

Software Requirement Specifications

LOST AND FOUND WEBSITE

LOST AND FOUND WEBSITE FOR INFORMATICS
THAT REALLY NEED ITEMS TO GET BACK

For :


Analaysis and Design of Information Systems

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1 Introduction

1.1 Purpose

This document contains the Software Requirements Specification (SKPL) or Software Requirement Specification (SRS) for the Lost and Found System web. The purpose of writing this document is to provide an explanation of the results of the software to be built either in the form of a general overview as well as detailed and thorough explanations.

This document will be used as reference material in the process of development and evaluation materials during the process of development perangkat lunak maupun diakhir pengembangannya. With the document is expected SKPL software development will be directed and focused and do not give rise to ambiguity, especially for website developers lost and found.

1.2 Scope

Department of Information Engineering ITS, which is a software in the form of a desktop information system used to facilitate the search for the missing items in the Technical Information ITS. The built system can do the following things:

- 1). Collect information missing items and artifacts that exist in Information Engineering ITS
 - 2). Being media reporting missing items and artifacts in Information Engineering ITS
- With a system of reporting and finding lost items in the Technical Information ITS is expected that students, faculty and employees can more easily find out info and finding lost items quickly and can perform reporting and finding lost items.

1.3 Definitions, acronyms, and abbreviation

Here is a list of definitions and key terms used in this document SKPL:

- o SRS : *Software Requirements Specification*, atau
- SKPL : Spesifikasi Kebutuhan Perangkat Lunak
Documents containing the results of the analysis of software requirements specification.
- IEEE : *Institute of Electrical and Electronics Engineering*
The international standard for the development and design of products.
- o TBD : *To Be Defined*
- o LAN : Local Area Network
- o Asada

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1.4 Rule naming and numbering

Writing this SKPL document using a variety of naming and numbering rules are different for certain parts. Naming and numbering used by it / The sections are as listed in Table 1 below.

Table 1. Rule naming and Numbering

Part	Rule Naming/Numbering
Image	Image XX , rule for image in this document, e.g Image 1
Table	Table XX, rule for table in this document, e.g Table 1

1.5 References

The documents used as a reference in the SRS is as follows:

- 1) Dokumen *Software Requirement Specification (SRS)* – IEEE tahun 1999 oleh Karl E. Wiegers.
- 2) Panduan Penggunaan dan Pengisian Spesifikasi Perangkat Lunak (SKPL), Jurusan Teknik Informatika, Institut Teknologi Sepuluh November.
- 3) Panduan Penggunaan dan Pengisian Spesifikasi Perangkat Lunak (SKPL), Jurusan Teknik Informatika, Institut Teknologi Bandung.

1.6 Overview Document

This document outlines consists of three chapters with the following details:

- Chapter 1 Introduction, an introduction to this SKPL document that contains the purpose of writing the document, the scope of the problem, also contains definitions and terms used as well as a general description of the document which is a summary document SKPL.
- Chapter 2 Description Global Software, define the perspective of software products as well as assumptions and dependencies that are used in web development lost and found.
- Chapter 3 Detailed Description of Requirement, describing the special needs of the web lost and found, which include the need for external interfaces, functionality requirements, performance requirements, design constraints, attributes of software systems, and other needs of the web lost and found

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2 General Description Software

2.1 General Description System

Information systems and finding lost items is a system that captures information and finding lost items in the Technical Information ITS and a media reporting and finding lost items. In this system there are two users connected to this system, the users (faculty, students and employees) and an information center and finding lost items Technical Information ITS (Admin). Users have the right to obtain information about the missing items and findings. The information center and finding lost items Technical Information ITS charge of providing information to the user and control the system. This information system can be accessed by all users who will search the missing items and who wish to report finding items. Sistem perangkat lunak yang dibangun memiliki beberapa bagian utama berdasarkan pengguna, yaitu adalah sebagai berikut :

1) From the user side, the system provides many features for ease of use and faster to access SI lost items and findings, such as a feature to see information missing items and findings, reported missing items and findings, and earn points for every item findings and could redeem it.

2) From the admin side, the system can handle multiple processes and user account settings, such as changing the user's profile information, delete user accounts that are inactive / requests from users. Then, the system can display a list of missing items and the findings and answer questions from users of the website.

2.2 Product Functions

Perangkat Lunak *Lost and Found* ini mempunyai beberapa fungsi utama, antara lain:

1. (SKPL-F1) to register a user account
2. (SKPL-F2) to edit the user profile
3. (SKPL-F3) to report finding items
4. (SKPL-F4) to report lost items
5. (SKPL-F5) to ask for help, in the fom of a question
6. (SKPL-F6) to delete a user account
7. (SKPL-F7) to give a reward

2.3 Characteristics of Users

The characteristics of users form this system is :

No	User Catagory	Task	Access to Application	Ability to be possessed
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1.	<i>Lost and Found Center</i>	Managing Information Systems	Can manage (add, change, and delete) information and finding lost items	1.Can operate a computer 2.Can use internet 3.Can operate web and database
2.	Users	Accessing Information System	Can see and report missing items and finding items	1.Can operate a computer 2.Can use internet

2.4 Restrictions

Lost and found web system development has limitation, as follows :

1. Lost and Found Information System is built using HTML, ASP C #.
2. The interface is only a simple menu display.
3. The limitations of the hardware used, for example, limited memory capacity, storage capacity is limited, and input only in the form of text and numbers, as well as some of the characters. The input data may include spares, quantity, price, address, etc.
4. Software support used is DBMS SQL-Server, Visual Studio 2012, Notepad ++ and Sublime Text 3.

