Lost and Found

By

Md. Jayed Hossain Jibon
(151-35-969)

&

Antar Mohit Ridoy
(151-35-938)

A Project submitted in partial fulfillment of the requirement for the degree of Bachelor of Science in Software Engineering

Department of Software Engineering
DAFFODIL INTERNATIONAL UNIVERSITY

Fall – 2018

APPROVAL

This **Project** titled "**Lost & Found**", submitted by **Md Jayed Hossain Jibon, ID:151-35-969 and Antar Mohit Ridoy, ID:151-35-938** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Software Engineering and approved as to its style and contents.

BOARD OF EXAMINERS

Dr. Touhid Bhuiyan
Professor and Head — **Chairman**
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

K. M. Imtiaz-Ud-Din
Assistant Professor — **Internal Examiner 1**
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

Asif Khan Shakir
Lecturer — **Internal Examiner 2**
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

Dr. Md. Nasim Akhtar
Professor — **External Examiner**
Department of Computer Science and Engineering
Faculty of Electrical and Electronic Engineering
Dhaka University of Engineering & Technology, Gazipur

©Daffodil International University

DECLARATION

We hereby declare that, this project has been done by us under the supervisor of **Md. Anwar Hossen , Senior Lecturer Department of SWE at Daffodil International University.** We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

Md: Jayed Hossain Jibon
ID: 151-35-969
Batch: 16th
Department of Software Engineering
Faculty of Science & Information Technology
Daffodil International University

Antor Mohit Ridoy
ID: 151-35-938
Batch: 16th
Department of Software Engineering
Faculty of Science & Information Technology
Daffodil International University

Certified by:

Md. Anwar Hossen

Lecturer (Senior)

Department of Software Engineering

Faculty of Science & Information Technology

©Daffodil International University

ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete this project successfully.

We feel grateful to Md. Anwar Hossen, Lecturer, Department of Software Engineering, Daffodil International University, Dhaka. Deep Knowledge and keen interest of our supervisor in the field of Lost & Found web application influenced us to carry out this project. His endless patience, scholarly guidance and energetic supervision, valuable advice made it possible to complete this project.

We would like to express our heartiest gratitude to Head & Associate Professor Dr. Touhid Bhuiyan, Department of Software Engineering, for his kind help to finish our project and also to other faculty member and the staff of Software Engineering department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

©Daffodil International University

EXECUTIVE SUMMARY

Lost & Found is a web-based system. This system is for the people who lost something and searching for it or found something that he/she want to return. In this system user will get information about all recent lost and found items and persons. Communicating with the person through our system user can get back their lost things or return a lost thing.

It's a smart system to easily find a lost thing without any hassle. A place for find lost things and returning lost things.

Here, User can create post, view all lost and found posts, make comment on a post, update post, delete post and also can win reward by returning a valuable lost thing.

The main purpose of the system is to make a simple platform where people can search their lost thing and return something that he/she found somewhere.

©Daffodil International University

TABLE OF CONTENTS

Chapter 1:Introduction 1
1.1. Project Overview 1
1.2 Purpose of the project 1
1.2.1 The User Business or Background of the Project Effort 1
1.2.2 Benefits & Beneficiaries 1
1.2.3 Goals of the Project 2
1.3 Stakeholders 2
1.4 Proposed System Model 3
1.5 Project Schedule 4
1.5.2 Release Plan 4
Chapter 2: Software Requirement Specification 5
2.1 Functional Requirements 5
2.2 Non Functional Requirements 5
2.3 Data Requirement 6
2.4 Performance Requirements 6
2.4.1 Speed and Latency Requirements 6
2.4.2 Precision or Accuracy Requirements 6
2.4.3 Capacity Requirements 7
2.5 Dependability Requirements 7
2.5.1. Reliability Requirements 7
2.5.2 Availability Requirements 7
2.5.3 Robustness or Fault-Tolerance Requirements 7
2.5.4 Safety-Critical Requirements 8
2.6 Maintainability and Supportability Requirements 8
2.6.1 Maintenance Requirements 8
2.6.2 Supportability Requirements 8
2.6.3. Adaptability Requirements 8
2.6.4. Scalability or Extensibility Requirements 8
2.7 Security requirements 8
2.7.1. Access Requirements 8

©Daffodil International University

2.7.2 Integrity Requirements 9
2.7.3 Privacy Requirements 9
2.7.4 Usability and Human-Interaction Requirements 9
2.8 Look and Feel Requirements 9
2.8.1. Appearance Requirements 9
2.9. Operational and Environmental Requirements 9
2.10 Legal Requirements 9
3.1 Use Case Diagram 10
3.2 Use case Description: 11
3.2.1 Sign up: 11
3.2.2. Login 11
3.2.3 Logout 12
3.2.4 Create lost post 12
3.2.5. Create Found post 13
3.2.6 Verify Post 13
3.2.7. Delete post Module 14
3.2.8 Update Post 15
3.2.9 Search Post 15
3.2.10 Comment on post Module 16
3.3 Activity Diagram (Owner, finder & admin) 17
3.3.1 Activity Diagram (Owner & Finder) 18
3.3.2 Activity Diagram (admin) 19
3.4 Sequence Diagram 20
3.4.1 Sequence diagram for user signup and login 20
3.4.2 Sequence Diagram for user Create Found post and view all Found post 21
3.4.3 Sequence Diagram for user create lost post and View all lost post 22
3.4.4 Sequence Diagram for User Search Found Person 23
3.4.5 Sequence Diagram for search found items 23
3.4.6 Sequence Diagram for user search lost person 24
3.4.7 Sequence Diagram for user search lost item 24
3.4.8 Sequence case Diagram for user comment on a post 25
3.4.9 Sequence Diagram for user logout 25

©Daffodil International University

3.4.10 Sequence Diagram for admin login 26
3.4.11 Sequence Diagram for Admin Logout 26
Chapter 4: System Design Specification 27
4.1 Class Responsibilities Collaboration (CRC) Cards 27
4.1.1 CRC for my user 27
4.1.2 CRC For admin log 27
4.1.3 CRC for found person 27
4.1.4 CRC for Found item 28
4.1.5 CRC for Lost person 28
4.1.6 CRC for Lost item 28
4.2 Data Flow Diagram 29
4.2.1 DFD Level-0 29
4.2.2 DFD Level -1 30
4.3 ER Diagram 31
4.4 Schema Diagram 32
4.5 Development Tools & Technology 33
4.5.1 User Interface Technology 33
4.5.2 Implementation Tools & Platforms 33
Chapter 5: System Testing 34
5.1 Testing Features 34
5.1.1 Features to be tested 34
5.1.2 Features not to be tested 34
5.2 Testing Strategies 35
5.2.1 Test Approach 35
5.2.2 Pass/Fail Criteria 35
5.2.3 Suspension and resumption 35
5.2.4 Testing Schedule 36
5.2.5 Requirement Traceability Matrix 36
5.3 Testing Environment (Hardware/Software) 37
5.4 Test Cases 37
5.4.1 Sign up module 37
5.4.2 Login Module 38

©Daffodil International University

5.4.3 Search module 38
5.4.4 Create post module 38
Chapter 6: User Manual Screenshot 40
6.1 User manual for user: 40
6.1.1 User Home Page 40
6.1.2 User Signup 41
6.1.3 User login 41
6.1.4 User post creation form for person 42
6.1.5 User creation form for item 43
6.1.6 User view found post 44
6.1.7 User view lost post 44
6.1.8 Make comment on a post 45
6.2 User Manual for Admin 46
6.2.1 Admin Login 46
Chapter 7: Project Summery 47
7.1 GitHub link: 47
7.2 Limitations 47
7.3 Obstacles & Achievements 47
7.4 Conclusion 48
7.5 Future Scope 48
Appendix 49

©Daffodil International University

LIST OF FIGURES

Figure 1.1: Agile model 3
Figure 1.2: Gantt chart 4
Figure 3.3: Use Case 10
Figure 3.4: Activity Diagram (user & admin) 17
Figure 3.5: Activity Diagram(user) 18
Figure 3.6: Activity Diagram (admin) 19
Figure 3.7: Sequence diagram for user signup and login (User) 20
Figure 3.8: Sequence Diagram create found post and view (User) 21
Figure 3.9: Sequence Diagram for create lost post and View all lost post (User) 22
Figure 3.10: Sequence Diagram for search Found Person (User) 23
Figure 3.11: Sequence Diagram for search Found Items (User) 23
Figure 3.12: Sequence Diagram for search lost Person (User) 24
Figure 3.13: Sequence Diagram for search lost items (User) 24
Figure 3.14: Sequence case Diagram for comment on a post (User) 25
Figure 3.15: Sequence Diagram for logout (User) 25
Figure 3.16: Sequence Diagram for login (admin) 26
Figure 3.17: Sequence Diagram for Logout (admin) 26
Figure 3.18: DFD Level - 0 29
Figure 3.19: DFD Level - 1 30
Figure 3.20: ER Diagram 31
Figure 3.21: Schema Diagram 32
Figure 4.22: User Homepage 40
Figure 4.23: User Signup 41
Figure 4.24: User Login 41
Figure 4.25: User post creation form for person 42
Figure 4.26: User creation form for item 43
Figure 4.27: User view found post 44
Figure 4.28: User view lost post 44

©Daffodil International University

Figure 4.29: Make comment on a post 45
Figure 4.30: Admin Login 46

©Daffodil International University

LIST OF TABLES

Table 2.1: Functional Requirements 5
Table 2.2: Non-Functional Requirements 5
Table 2.3: Data Requirements 6
Table 2.4: Speed Latency Requirements 6
Table 2.5: Precision or Accuracy Requirements 6
Table 2.6: Capacity Requirements 7
Table 2.7: Reliability Requirements 7
Table 2.8: Availability Requirements 7
Table 2.9: Robustness or Fault-Tolerance Requirements 7
Table 2.10: Maintenance Requirements 8
Table 2.11: Supportability Requirements 8
Table 2.12: Access Requirements 8
Table 2.13: Integrity Requirements 9
Table 2.14: Privacy Requirements 9
Table 2.15: Appearance Requirements 9
Table 3.16: Sign up 11
Table 3.17: Login 11
Table 3.18: Logout 12
Table 3.19: Create lost post 12
Table 3.20: Create Found post 13
Table 3.21: Verify post 14
Table 3.22: Delete post 14
Table 3.23: Update post 15
Table 3.24: Search post 15
Table 3.25: Comment on post 16
Table 4.26: CRC for my user 27
Table 4.27: CRC for Admin login 27
Table 4.28.: CRC for found post 27
Table 4.29.: CRC for Found item 28

©Daffodil International University

Table 4.30: CRC for Lost person 28
Table 4.31: CRC for Lost item 28
Table 4.32: User Interface Technology 33
Table 4.33: Implementation Tools & Platforms 33
Table 5.34: Features to be tested 34
Table 5.35: Features not to be tested 34
Table 5.36: Testing Schedule 36
Table 5.37: Traceability Matrix 36
Table 5.38: Sign up 37
Table 5.39: Login 38
Table 5.40: Search 38
Table 5.41: Create post 38
Table 6.42: Obstacles & Achievements 47

©Daffodil International University

CHAPTER 1
INTRODUCTION

1.1. Project Overview

Lost & Found is basically a web application which is currently built for online platform. The system is developed for the people who lost something or found something. The lost thing or found thing can be even a person. If something gets missing the owner post on our application or if anyone found something and went to return post on our application. Their communication with each other will happen through our application. User will gain reward by returning a lost thing and also make comments under a post.

It's a smart solution to search any lost thing or return any found thing. User can also search through keyword, location or category. This is an easy, authentic and fastest way to get lost back and return found. Getting things hand to hand without any hassle.

So. Our application is a commutation bridge between the person who lost something searching for that and the person who found something and want to return that to the real owner.

1.2 Purpose of the project

1.2.1 The User Business or Background of the Project Effort

Lost & Found web application gives user the facility to get any lost thing or return any found thing by just making post on our application. By using our application user can search thing by location or category. User can get reward by returning any lost thing. User can see how many lost posts and found posts are there in our application.

1.2.2 Benefits & Beneficiaries

This proposed system intends to return any lost any lost thing. Generally, user just register once and anytime he/she can login and create lost or found post. User get lost thing hand to hand through our service.

This main advantage is user can get lost thing by just searching it on our website. User can search multiple things on our website. User can create multiple post in our application. User can create found and lost both.

Using lost & found web application will be beneficial for almost every individual person of our country. For keeping the process simple we have listed some of beneficiaries and benefits of this project are given below.

Beneficiaries:

1. People who lost something and searching for.
2. People who found something and want to return.

Benefits:

1. User can easily create lost or found post which will help him as an announcement.
2. Application will show latest post automatically on the top.
3. User will get reward.

1.2.3 Goals of the Project

Lost & Found web application is aimed at just collecting a lost thing from the founder and return it to the owner. User don't have to physically search that or go to police to for making GD. Just create a post and check regularly relevant posts of our application.

1.3 Stakeholders

The Owner

The person who lost something and make post on our application to get that thing back. He is real owner.

The Founder

The holy hearted person who found something and want to return the thing back to genuine owner of that thing.

System admins

The persons who are maintaining the whole system or application.

Priority assigned to Users

- The Owner – HIGH Priority
- The Founder – HIGH Priority.

1.4 Proposed System Model

A process model is an abstract representation of a software process and each model represents a process of a particular perspective which provides only partial information about that process.

Our propose system is designed using Agile model. Agile model work with iterations. Each iteration lasts for 2 to 3 weeks. It's a incremental process of software development.

Agile model can change and response with the change of requirements, technology and people.

