Sri Lanka Institute of Information Technology.

Software Process Modelling-Assignment No-02

MLB_09.02_6

Online Land Sales System

PROJECT ID	MLB_09.02_6
CASE STUDY NAME	Online Land sales systems.
CAMPUS/CENTER	Malabe.

Group Details:

	Student Registration Number	Student Name
1	IT21177514	M.R. Tharu Ransika.
2	IT21178504	K.V.S. Dinuri Dasanya.
3	IT 21179976	D.H.K. Hasini Ishara.
4	IT 21178740	K.K.L. Rathnasiri
5	—	—

We hereby certify,

☑ The attached is our own work and no further changes will be made.

☑ We have contributed in this assignment to the best of our ability.

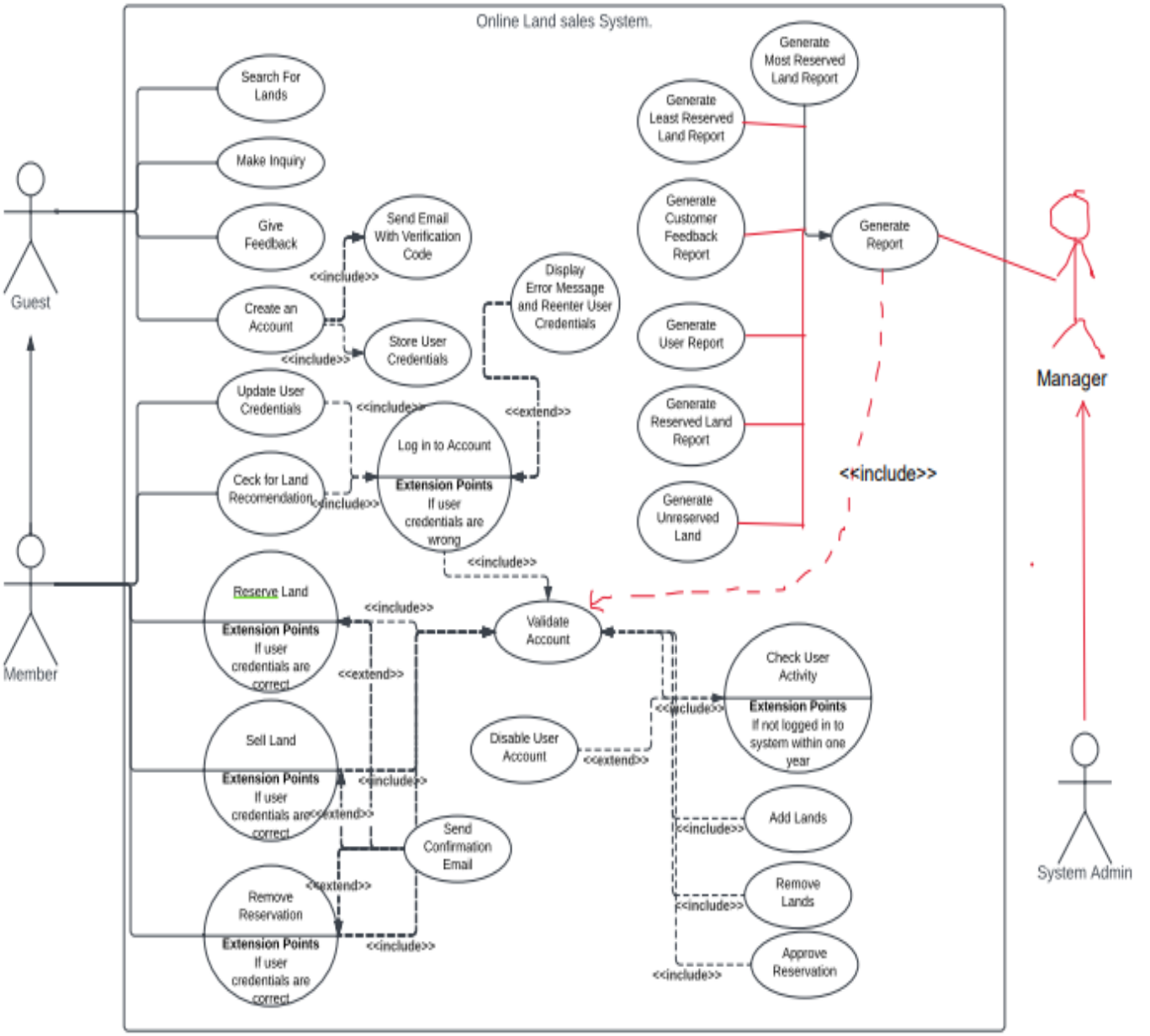
And we understand,

☑ We may be subject to student discipline processes in the event of an act of academic misconduct by us including an act of plagiarism or cheating.

Group Details:

	Student Name	Student Registration Number	Date	Signature
1	M.R. Tharin Rausika	IT21177514	2022/03/15	Rausika
2	D.H.K. Hasini Ishara	IT21179976	2022/03/15	Ishara
3	K.V.S. Dinuri Dasanya	IT21178504	15/03/2022	Dasanya
4	K.Kavisha Lakmini Rathnasiri	IT21178740	15/03/2022	Kavisha
5	—	—	—	—

01. Use Case Diagram (Assignment No-01)



Important:

01. We included a clear Use Case Diagram in uploaded file.
02. We used **Lucidchart** Online tool to draw our use case diagram. But, some features (**Generalization/Inheritance of Use Cases etc.**) are not available in free version. We were deeply embarrassed by that situation. Therefore we used **Adobe Acrobat Reader DC** Software to complete use case diagram. We kindly request you to consider this situation.

02. Use Case Scenarios and Activity Diagrams

Student ID: IT21177514 **Student Name:** K.K.L. Rathnasiri.

IT1060 – Software Process Modeling **2022 - February**

Assignment 2 Certify Sheet

I hereby certify,

- [x] The attached is my own work and no further changes will be made.
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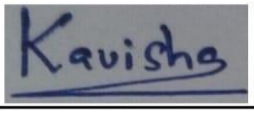
And I understand,

- [x] I may be subject to student discipline processes in the event of an act of academic misconduct by me including an act of plagiarism or cheating.

Student Details:

Student Name	Student Registration Number	Date	Signature
Rathnasiri K.K.L.	IT21178740	2022/05/01	