2.5 Operating Environment

Application lost and found web will be functioning with specification :

Platform of operating system : Microsoft Windows

Operating system : Windows Server 2003/XP SP2/Vista/7/8

DBMS : SQL-Server

Kerangka kerja : HTML dan ASP C#

3 General Description Requirement

3.1 External Interface Requirement

3.1.1 User Interface

Lost and Found use graphical user interface (GUI). Users can input via the keyboard and mouse, and is used by the Windows operating system..

3.1.2 Hardware Interface

Lost and Found System running on the server computer. All computers are installed Lost and Found to be interconnected in a LAN.

3.1.3 Software Interface

Lost and Found is a program that will be built using HTML, ASP C #, SQL-Server and will run on WINDOWS Operating System.

3.1.4 Communications Interface

Lost and Found is a system that is connected in the Internet network..

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3.2 Functional Description

3.2.1 Use Case Diagram

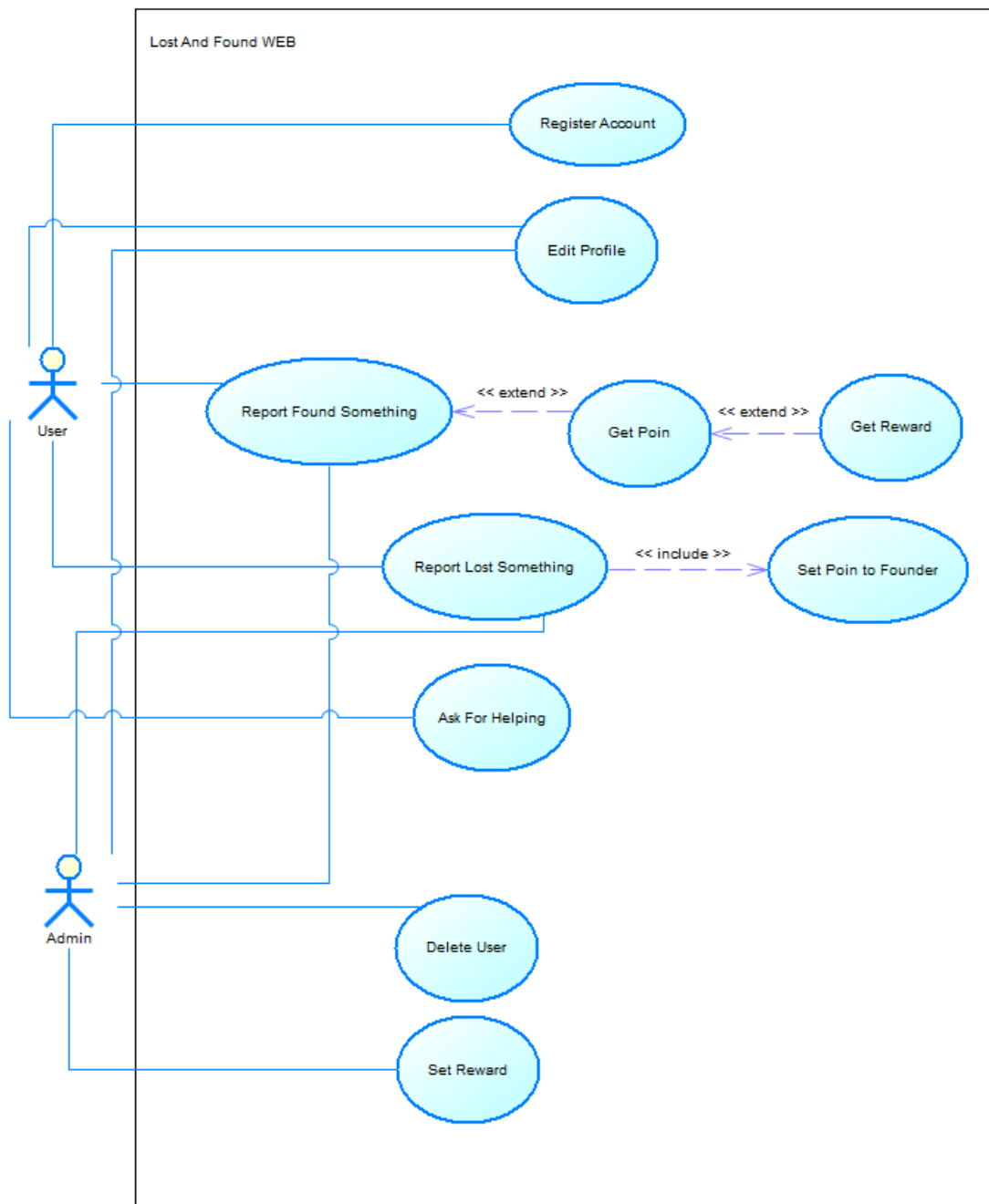


Image 1. Use Case Diagram

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3.2.2 Function 1: Register user account

3.2.2.1 Scenario : Register user account

UC Code	UC 01
UC Name	Register Account
Actor	User
Description	User gets account to access the features that can only be accessed by member
Relationship	Association
Pre-Condition	-
Post Condition	Adding user database to the system and users can use features in web application
Main Flow	
Actor	System
1. User go to registration page 3. User input data in registration form	2. System show registration form 4. System input user data to system database A1. System don't recognize the input from user 5. Finish
Alternate Flow	
A1. System don't recognize the input from user	
Actor	System
A.1.2. User noticed that message	A1.1. System will show error message that input data from user not valid A.1.3. System back to number 2

