

**ITP Assignment**  
**Activity 2**  
**Activity 02\_ITP25\_B2\_C1-45**

<b>IT Number</b>	<b>Student Name</b>	<b>Student Email address</b>	<b>Contact Number</b>
IT23157446	BOGODA ARACHCHI B.A.L.M.U	it23157446@my.sliit.lk	0712298436
IT23154230	PALLIYAGURUGE H.H.W	it23154230@my.sliit.lk	0711784003
IT23149380	GALLAGE P.G.T.N.D	it23149380@my.sliit.lk	0710763706
IT23173286	UDAGEDARA M.C.H	it23173286@my.sliit.lk	0757414833
IT23344556	JAYAWICKRAMA W.T.L	it23344556@my.sliit.lk	0774197985

## Table of Contents

<b>1. Stakeholders and Onion diagram .....</b>	<b>3</b>
<b>2. Functional Requirements (for direct system users).....</b>	<b>4</b>
<b>3. Non-Functional Requirements .....</b>	<b>4</b>
<b>4. Technical Requirements .....</b>	<b>5</b>
<b>5. Use Case Diagram.....</b>	<b>6</b>
<b>6. Use Case Descriptions .....</b>	<b>7</b>
<b>7. Diagrams .....</b>	<b>16</b>
<b>A. System Diagram .....</b>	<b>16</b>
<b>B. Flow Chart .....</b>	<b>17</b>
<b>C. Data Flow Diagram .....</b>	<b>18</b>
<b>8. Project plan .....</b>	<b>18</b>

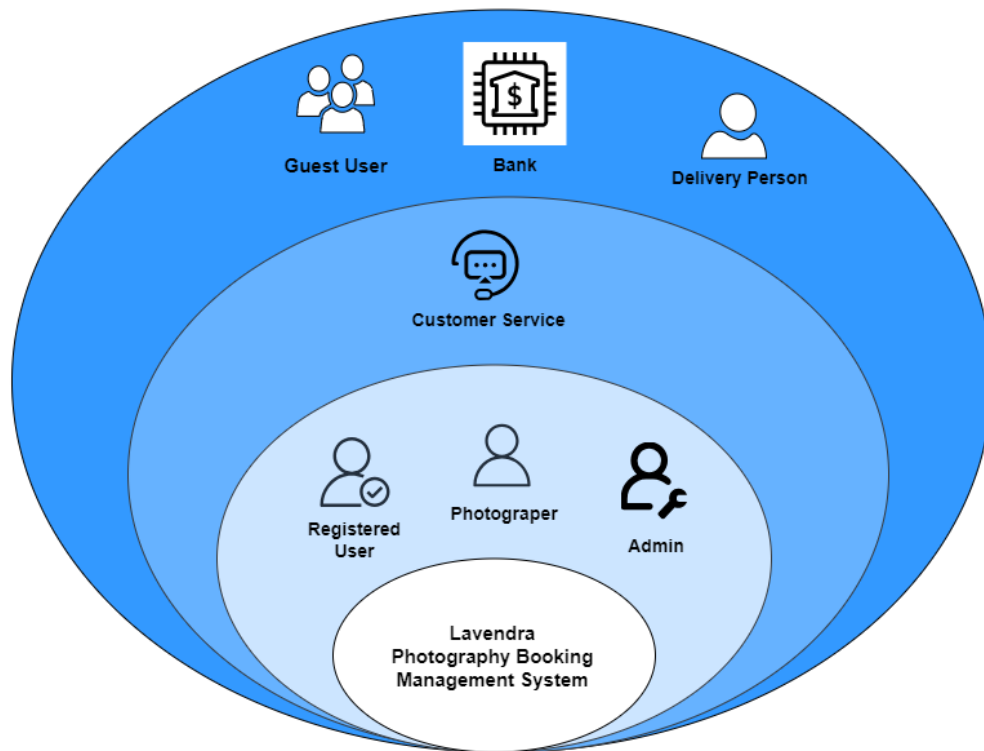
# 1. Stakeholders and Onion diagram

## Stakeholders

Core Users (innermost layer) – Registered Users, Photographers, Admin

Supporting Users – Customer service

External Bodies – Guest Users, delivery Person, Bank



## **2. Functional Requirements (for direct system users)**

- **For Registered Users:**

- User registration and login
- View and book available packages
- Rent available items.
- Make payments online.
- Manage bookings.
- View booking history
- Make inquiries.