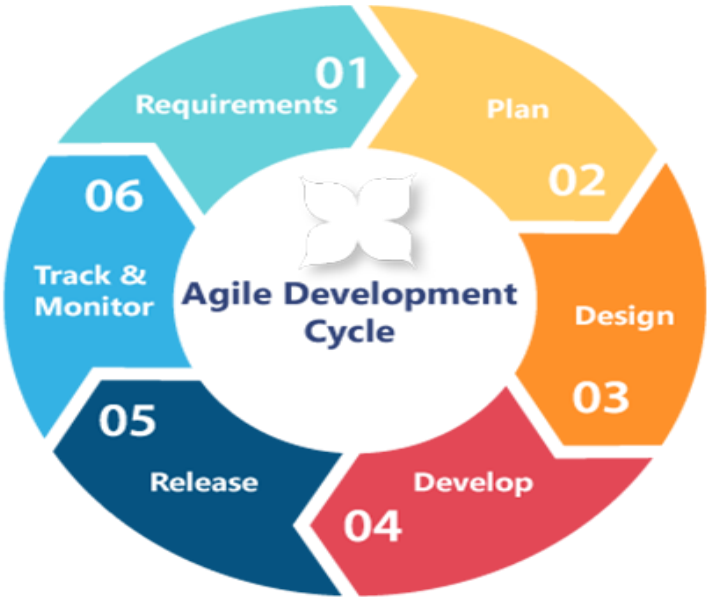

Figure 1.1: Agile model

©Daffodil International University

1.5 Project Schedule

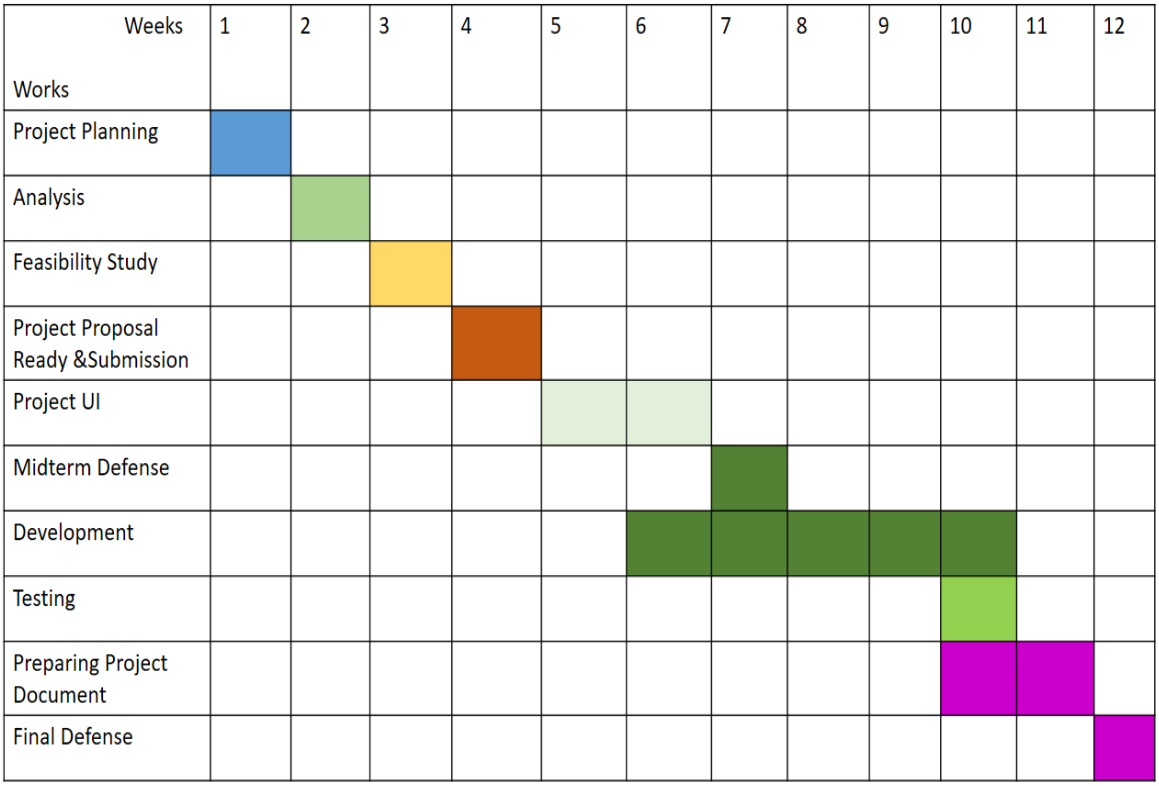

Figure 1.2: Gantt chart

1.5.2 Release Plan

Release 1: beta version 1.0.0 on 30/11/2018
Release 2: beta version 2.0.0 on 2/12/2018
Release 3: beta version 3.0.0 on 5/12/2018

©Daffodil International University

CHAPTER 2

SOFTWARE REQUIREMENT SPECIFICATION

2.1 Functional Requirements

Functional Requirements are given in table 2.1

Table 2.1: Functional Requirements

ID	Requirement	Description	Priority
01	Create Lost Post	User can create post if he/she lost something	H
02	Create Found Post	User can create post if he/she found something.	H
03	Edit post	User can edit post after creating a post.	L
04	Delete Post	User can delete post whenever he wants.	L
05	Comment on Post	User can comment on any lost or found post.	L

2.2 Non-Functional Requirements

Non-Functional Requirements are given in table 2.2

Table 2.2: Non-Functional Requirements

ID	Requirement	Description	Priority
01	Search	Search Lost posts and found posts.	H
02	Sign Up	People can get services from application by signing up once a time.	H
03	Login	User can login after signing up	H
04	Logout	A login user can logout whenever he/she wants.	H

©Daffodil International University

2.3 Data Requirement

Data Requirements are given 2.3

Table 2.3: Data Requirements

No.	Description	Priority
1.	User have search for valid keywords.	H
2.	User have to enter valid information on the forms otherwise system will show an error message.	M
3.	User must have to sign up before login. Login data will be matched with signup data if it does not match user will get error message.	M
4.	All field on form must have to be fill up otherwise user will get error message.	H

2.4 Performance Requirements

2.4.1 Speed and Latency Requirements

Speed and Latency Requirements are given 2.4

Table 2.4: Speed Latency Requirements

No.	Description	Priority
1.	The system should load the data from server within 2 seconds.	H
2.	The system must have a high speed of manipulation data and reply to the user request.	H

2.4.2 Precision or Accuracy Requirements

Precision or Accuracy Requirements are given in table 2.5

Table 2.5: Precision or Accuracy Requirements

No.	Description	Priority
1	The input data should be validated when User or admin provide data to the system	M
2	All data should be in place accurately where it is associated	M

©Daffodil International University

2.4.3 Capacity Requirements

Capacity Requirements are given in Table 2.6

Table 2.6: Capacity Requirements

No.	Description	Priority
1.	The application size must have to be less than 200 Mb	L
2.	The remote server database size must be able to load the system data.	L

2.5 Dependability Requirements

2.5.1. Reliability Requirements

Reliability Requirements are given in table 2.7

Table 2.7: Reliability Requirements

No.	Description	Priority
1.	Sign up, create post, comment must depend on insertion of new data in the server.	H
2.	System must send the user data to the server	H

2.5.2 Availability Requirements

Availability Requirements are given in table 2.8

Table 2.8: Availability Requirements

No.	Description	Priority
1.	The system should work 24 hours a day	H
2.	The system should provide the desired data to the user on time	H

2.5.3 Robustness or Fault-Tolerance Requirements

Robustness or Fault-Tolerance Requirements are given in table 2.9

Table 2.9**:** Robustness or Fault-Tolerance Requirements

No.	Description	Priority
4.	If the system has been crashed, it should not be more than an hour.	M
7.	Supports all screen size.	M

2.5.4 Safety-Critical Requirements

No visible Safety-Critical requirements

2.6 Maintainability and Supportability Requirements

2.6.1 Maintenance Requirements

Maintenance Requirements are given in table 2.10

Table 2.10: Maintenance Requirements

No.	Description	Priority
1.	The system maintenance should be quick	M

2.6.2 Supportability Requirements

Supportability Requirements are given in table 2.11

Table 2.11: Supportability Requirements

No.	Description	Priority
1.	The system should support in all type of android and computer device.	M
2.	Supports all screen size.	M

2.6.3. Adaptability Requirements

No visible adaptability requirements

2.6.4. Scalability or Extensibility Requirements

No visible adaptability requirements

2.7 Security requirements

2.7.1. Access Requirements

Access Requirements are given in table 2.12

Table 2.12: Access Requirements

No.	Description	Priority
5.	Only SEQURITY Administrator will be able to enter the system to make maintenance.	M
6.	The Application user access boundary should be within the application	M

2.7.2 Integrity Requirements

Integrity Requirements in given table 2.13

Table 2.13: Integrity Requirements

No.	Description	Priority
1.	The data of the system must not be altered without any permission	M
2.	The data integrity should be maintained	M

2.7.3 Privacy Requirements

Privacy Requirements are given in table 2.14

Table 2.14: Privacy Requirements

No.	Description	Priority
1.	The user data must not be visible for public	M
2.	The user data should not contain any private issues.	M

2.7.4 Usability and Human-Interaction Requirements

No Usability and Human-Interaction Requirement

2.8 Look and Feel Requirements

2.8.1. Appearance Requirements

Appearance Requirements are given in table 2.15

Table 2.15: Appearance Requirements

No.	Description	Priority
1.	The user interface must be attractive	D
2.	The user interface must be user friendly	D
3.	The user interface must be user interactive.	D

2.9. Operational and Environmental Requirements

No Operational and Environmental Requirements

2.10 Legal Requirements

No Legal Requirements

CHAPTER 3

SYSTEM ANALYSIS

3.1 Use Case Diagram

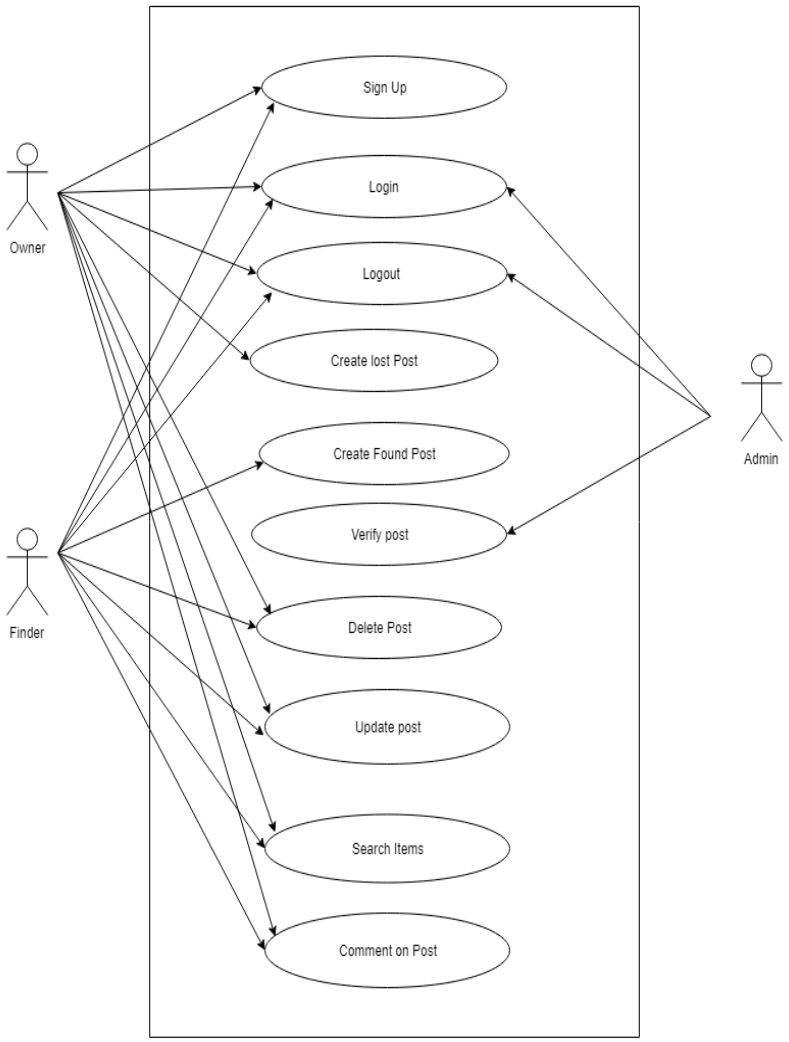

Figure 3.3: Use Case

©Daffodil International University

3.2 Use case Description:

3.2.1 Sign up:

User have to complete sign up by providing basic information's before login. In sign, up form all field must have to fill up and information's must have to be accurate. Sign up details given in table 3.16

Table 3.16: Sign up

Use Case Name:	Sign up module
Scenario:	User have to sign up to login.
Brief Description:	Without signup user cannot login and access main features of the system.
Actor:	Finder and owner
Precondition:	Must go into sign up page.
Post condition:	User must have provided all necessary information in the sign-up form.
Main-Success Scenario	1.Server must have to be working. 2. User have to properly fill the signup form. 3. Completing sign up user get confirmation message.
Scenario Extensions	1.Have fill all fields in the signup form. 2.Have to provide proper information otherwise signup can't be complete.

3.2.2. Login

User have to login to obtain all internal features. For login user have to provide user-name and password. Login details given in table 3.17

Table 3.17: Login

Use Case Name:	User have to login to access main features of the system.
Scenario:	In the system if user want to make post, comment, update and delete post he /she have to login.
Brief Description:	Once a user login he/she can create post, view his post, update and delete his/her post. All this feature is accessible for the login users.
Actor:	Finder, owner, admin

Precondition:	Must have to sign up.
Post condition:	User have provided right user name and password.
Main Success Scenario	1.Server must have to be working. 2.. User name and password must be matched. 3. After login user get confirmation message.
Scenario Extensions	1. Have fill all fields in the signup form. 2.Have provide proper information otherwise signup can't be complete.

3.2.3 Logout

User can logout after successfully login. Logout is only available for user who already logged in into the system. Logout details given in table 3.18

Table 3.18: Logout

Use Case Name:	User can logout after login.
Scenario:	If user want get out of the system, he/she can logout.
Brief Description:	After using the internal features of the system user can logout to make system information safe.
Actor:	Finder, owner, admin
Precondition:	Must have to logged in.
Post condition:	Logout should be confirmed.
Main Success Scenario	1. Get logout confirmation message
Scenario Extensions	1. User have to sign up and login if login not confirmed log out cannot be done.

3.2.4 Create lost post

User can create lost post after login once. Create lost post details given in table 3.19

Table 3.19: Create lost post

Use Case Name:	User can create lost post after login.
Scenario:	If user want to make a lost post, he can make it.