3.2.2.2 Activity Diagram : register user account

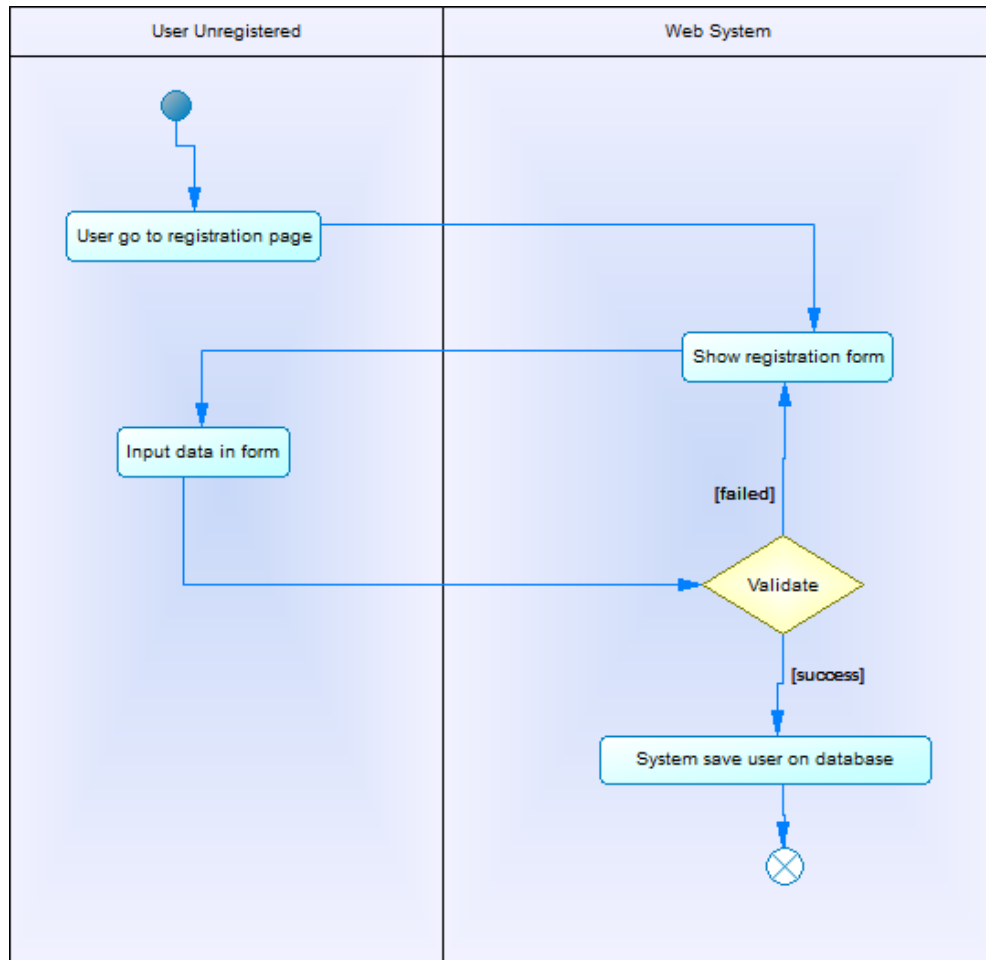


Image 2. Activity Diagram : register user account

3.2.3 Function 2: Edit user profile

3.2.3.1 Scenario : edit user profile

UC Code	UC 02
UC Name	Edit Profile
Actor	User or admin
Description	User / admin who has an account to be able to edit the data account
Relationship	Association
Pre-Condition	1. User must have an account 2. User/admin must be logged in
Post Condition	User/admin can change profile information
Main Flow	
Actor	System
1. User / admin open the data profile 2. User / admin edit/change the data profile	2. The system open the form 3. The system change user database based on changing data by user / admin A1. User / admin doesn't confirm the changing 4. Finish
Alternate Flow	
A1. User doesn't confirm the changing	
Actor	System
A1.2. The user/admin click "OK" to dismiss the alert dialog	A1.1. System shows the alert dialog A1.3. System back to number 2