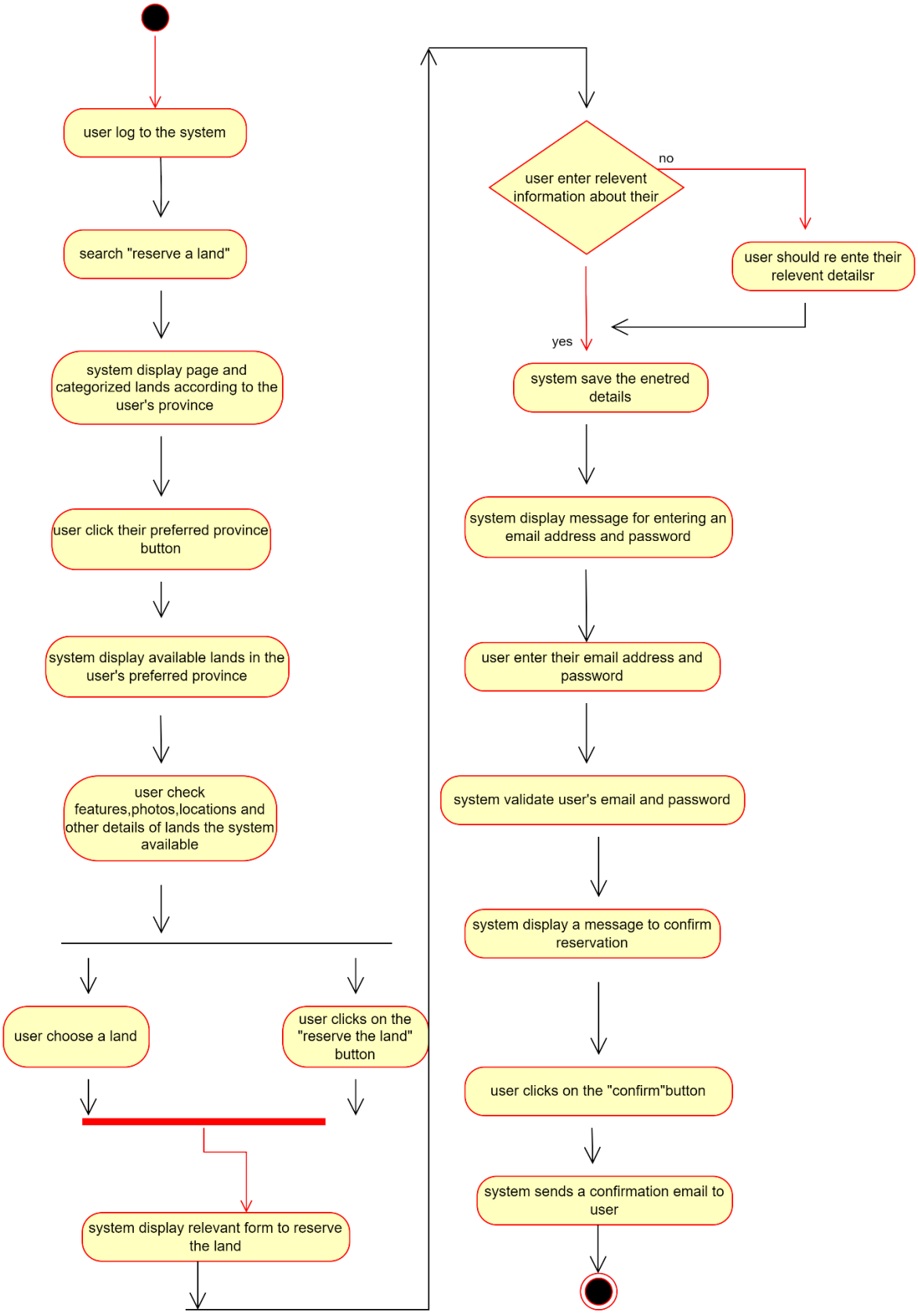
Part 01

Use Case Name: Reserve Land

Number	001	
Name	Reserve a land	
Summary	Reserve land from the available lands, displayed by the system	
Priority	3 (1-lower priority and 5-highest priority)	
Precondition	1. user should have logged into the system	
	2. User should have created an account	
	3. User should have a registered password and email address	
Postcondition	user has a reserved land and a received confirmation email	
Primary actor	user	
Main scenario	Step	action
	(01)	The system displays the page and the categorized lands according to the province
	(02)	User clicks on his or her preferred province button
	(03)	The system displays the available lands in the user's preferred province
	(04)	The user checks features, photos, locations, and other details of the lands the system has available
	(05)	The user chooses a land and clicks on the "reserve the land" button
	(06)	The system displays a relevant form to reserve a land
	(07)	Users enter relevant personal information about his or her
	(08)	The system saved entered details
	(09)	The system displays a message for entering an email address and password

	(10)	The user entered his or her email address and the password
	(11)	The system validates the user's email and password
	(12)	The system displays a message to confirm the reservation
	(13)	The user clicks on the "confirm" button
	(14)	The system sends a confirmation email to a user
Extension	step	Branching action
	(11.1)	The system identifies user has entered a wrong password or an email address
	(11.2)	The system displays an error message and a message for entering the password and email address again
	(12.1)	user clicks on the "not confirm" button
	(12.2)	the system exits from the page
Challenges faced	user has no email address	

Activity Diagram


user log to the system
search "reserve a land"
system display page and categorized lands according to the user's province
user click their preferred province button
system display available lands in the user's preferred province
user check features,photos,locations and other details of lands the system available
user choose a land
user clicks on the "reserve the land" button
system display relevant form to reserve the land
user enter relevent information about their
no
user should re ente their relevent detailsr
yes
system save the enetred details
system display message for entering an email address and password
user enter their email address and password
system validate user's email and password
system display a message to confirm reservation
user clicks on the "confirm"button
system sends a confirmation email to user

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Assignment 2 Certify Sheet

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- [x] I have contributed in this assignment to the best of my ability.

And I understand,

- [x] I may be subject to student discipline processes in the event of an act of academic misconduct by me including an act of plagiarism or cheating.

Student Details:

Student Name	Student Registration Number	Date	Signature
M. R. Tharin Ransika	IT21177514	01/05/2022	Ransika.

2

Part 01

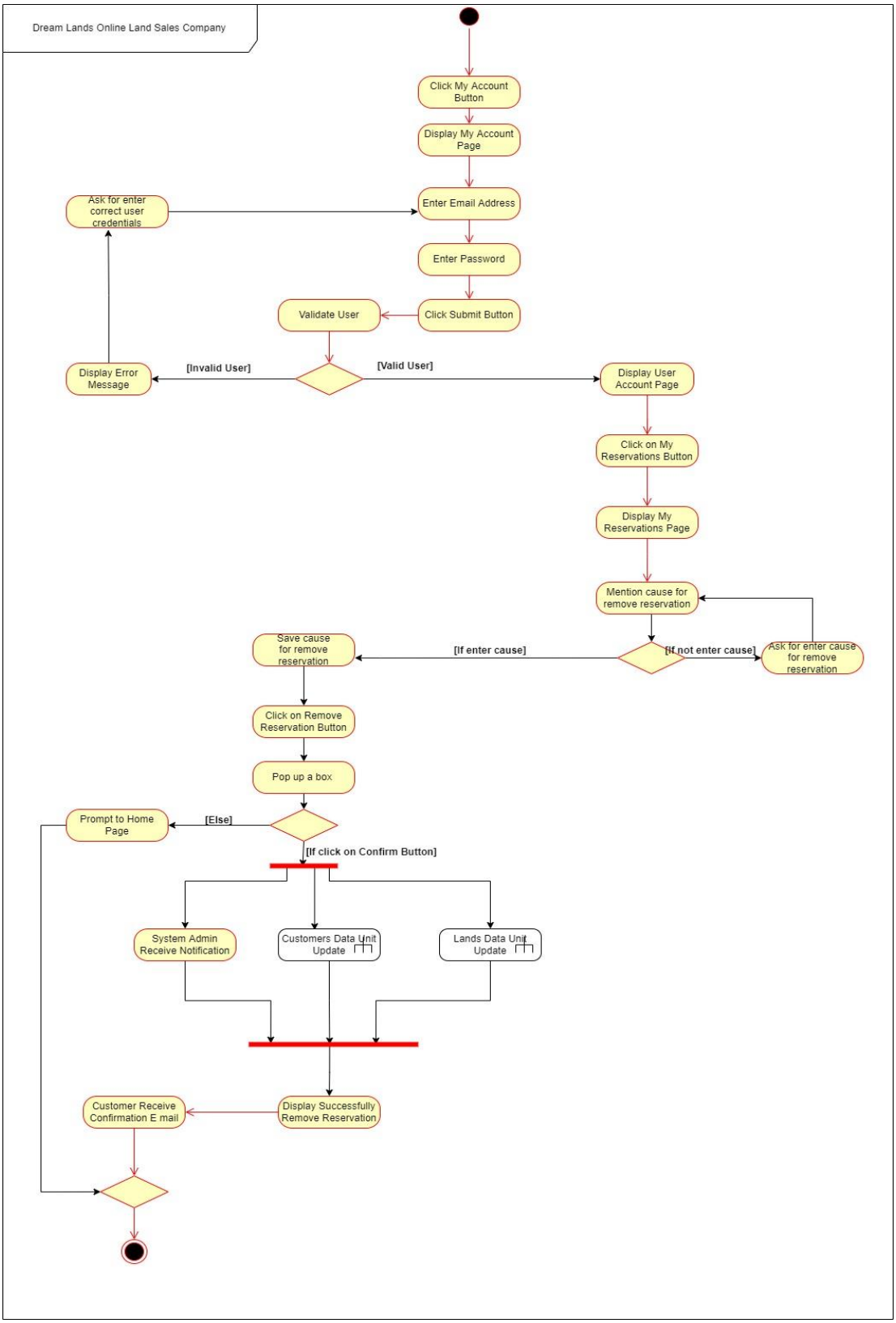
1. **Use Case Name:** Remove reservation