Brief Description:	After login user can create a lost post by simply go to post creation section and select lost post.
Actor:	Owner
Precondition:	Must have to logged in.
Post condition:	Must fill all fields in the form.
Main Success Scenario	1. Get post creation successful message.
Scenario Extensions	1.if form is properly not filled up post creation cannot be done.

3.2.5. Create Found post

User can create found post after completely login. Create Found post details given in table 3.20

Table 3.20: Create Found post

Use Case Name:	User can create found post after login.
Scenario:	If user found something, he can make a found post.
Brief Description:	After login user can create found post in by providing all information in the form.
Actor:	Finder
Precondition:	Must have to logged in.
Post condition:	Must fill all fields in the form.
Main Success Scenario	1. Get post creation confirmation message.
Scenario Extensions	1. Without valid information post creation cannot be done.

3.2.6 Verify Post

Admin will verify any lost post or found post that has been created by user. After making a post by the user admin will check all information's. Verify post details given in table 3.21

©Daffodil International University

Table 3.21: Verify post

Use Case Name:	Admin can verify posts created by user.
Scenario:	After a lost or found post creation admin will check all the information's.
Brief Description:	When user create posts, he can make mistakes or provide wring information admin will check all posts.
Actor:	Admin
Precondition:	Admin have to login into the system.
Post condition:	Posts must have to be available.
Main Success Scenario	1. View only valid posts.
Scenario Extensions	1. If posts are not available admin cannot verify anything.

3.2.7. Delete post

User can delete previous created posts. Delete post details given in table 3.22

Table 3.22: Delete post

Use Case Name:	User can delete posts that he created before.
Scenario:	Whenever user don't need any post, he can delete that post.
Brief Description:	After getting back a lost thing or found that thing user don't need that post he created in the system so he can delete that post.
Actor:	owner, Finder, Admin
Precondition:	1.Have to logged in
Post condition:	1.Must have to create a post.
Main Success Scenario	1. Never see the deleted post
Scenario Extensions	1.If user don't create any post by own, he cannot delete post.

©Daffodil International University

3.2.8 Update Post

User can update a post after creating that post. Update post details given in table 3.23

Table 3.23: Update post

Use Case Name:	User can update previous post.
Scenario:	If user thing he need to change information of a post he created before he can update the post.
Brief Description:	After getting back a lost thing or found that thing user don't need that post he created in the system so he can delete that post.
Actor:	Owner, finder, admin
Precondition:	1.Have to login.
Post condition:	1.Must have to create a post.
Main Success Scenario	1. view Updated post.
Scenario Extensions	1. User can update only own post.

3.2.9 Search Post

User can search post in lost and found section separately. Search post details given in table 3.24

Table 3.24: Search post

Use Case Name:	User can search found and lost posts
Scenario:	If user want information of a particular thing he can search with similar words.
Brief Description:	There are so many posts in the system sometimes it's hard to find a particular post so user can search and easily find it.
Actor:	Owner, Finder
Precondition:	1.Have to search proper keywords.
Post condition:	1.Post have to be available.
Main Success Scenario	1. Find easily specific information
Scenario Extensions	1.If posts are not available search cannot be done.

3.2.10 Comment on post Module

User can comment on a post. Comment on post details given in table 3.25

Table 3.25: Comment on post

Use Case Name:	Commenting on a post.
Scenario:	If user want to comment on a post he can.
Brief Description:	After getting back a lost thing or found that thing user don't need that post he created in the system so he can delete that post.
Actor:	Owner, Finder
Precondition:	1.Have to logged in
Post condition:	1.Post have to be available.
Main Success Scenario	1. instant comment and reply on a post.
Scenario Extensions	1.If user not logged in comments cannot be done.

©Daffodil International University

3.3 Activity Diagram (Owner, finder & admin)

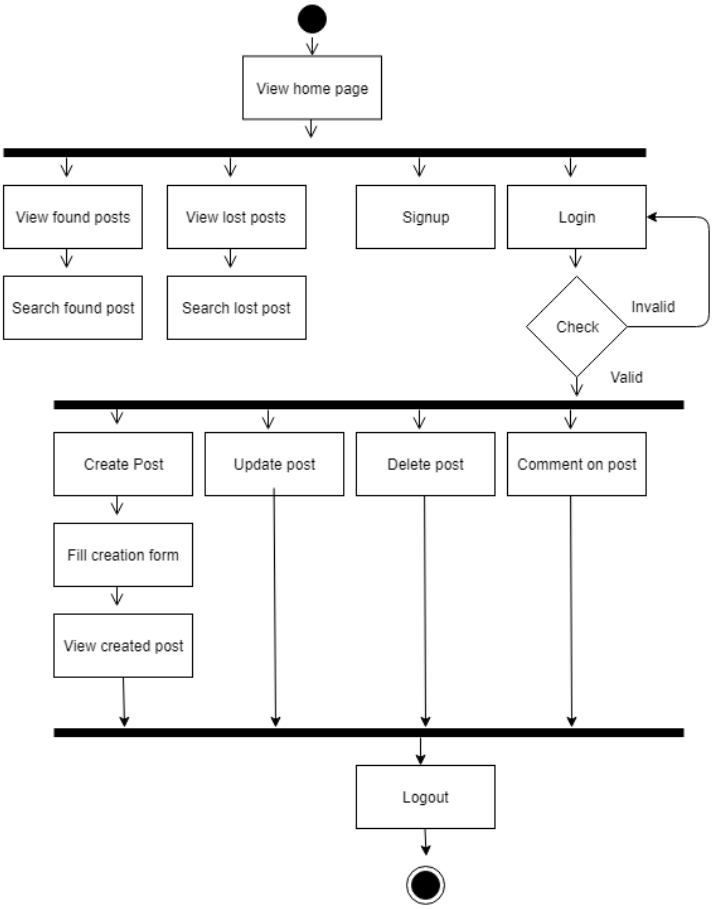

Figure 3.4: Activity Diagram (user & admin)

©Daffodil International University

3.3.1 Activity Diagram (Owner & Finder)

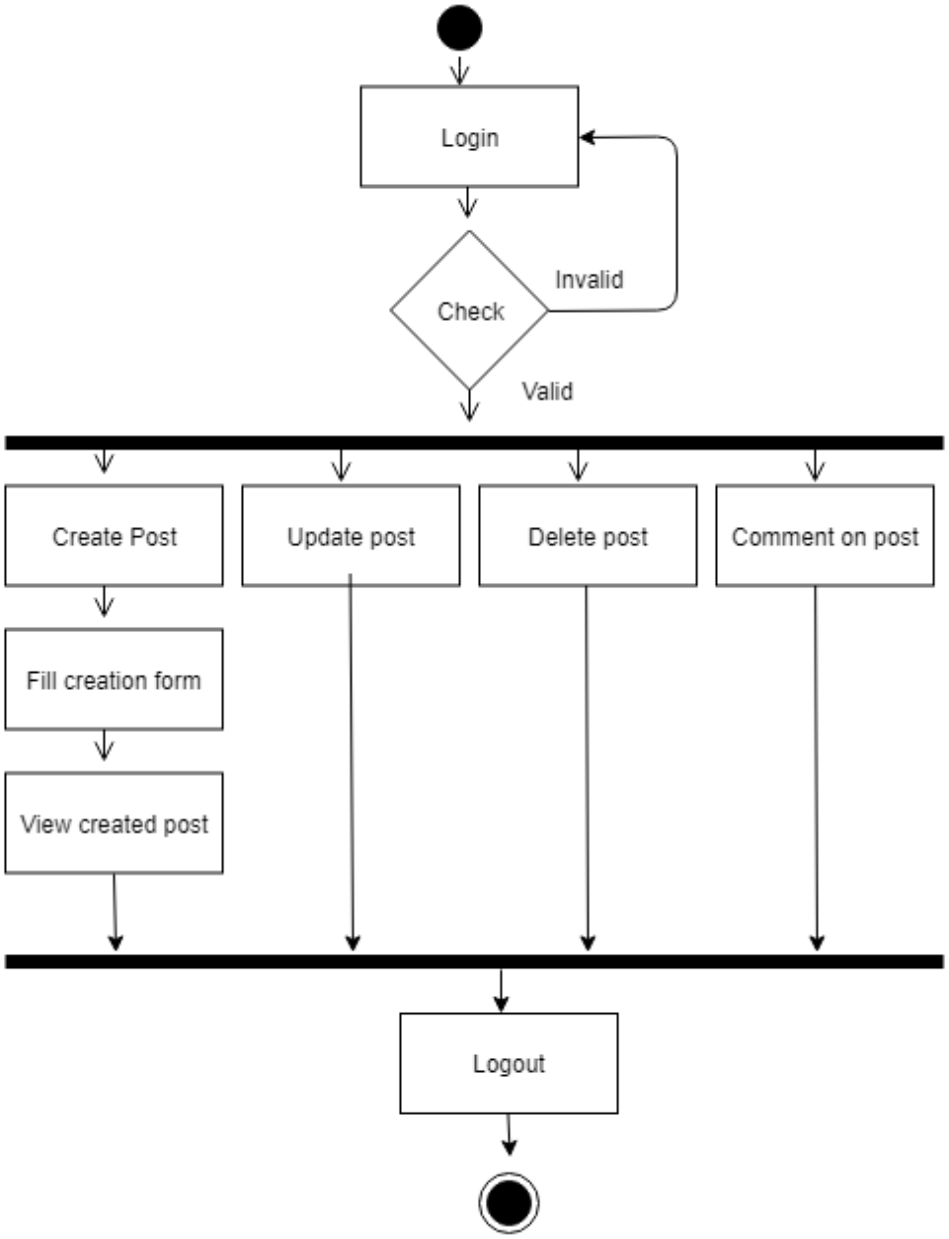

Figure 3.5: Activity Diagram(user)

©Daffodil International University

3.3.2 Activity Diagram (admin)

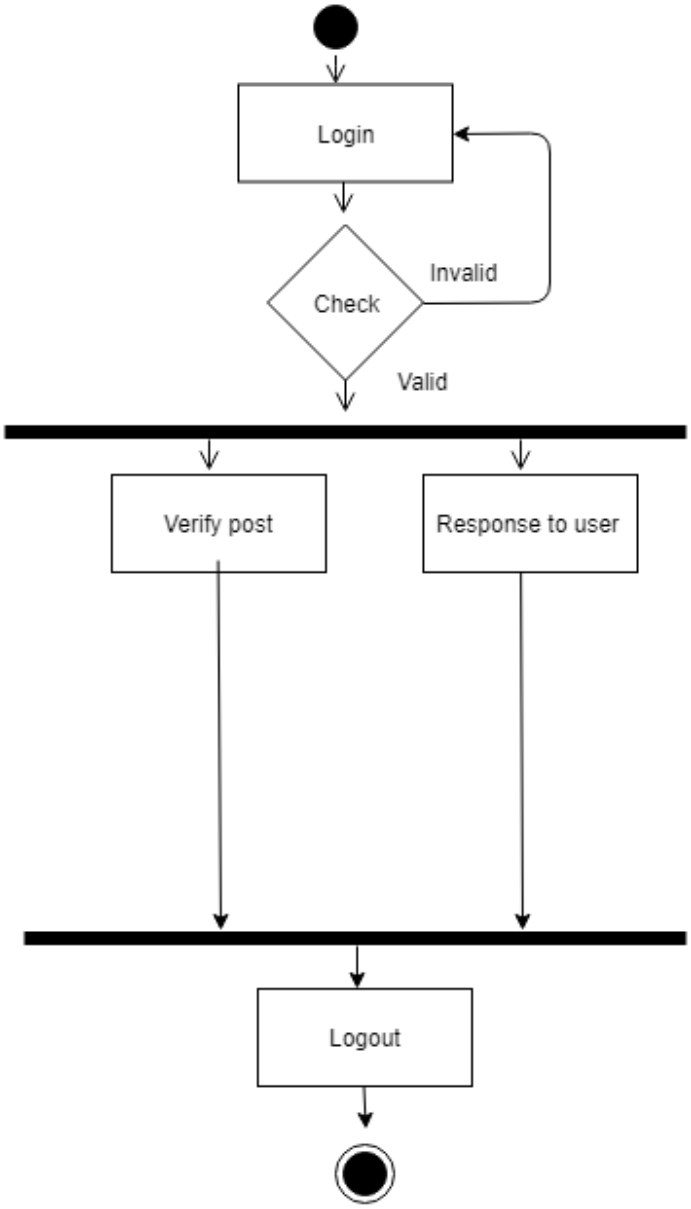

Figure 3.6: Activity Diagram (admin)

©Daffodil International University

3.4 Sequence Diagram

3.4.1 Sequence diagram for user signup and login

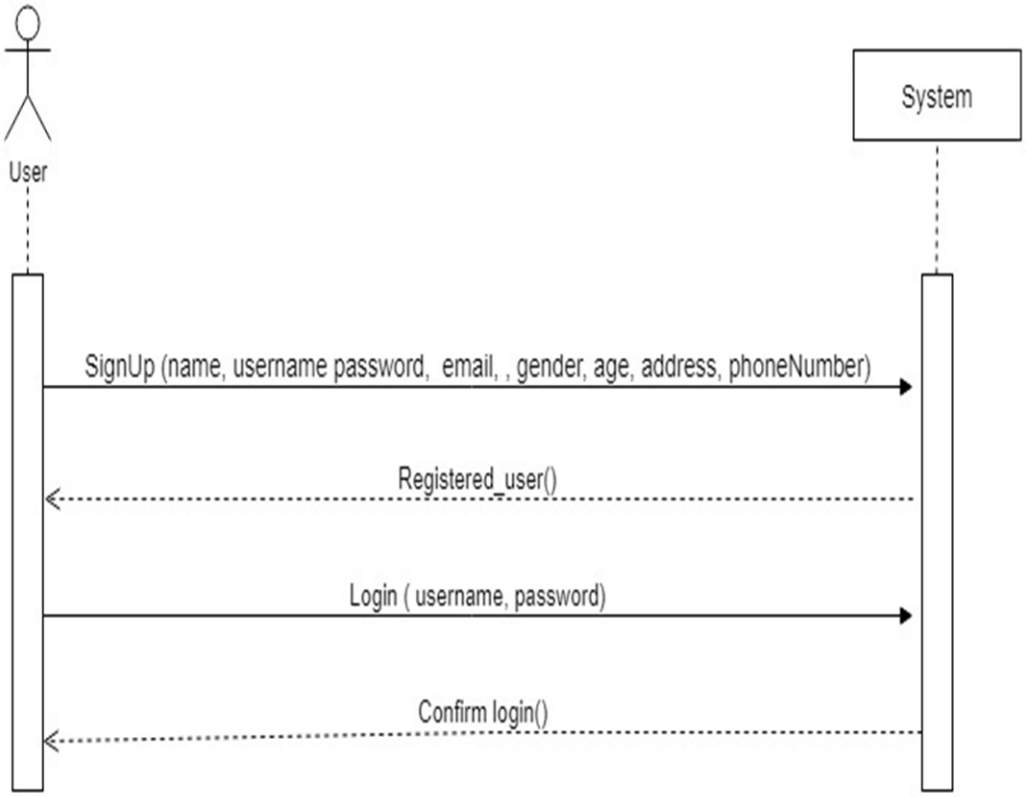

Figure 3.7: Sequence diagram for user signup and login (User)