3.2.3.2 Activity diagram : edit user profile

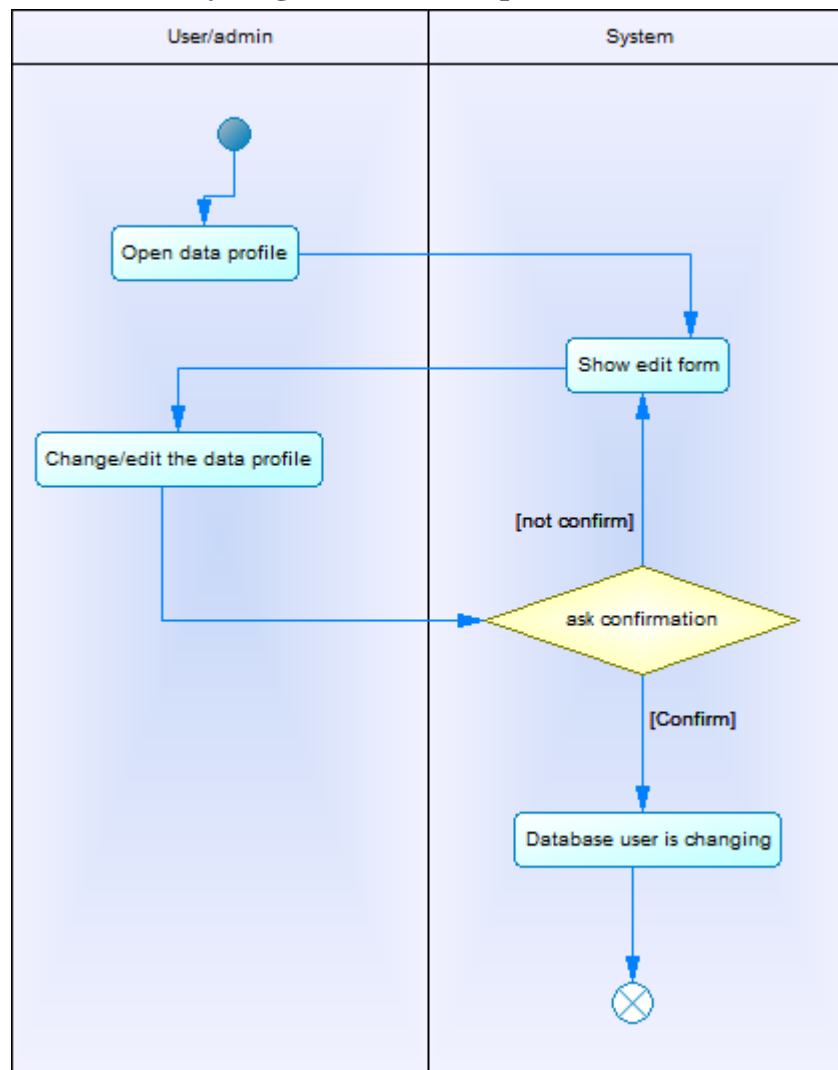


Image 3. Activity Diagram “edit user profile”

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3.2.4 Function 3: Report lost items

3.2.4.1 Scenario : report lost items

UC Code	UC 03
UC Name	Post lost something
Actor	User or admin
Description	User/admin needs to fill in lost items in detail and report the lost items
Relationship	Association
Pre-Condition	1. User must have an account 2. User/admin must be logged in
Post Condition	User/admin can report the found items
Main Flow	
Actor	System
1. User/admin click the reporting menu 2. User/admin set point to founder 4. User/admin fill the form reporting (items name, poster/picture, location, etc)	2. System open point form 3. System open the report form 4. The system save and processes the report A1. The form report is not complete 5. The system displays it to the searching lost items 6. Finish
Alternate Flow	
A1. The form report is not complete	
Actor	System
A1.2. The user /admin click "OK" to dismiss the alert dialog	A1.1. System shows the alert dialog A1.3. System back to number 3

3.2.4.2 Activity diagram : report lost items

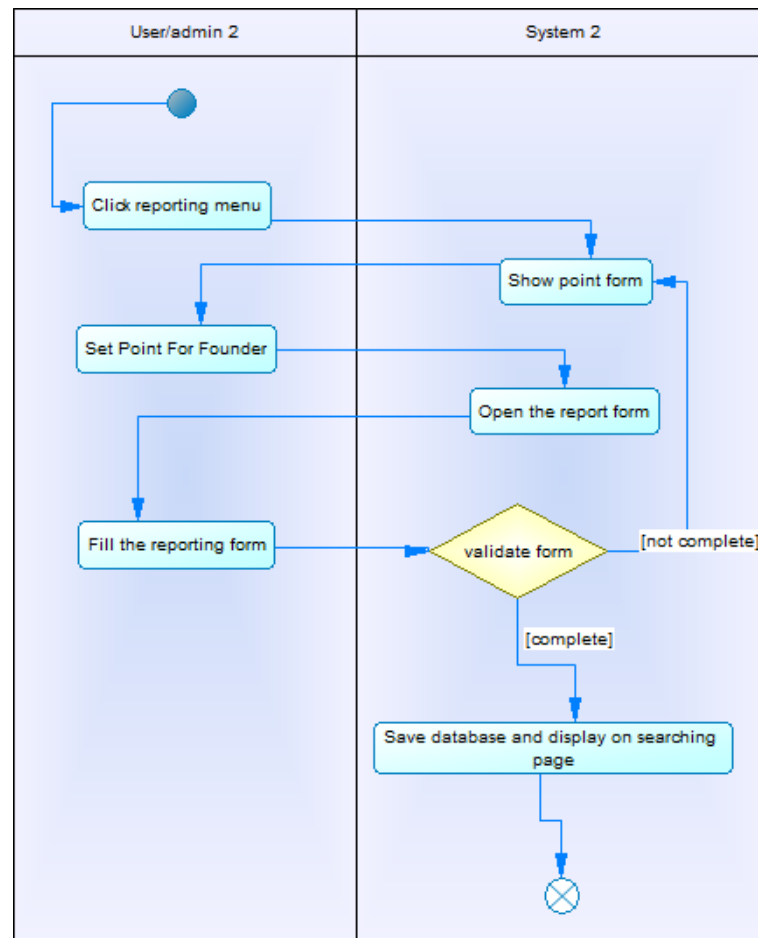


Image 4. Activity diagram “report lost items”

3.2.5 Function 4 : report found items

3.2.5.1 Scenario : report found items

UC Code	UC 04
UC Name	Post Found Something
Actor	User or admin
Description	User/admin needs to fill in found items in detail and report the found items
Relationship	Association
Pre-Condition	1. User must have an account 2. User/admin must be logged in
Post Condition	User/admin can get points
Main Flow	
Actor	System
1. User click the reporting menu 3. User/admin fill the form reporting (items name, poster/picture, location, etc)	2. System opens the form 4. The system processes the report A1.1 The form report is not complete 5. The system displays it to the searching found items 6. Finish
Alternate Flow	
A1.1. The form report is not complete	
Actor	System
A1.2. The user click "OK" to dismiss the alert dialog	A1.1. System shows the alert dialog A1.3. System back to number 2

