UNIVERSITY PARTNER

UNIVERSITY OF WOLVERHAMPTON

HERALD COLLEGE KATHMANDU

Project and Professionalism(6CS007)

Survey Equipment Rental

(Artefact Design and Test Plan)

Student ID : 2358836

Student Name : Mausham Dhakal

Group : L6CG19

Supervisor : Mr. Nikunja Lamsal

Reader :Mr. Shiv Kumar Yadav

Submitted on :02-02-2025

Table of Contents

Functional Decomposition Diagram 4

Test Cases for Rental eCommerce Website 5

User Management 7

Er Diagram 7

Class Diagram 8

Activity Diagram 9

Use case Diagram 10

Sequence diagram 11

Product management 12

Er diagram 12

Class diagram 13

Activity Diagram 14

Use Case Diagram 15

Sequence Diagram 16

Payment methods 17

Er diagram 17

Class diagram 18

Activity diagram 19

Use case diagram 20

Sequence diagram 21

Notification management 22

Er diagram 22

Class diagram 23

Activity Diagram 24

Use case Diagram 25

Sequence diagram 26

Artefact Design 27

Table of Figures

Figure 1: login page 27
Figure 2: Product page 28
Figure 3: Rent pages 28
Figure 4: Payment Pages 28
Figure 5: Sign up page 28
Figure 6: product page 28
Figure 7: rent page 28
Figure 8: Payments 28
Figure 9: login pages 28

Functional Decomposition Diagram

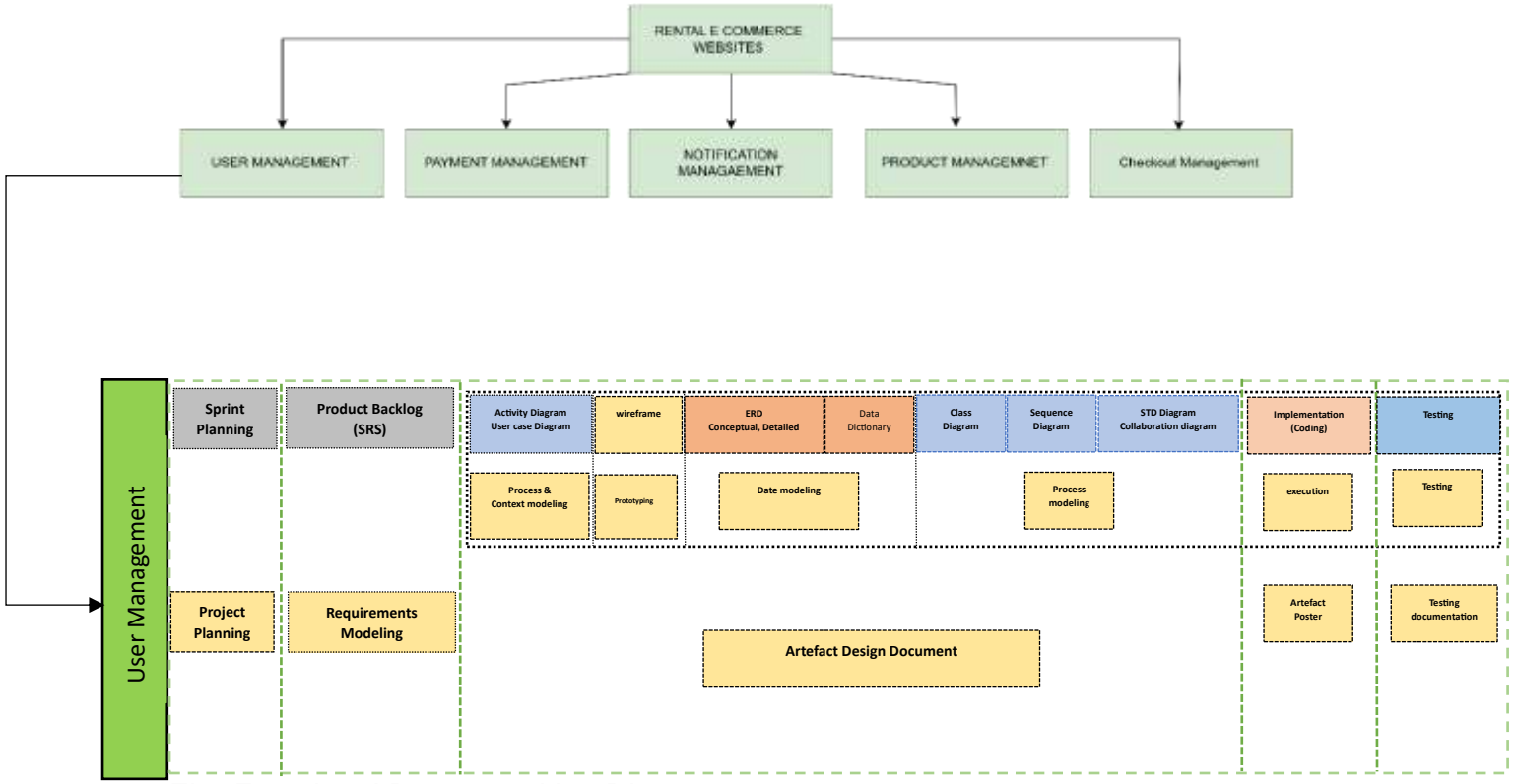


Fig: *Functional Decomposition Diagram*

UM -F-1.0 → **Numbering**

Sub system

UM: user management
PM: Product management
MM: Moter management
NM: Notification Management
SM: Sensor Management