©Daffodil International University

3.4.2 Sequence Diagram for user Create Found post and view all Found post

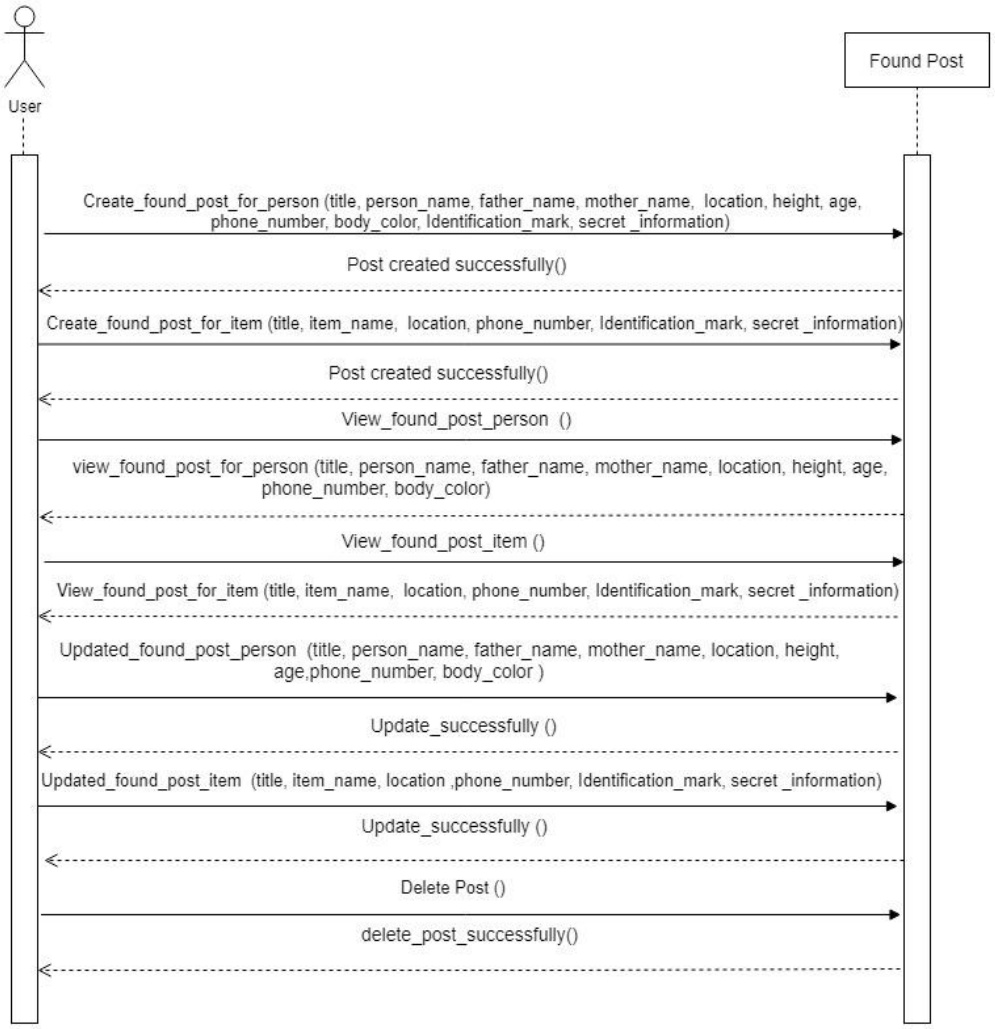

Figure 3.8: Sequence Diagram create found post and view (User)

©Daffodil International University

3.4.3 Sequence Diagram for user create lost post and View all lost post

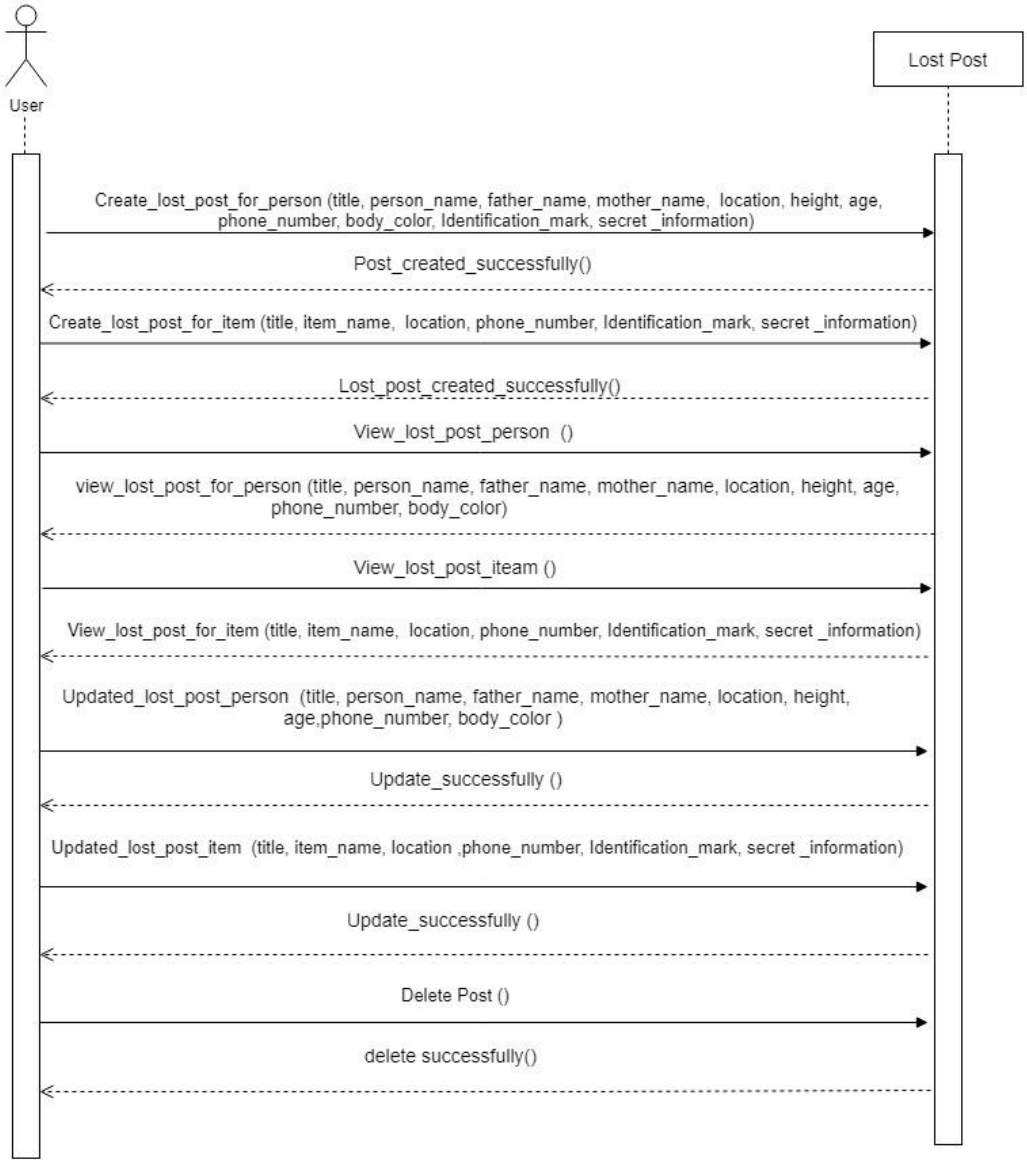

Figure 3.9: Sequence Diagram for create lost post and View all lost post (User)

©Daffodil International University

3.4.4 Sequence Diagram for User Search Found Person

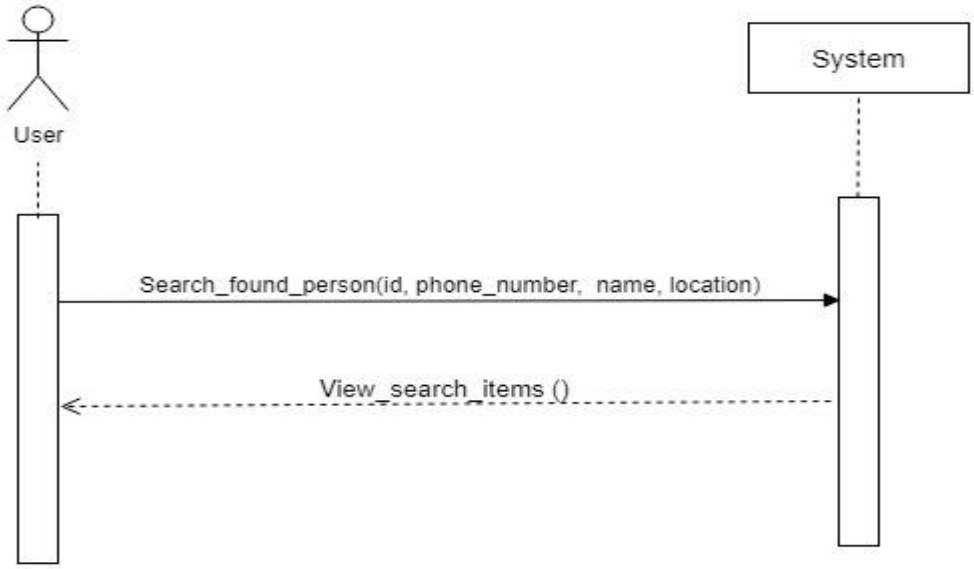

Figure 3.10: Sequence Diagram for search Found Person (User)

3.4.5 Sequence Diagram for search found items

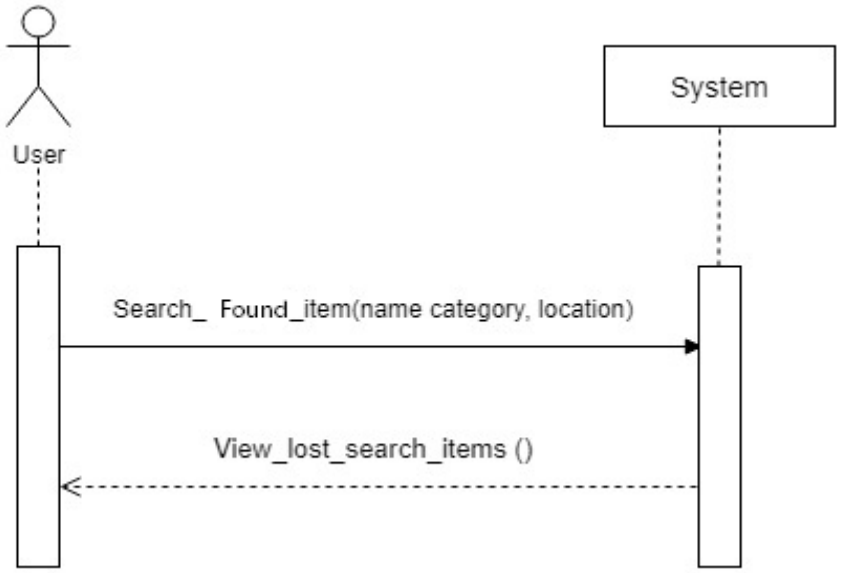

Figure 3.11: Sequence Diagram for search Found Items (User)

©Daffodil International University

3.4.6 Sequence Diagram for user search lost person

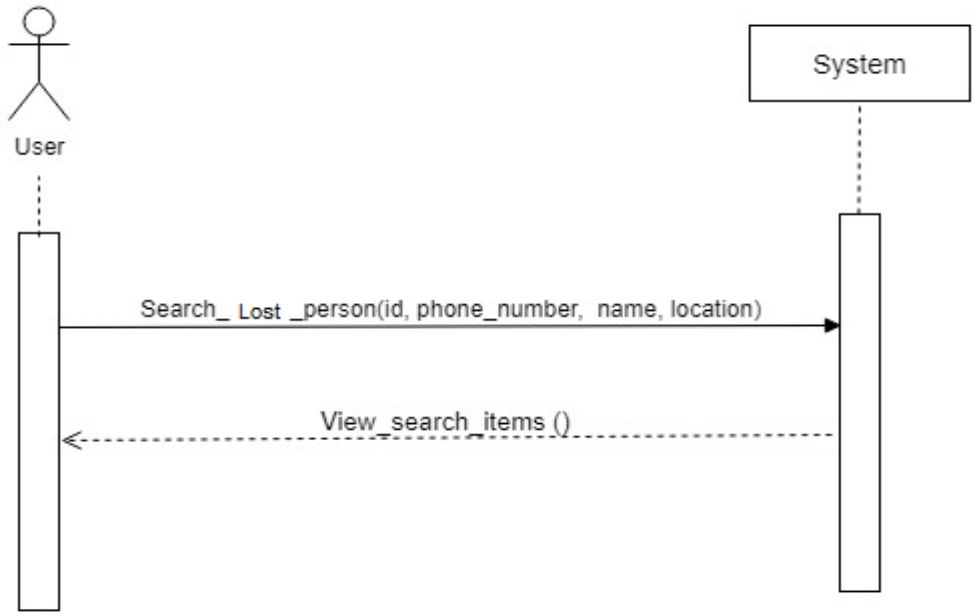

Figure 3.12: Sequence Diagram for search lost Person (User)