3.2.5.2 Diagram activity : report found items

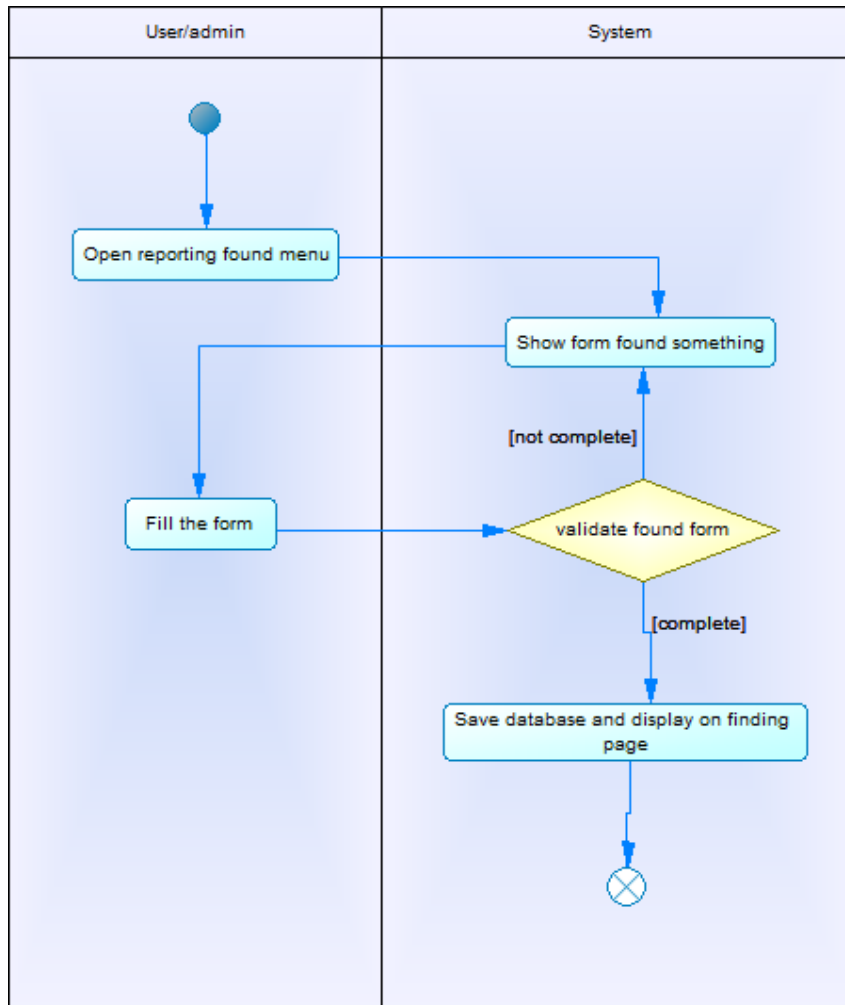


Image 5. Activity diagram “report found items”

3.2.6 Function 5 : get point

3.2.6.1 Scenario : get poin

UC Code	UC 05
UC Name	Get points
Actor	User or admin
Description	User/admin needs to report found items first in detail and will get the points to be redeemed with rewards
Relationship	Extended
Pre-Condition	<ol style="list-style-type: none">1. User must have an account2. User/admin must be logged in3. User/admin must report found item
Post Condition	User/admin can get rewards
Main Flow	
Actor	System
1. User go to claim point page	<ol style="list-style-type: none">2. The system show claim page3. The system processes the report and displays the points4. The system calculates and displays all the user points5. Finish
Alternate Flow	-

3.2.6.2 Activity diagram : get poin

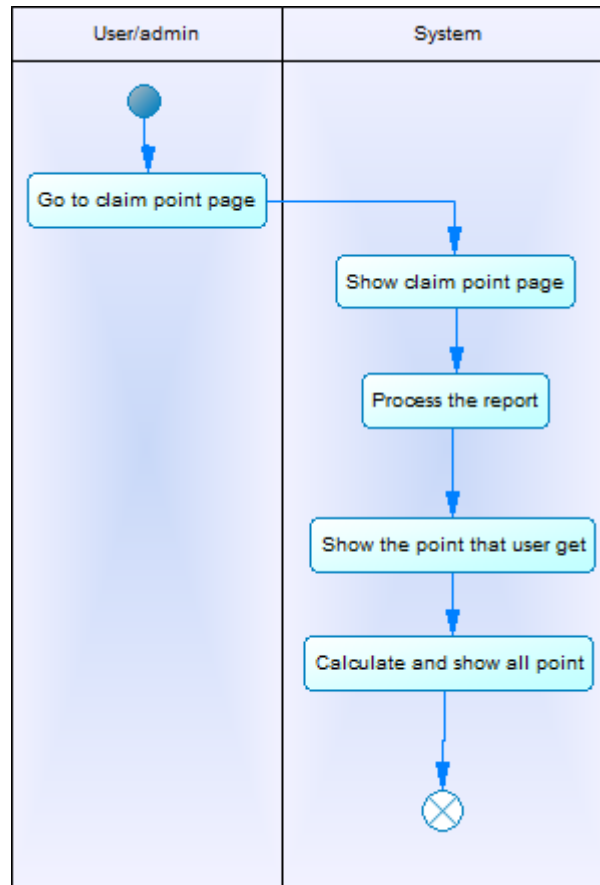


Image 6. Activity diagram “get poin”

3.2.7 Function 6 : get reward

3.2.7.1 Scenario : get reward

UC Code	UC 06
UC Name	Get Reward
Actor	User or admin
Description	User / admin will get rewards by redeem the rewards with the corresponding points
Relationship	Extended
Pre-Condition	1. User must have an account 2. User /admin must be logged in 3. User /admin must report found item 4. User /admin already has points
Post Condition	User / admin get reward(can be anything from the web)
Main Flow	
Actor	System
1. User go to the redeem reward page 3. User choose the rewards	2. The system displays the rewards 4. The system processes the redeem points from user A1. The point is not enough to be claimed 5. The system send email to user 6. Finish
Alternate Flow	
A1. The point is not enough to be claimed	
Actor	System
A1.2. The user click "OK" to dismiss the alert dialog	A1.1. System displays the alert dialog A1.3. System back to number 1