Types of the Requirements

F: Functional Requirement

NF: Non- functional Requirements

UR: Usability Requirements

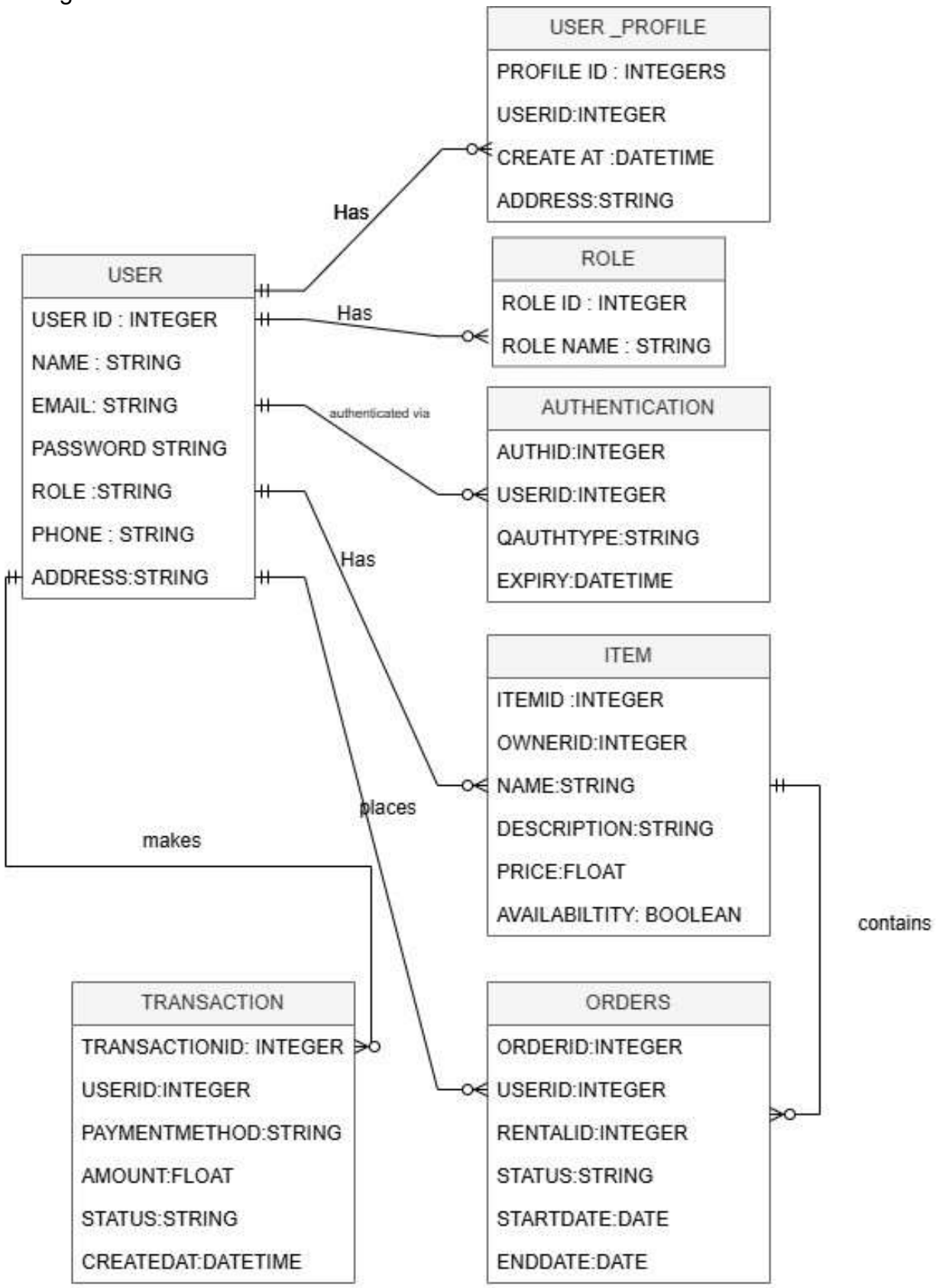
Test Cases for Rental eCommerce Website

Test Case ID	Test Name	Test Description	Expected Result	Observation	Evidence	Result
T01	Login	Verify that users can log in with valid credentials.	User should be able to log in and access the dashboard.	User successfully logged in with valid credentials, and access to the dashboard was granted.	Refer to Screenshot 1	Pass
T02	Invalid Login	Verify that an error message appears for incorrect credentials.	User should see an error message when using invalid credentials.	User entered incorrect credentials, and an error message was displayed.	Refer to Screenshot 2	Pass
T03	User Registration	Verify that a new user can successfully register.	User should be able to create an account.	User filled out the registration form, submitted it, and received confirmation.	Refer to Screenshot 3	Pass
T04	Browse Equipment	Ensure that users can view the list of available survey equipment.	Equipment list should be displayed properly.	User navigated to the equipment page, and all items were displayed correctly.	Refer to Screenshot 4	Pass

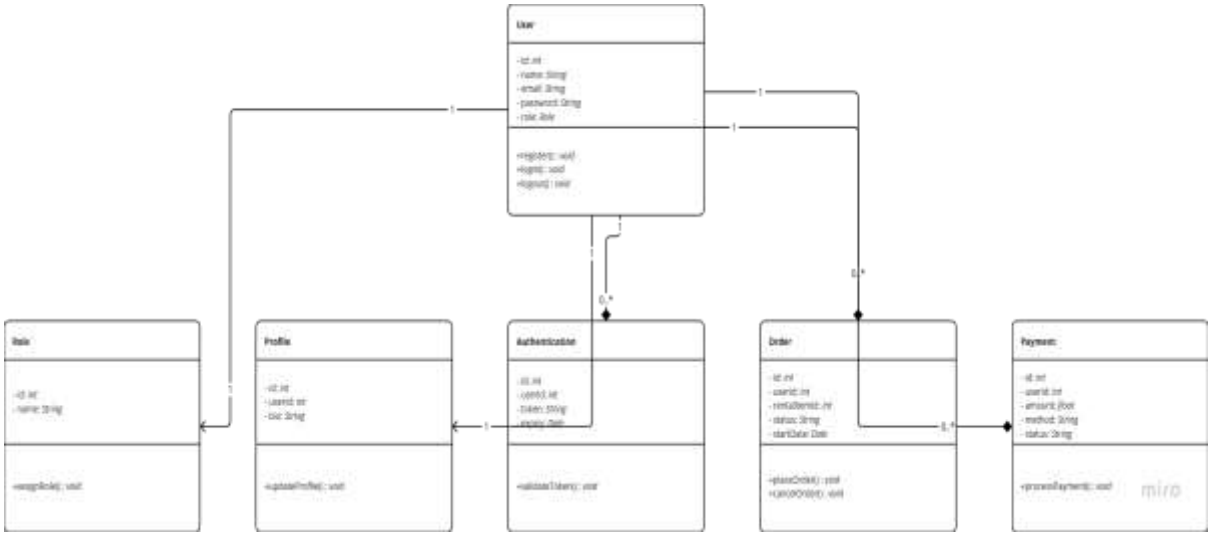
T05	Equipment Details	Verify that users can view detailed information on an item.	Clicking on an item should open a details page.	User clicked on an item, and the detailed information was displayed correctly.	Refer to Screenshot 5	Pass
T06	Checkout page	Verify that the checkout page is shown correctly.	The checkout page should show all the input fields and users can fill the form.	User was shown the checkout form correctly and user was able to fill all the input fields.	Refer to Screenshot 6	Pass
T07	Logout	Ensure users can log out and be redirected to the login page.	Users should be logged out and redirected to the login page.	User clicked 'Logout' and was redirected to the login page.	Refer to Screenshot 7	Pass

