to summarise the report. They need to calculate manually and check again to do the monthly or yearly report. While if they use this proposed system, they no need to calculate by manually.

1.2 Project Scope

The target user for this proposed system is students, and storekeepers. This allows storekeeper as an admin to update, add, delete the items that can be stored in the storeroom. While for students, they can view the availability of item's status whether can stored or not and can add the item that they want to keep in the storeroom. The information of students such as their matrix number and their item will be saved in the database. The hardware required for this system are preferable computer processor, RAM, hard disk, and monitor. While the software required is a programming language, operating system, a database, system development tool, browser and GUI interface.

1.3 Objectives

The objectives of this project are:

- To develop an online system for student's personal properties or stuff.
- To design a bag tag label that contain students and item information.
- To produce monthly report for total of payment receive and total item stored.

1.4 Methodology

The methodology that is chosen for this project is RAD (Rapid Application Development) Methodology. It consists of several phases such as:

Phase	Tasks
Requirements Planning	a) Users, student, and supervisor agree upon the project being proposed b) Obtain approval from the examiner to continue the project
User Design & Development	a) Interaction with users gain data b) Build models and prototype for the system c) JAD session a) Program development b) Coding the system c) Unit testing, integration, and system testing
Cut Over	a) Data conversion b) Full-scale testing of the system c) System changeover d) User training

Rapid application development (RAD) has been present for some time now in software development. This method was conceived to fix some of the shortfalls that were being experienced with the waterfall model.

Rapid application development is specifically suited for developing software that conforms to user requirements. The development process is suited for adaptability to accommodate new information that might be gained during the project's lifetime.

1.4.1 Requirements and Planning Phase

In this phase, the student and supervisor agree upon the project being proposed which is an online system for student's personal property, e-College Property System. The

student also needs to obtain the examiner's approval to proceed with the project. We need to discover to define the exact goal of the project.

1.4.2 Design and Development phase

After discovering phase then continue to design and develop the system. Design and development must meet the user's requirements and easy to be understood. The interface must be user-friendly and efficient to the user. This phase also can start to develop the prototype after the designing phase is finish. The prototype will be presented to the supervisor and need to do some changes if the supervisor asks. A unit and system testing will be conducted from time to time.

1.4.3 Cutover

Cutover is the last phase of the RAD method. In this phase need to do data conversion. Full-scale testing of the system will be conducted. The changeover to the new system and user training also need to be applied. All final changes are made while the system developer continues to look for bugs in the system. When the system is working and meet the requirement that has been proposed, then it is ready to present to the supervisor and also examiner during the presentation.

1.5 Project Significance

This online system has many significant for student's college management. But this is more highlight on store management. This is because nobody proposes this problem. For the first-timer, this online system can ease many people especially students. Thus, this system actually can be accessed easily than using manual registration.

The system will provide ease of administration by performing all the work on a computer system thereby maintaining the reliability and safety of the data maintained. All data will be retained in the system and the data will be secured in the system. So, if the students forget their stuff, they can refer their receipt given to check what they keep in the storeroom.

Thus, it provides a fast and efficient interface for easy access and updating of data. To keep updated, the storekeeper can only click to update the stuff's availability and the user or student can view on their screen which stuff can be stored according to the availability. So, the student no needs to go and ask the storekeeper and efficient for updating data.

Dealing with the student also will be an issue. So, with this online system will make the store management more user-friendly and save time. They no need to have a long queue just to check their stuff and calculate the fees. They only show the receipt and

the storekeeper can directly take or keep their stuff from the store. Only paid stuff will get the receipt so it is so easy and efficient.

1.6 Project Schedule

The project schedule acts as a guideline and timeline for the project to be completed. The Gantt chart is used to represent the project schedule. The figure below shows the project schedule in developing the college Property system. The timeline to complete this report is approximately 4 months. This project began with the approval of the project proposal in September 2019 and expected to finish with the working prototype by May 2020.