- **For Administrative:**

- Manage user roles.
- Generate and analyze reports.
- Monitor payment transactions.
- Update social media accounts.
- Manage devices and notices.
- Manage blogs and add rental items to the system.

- **For photographers:**

- Add packages to the system.
- Provide blog details to the administration.
- Upload photos to the gallery

## **3. Non-Functional Requirements**

- **For Registered Users:**

- Security – ensure the security of user data and payment processes.
- Performance – Users expect a fast and efficient performance in the system.
- Usability – interfaces that are easy to use and user friendly.

- **For Administrative:**

- Security – restricted access to financial data
- Accuracy- ensure correct calculations.
- Auditability – Maintaining clear logs of transactions.

- **For photographers:**

Scalability – ability to handle multiple bookings efficiently.

Availability- the system should remain available and operational with very little interruption or without a delay.

## **4. Technical Requirements**

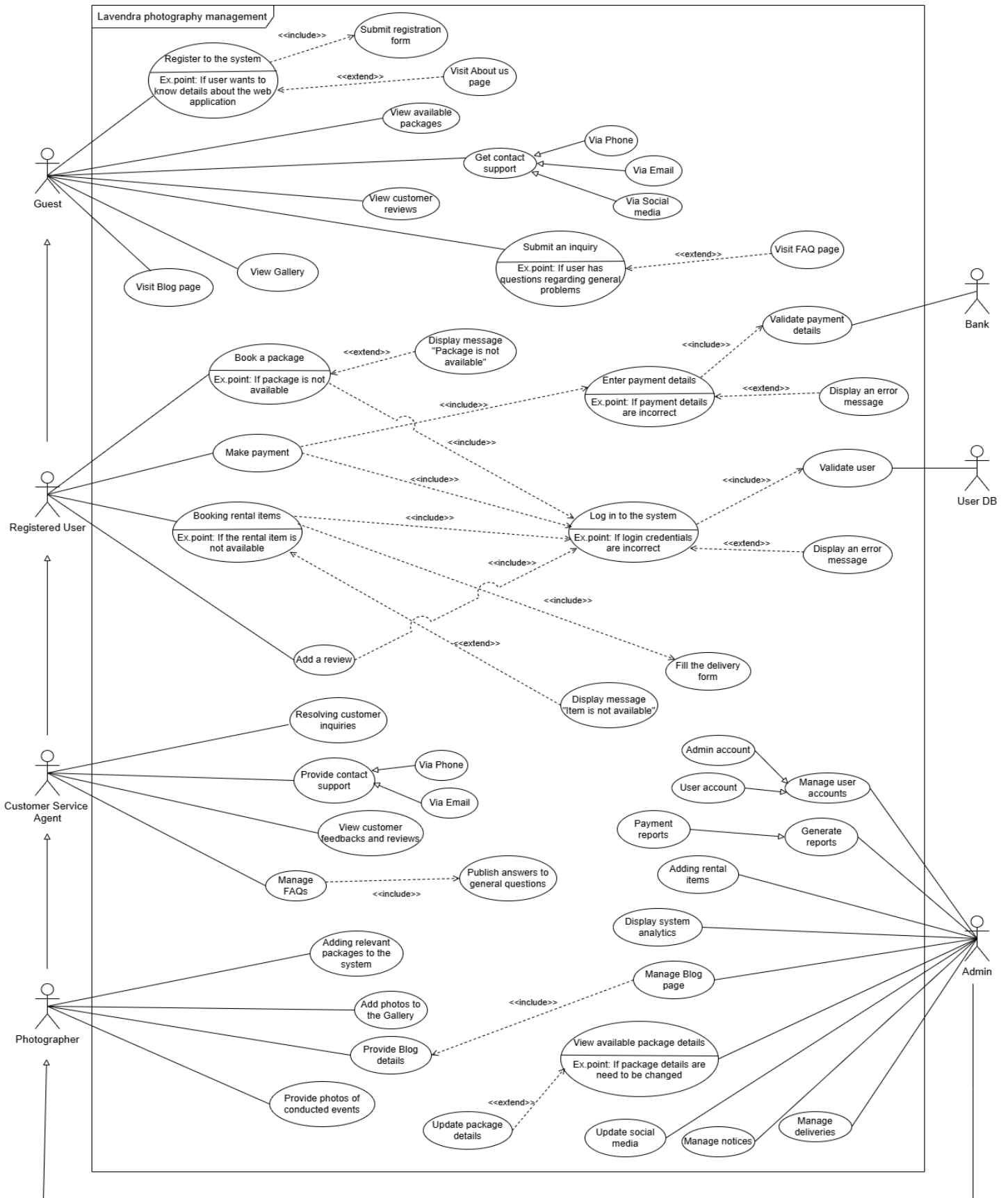
Backend – Node.js with Express.js

Frontend – React.js

Database – MongoDB

Payment integration – Stripe API

## 5. Use Case Diagram



## 6. Use Case Descriptions

- **Make payment.**

Use case number	1	
Name	Make Payment	
Summary	Make a payment for the selected package	
Priority	1	
Pre-conditions	User should have logged in & selected a package.	
Post-conditions	Receives a payment successful message	
Primary Actor	Registered User	
Trigger	User wants to book a package	
Main Scenario	<b>Step</b>	<b>Action</b>
	1	User visits the webapp
	2	User selects a booking to pay for.
	3	User navigates to the payment section
	4	Checks the amount to be paid.
	5	System displays the payment options
	6	User selects a payment method
	7	Fill the payment form with required data