Use Case ID:	002	
Use case Name:	Remove reservation.	
Pre-Conditions:	1.User should have logged into the system. 2.User should have created account. (User should have registered password and registered e-mail address in system.)	
Post-Conditions:	User has removed reservation and received confirmation e-mail from the system about removing reservation.	
Primary Actor:	Registered Customer.	
Main Scenario	**Steps**	**Action**
	01	User clicks on "My Account" button in home page.
	02	System displays portal for enter e-mail address and password.
	03	User enters his/her e-mail address, password and clicks on "Submit" button.
	04	System validates the user. (By using User's e-mail address and password.)
	05	System displays user's account page.
	06	User clicks on "My Reservations" button.
	07	System displays "My Reservations" page. (This page contains details of Number of Reserved Land, Reserved Date, Reserved Time, Features and photos of Reserved Land.)
	08	User types the cause for removing reservation in "Cause for Removing Reservation" box.

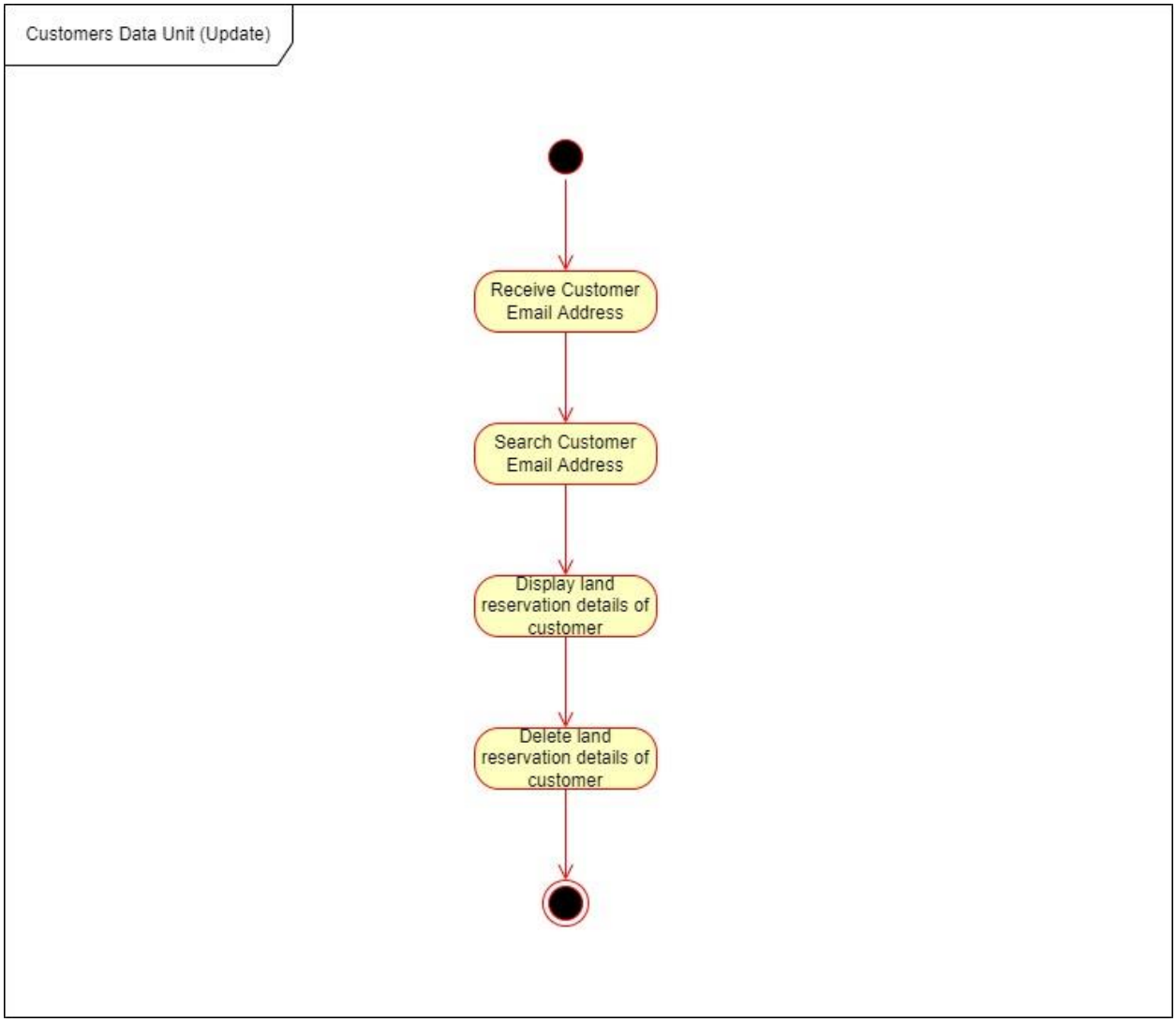
	09	System saves cause for removing reservation.
	10	User clicks on “Remove Reservation” button.
	11	System pops up box for confirm the removing reservation.
	12	User clicks on “Confirm” button in pop up box.
	13	Customers Data Unit get updates. (Customers data unit deletes land reservation details of particular customer.)
	14	Lands Data Unit get updates. (Lands data unit deletes land reservation details of particular land.)
	15	System Admin receives notification mentioned removing reservation.
	16	System sends a confirmation e-mail to user about removing reservation.
	17	System displays message “Successfully Removed Reservation”.
Extensions	**Step**	**Branching Action**
	04.1	System identifies user has entered invalid e-mail address or invalid password.
	04.2	System displays error message “Invalid e-mail address or password. Enter correct e-mail address and password again” and “Forgot Password” Option.
	10.1	System identifies user has not entered cause for removing reservation.
	10.2	System displays message “Enter cause for removing reservation”.
	12.1	User clicks on “Cannot Confirm” button.