3.2.7.2 Activity diagram : get reward

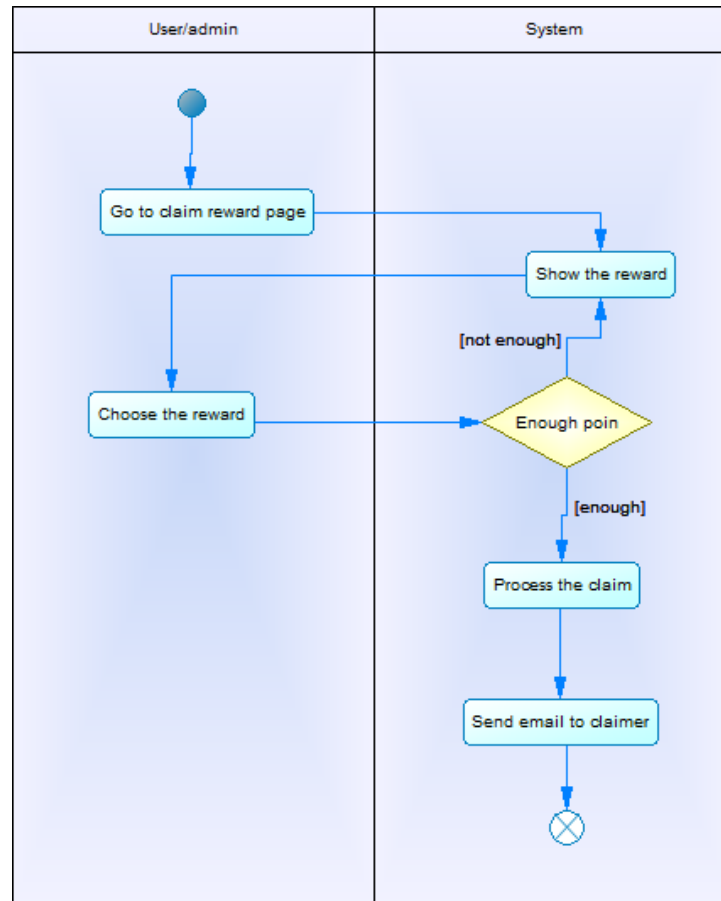


Image 7. Activity diagram “get reward”

3.2.8 Function 7: Give point to founder

3.2.8.1 Scenario : give point to founder

UC Code	UC 07
UC Name	Sets points to founder
Actor	User or admin
Description	User/admin must set the points first before post the lost items
Relationship	Include
Pre-Condition	1. User must have an account 2. User/admin must be logged in 3. User/admin wants to report the lost items
Post Condition	-
Main Flow	
Actor	System
1. User / admin go to set point page 3. User /admin sets the points	2. The system opens the form for set points 3. The system processes it 4. The report of lost items will be sent 5. Finish
Alternate Flow	-

3.2.8.2 Activity diagram : give point to founder

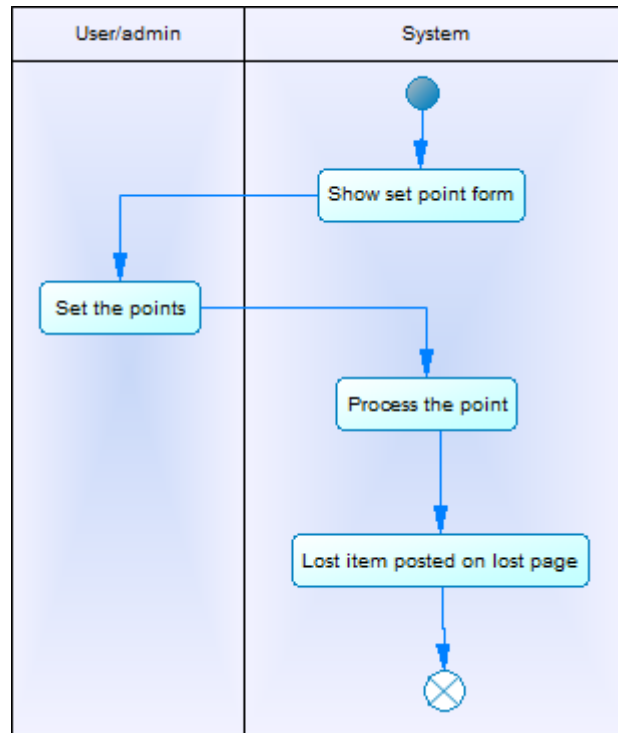


Image 8. Activity diagram “give point to founder”

3.2.9 Function 8 : get help

3.2.9.1 Scenario : get help

UC Code	UC 08
UC Name	Ask For helping
Actor	User
Description	User can ask for help about anything in lost and found website
Relationship	Association
Pre-Condition	1. User must have an account 2. User must be logged in
Post Condition	-
Main Flow	
Actor	System
1. User visit help menu 3. User fill the form	2. The system opens the form 4. The system processes the form A1. The form is not complete 5. The system will send the form to admin 6. Finish
Alternate Flow	
A1. The form is not complete	
Actor	System
A1.2 The user click "OK" to dismiss the alert dialog	A1.1 The system displays the alert dialog A.1.3 System back to number 1