3.4.7 Sequence Diagram for user search lost item

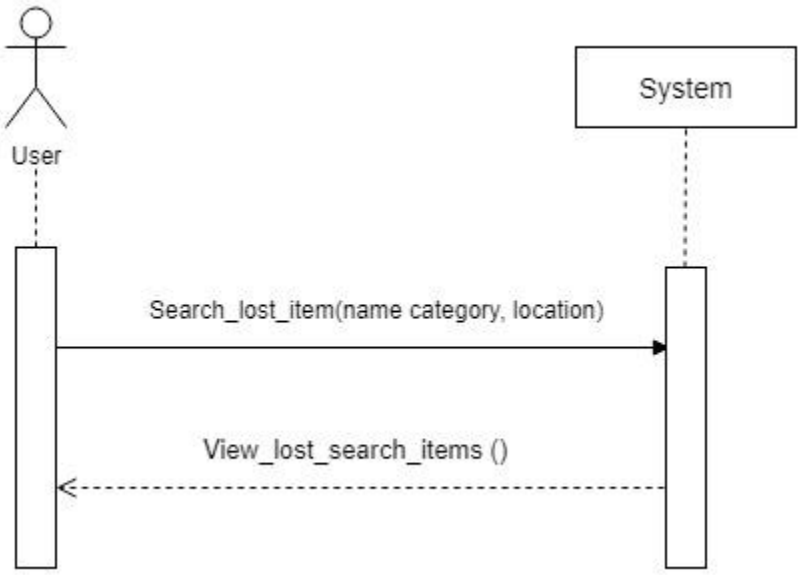

Figure 3.13: Sequence Diagram for search lost items (User)

©Daffodil International University

3.4.8 Sequence case Diagram for user comment on a post

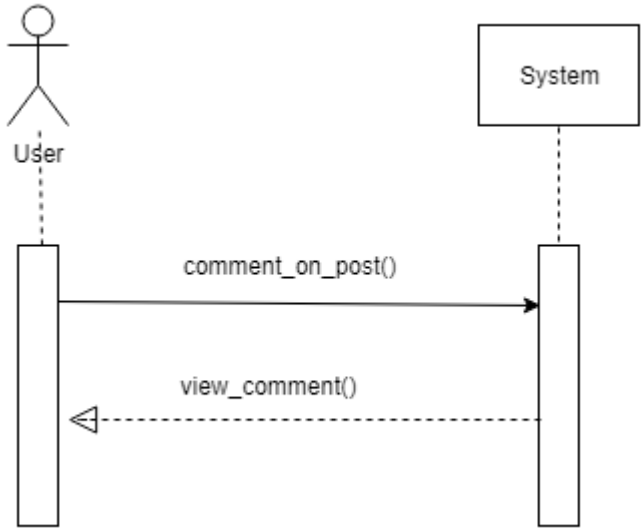

Figure 3.14: Sequence case Diagram for comment on a post (User)

3.4.9 Sequence Diagram for user logout

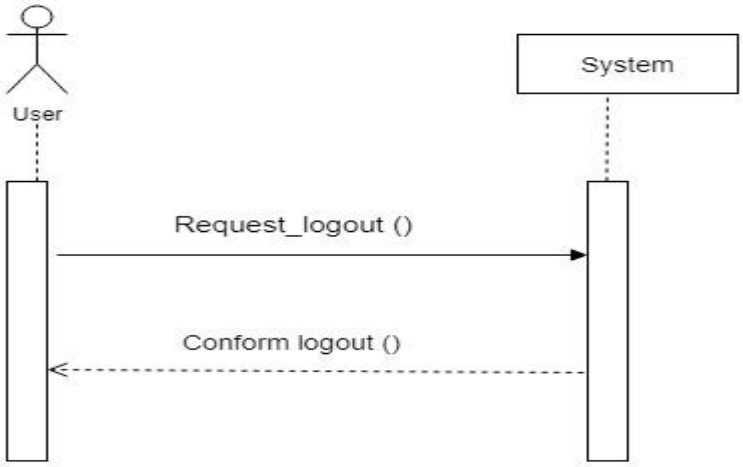

Figure 3.15: Sequence Diagram for logout (User)

©Daffodil International University

3.4.10 Sequence Diagram for admin login

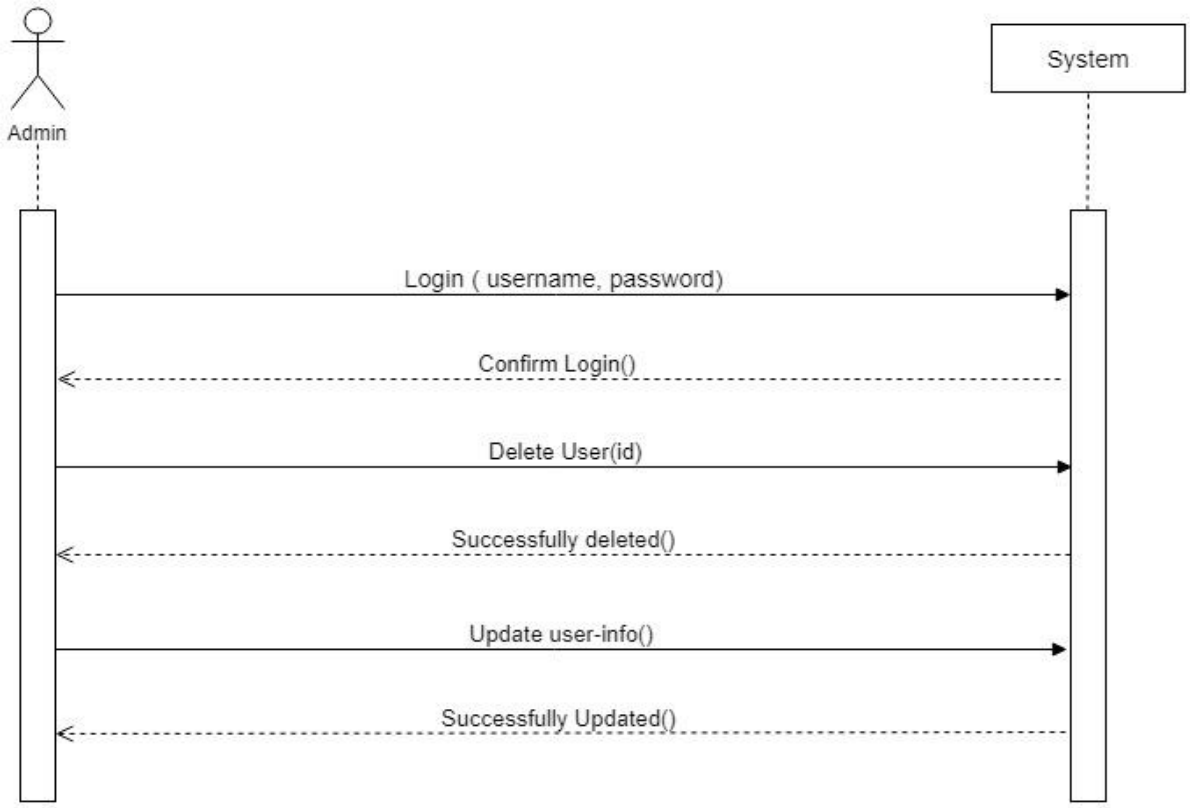

Figure 3.16: Sequence Diagram for login (admin)

3.4.11 Sequence Diagram for Admin Logout

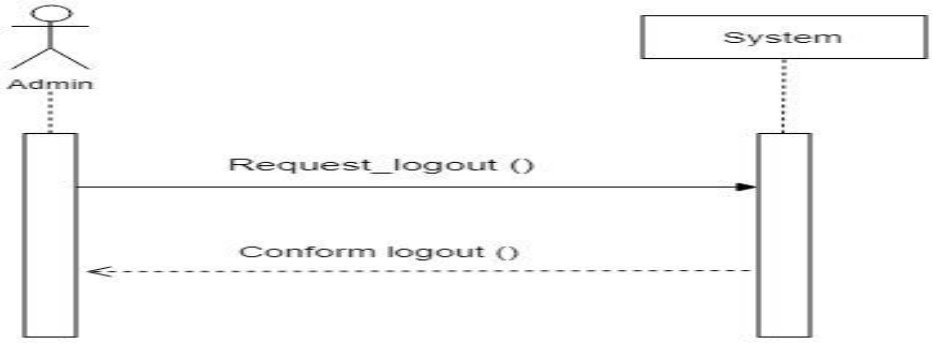

Figure 3.17: Sequence Diagram for Logout (admin)

©Daffodil International University

CHAPTER 4
SYSTEM DESIGN SPECIFICATION

4.1 Class Responsibilities Collaboration (CRC) Cards

4.1.1 CRC for my user

CRC for my user is given in table 4.26

Table 4.26: CRC for my user

My user	
Responsibility	Collaboration
Fill sign up form	Signup
Login into system with username and password	Login

4.1.2 CRC For admin log

CRC for Admin login in given in table 4.27

Table 4.27: CRC for Admin login

Admin log	
Responsibility	Collaboration
Admin Login into system with username and password	Login

4.1.3 CRC for found person

CRC for found post is given in table 4.28

Table 4.28.: CRC for found post

Found Person	
Responsibility	Collaboration
Create a lost post for Found item	Found post person

©Daffodil International University

4.1.4 CRC for Found item

CRC for Found item is given in table 4.29

Table 4.29.: CRC for Found item

Found Item	
Responsibility	Collaboration
Create a lost post for Found item	Found post item

4.1.5 CRC for Lost person

CRC for Lost person is given in table 4.30

Table 4.30: CRC for Lost person

Lost person	
Responsibility	Collaboration
Create a lost post for missing person	Lost post person

4.1.6 CRC for Lost item

CRC for Lost item is given in table 4.31

Table 4.31: CRC for Lost item

Lost item	
Responsibility	Collaboration
Create a lost post for missing item	Lost post item