User Management

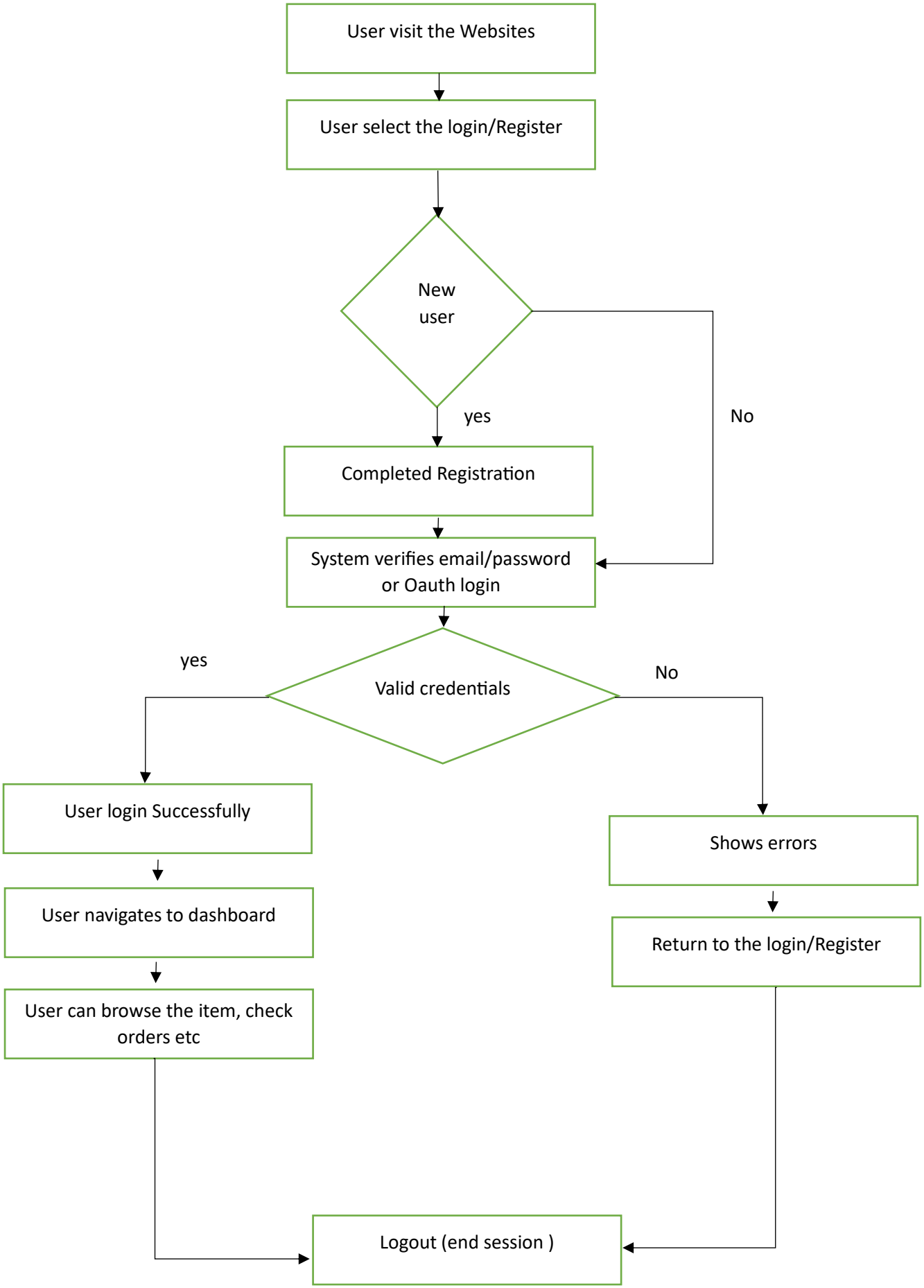
Er Diagram



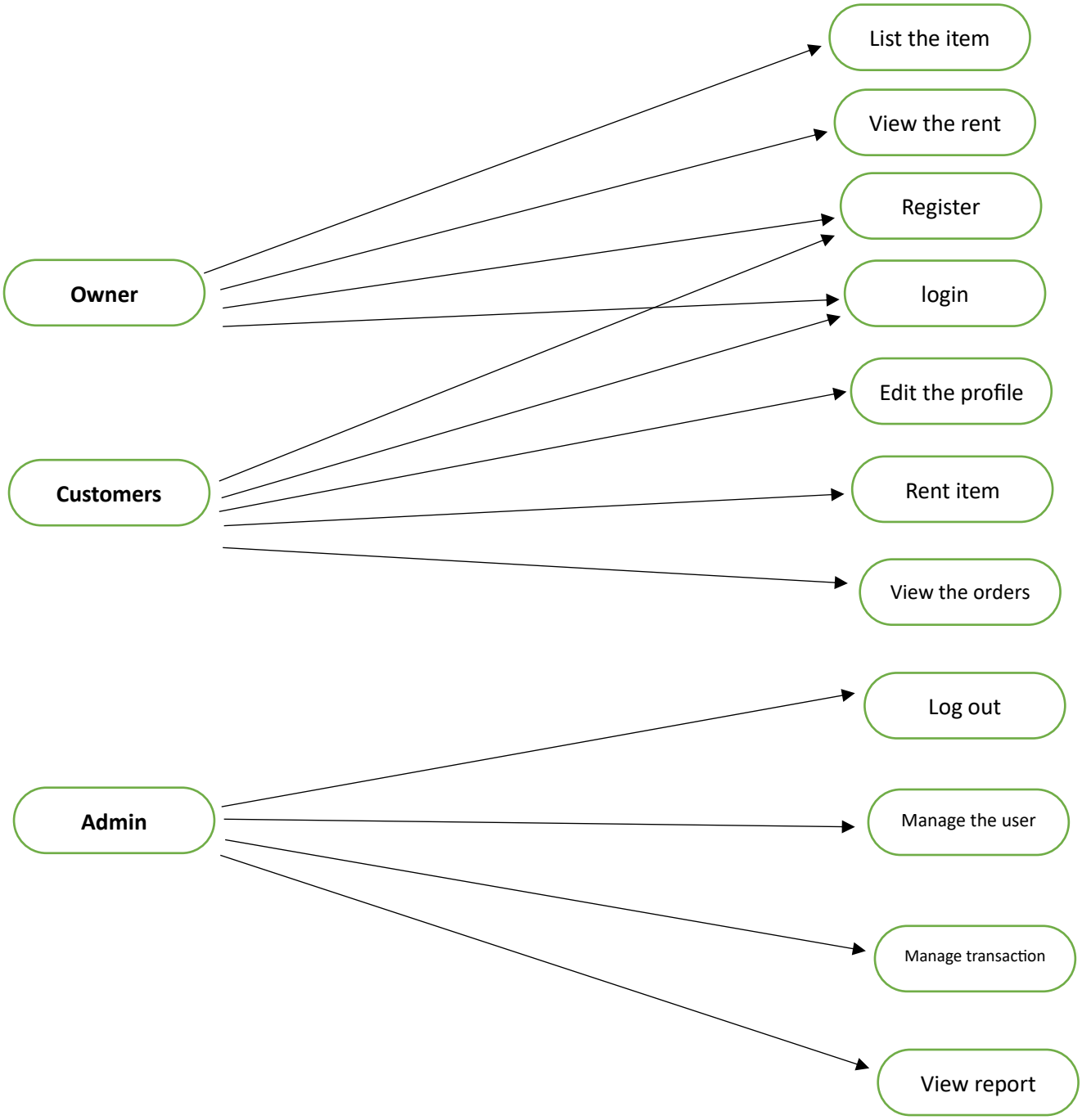
Class Diagram



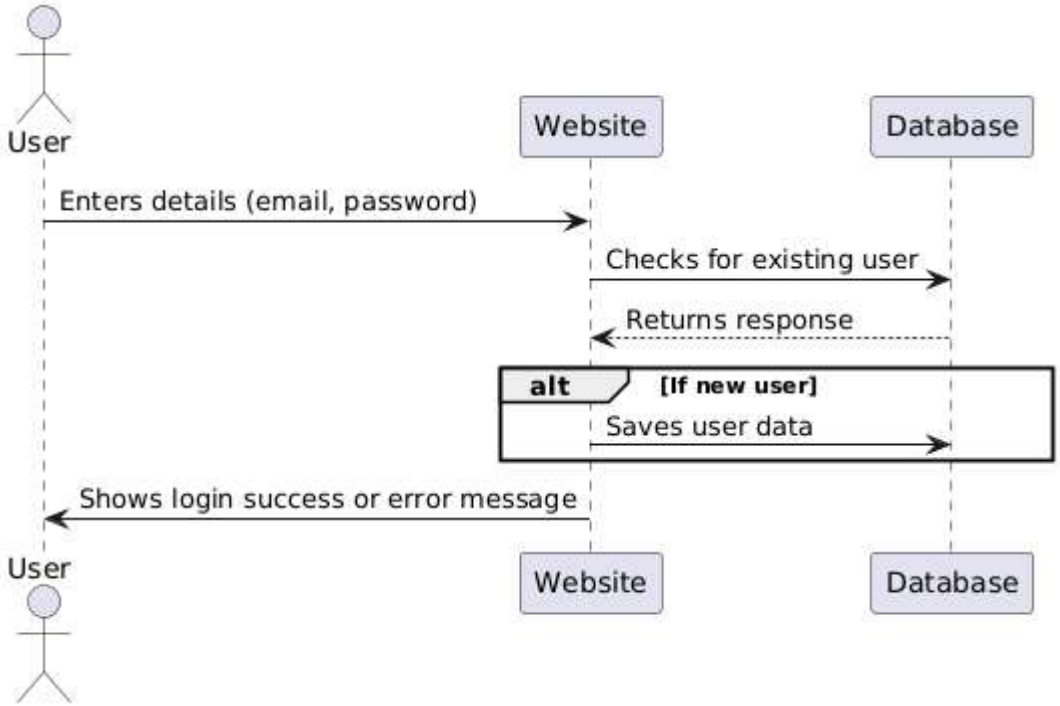