3.2.9.2 Activity diagram : get help

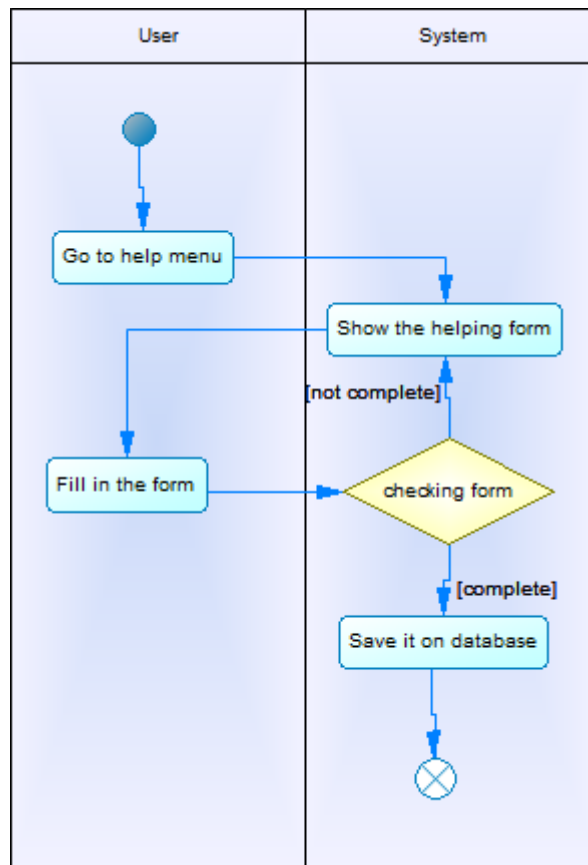


Image 9. Activity diagram “get help”

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3.2.10 Function 9 : Delete user account

3.2.10.1 Scenario : delete user account

UC Code	UC 09
UC Name	Delete User
Actor	Admin
Description	Admin can delete the user account if it needs to be deleted and if there is the request from user
Relationship	Association
Pre-Condition	1. Admin must have an account 2. Admin must be logged in
Post Condition	-
Main Flow	
Actor	System
1. Admin go to delete page 3. Admin choose user to delete it	2. The system show all user and the user who doesn't active for a long time 4. The system process deleting database A1. The System can't find the name in database 5. The system sends the warning to user by email 6. Finish
Alternate Flow	
A1. The system can't find the name in the database	
Actor	System
A1.2 Admin press "OK" button	A1.1 The system shows alert dialog A1.3 The system back to number 1

3.2.10.2 Activity diagram : delete user account

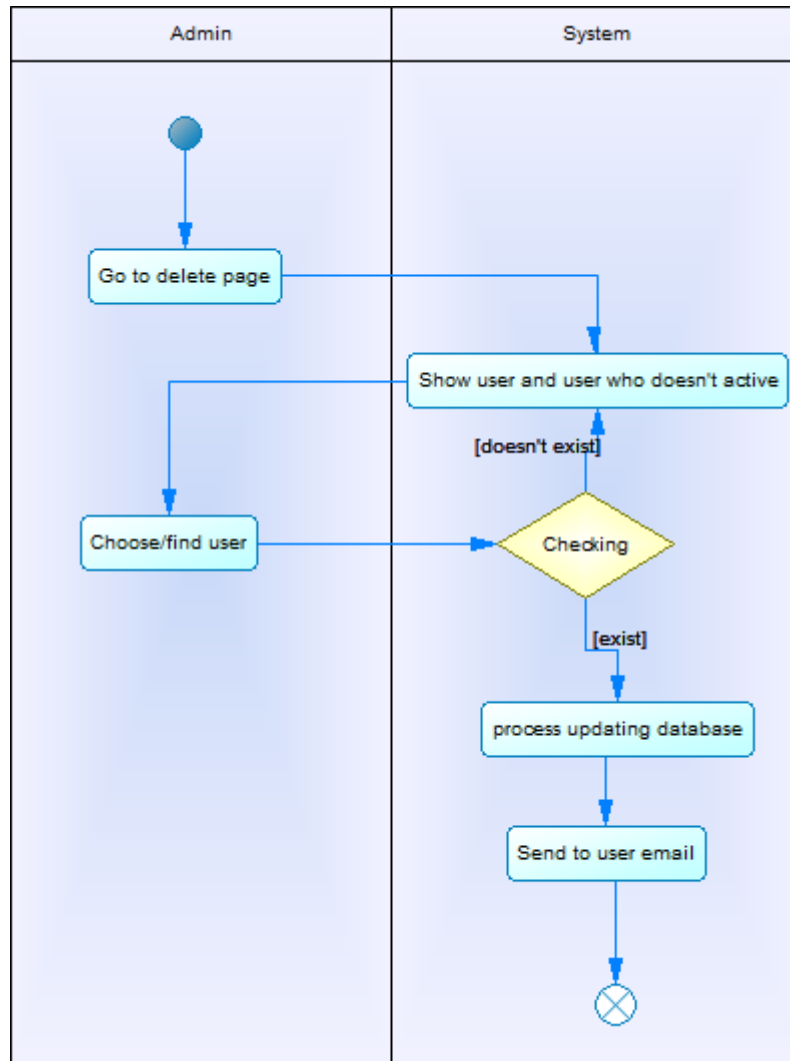


Image 10. Activity diagram “delete user account”

3.2.11 Function 10 : set reward

3.2.11.1 scenario : set reward

UC Code	UC 10
UC Name	Set Reward
Actor	Admin
Description	Admin can set rewards depend on points
Relationship	Association
Pre-Condition	1. Admin must have an account 2. Admin must be logged in
Post Condition	The reward added to reward page
Main Flow	
Actor	System
1. Admin access to reward database 3. Admin set kind of reward on database	2. The open the reward database 4. The system process it and displays it to the website
Alternate Flow	-