	12.2	System exists from “My Reservations” page and prompt to Home Page

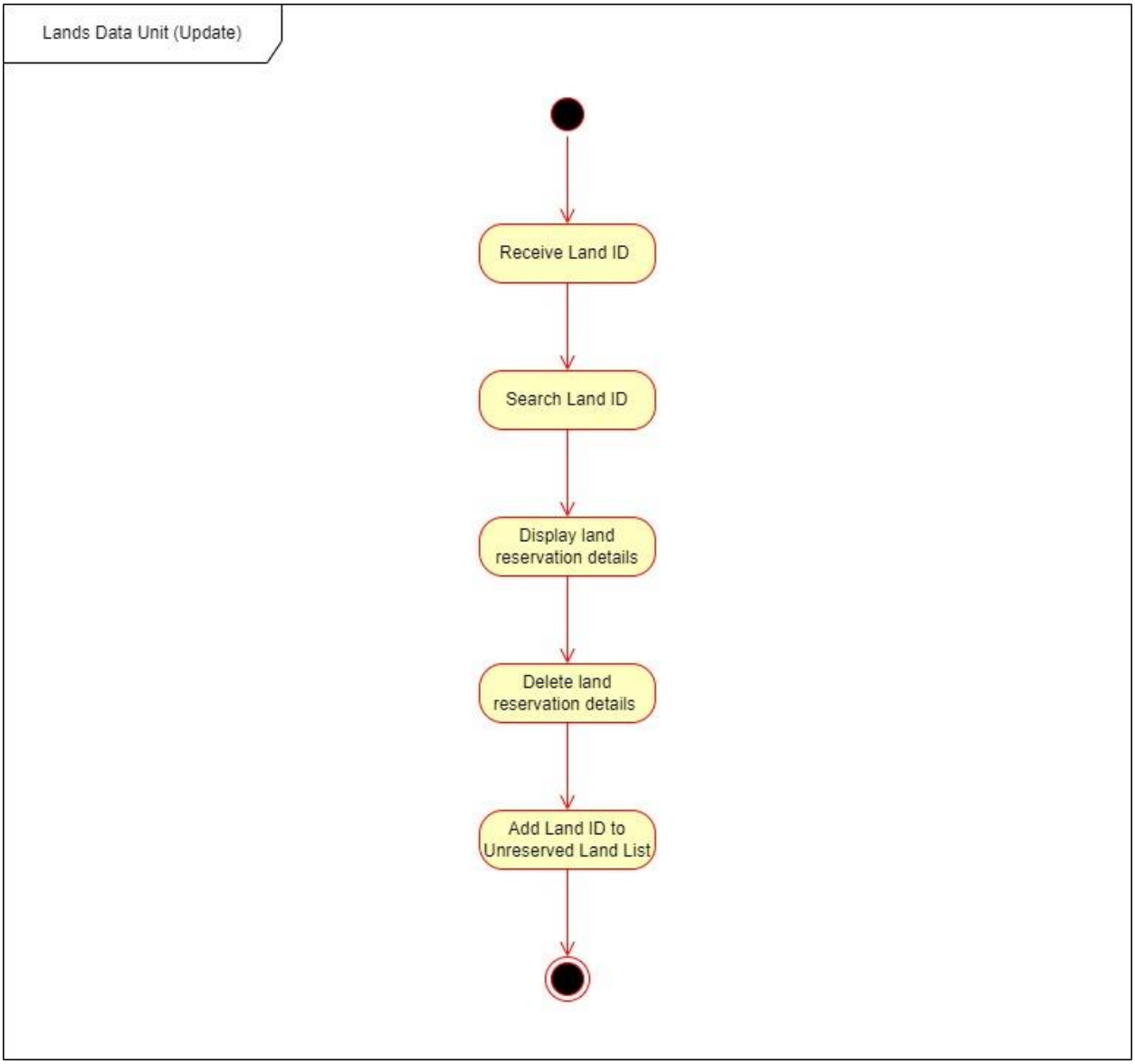
2. Activity Diagram



Call Action (Customers Data Unit Update)

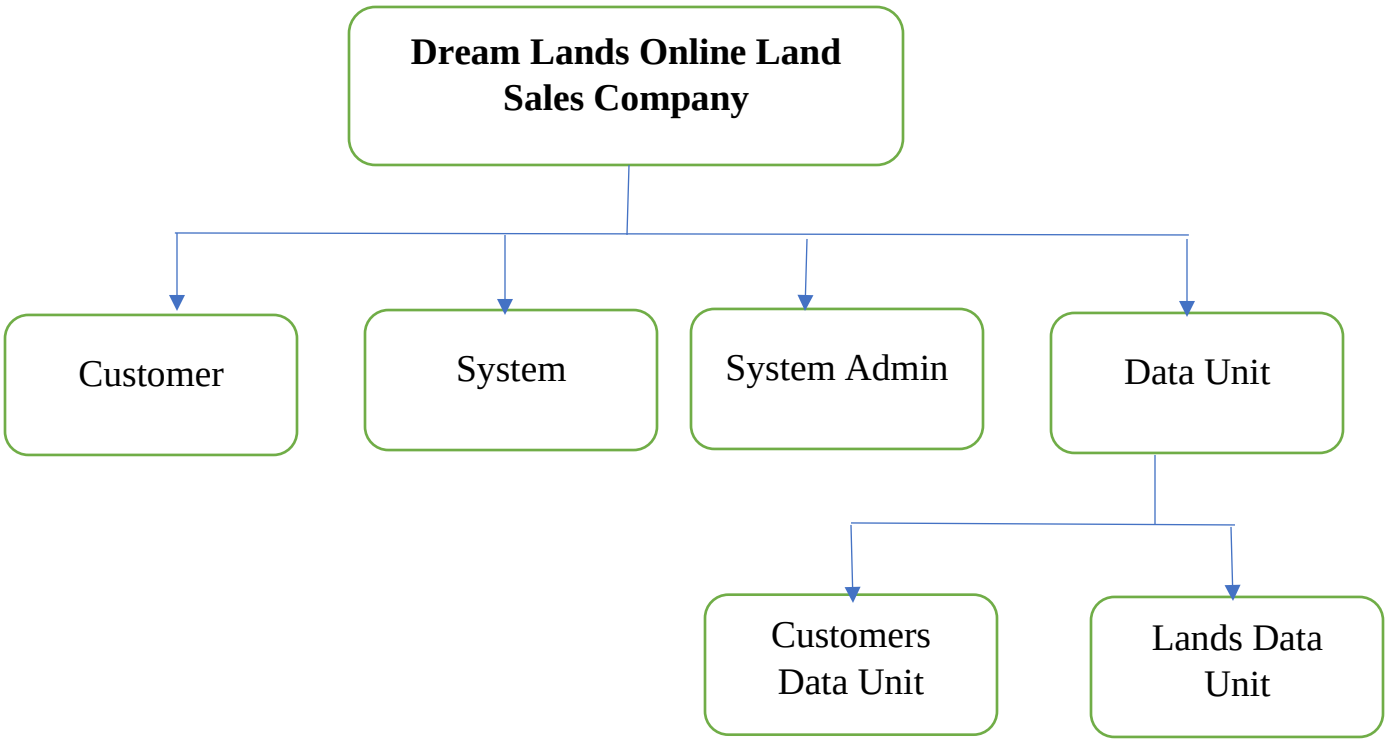


Call Action (Lands Data Unit Update)