©Daffodil International University

4.2 Data Flow Diagram

4.2.1 DFD Level-0

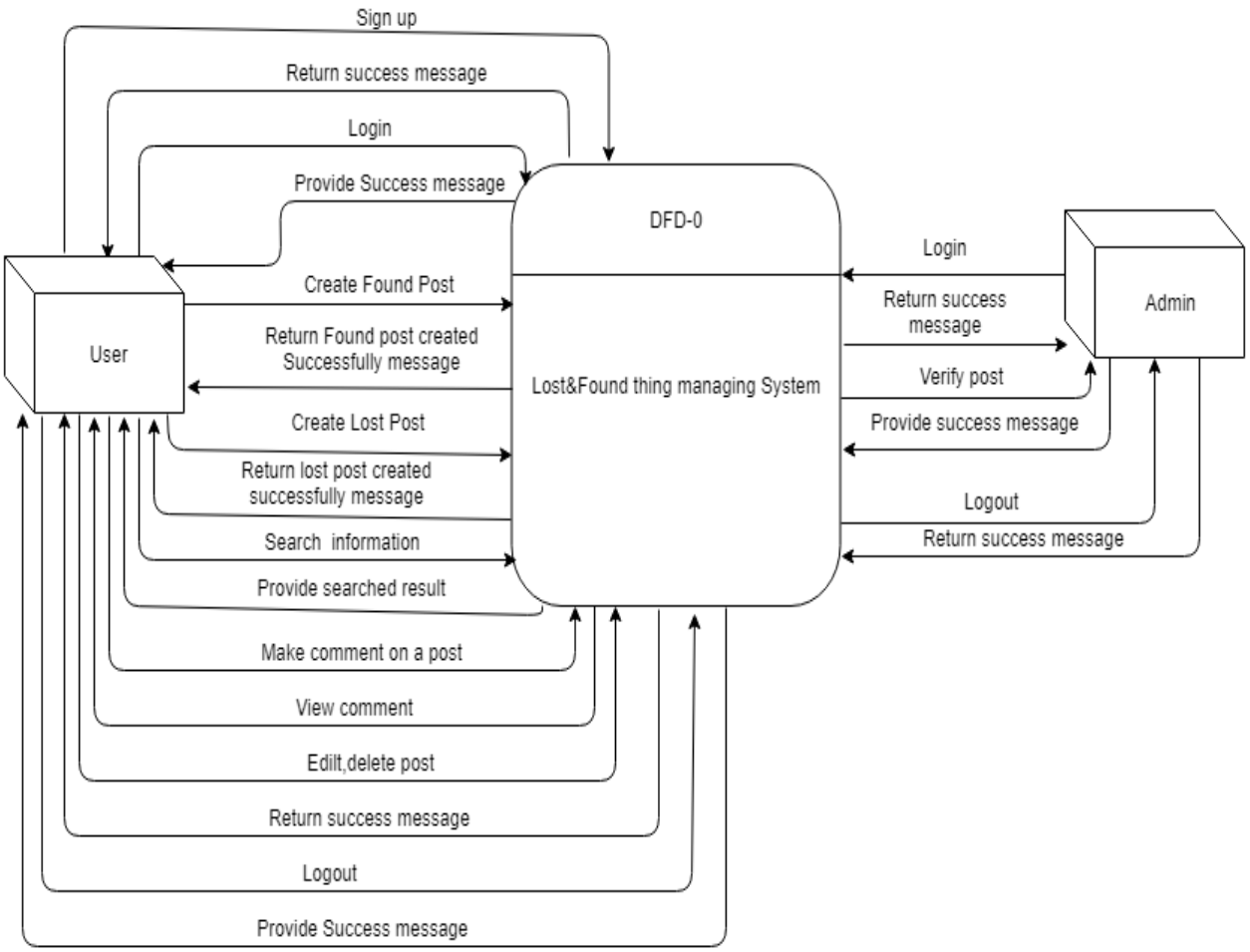

Figure 4.18: DFD Level - 0

©Daffodil International University

4.2.2 DFD Level -1

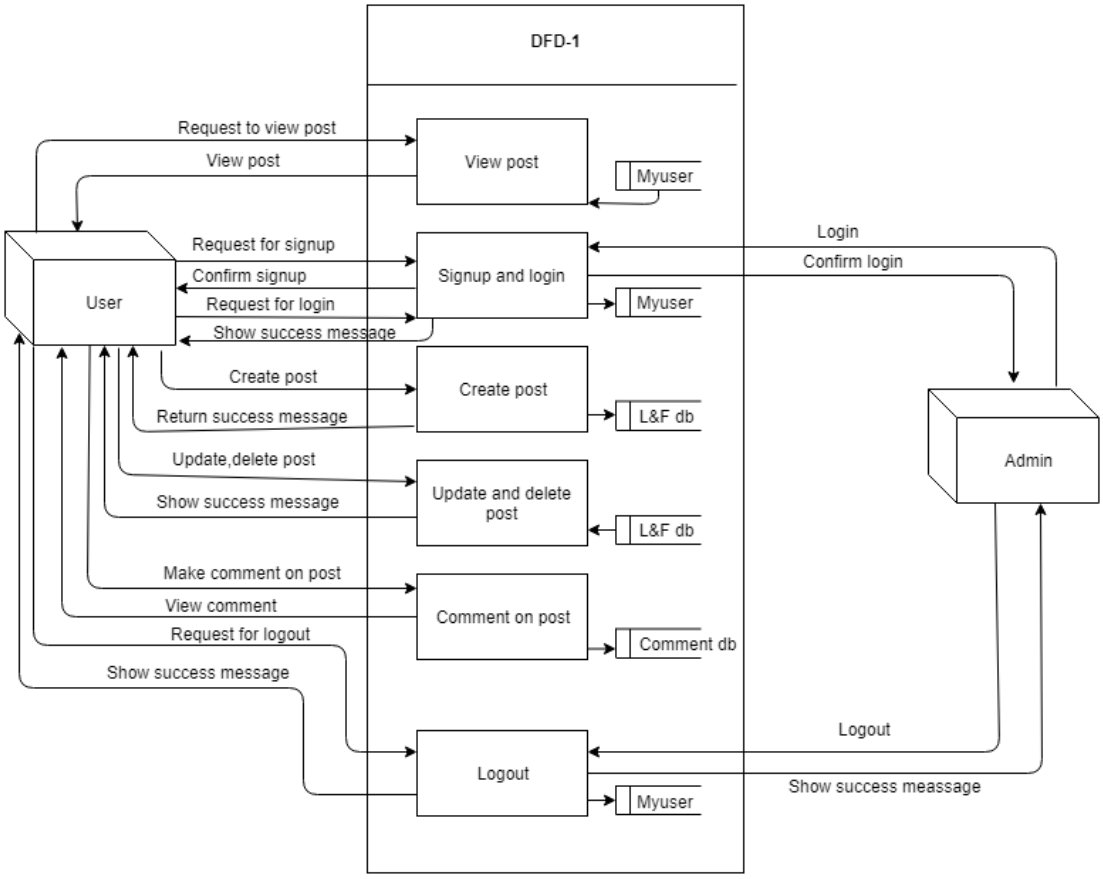

Figure 4.19: DFD Level - 1

©Daffodil International University

4.3 ER Diagram

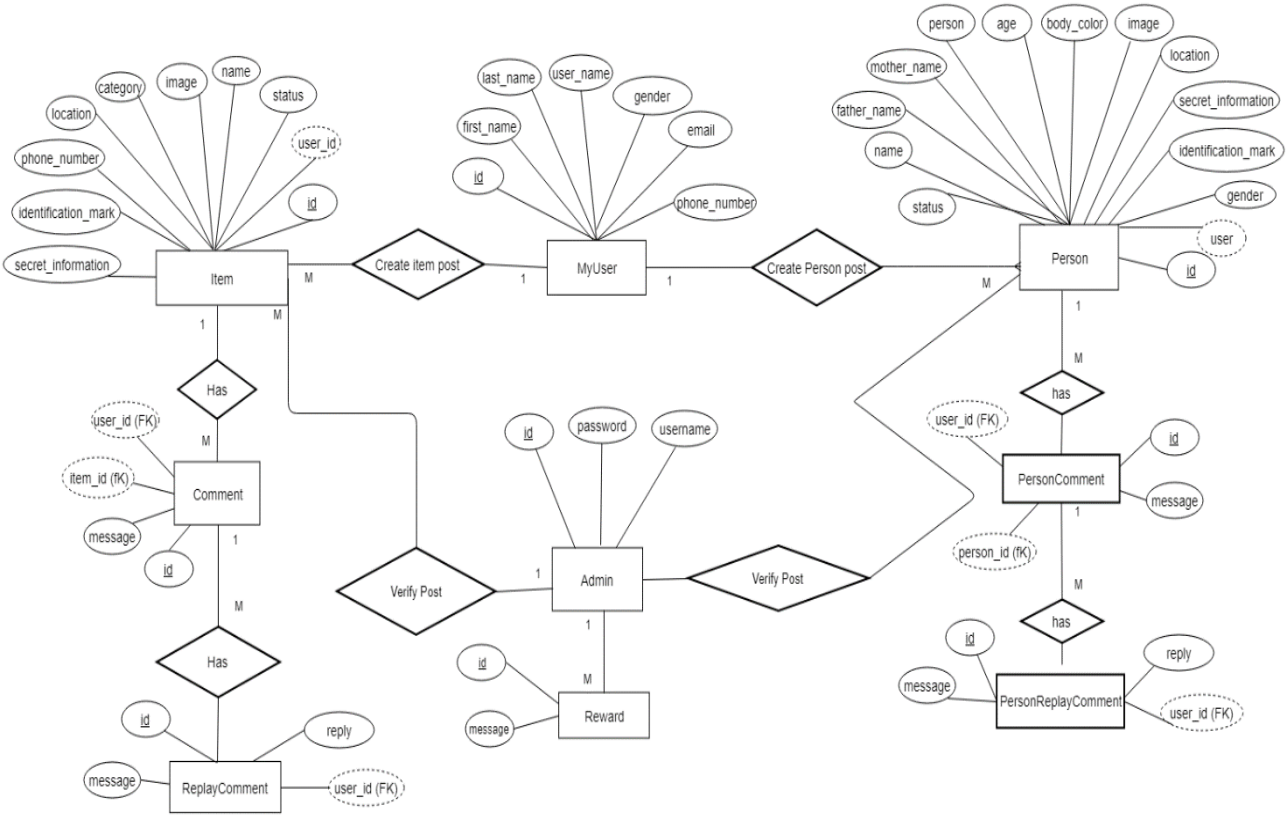

Figure 4.20: ER Diagram

©Daffodil International University

4.4 Schema Diagram

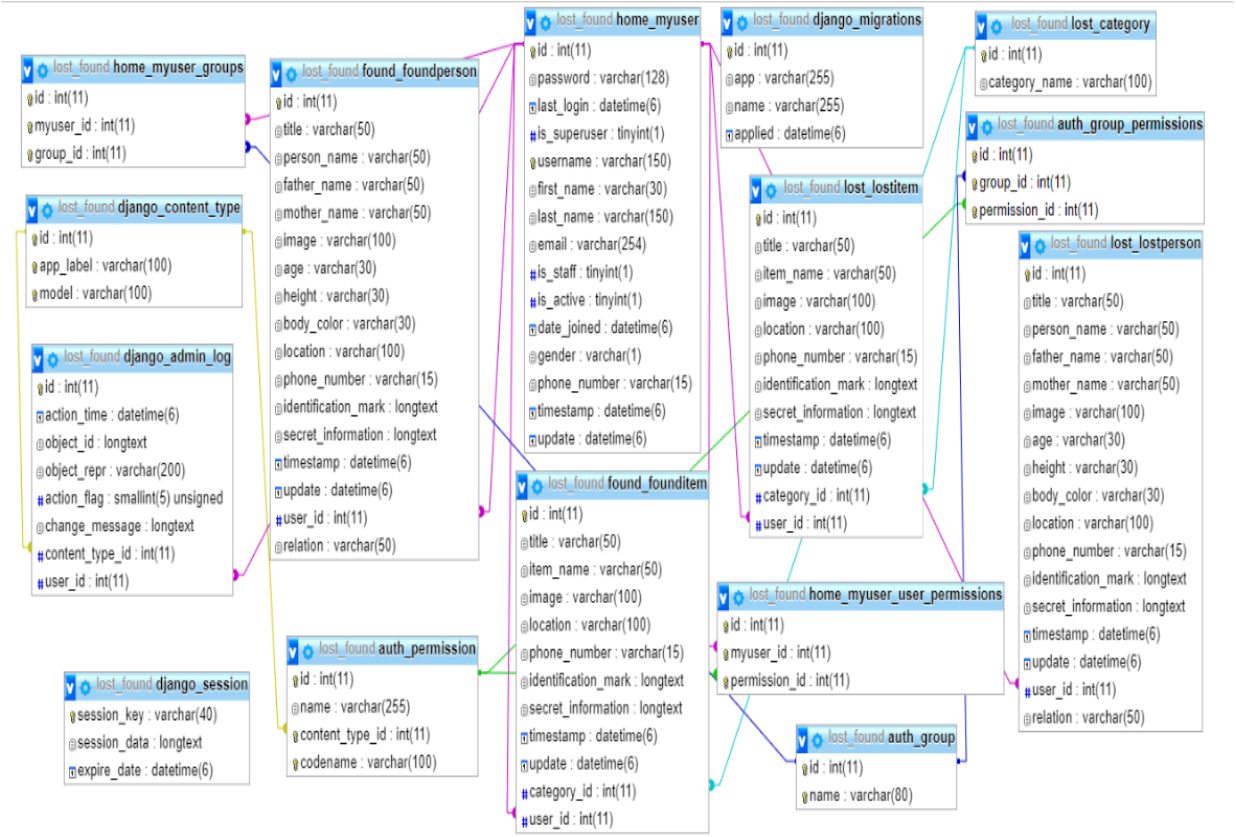

Figure 4.21: Class Diagram

©Daffodil International University

4.5 Development Tools & Technology

4.5.1 User Interface Technology

User Interface Technology is given in table 4.32

Table: 4.32: User Interface Technology

4.5.1.1	Python Programming Language (Django Framework)
4.5.1.2	JavaScript jQuery
4.5.1.3	HTML5, CSS3 and Twitter Bootstrap
4.5.1.4	Font Awesome

4.5.2 Implementation Tools & Platforms

Implementation Tools & Platforms is given in table in table 4.33

Table: 4.33: Implementation Tools & Platforms

4.5.2.1	Visual Studio Code v 1.27.2 and PyCharm
4.5.2.2	Postgre SQL
4.5.2.3	Lightweight web server

©Daffodil International University

CHAPTER 5

SYSTEM TESTING

5.1 Testing Features

5.1.1 Features to be tested

Features to be tested details are given in table 5.34

Table 5.34: Features to be tested

Featured ID	Featured Name	Description	Involved User
001	Login (Admin)	Check admin login working or not	Admin
002	Search	Check search feature working or not	User
003	Create post	Check user can successfully create a post.	User
004	View post	Check User can see all found post in found section and lost post in lost section.	User
005	Post details	Check user can see a post details by clicking on detail.	User
006	Edit/delete post	Check user can edit / delete a post or not.	User
007	Comment	Check user successfully make a comment under a post.	User
008	Logout	Check user can log out or not	User
009	Logout (Admin)	Check admin can logout or not.	Admin

5.1.2 Features not to be tested

Features not to be tested details are shown in table 5.35

Table: 5.35: Features not to be tested

Featured Id	Featured Name	Description	Involved User
001	Accuracy	How accurate the system loads data	System
002	Speed	How fast the system retrieve data from server	System
003	Security	How secure is the system data	System

©Daffodil International University

5.2 TESTING STRATEGIES

5.2.1 Test Approach

Test strategy is the process and procedures of how the system should be tested The test date is identified by expected output for actual input. Test plan is a standard document produced in most software engineering projects. Low quality projects don't have test plans. Test plan is written after requirement analysis. System is tested with sample data to see how it handle input and output functions with extreme data

5.2.2 Pass/Fail Criteria

1. High reliability will pass the system.
2. If the system is 80% error free it will pass either will fail.
3. If the system retrieve data in less than 4 seconds it will pass.
4. If the validation work properly system will pass.
5. If the system retrieve 80% accurate data system will pass.

5.2.3 Suspension and resumption

Suspension:

1. Unavailability loading data from server.
2. System Crush.
3. Invalid data.

Resumption:

1. System taking too much time to load data.
2. Failure in data validation.

©Daffodil International University

5.2.4 Testing Schedule

Testing Schedule is given in table 5.36

Table: 5.36: Testing Schedule

Id	Task name	Duration	Start	Finish
01	Testing planning	2 days	26-nov 2018	28-nov 2018
02	Test plan and QA schedule preparation	1 days	29-nov 2018	30-nov 2018
03	Test point preparation	2 days	30-nov 2018	2-dec 2018
04	Testing and Bug reporting	2 days	2-dec 2018	4-dec 2018

5.2.5 Requirement Traceability Matrix

Requirements:

1. Signup
2. Login
3. Search
4. Create Post
5. Comment on post
6. Edit post
7. Delete post
8. Logout

Test cases:

1. Signup module
2. Login module
3. Create post module
4. Edit post module
5. Delete post module
6. Comment post module
7. Logout module
8. Search post module

Traceability Matrix

Table 5.37: Traceability Matrix

Requirement	Req1	Req2	Req3	Req4	Req5	Req6	Req7	Req8
Test cases								
TC1	X							
TC2		X						
TC3				X				
TC4						X		
TC5							X	
TC6					X			
TC7								X
TC8			X					

©Daffodil International University

5.3 Testing Environment (Hardware/Software Requirements)

Software: PyCharm
Hardware: Computer

5.4 Test Cases

5.4.1 Sign up module

Sign up module are given in table 5.38.