	8	Click on the “Pay” button
	9	Confirm the payment
	10	System display success message to the user.
Extensions	<b>Step</b>	<b>Action</b>
	8a	If user enters incorrect payment details, system will display an error message and ask to correct it.
	8b	If the payment process fails, system gives a retry option.

- **Book a package.**

Use case number	2	
Use case name	Book a package	
Summary	User goes through the available packages list and books the preferred package	
Priority	1	
Pre-conditions	The user should have registered and logged in	
Post conditions	The registered user successfully books the preferred package	
Primary actor	The registered user	
Secondary actors	The admin	
Trigger	The registered user views the available packages and selects the one that best meets their requirements.	
<b>Main success scenario</b>	<b>Step</b>	<b>Action</b>
	1.	Visit and log in to the website
	2.	Go to packages page
	3	Enter a date, time and location
	4.	View available packages
	5.	Choose the preferred package
	6.	Add the package to the cart
	7.	Adjust the number of photographers from the cart



	8.	The registered user finalizes their order in the preferred manner
	9.	Click on “Proceed to payment” button
	10.	Pay the relevant advance amount successfully
	11	Successfully book the package
	12.	Receive a booking confirmation message
	13.	Receive a unique booking ID
	14.	Redirect to a page with order details
<b>Extensions</b>	<b>Step</b>	<b>Action</b>
	5a	If the preferred package is not available, ask the admin to update the packages
	7a	If the maximum number of photographers available is not enough, contact the admin
	9a	If the user is not logged in, ask the user to log in
	10a	If the payment is not successful, contact the admin
	12a	If the confirmation message is not received, send an inquiry message to the admin
	13a	If booking ID not received, click on “send again” button