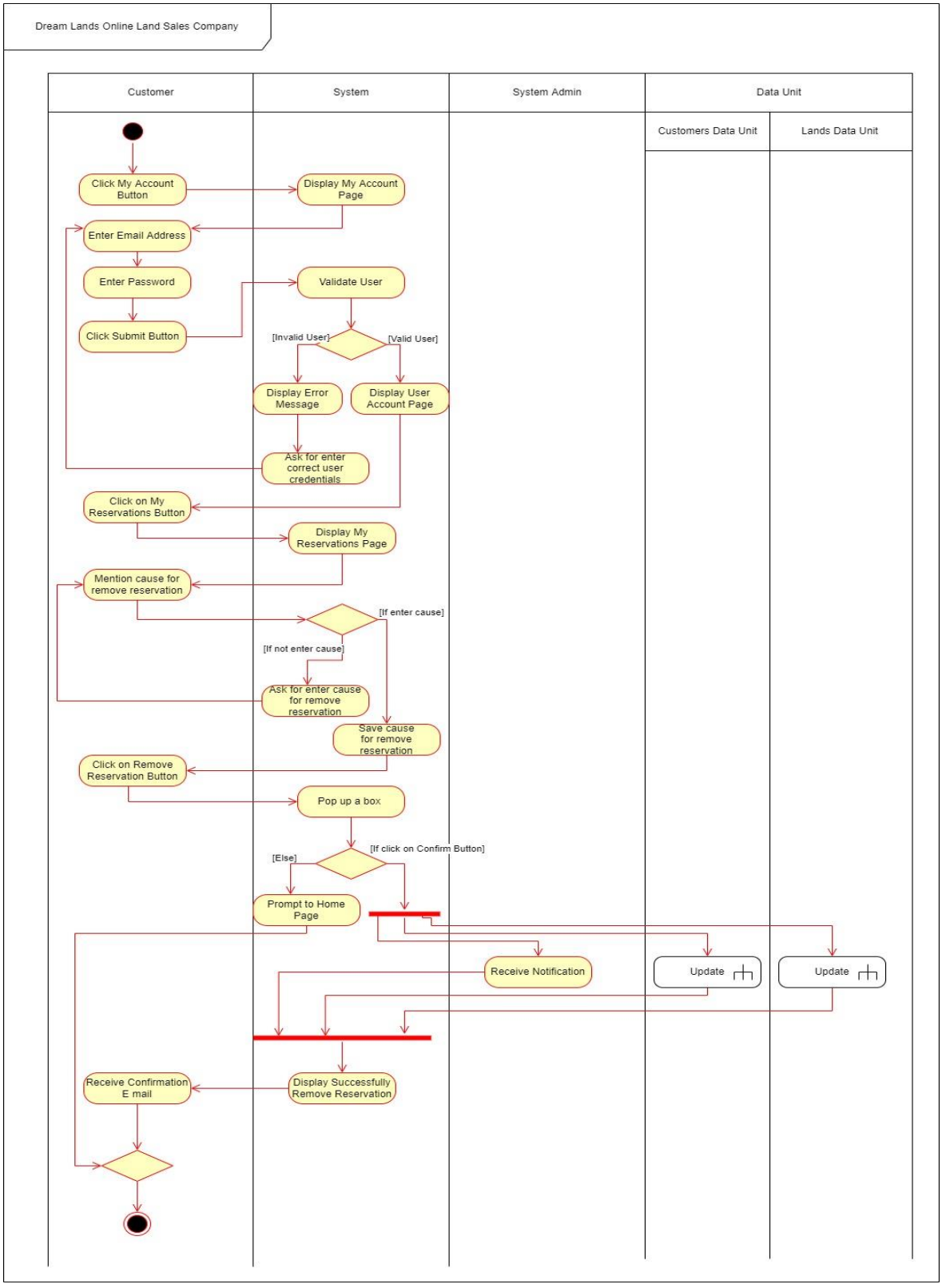
Part 02

1. **Identify Subsystems of Scenario**

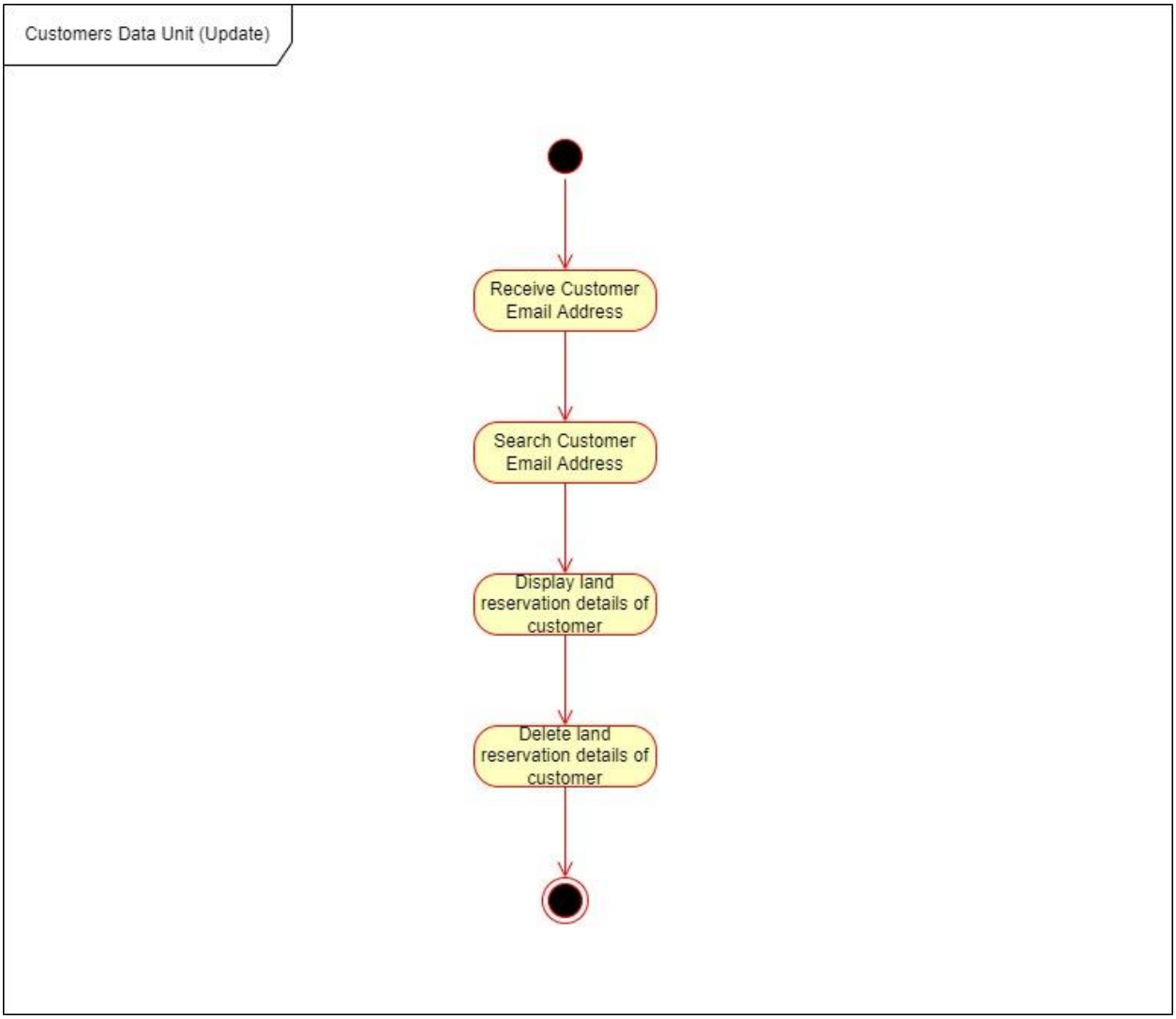


Level 01 Subsystems: Customer, System, System Admin, Data Unit
Level 02 Subsystems: Customers Data Unit, Lands Data Unit