Table 5.38: Sign up module

Id	ACTION	Input	Expected Result	Actual Result	Pass/Fail	Code module
1	Sign up	First name: Ripon Last name: Sarkar Username: Rk Password: rk200cr7 Email: rk@gmail.com Gender: Male Location: Dhaka Phone number:0175615afc	Show error message phone number is invalid	Showing error message phone number is invalid	Pass	Models
2.	Sign up	First name: Ripon Last name: Sarkar Username: Rk Password: rk200cr7 Email: Gender: Male Location: Dhaka Phone number:017561545	Show error message email field required	Showing error message email filed required	Pass	Models
3.	Sign up	First name: Ripon Last name: Sarkar Username: Rk Password: rk200cr7 Email: rk@gmail.com Gender: Male Location: Dhaka Phone number:017561545	Signup Successful	Showing success message	Pass	My_user

©Daffodil International University

5.4.2 Login Module

Table 5.39: Login Modul

Id	ACTION	Input	Expected Result	Actual Result	Pass/Fail	Code module
1	Login	User name; Rk Password: abch20	Show error message password don't match	Showing error message password don't match	Pass	Models
2.	Login	User name; Rk Password: rk200cr007	Login successful	Showing success message	Pass	Models

5.4.3 Search module

Table 5.40: Search module

Id	ACTION	Input	Expected Result	Actual Result	Pass/Fail	Code module
1	Search	Search for Dhaka	Show all post of Dhaka	Showing all post of Dhaka	Pass	Views
2.	Search	Search for watch	Show all post of watch	Showing all post of watch	Pass	Views
3.	Search	Search for 1253A	Show error message invalid keyword	Showing error message invalid keyword	Fail	Views

5.4.4 Create post module

Table 5.41: Create post modules

Id	ACTION	Input	Expected Result	Actual Result	Pass/Fail	Code module
1	Create found post for person	Title: A Person Lost Today Name: Antar Mohit Phone: +88018665665 Email: antar@gmail.com Location: Dhaka Body color: White	Show success message	Showing success message	Pass	Forms and views

		Father: AB mia Mother name: rupta khatun Secret information: red EYE glass Identification mark: Spot on chest.				
2.	Create found post for item	Title: I have Found a Pen drive Item Name: Adata Phone: +8801455415145 Email: rahim@gmail.com Location: Secret information: Picture of my NId inside Identification mark: Broken backside.	Show Error message Location field required.	Showing error message	Pass	Forms and views
3.	Create lost post for person	Title: A Little Girl is Missing Name: Nasma Rani Phone: +8801746854265 Email: alal@gmail.com Location: Dhaka Body color: White Father: Rafiq Haque Mother name: Najma Bagum Secret information: red E Identification mark: Spot on chest.	Show success message	Showing success message.	Pass	forms views
4.	Create lost post for Item	Title: I have Lost a money bag Item Name: Moneybag Phone: +8801455415145 Email: dulal.gmail.com Location: Rajbari Secret information: My Visa card inside Identification mark: Grey colour.	Show error message invalid Email	Show error message invalid Email	Pass	Forms views

©Daffodil International University

CHAPTER 6

USER MANUAL SCREENSHOT

6.1 User manual for user:

6.1.1 User Home Page

At first user will view the home page. In homepage user will see some buttons on the menu bar then few lost posts, reward post then few found post then footer. User will also see information about locations we are available on the top of the bottom side.

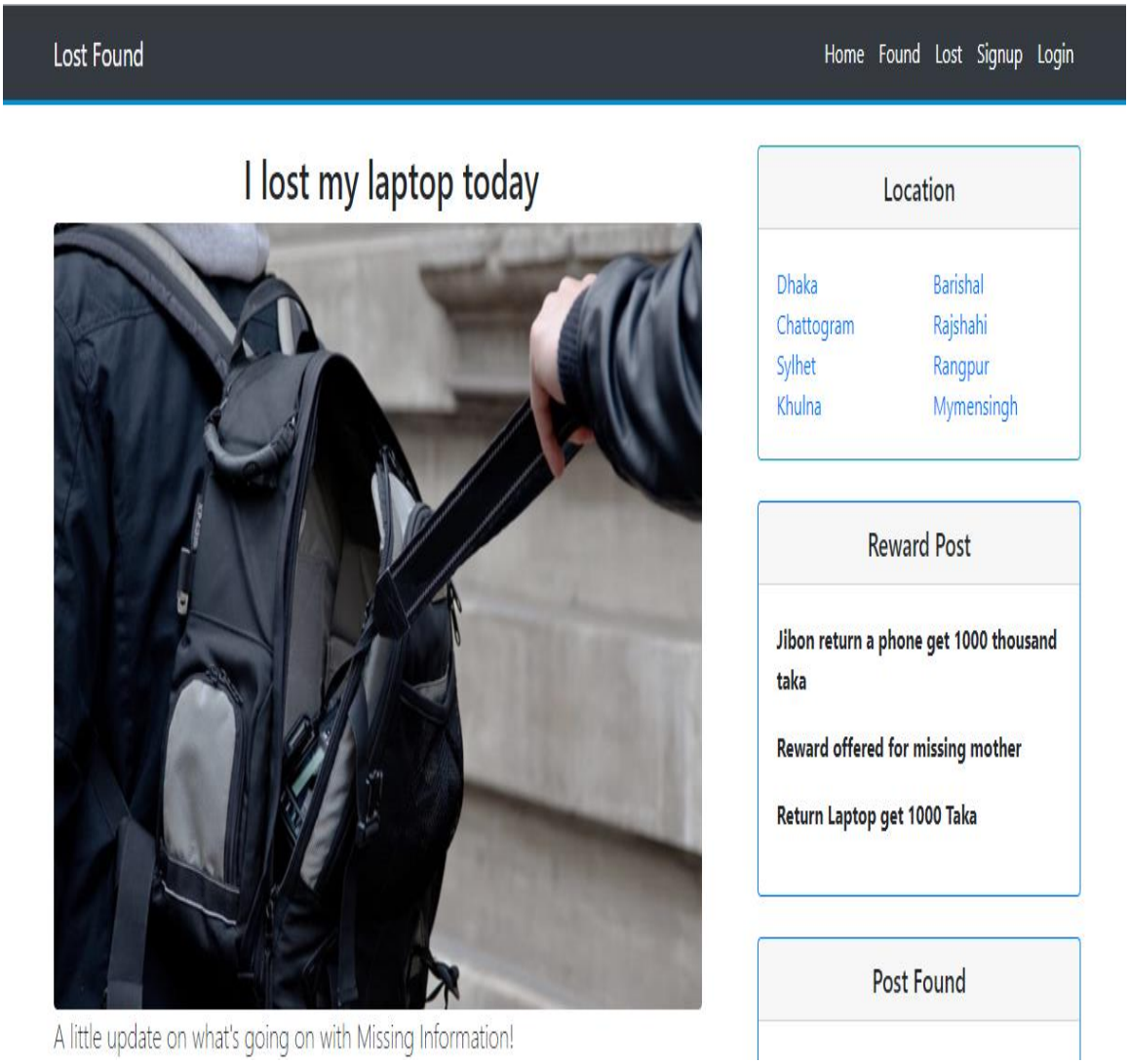

Figure 6.22: User Homepage

©Daffodil International University

6.1.2 User Signup

Before login into the system user must have to sign up. To sign up user have to go to sign up page.

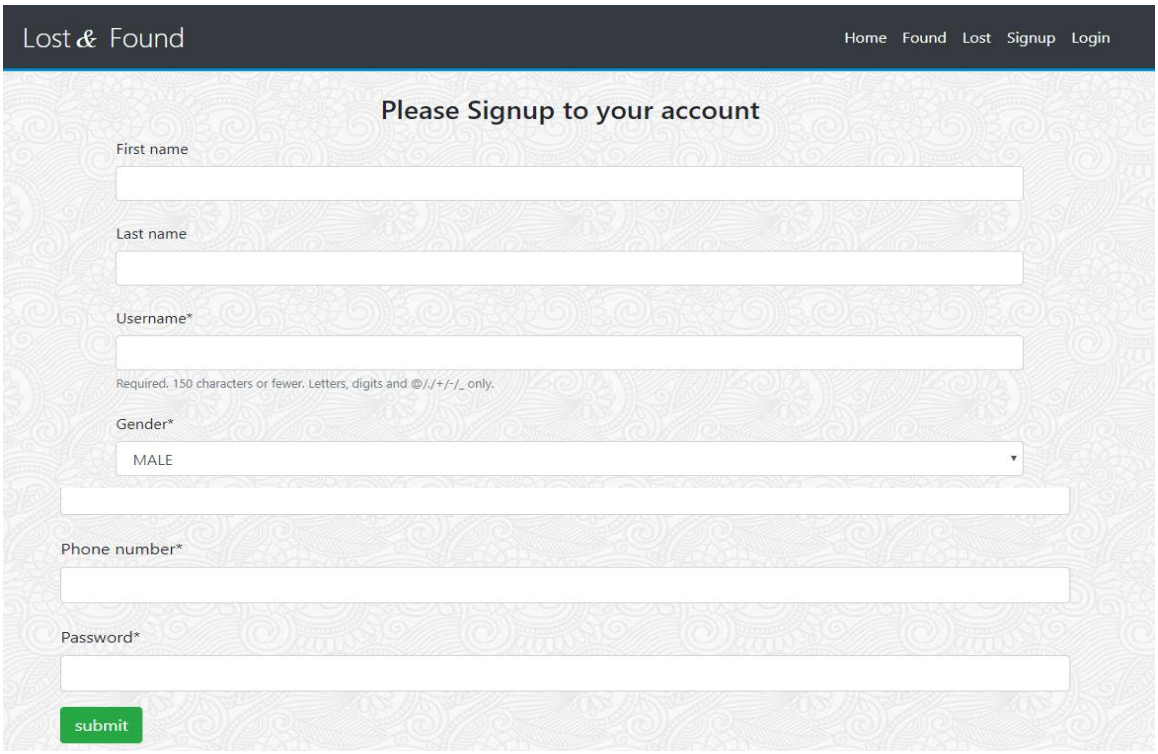

Figure 6.23: User Signup

6.1.3 User login

After sign up user can login into the system with the username and password

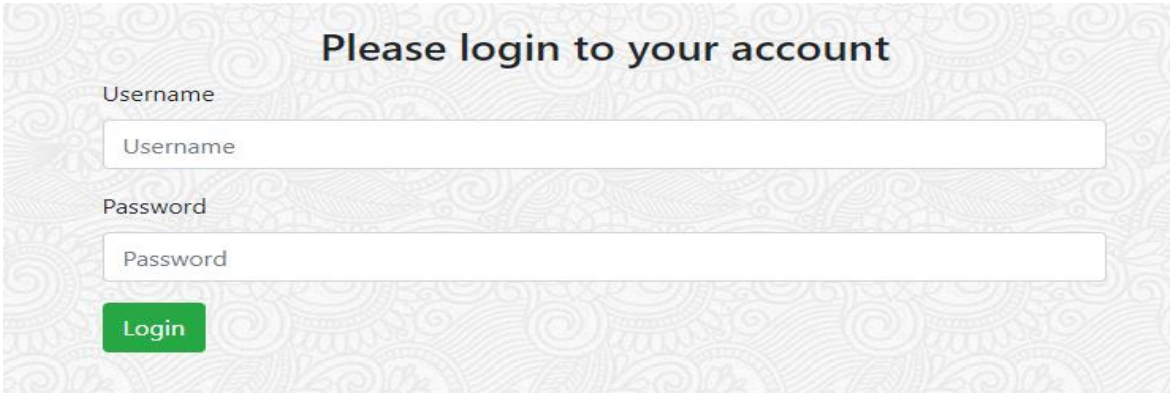

Figure 6.24: User Login

©Daffodil International University

6.1.4 User post creation form for person

User can create lost and found post for person and item. To make a post for person user have to select person. Then user will get a form.

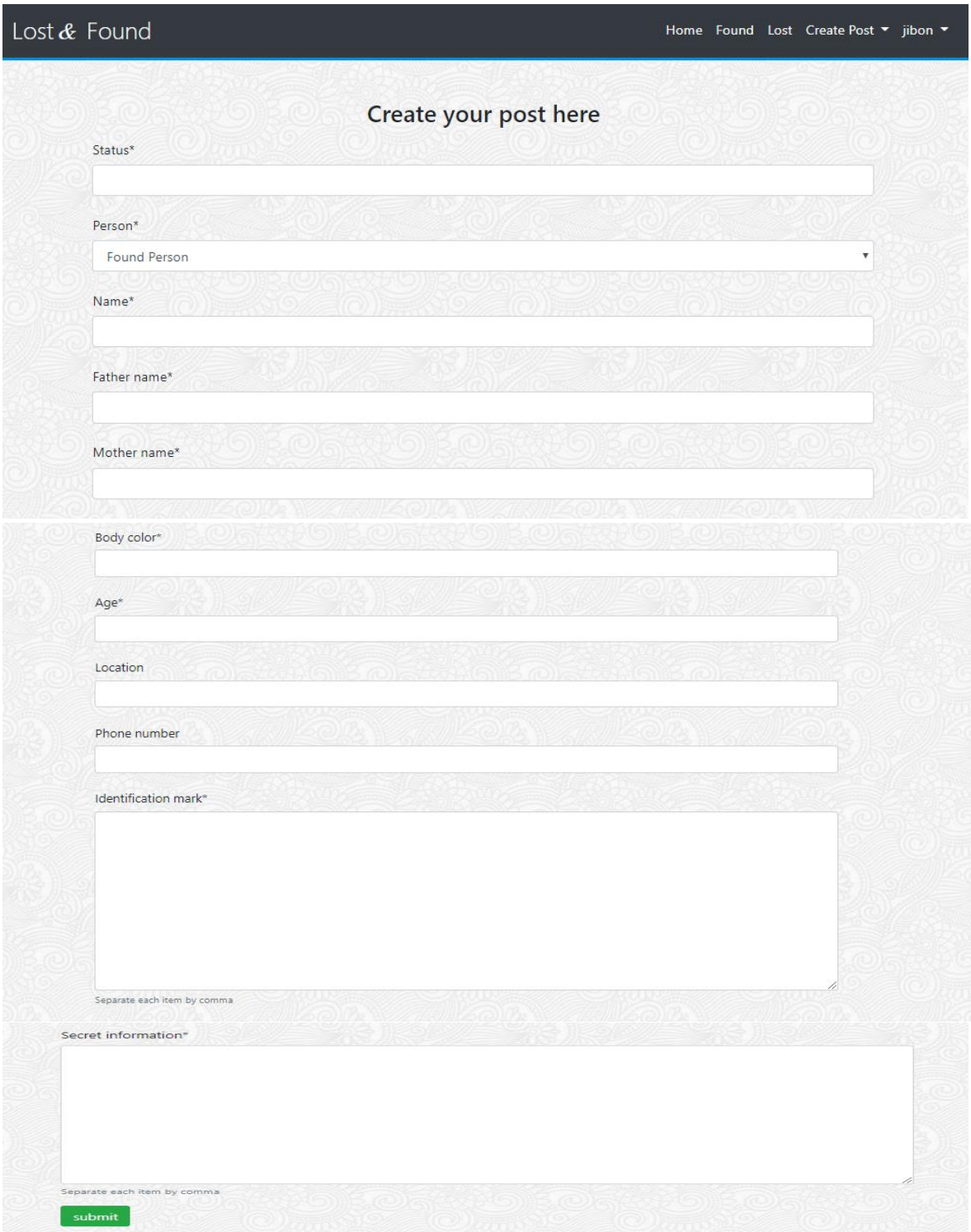

Figure 6.25: User post creation form for person

©Daffodil International University

6.1.5 User creation form for item

User can create post for item by selecting item option from the post creation from.