Activity Diagram



Use case Diagram

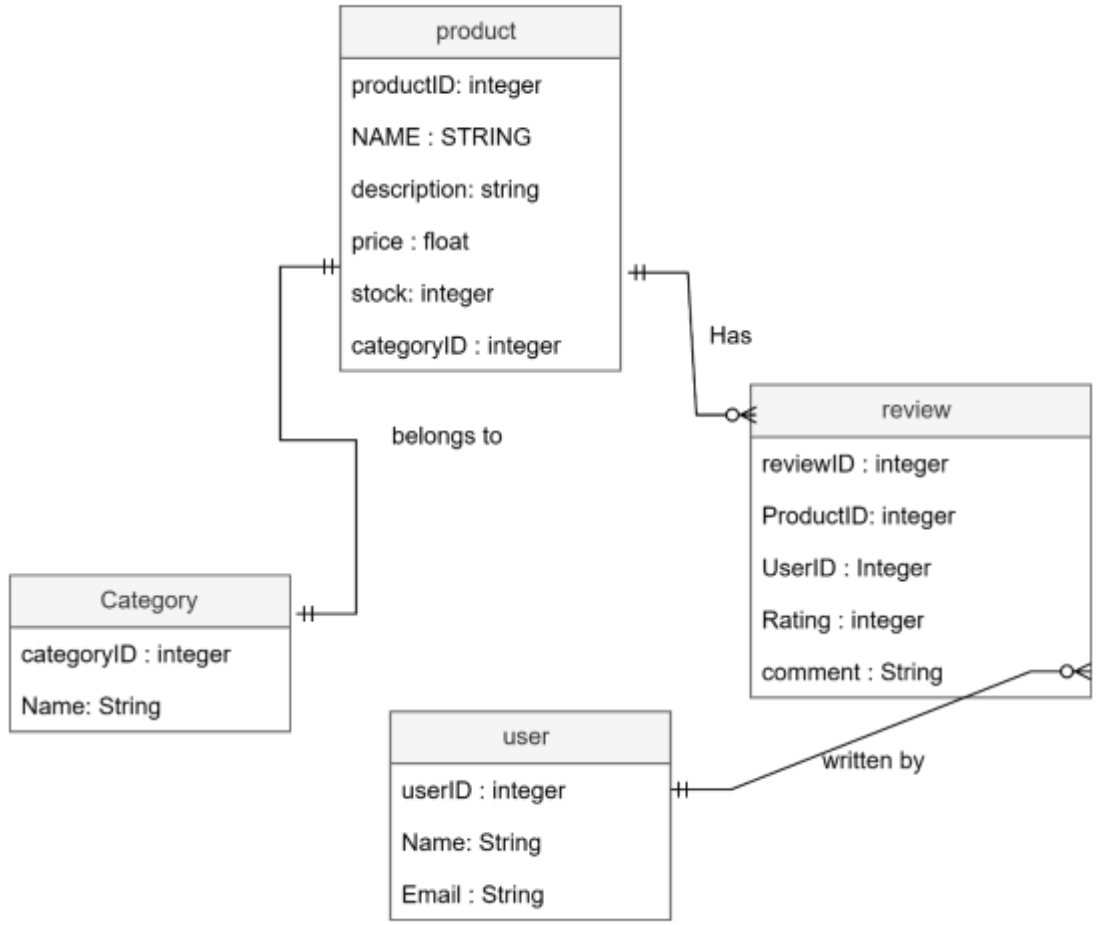


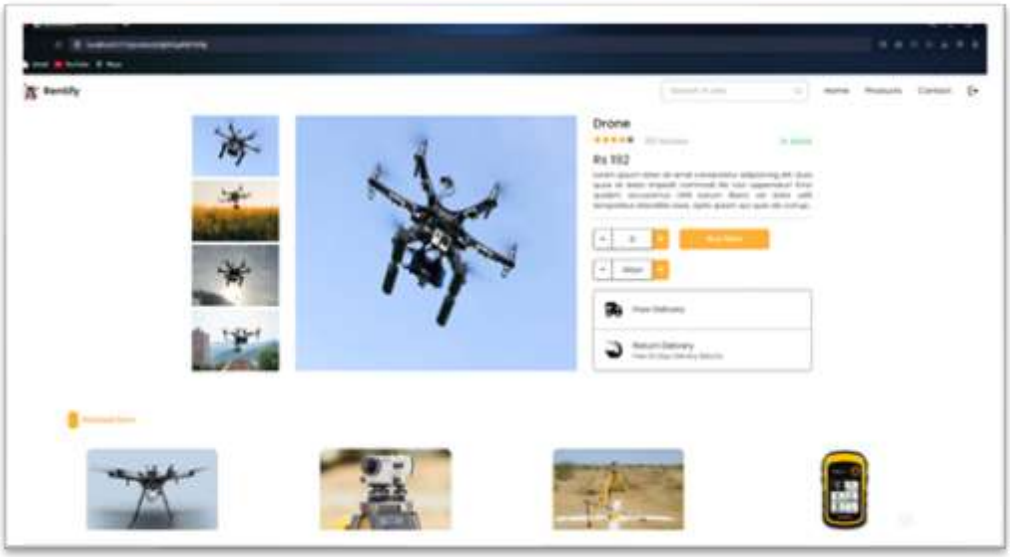
Sequence diagram



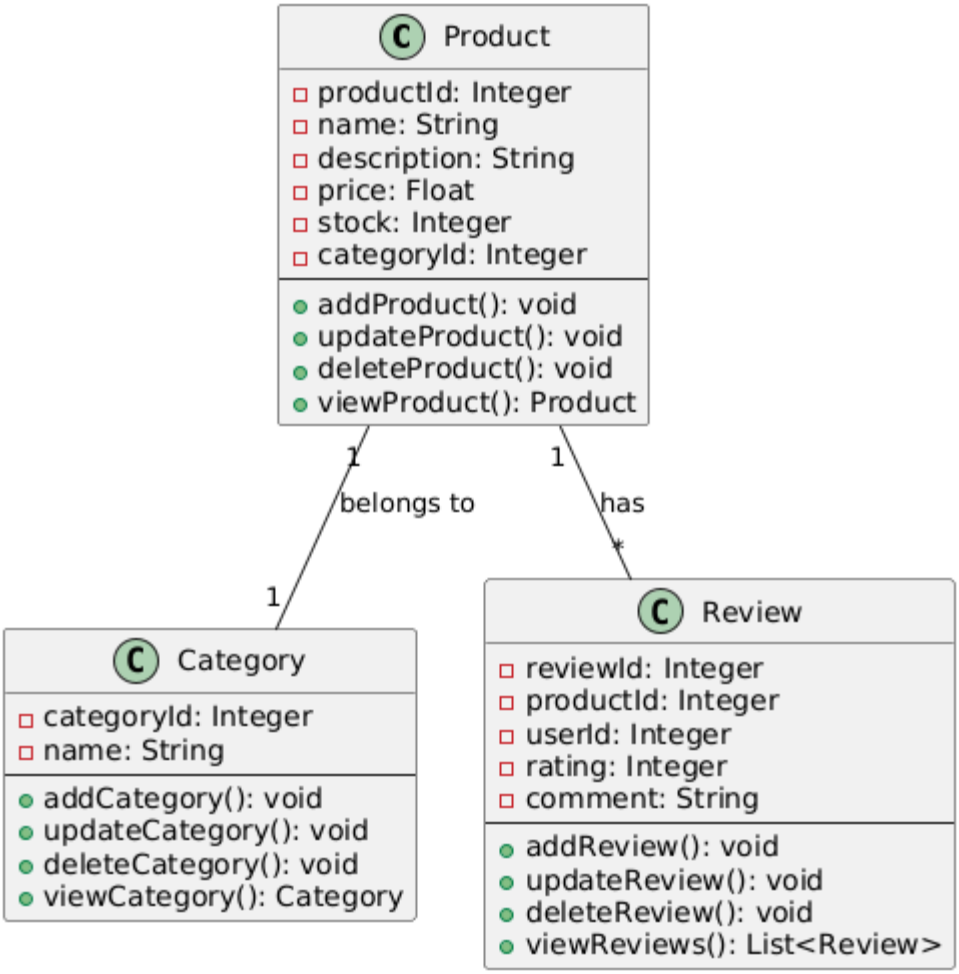