- **Booking rental items.**

ID	03	
Name	Booking Rental Item	
Summary	Allows a Registered User to book a rental item from the system	
Priority	1	
Pre-conditions	The user must be logged in, and the rental item must be available for booking.	
Post-conditions	The user receives a booking confirmation message, and the rental item is marked as reserved for the selected duration.	
Primary Actor	Registered User	
Trigger	The user wants to book a rental item.	
Main success scenario	<b>Step</b>	<b>Action</b>
	1.	The user visits the web app and login to the website.
	2.	User navigates to the rental items section.
	3.	The user selects the desired rental item(s)
	4.	The system checks the availability of the selected item(s).
	5.	The user proceeds to the booking section
	6.	The system displays the rental details and total cost.
	7.	The user selects a payment method and enters payment details.
	8.	The user clicks the "Pay" button to confirm the booking.
	9.	The system verifies payment details with the Bank.

	10.	If payment is successful, the system sends a booking confirmation message
	11.	The user logs out or continues browsing.
Extensions	<b>Step</b>	<b>Action</b>
	3a.	If the selected rental item is not available, the system displays a message: <i>"Item is not available."</i>
	6a.	If the user enters incorrect payment details, the system displays an error message and asks for corrections.
	8a.	If the payment process fails, the system provides a retry option.

- **Submit an inquiry.**

ID	4	
Name	Submit an inquiry	
Summary	Submit an inquiry regarding a specific question	
Priority	2	
Pre-conditions	Users must fill the inquiry form	
Post-conditions	Receives a reply email	
Primary Actor	Guest	
Trigger	User visits the inquiry page	
Main Scenario	<b>Step</b>	<b>Action</b>
	1	Visit the web site.
	2	Navigate to the inquiry page.
	3	Fill the form by entering the necessary details.
	4	Select the appropriate inquiry type from the available options.
	5	Click the “Submit” Button.
	6	A confirmation message appears, “Your inquiry has been successfully submitted.”
	7	User receives a unique inquiry id for their inquiry.
	8	Redirect to inquiry details page where the user can see their submitted inquiry details.
	9	User checks the inquiry status by entering the unique inquiry id.
	10	If the inquiry is resolved, display the status of the inquiry as “Resolved”.

	11	User receives a reply email with the solution.
Extensions	<b>Step</b>	<b>Action</b>
	3a	If the user misses the required fields, display an error message for each missing field.
	3b	If the user enters an invalid email with incorrect format, displays a validation message prompting the user to fix the error.
	4a	If the inquiry type is general, visit the FAQ page.
	10a	If the inquiry is still unresolved, display the status as “Pending”.