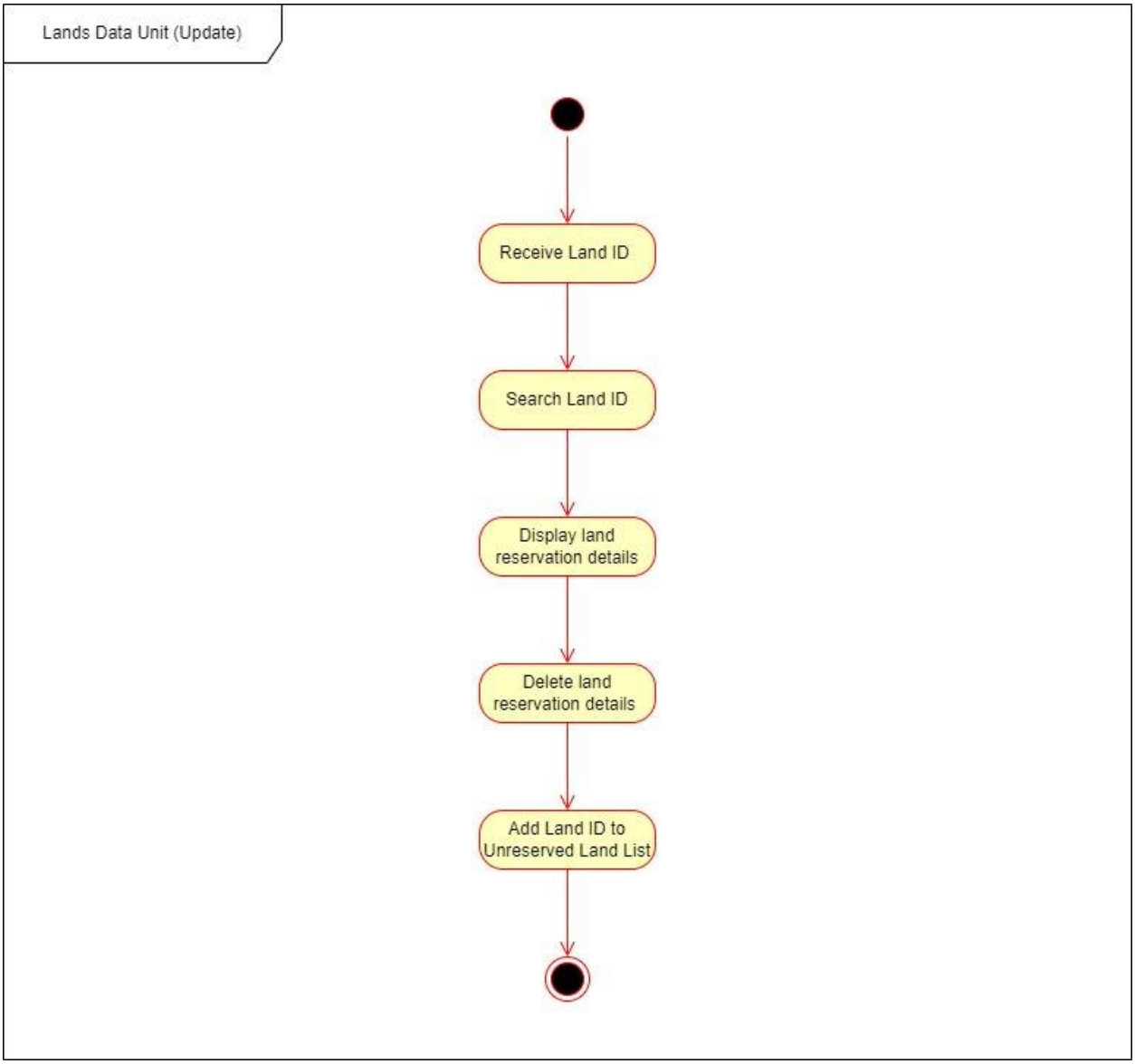
2. Activity Diagram



Call Action (Customers Data Unit Update)



Call Action (Lands Data Unit Update)



Important:

01. More clear and understandable Activity Diagrams are included in **"IT211771514-M.R. Tharin Ransika"** File.

02. "draw.io" Software was used to create Activity Diagrams.

03. The name we proposed to Online Land Sales System is **"Dream Lands"**.

Student ID: IT21178504 **Student Name:** K.V.S.D. Dasanya.

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Assignment 2 Certify Sheet

I hereby certify,

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- ☑ I have contributed in this assignment to the best of my ability.

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Student Details:

Student Name	Student Registration Number	Date	Signature
K.V.S.D. Dasanya	IT21178504	1/05/2022	Dasanya

2

Scanned with CamScanner

Part 01

1. **Use Case Name:** Add Lands

ID: 003

NAME: Add lands

Summary: User add the details and images of a new land to the system.

Priority: 5

Preconditions: User receives a request to add land.

Postconditions: User has added the land to the system and receives confirmation.

Primary actor: System Admin

Trigger: User chooses to add a land by clicking “Add New Land” button.

Main Scenario:

Steps	Action
1	System asks to enter login details.
2	User enters username and password.
3	System validate the user’s username and password.
4	System displays “ADD LANDS” button.
5	User clicks “Add Lands” button.
6	System displays add lands page.
7	User upload land images.
8	User enter land details.
9	User enter the location link.
10	User click on the submit button.
11	System shows a sample page with the details.
12	System asks to confirm the details.
13	User clicks on the confirm button.
14	System displays a message saying land added successfully.

Extensions:

Step	Branching Action

3a System notifies login details are invalid. System asks user to re-enter details.

7a User enters images in the wrong format. System asks the user to re-enter images.

8a System detects incomplete fields. System asks to complete the records.

8b System detects details in the wrong format. System gives an error message.

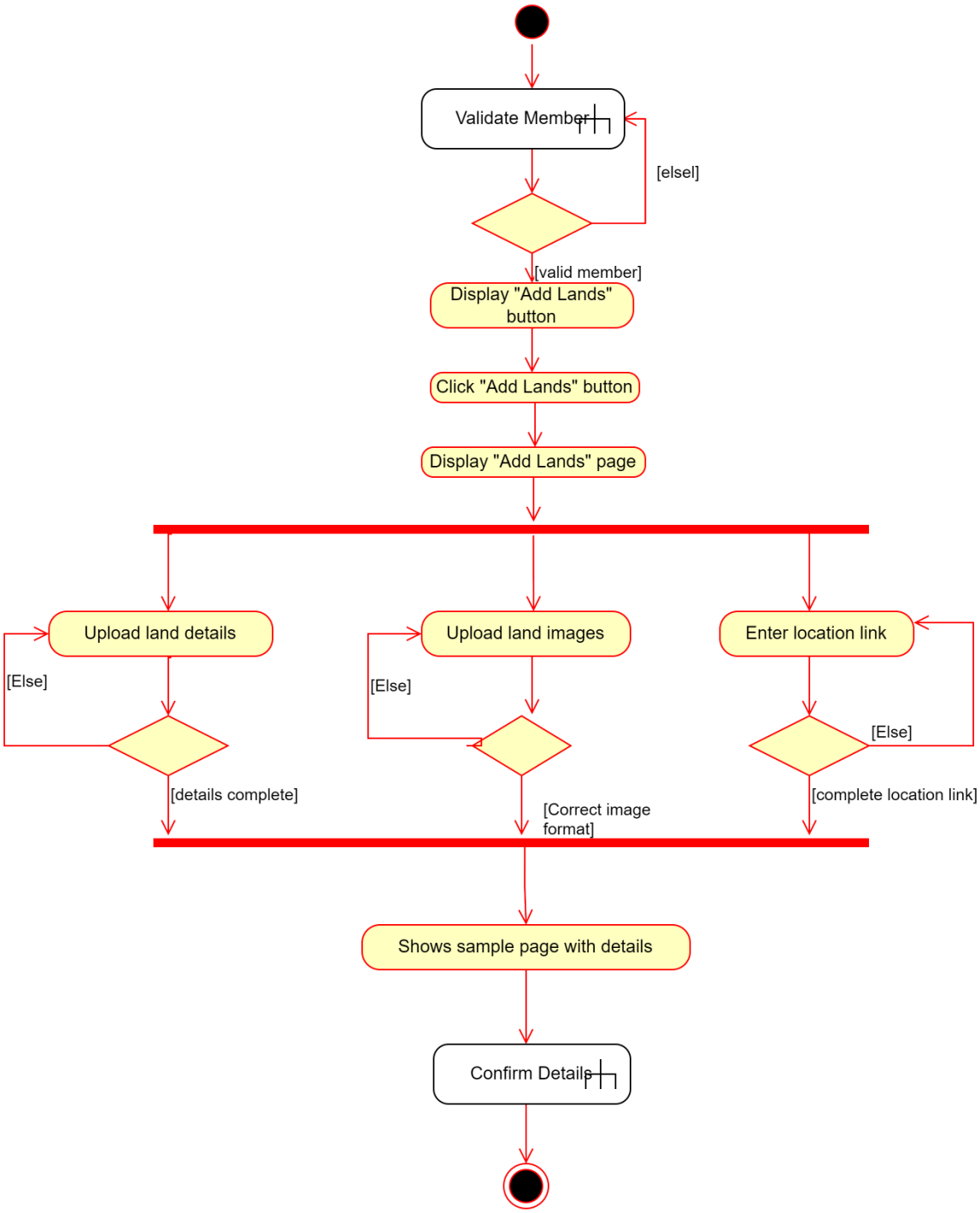
9a User doesn’t add a location link. System asks the user to enter the link.