Product management

Er diagram

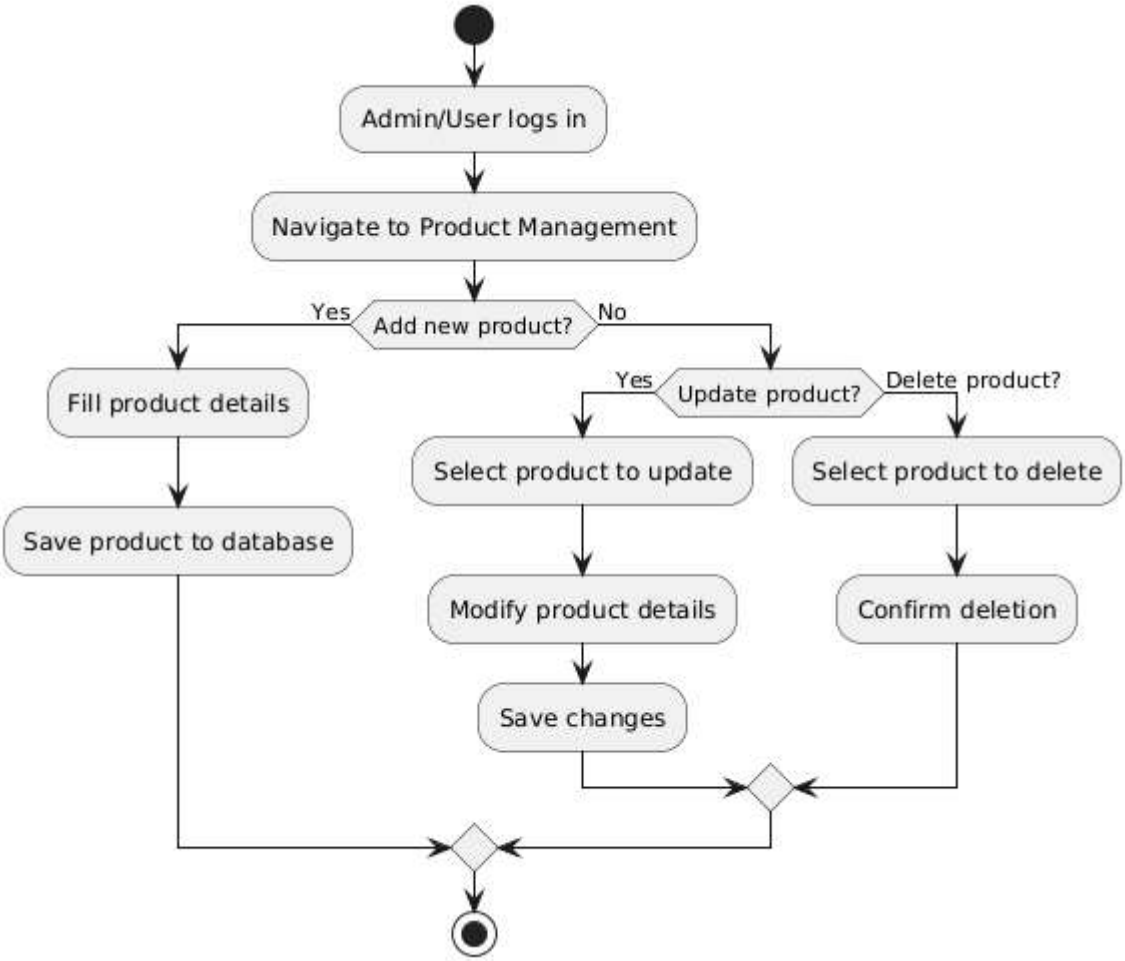




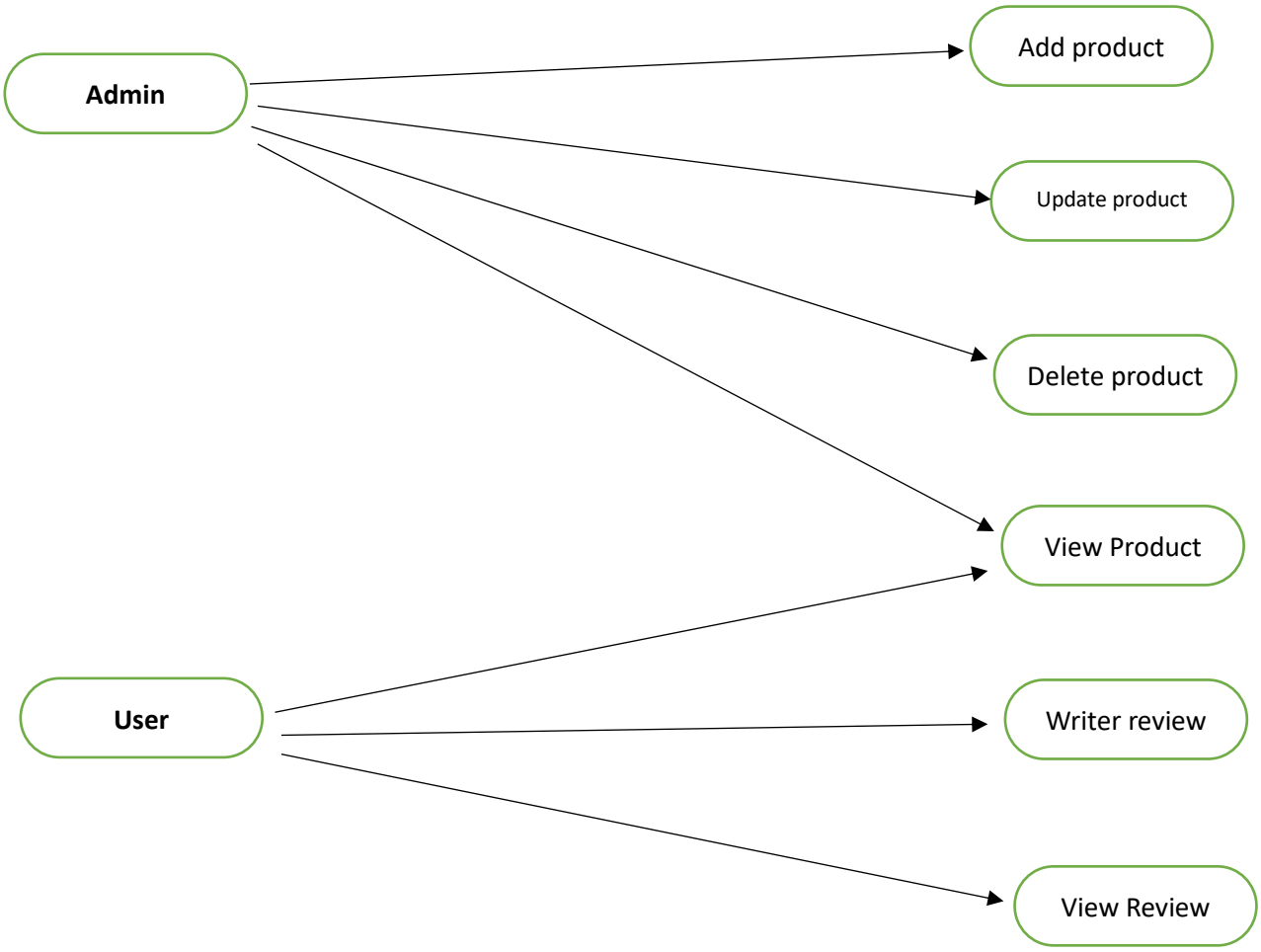
Class diagram



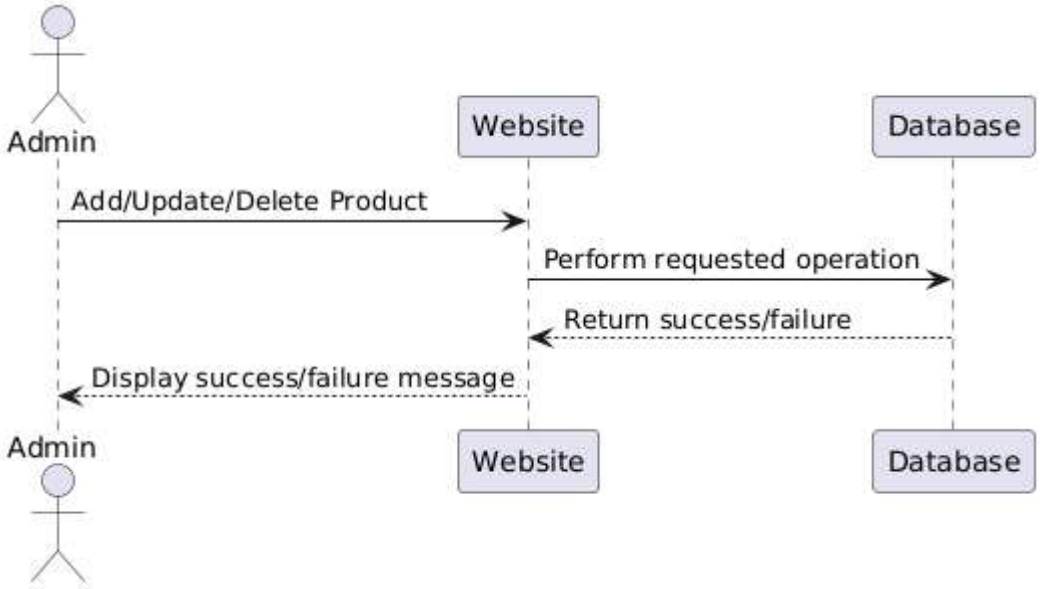