3.2.11.2 activity diagram : set reward

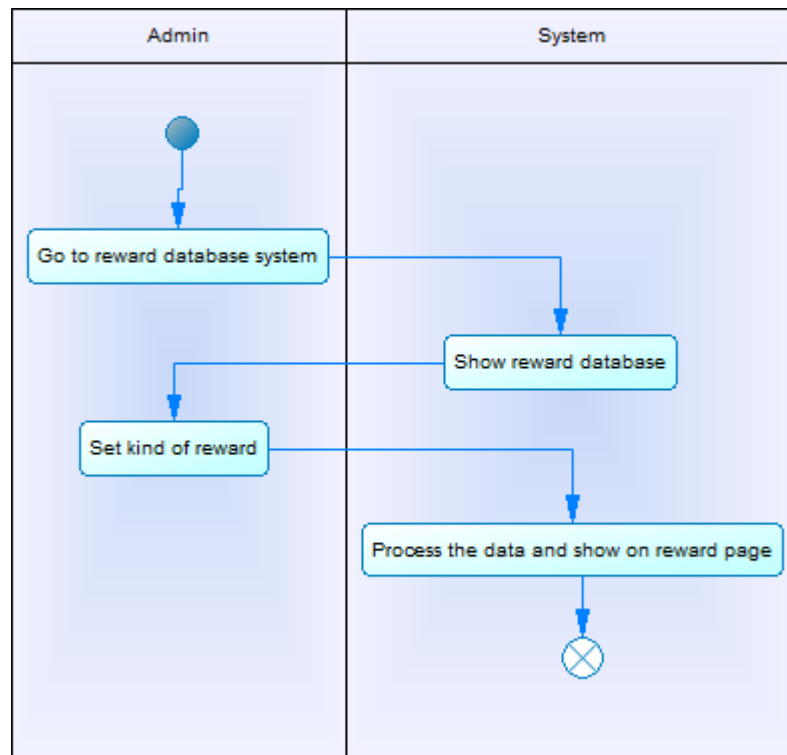


Image 11. Activity diagram “set reward”

1.1 Class Description

1.1.1 Class diagram

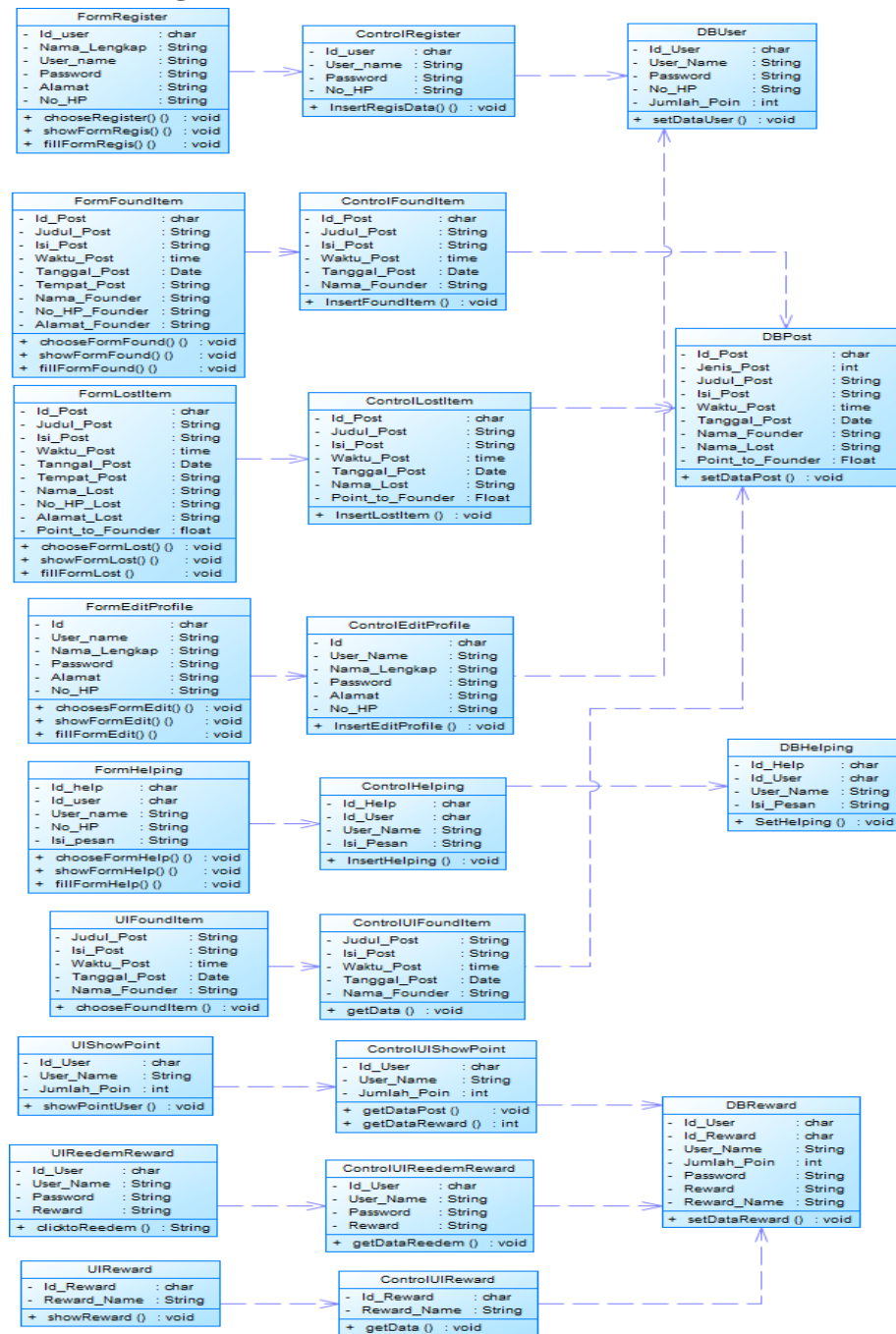


Image 29. Class Diagram