10a User clicks on the reset button. System exits.

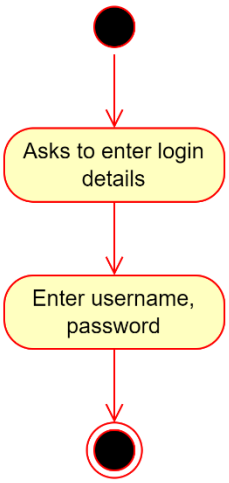
13a User clicks “Edit Details” button. Systems directs the user to edit the details.

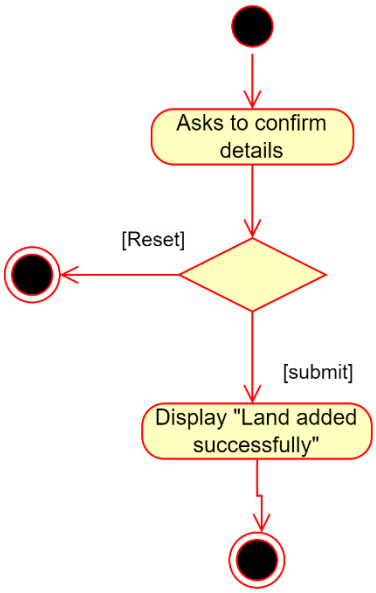
13b User clicks “Exit process” button. System exits

2. Activity Diagram

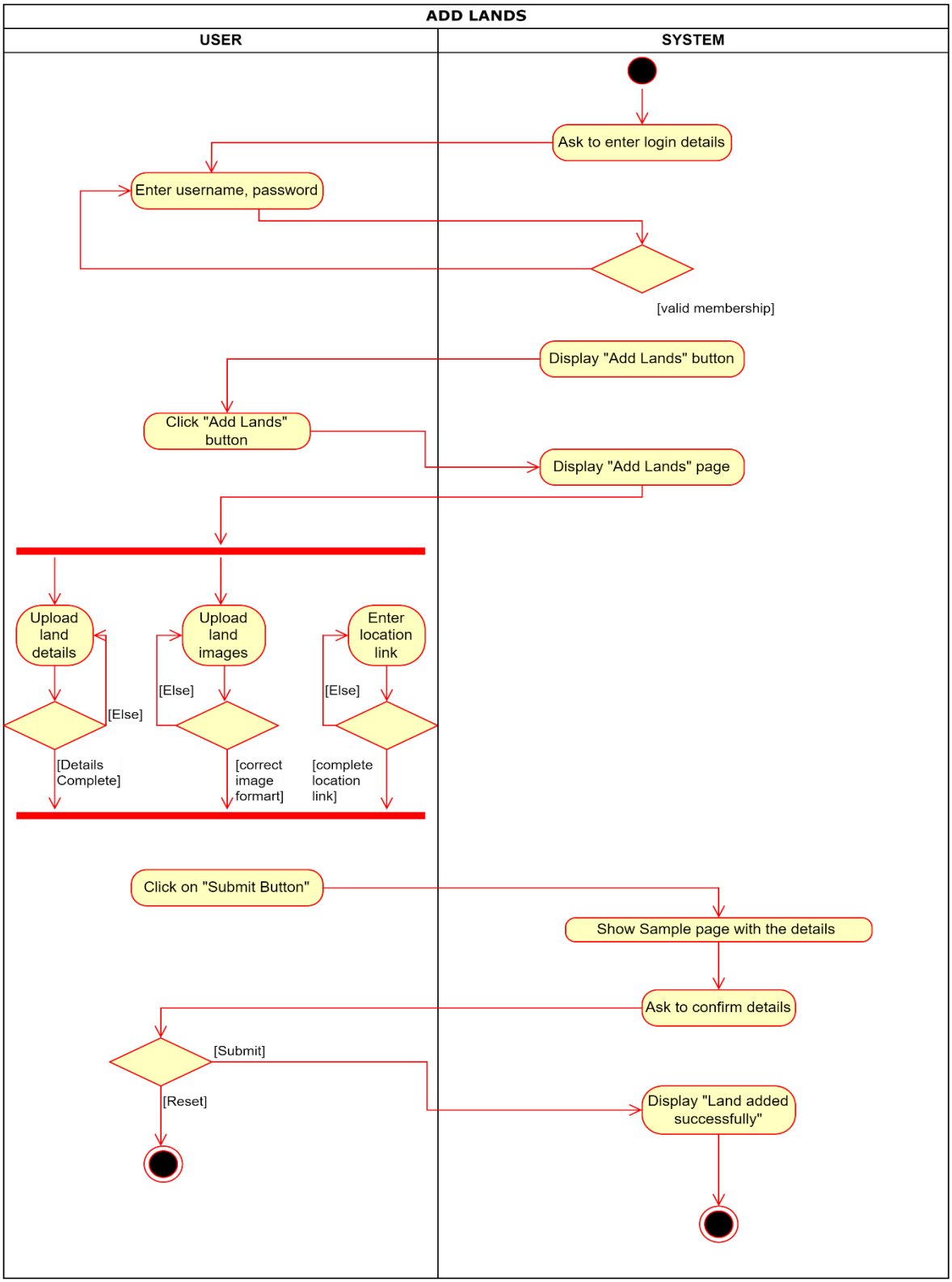


Call Actions





Part 02


ADD LANDS
USER
SYSTEM
Ask to enter login details
Enter username, password
[valid membership]
Display "Add Lands" button
Click "Add Lands" button
Display "Add Lands" page
Upload land details
[Else]
[Details Complete]
Upload land images
[Else]
[correct image formart]
Enter location link
[Else]
[complete location link]
Click on "Submit Button"
Show Sample page with the details
Ask to confirm details
[Submit]
[Reset]
Display "Land added successfully"

Student ID: IT21179976. **Student Name:** D.H.K. Hasini Ishara.

Part 01

1.Use Case Name: Sell Land

ID: 004

Name: Sell land

Summary: User is selling the land to the customers through the system

Priority: 3 (1-lowest priority, 5-highest priority)

Preconditions: User has logged into the system and created a account (user should has a valid registered password and email address)

Post conditions: User has uploaded the details and the photos about the land
user has received confirmation email

Primary actor: User

Main Scenario: (01) System displays relevant form to sell lands
(02) Customer enters land details, uploads some photos of the land and enters personal details (name, address, NIC ,…)
(03) System captures entered details and photos
(04) System displays a message for enter

password and email

(05) User enters the password and email

(06) System validates the user password and email

(07) System displays a message for confirm sell the land

(08) User clicks on “Confirm” button

(09) System sends confirmation email to the customer

Extensions: (03.1) System identifies the user has not uploaded some details and the photos of the land

(03.2) System displays a message for upload the photos and details of the land

(06.1) System identifies the user has entered a wrong password or a wrong email address