Activity Diagram



Use Case Diagram

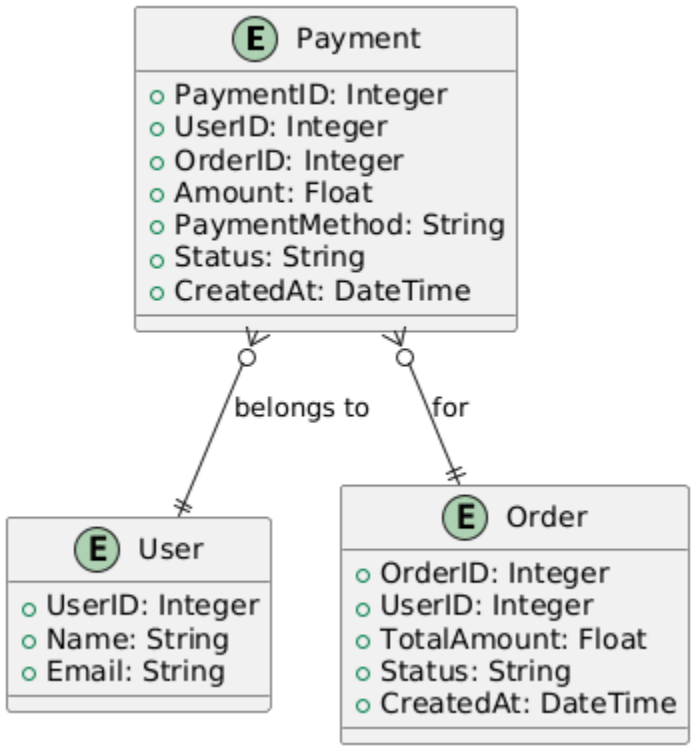


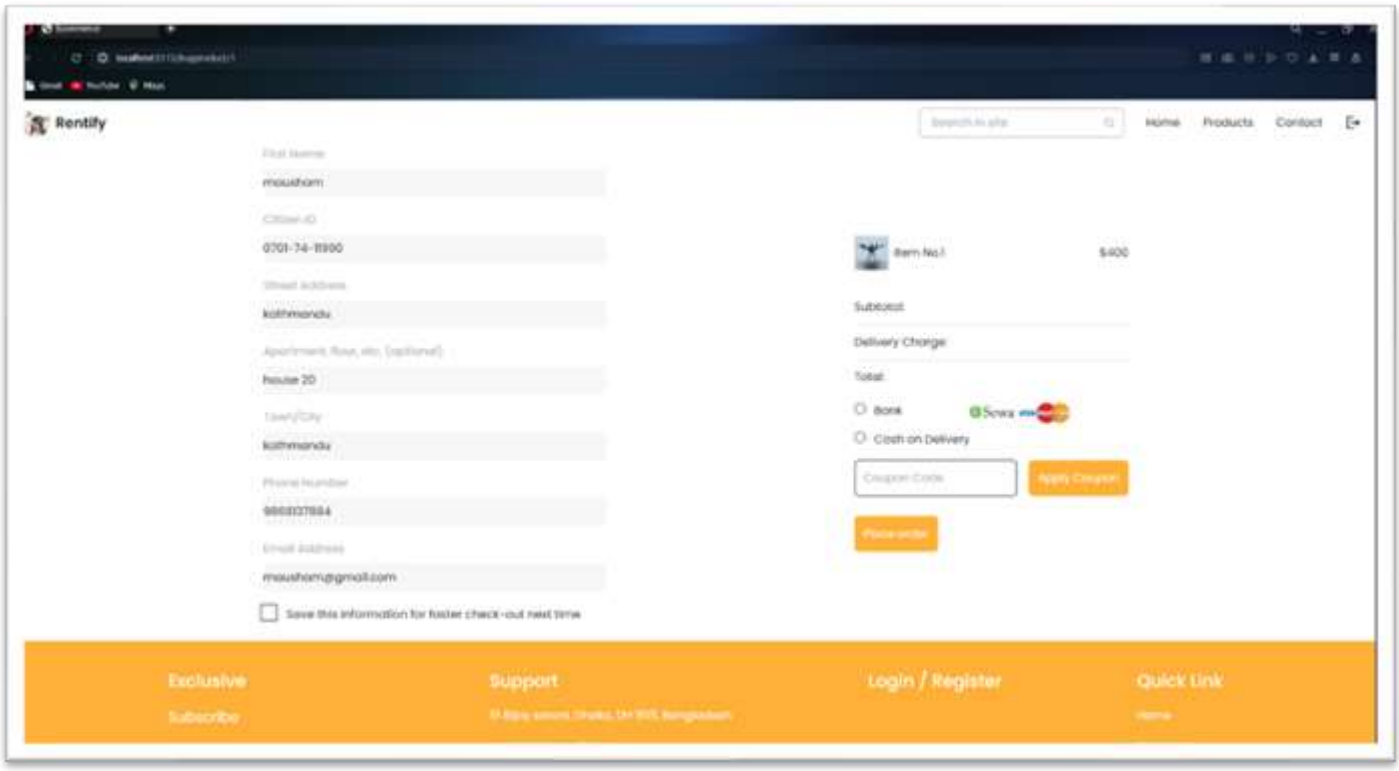
Sequence Diagram



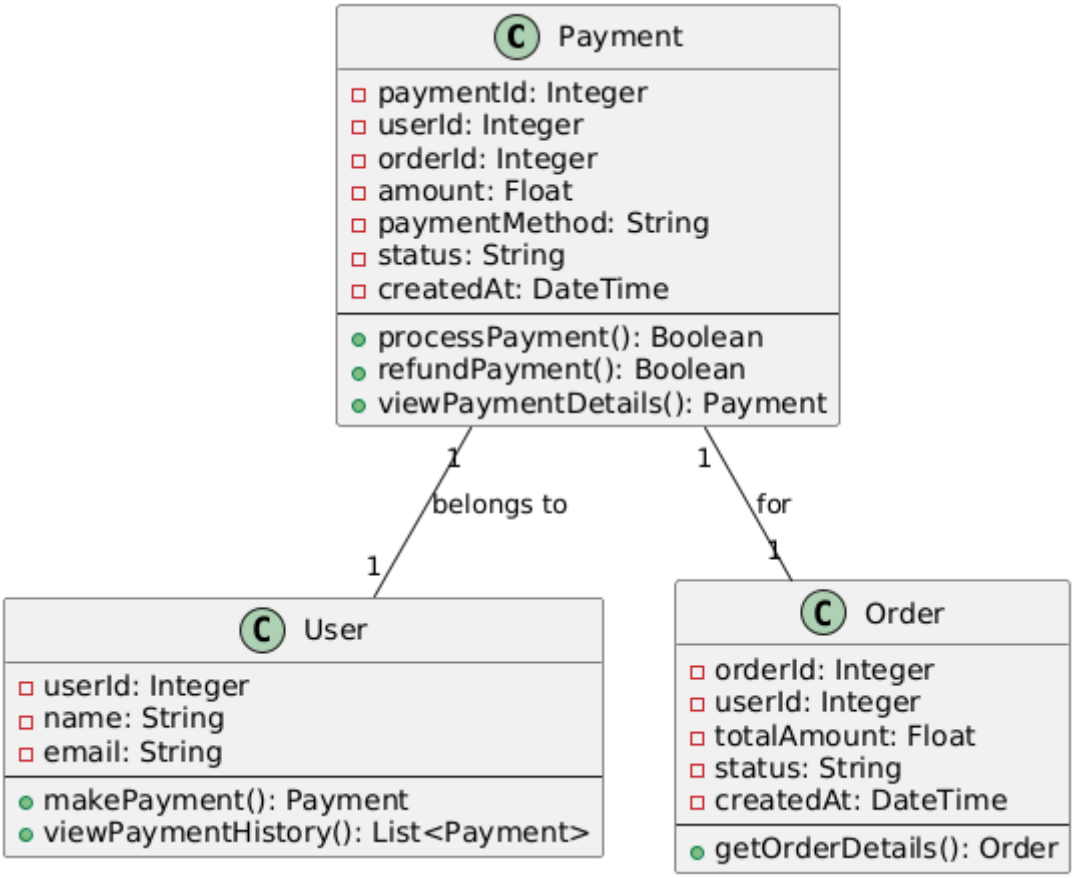