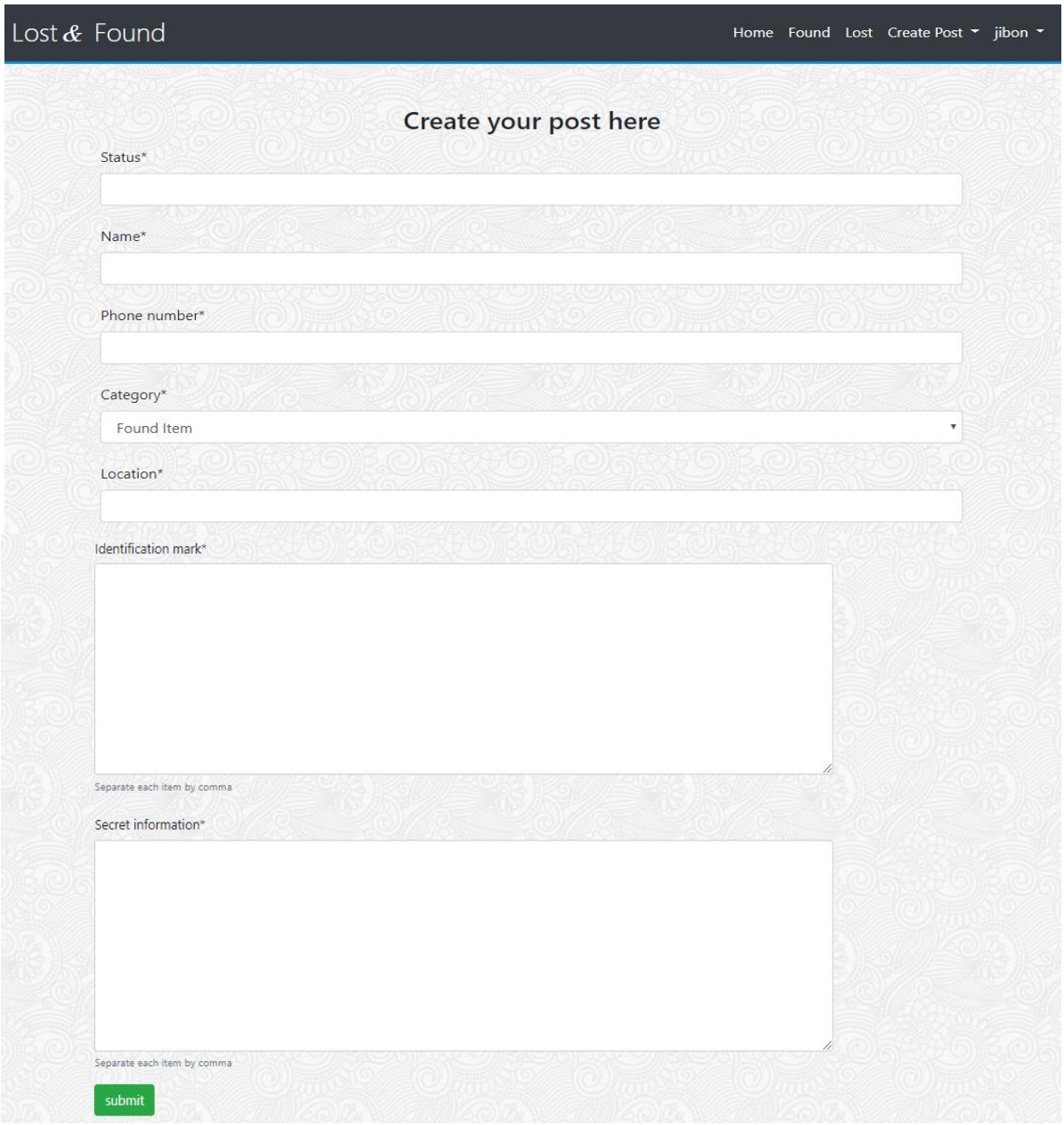

Figure 6.26: User creation form for item

©Daffodil International University

6.1.6 User view found post

Use can view found posts by selecting the found button from the menu bar.

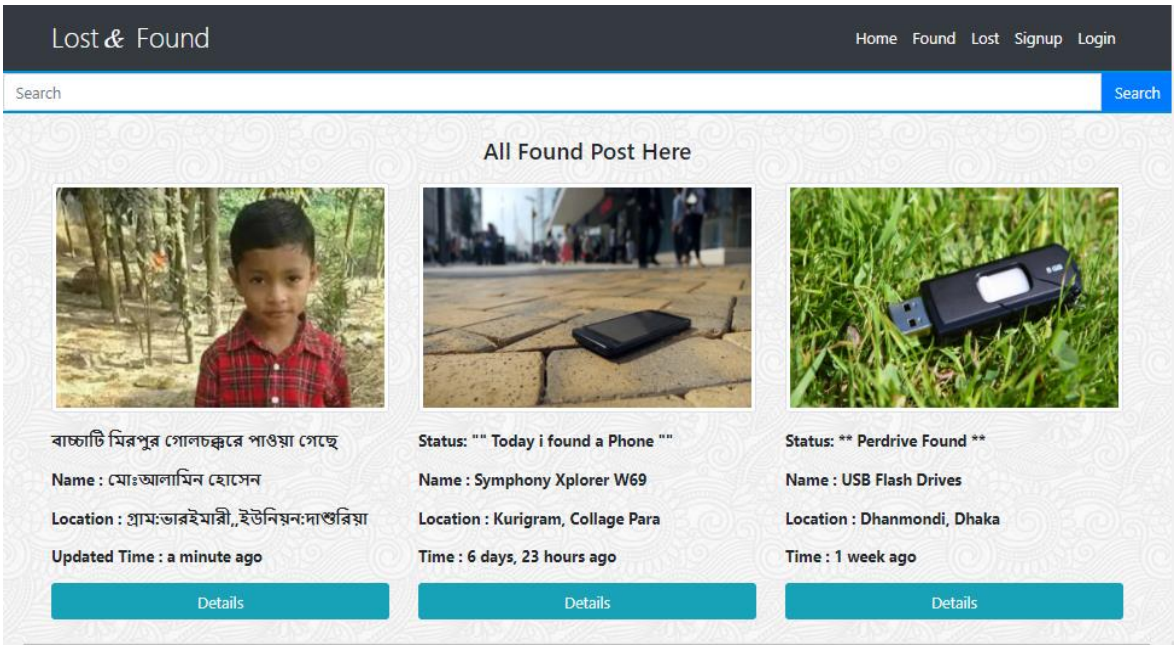

Figure 6.27: User view found post

6.1.7 User view lost post

User can view lost found by selecting lost button.

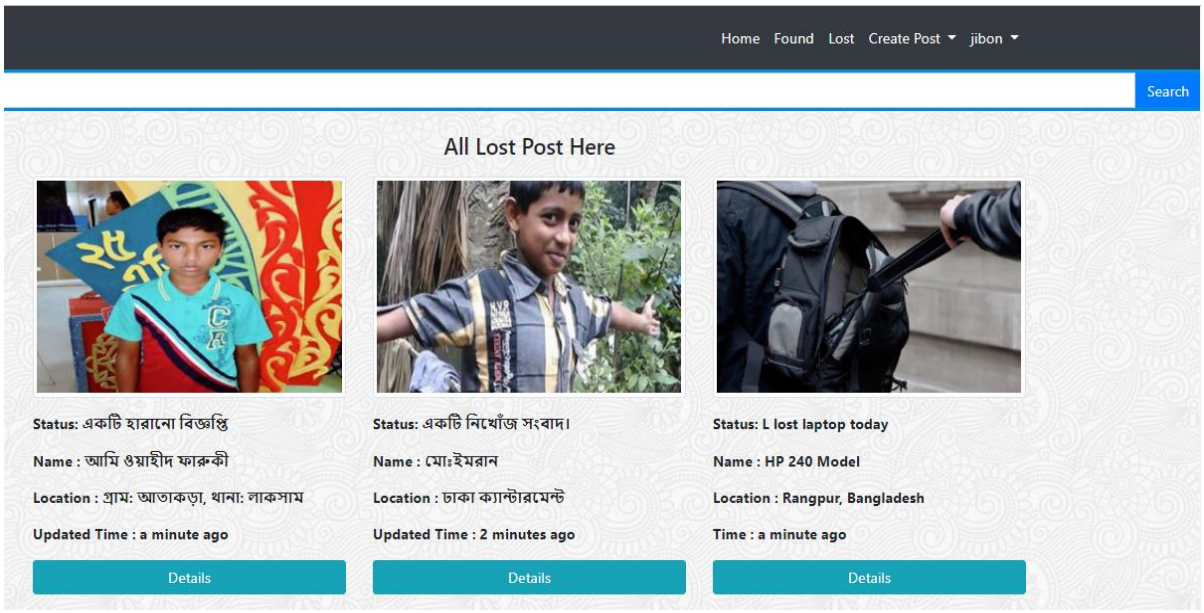

Figure 6.28: User view lost post

©Daffodil International University

6.1.8 Make comment on a post

User can make comment under a post and also reply on a comment.

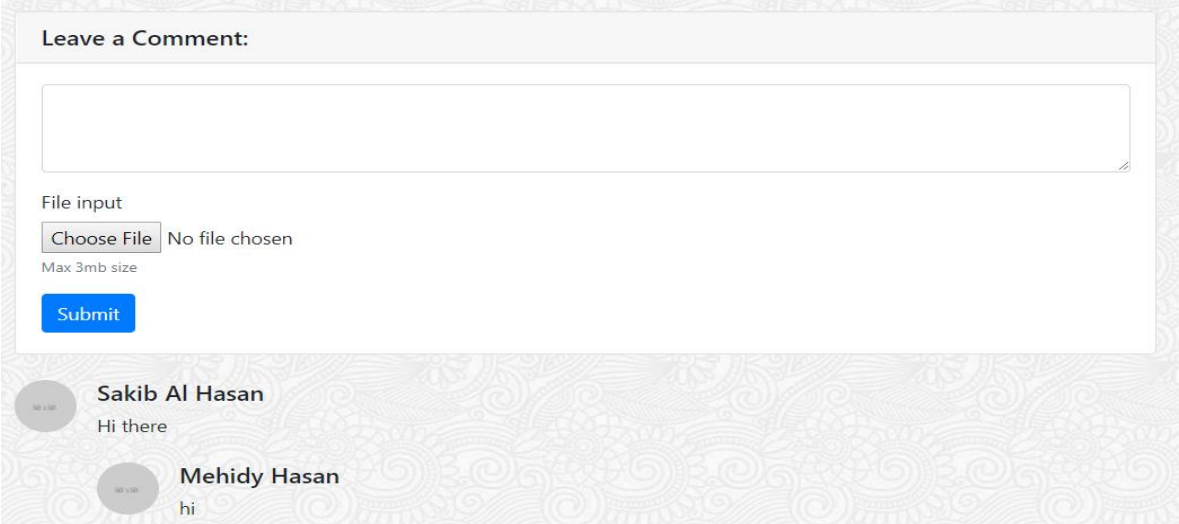

Figure 6.29: Make comment on a post

6.2 User Manual For Admin:

6.2.1 Admin Login

Admin login into the system as a super user. Admin don't have to login.

Figure 6.30: Admin Login

©Daffodil International University

CHAPTER 7
PROJECT SUMMERY

7.1 GitHub link:
https://github.com/jibon969/Lost-And-Found-Web-Project.git

7.2 Limitations

1. We cannot manage large amount of data.
2. System is not full error free.
3. System is not fully bug free.
4. System is full secure.

7.3 Obstacles & Achievements
Obstacles & Achievements are given in table 6.42

Table: 6.42: Obstacles & Achievements

Obstacles	Achievements
1.Form validation	1. Every field is validated.
2. Reduce response time.	2. Response time is within 3 seconds.
3. Showing update post on the top	3. Update posts are on top.
4. Matching user data with database when login.	4. User data matched when login.
5. Searching for location and item on homepage.	6. Getting all data according the searched word.

©Daffodil International University

7.4 Conclusion

Considering so many difficulties throughout the entire development process the web application and the system is ready to be used by the user with high accuracy and efficiency.
The system will be very easy to use and maintain as the documentation and user manual is available for every user. There will be surely room for enhancement during development.

The web application and the system is better, more effective and faster than the existing all other existing system. The system is rich with information and available for everyone.
The system will support all type of screen.

This system is not developed for small purpose it has a long plan. Not just in our country we want to make our system available for every country in the world. We want to help people by providing information about their lost and found things and make a communication between owner and finder.

7.5 Future Scope

Lost & Found application will help to handle missing problems of our country. A community will be buildup through our application which will help us to find any lost thing and also help us to return a lost thing back to the owner. People can earn special gifts by returning a lost thing back. So, it can be a source of earning.

Our purpose is to connect with every user through our service. Returning their valuable things safely without any hassle and damage. Handling missing issues in a smart way.

In future, we want to track location to find lost things.

APPENDIX

A

Acknowledgement

Approval

Activity Diagram

H

Hardware and Software Specification

Html5

C

Conclusion

Class Diagram

Context

Collaboration Diagram

I

Implementation

Introduction

D

Data Flow Diagram

Database Name

J

JavaScript

jQuery

E

Entity Relationship Diagram

S

Software Requirement Specification
Software Development Plan

Sequence Diagram

F

Future Scope

Functional Requirements

T

Testing

Test case

Tools

Traceability Matrix

U

Use case diagrams

N

Non-Functional requirements

P

Python

© 2018 Daffodil International University

© 2018 Daffodil International University