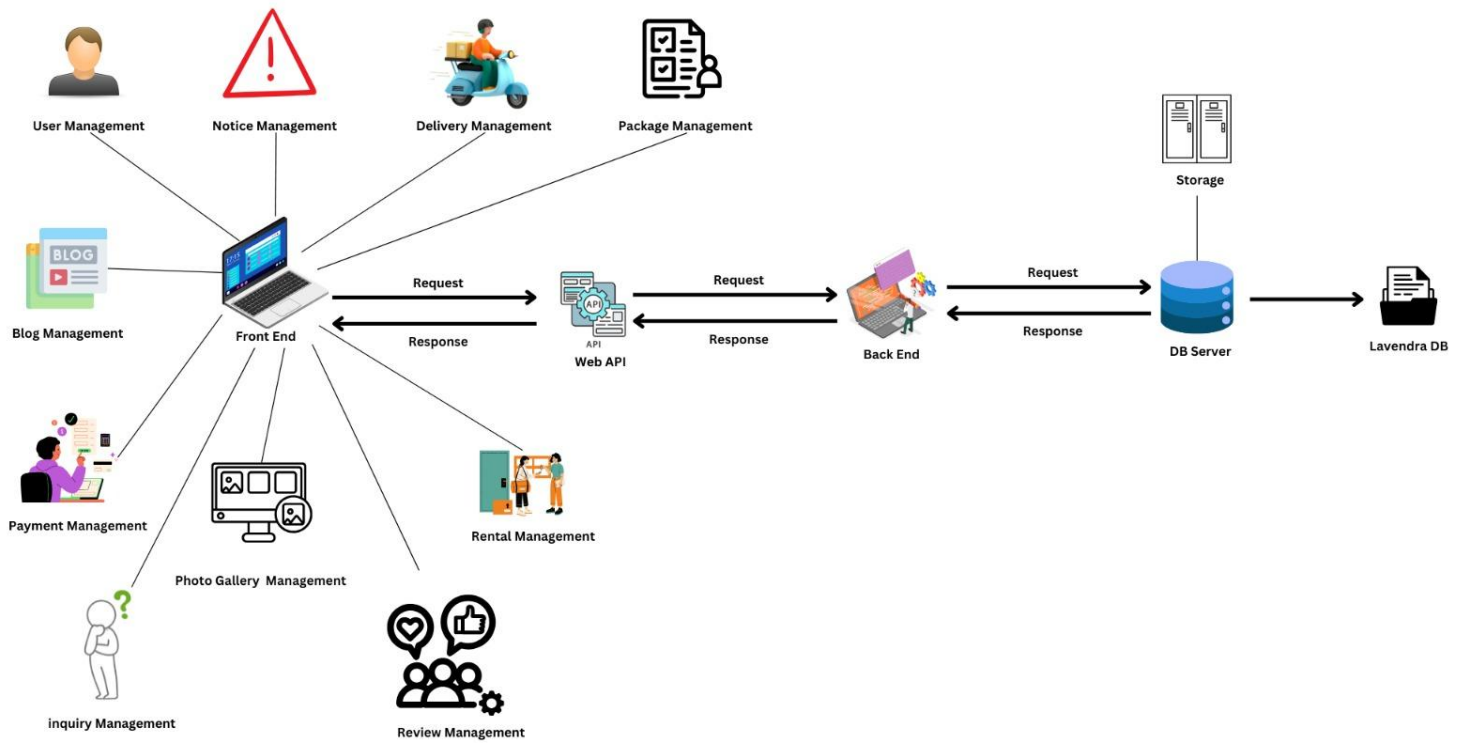
- **View Available Package Details**

Use case number	05	
Name	View Available Package Details	
Summary	The admin views the details of available photography packages.	
Priority	1	
Pre-conditions	The system must have existing package details stored.	
Post-conditions	The admin successfully retrieves and views package details.	
Primary Actor	Admin	
Trigger	Admin wants to check the available package details.	
Main Scenario	<b>Step</b>	<b>Action</b>
	1	Admin logs into the system using valid credentials.
	2	Admin navigates to the "Package Management" section from the dashboard.
	3	Admin selects the option to "View Available Packages."
	4	The system retrieves and displays a list of all available packages.
	5	Admin filters or searches for a specific package using keywords (e.g., name, price, category).
	6	Admin sorts packages based on criteria such as price, popularity, or availability.
	7	Admin clicks on a specific package to view full details (e.g., price, description, features, availability).
	8	Admin checks customer feedback and reviews for the selected package (if available).
	9	Admin verifies package availability for different locations or time slots (if applicable).

	10	Admin decides whether to update, delete, or keep the package as it is.
	11	If necessary, the admin navigates to the "Edit Package" section to modify details.
	12	Admin logs out of the system.
Extensions	<b>Step</b>	<b>Action</b>
	4a	If no packages are available, the system displays a message: “No available packages.”
	5a	If package details fail to load, the system provides a retry option.
	7a	If package details fail to load, the system provides a retry option.
	10a	If the Admin wants to update the package, they are redirected to the "Update Package" section.
	10b	If the Admin wants to remove the package, the system asks for confirmation before deletion.