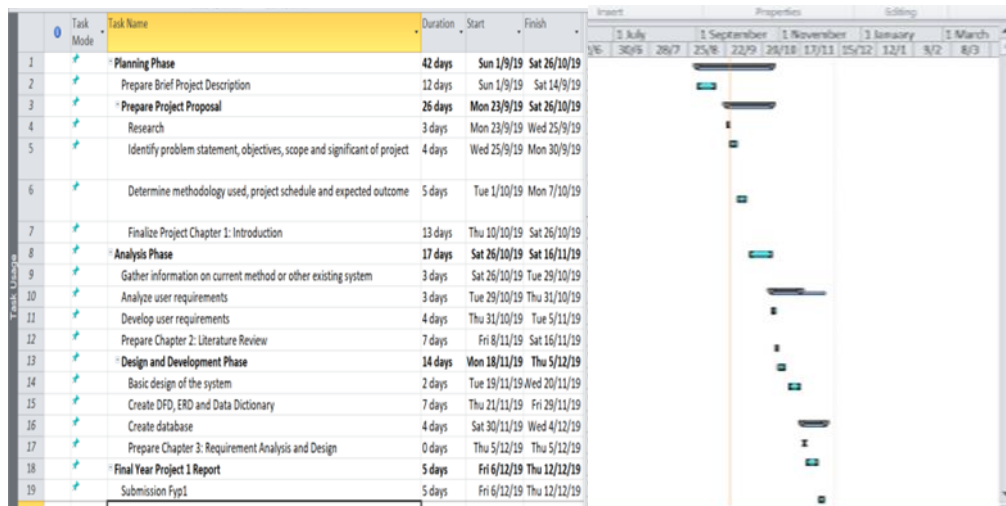


Figure 1.1 The project schedule for FYP1 semester 1 2019/2020

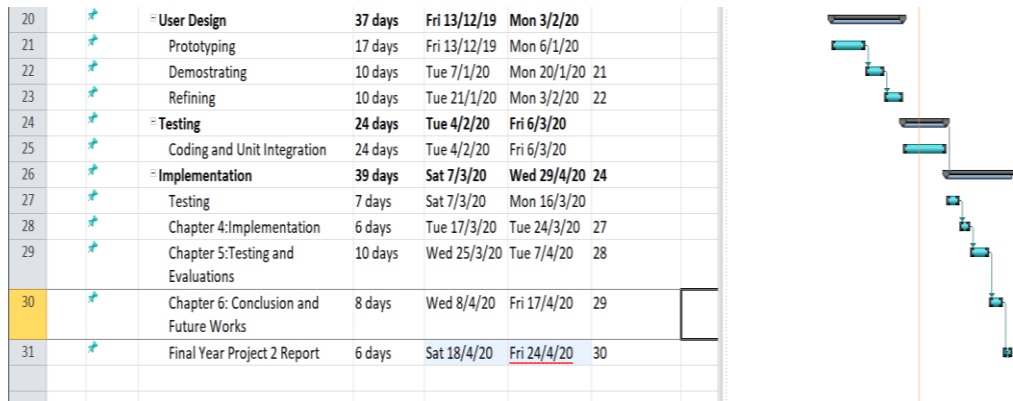


Figure 1.2 The project schedule for FYP2 semester 2 2019/2020

1.7 Expected Outcomes

A working online system that can store data and update the availability of the item's status. Then, we can print a receipt after paying the fees and can print tag for each item. The whole system must be useful to the student as well.

Chapter 2: Literature Review

The purpose of a literature review on this system is to gain an idea of how to create possible new features and technologies by comparing other existing systems for in developing the purposed system. The literature review also helps to identify the pros and cons of the systems. For this purposed idea is for keeping the student's baggage or stuff in the college's storeroom. The inventory system is really useful to the storekeeper, staff including the student. Then, to modify the current inventory system, bag tagging is being proposed to make the existing system more reliable. The comparison for existing systems in this chapter is more highlighted on the tagging method because the inventory system is too command and many students had compared to the system. So, these existing systems are more about the bag tagging procedures. Plus, the main objectives of these existing systems are the same which is to keep the baggage safely in one location. Similar to the system used in the airport, to keep the baggage in the cargo-passenger need to do a few steps. 3 types of resources can be discussed to compare between the existing system and the e-College Property. These three are from airline web from different countries that implement a different way for a luggage tag. The data presentation system that has been used for comparison (bag tagging) which are:

- Air Asia Airlines
- Incheon International Airport
- Avianca Airlines