Payment methods

Er diagram

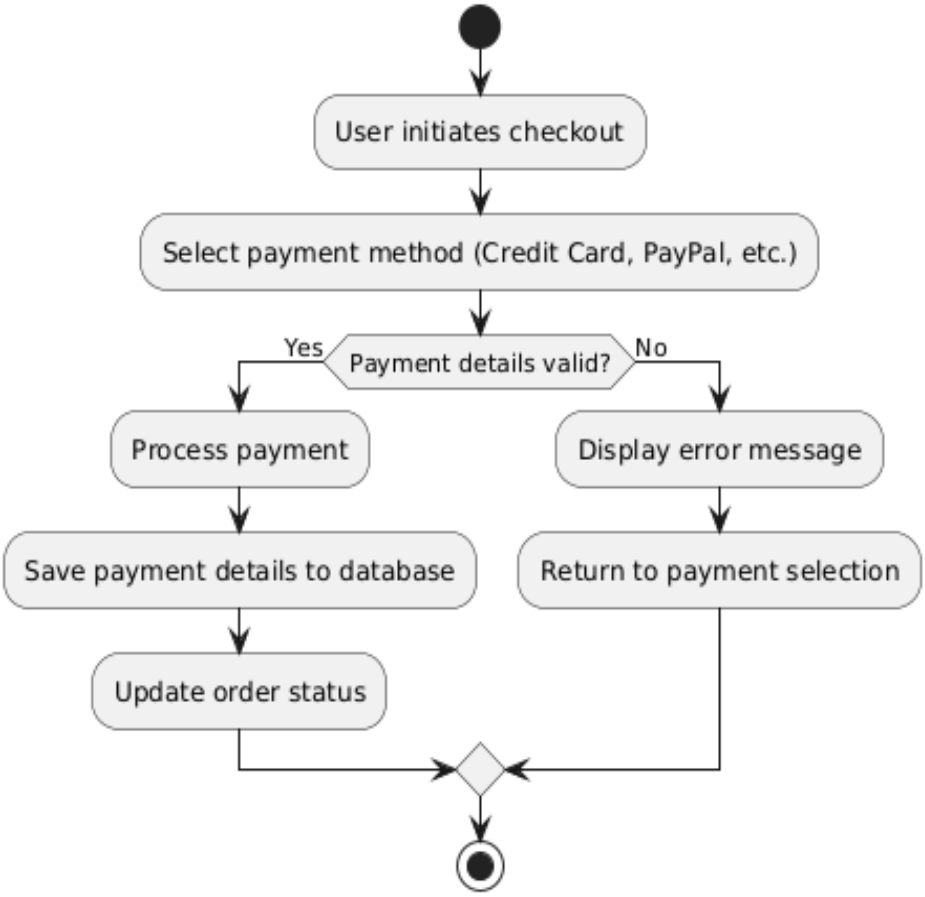




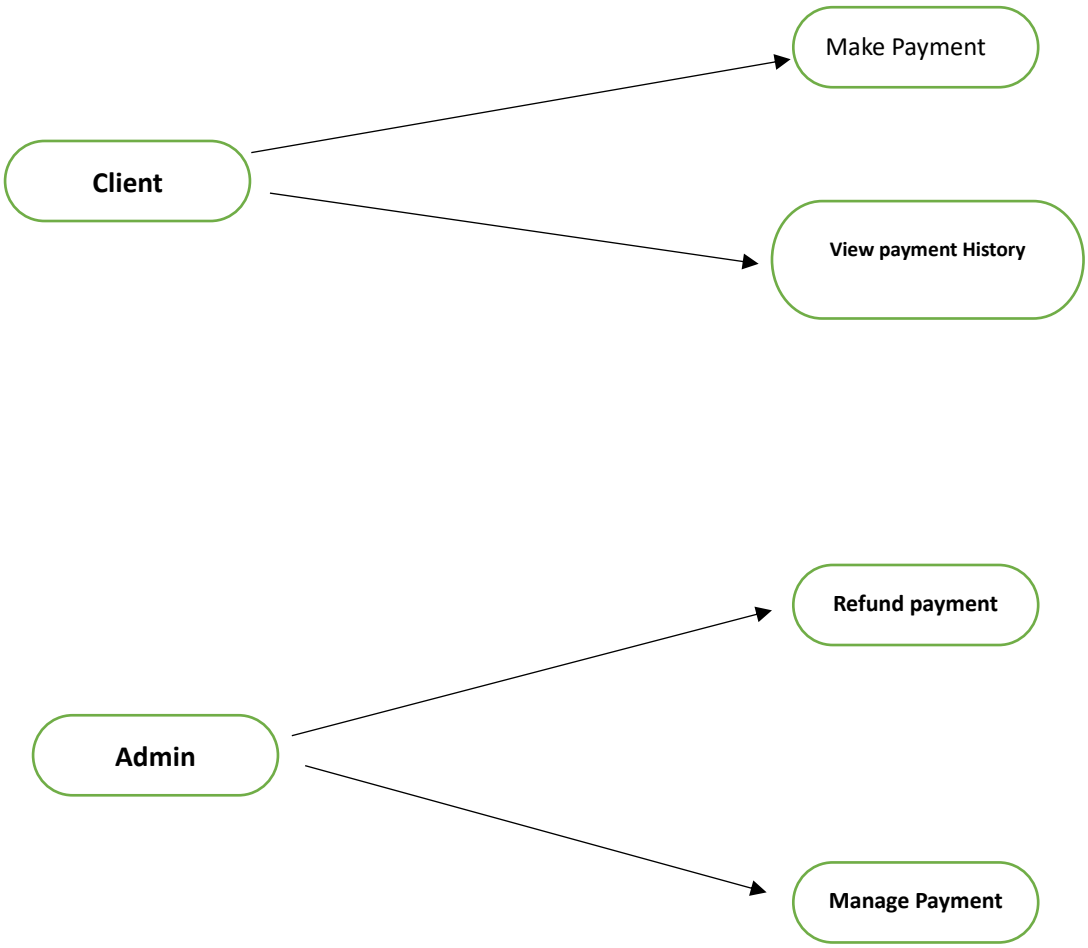
Class diagram



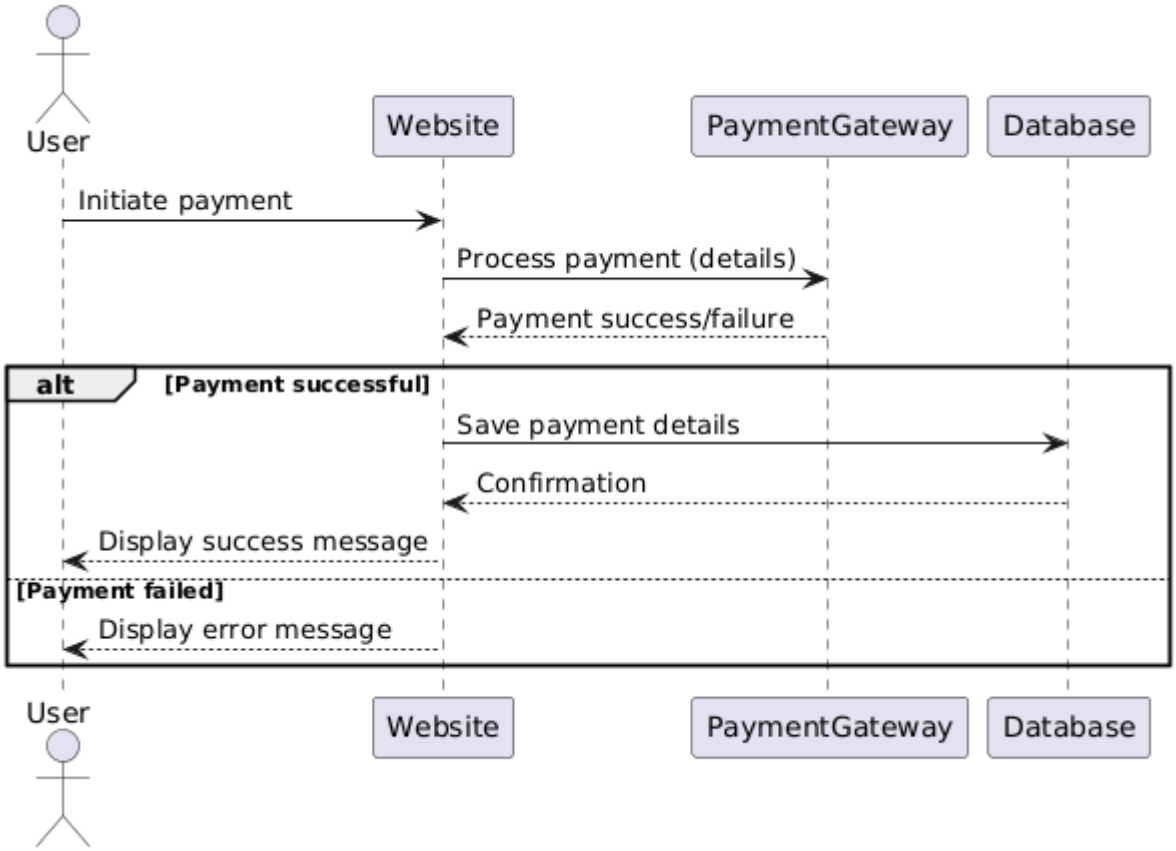