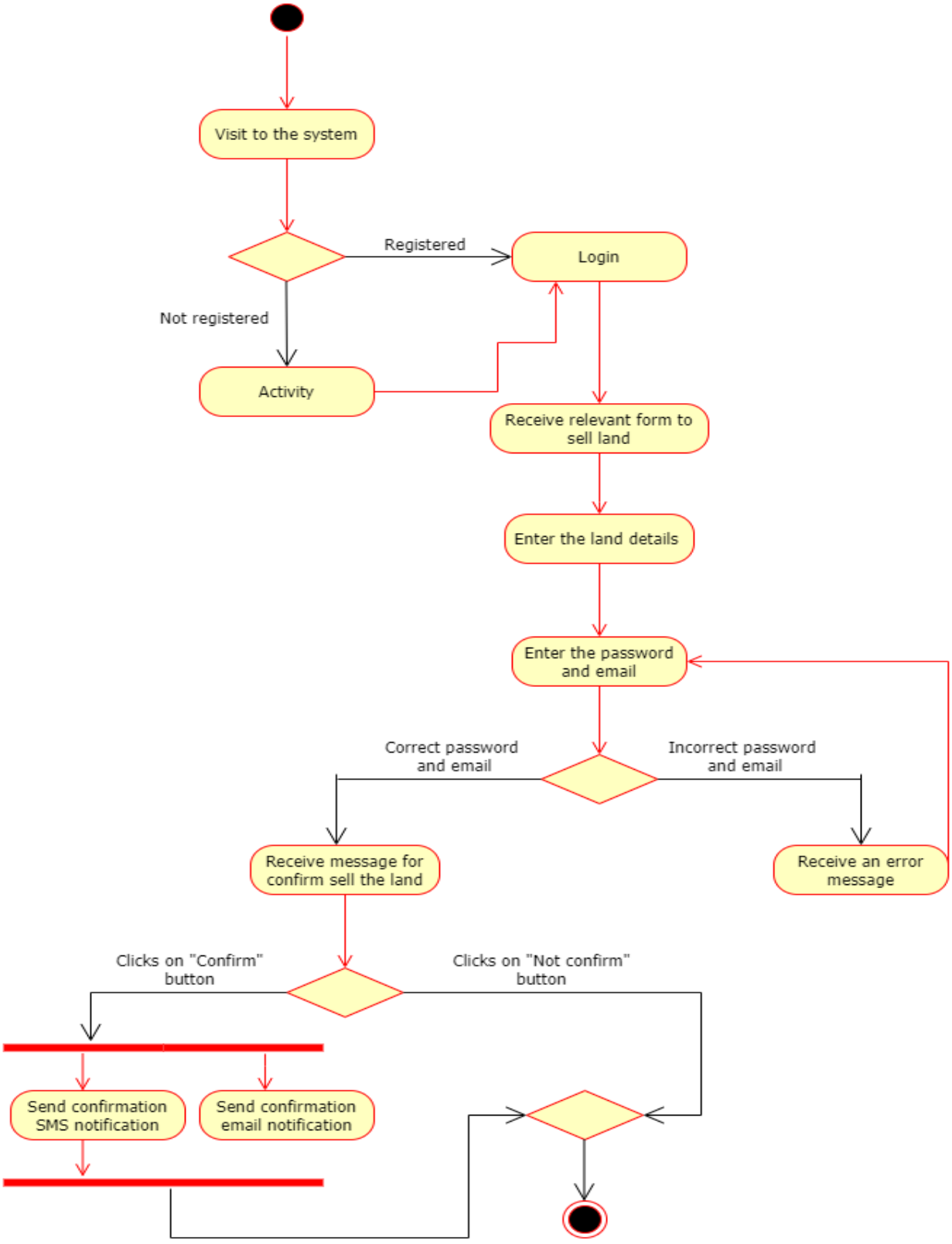
(06.2) System displays an error message and a message for enter the password and email again

(07.1) User clicks on “Not confirm” button

(07.2) System exits from the page

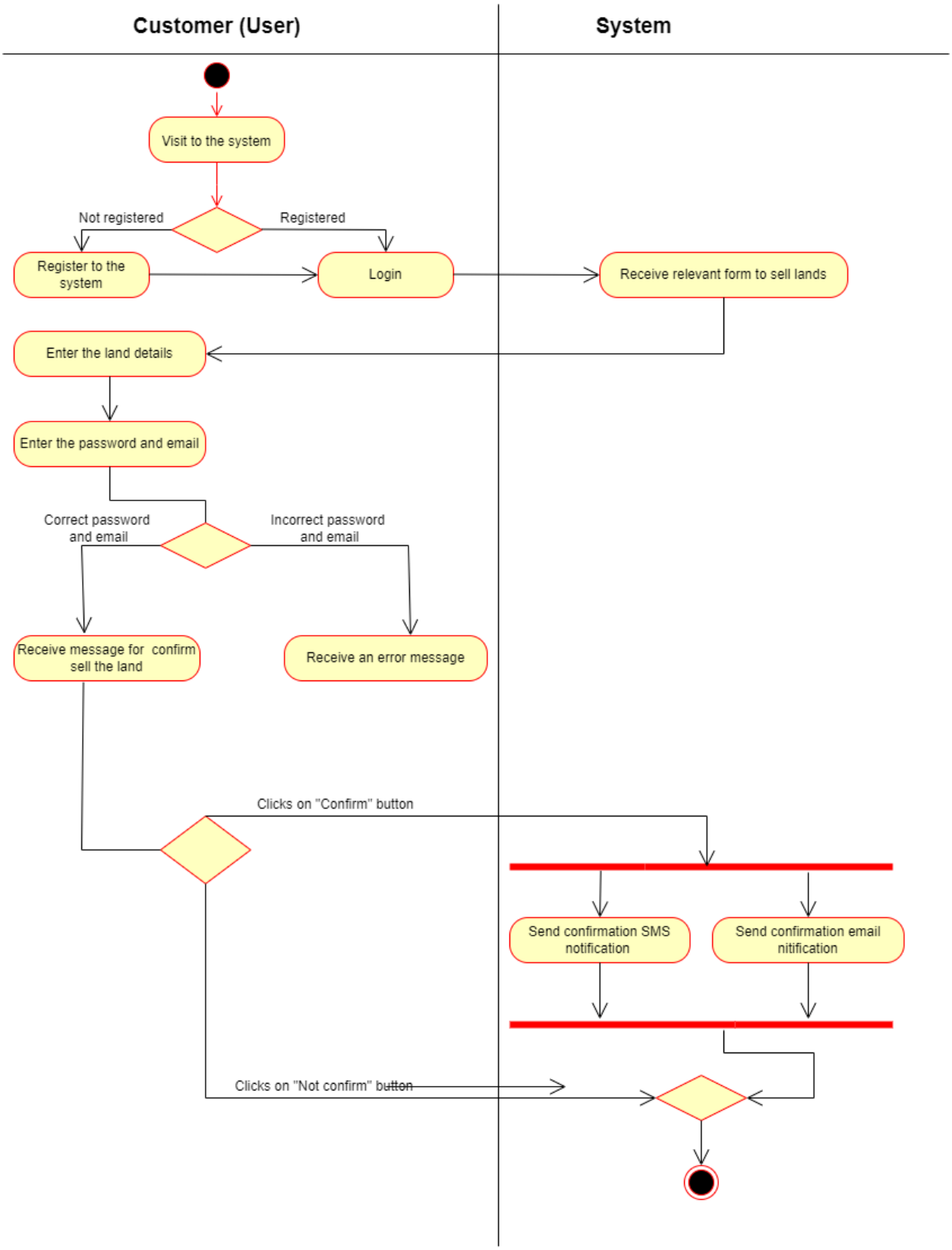
2.Activity Diagram

part 1


Visit to the system
Registered
Login
Not registered
Activity
Receive relevant form to sell land
Enter the land details
Enter the password and email
Correct password and email
Incorrect password and email
Receive message for confirm sell the land
Receive an error message
Clicks on "Confirm" button
Clicks on "Not confirm" button
Send confirmation SMS notification
Send confirmation email notification

Part 02

Activity Diagram


Customer (User)
System
Visit to the system
Not registered
Registered
Register to the system
Login
Receive relevant form to sell lands
Enter the land details
Enter the password and email
Correct password and email
Incorrect password and email
Receive message for confirm sell the land
Receive an error message
Clicks on "Confirm" button
Send confirmation SMS notification
Send confirmation email nitification
Clicks on "Not confirm" button

The End.