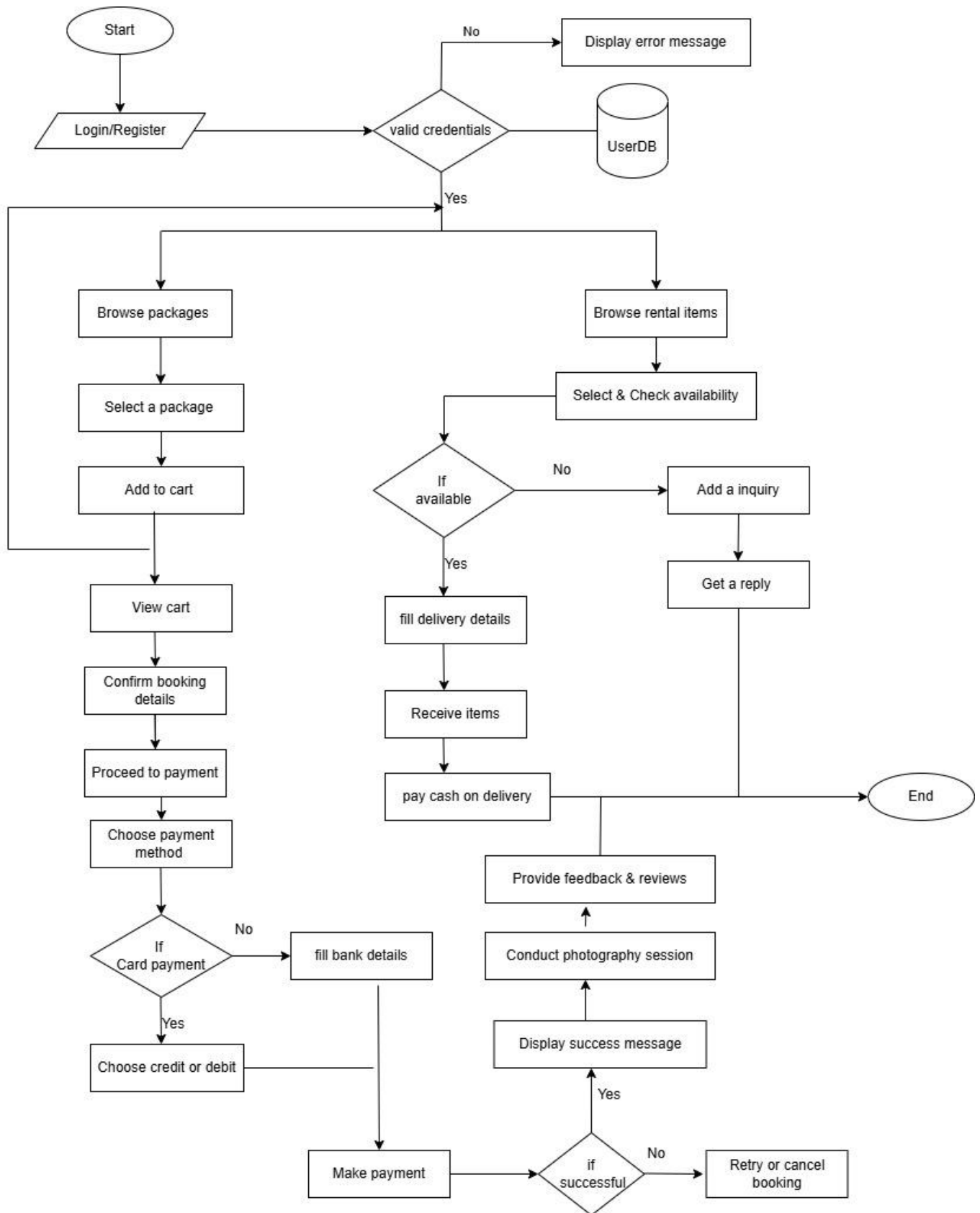
## 7. Diagrams

### A. System Diagram

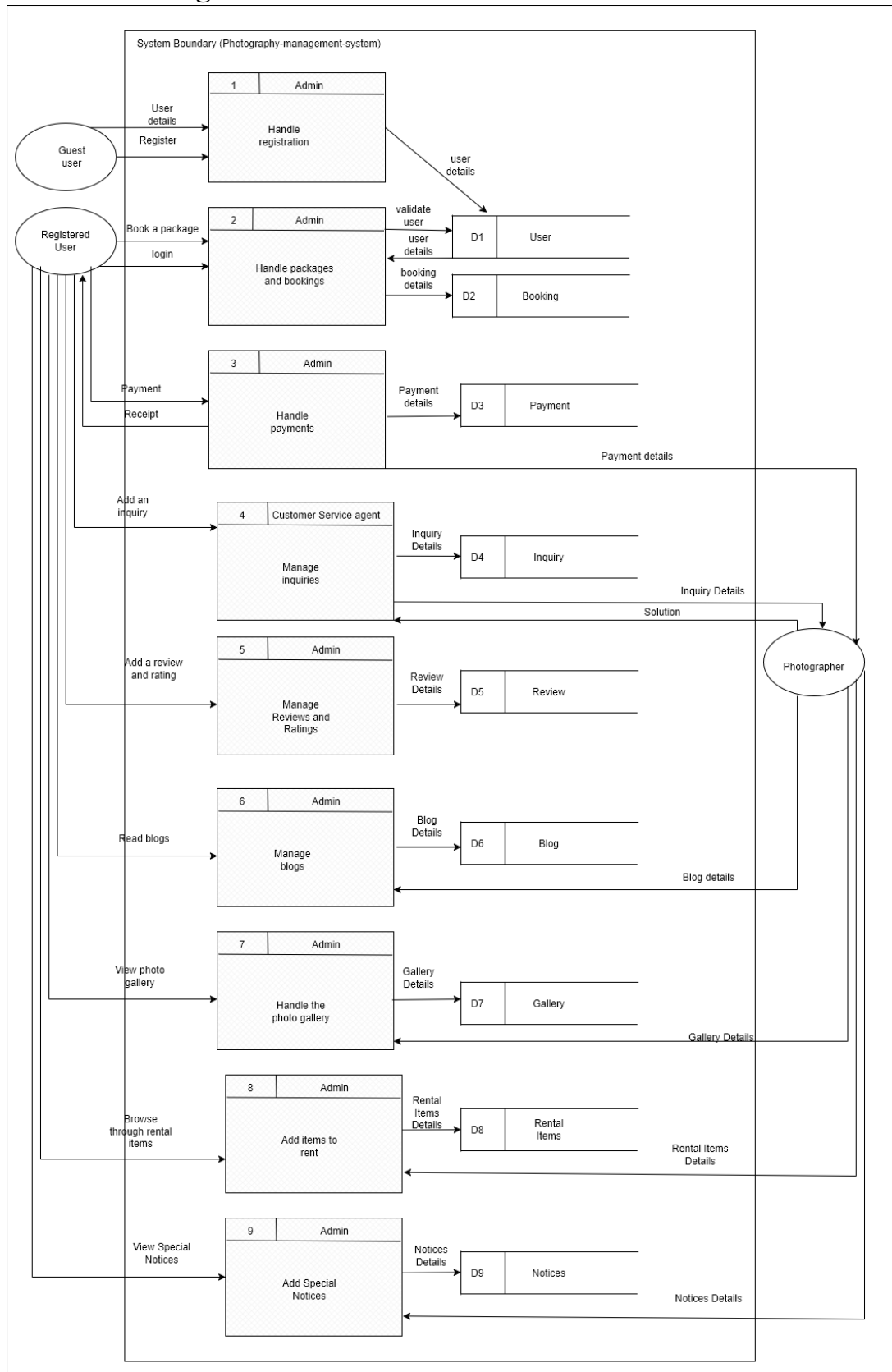




## B. Flow Chart



## C. Data Flow Diagram



## 8. Project plan

[illegible]