Activity diagram



Use case diagram

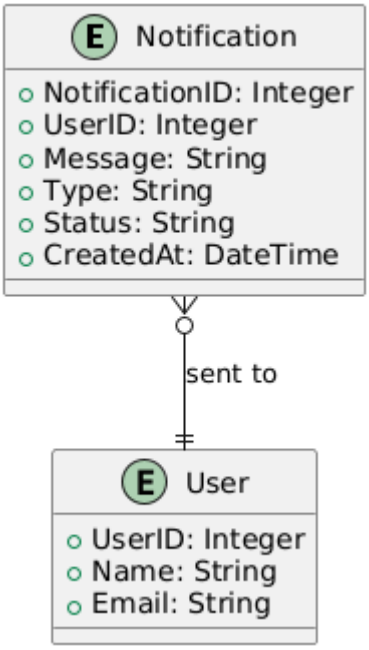


Sequence diagram

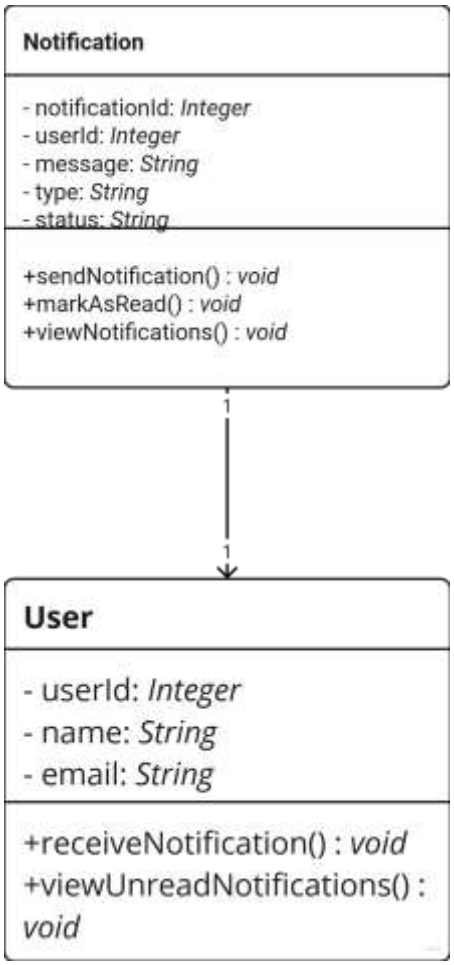


Notification management

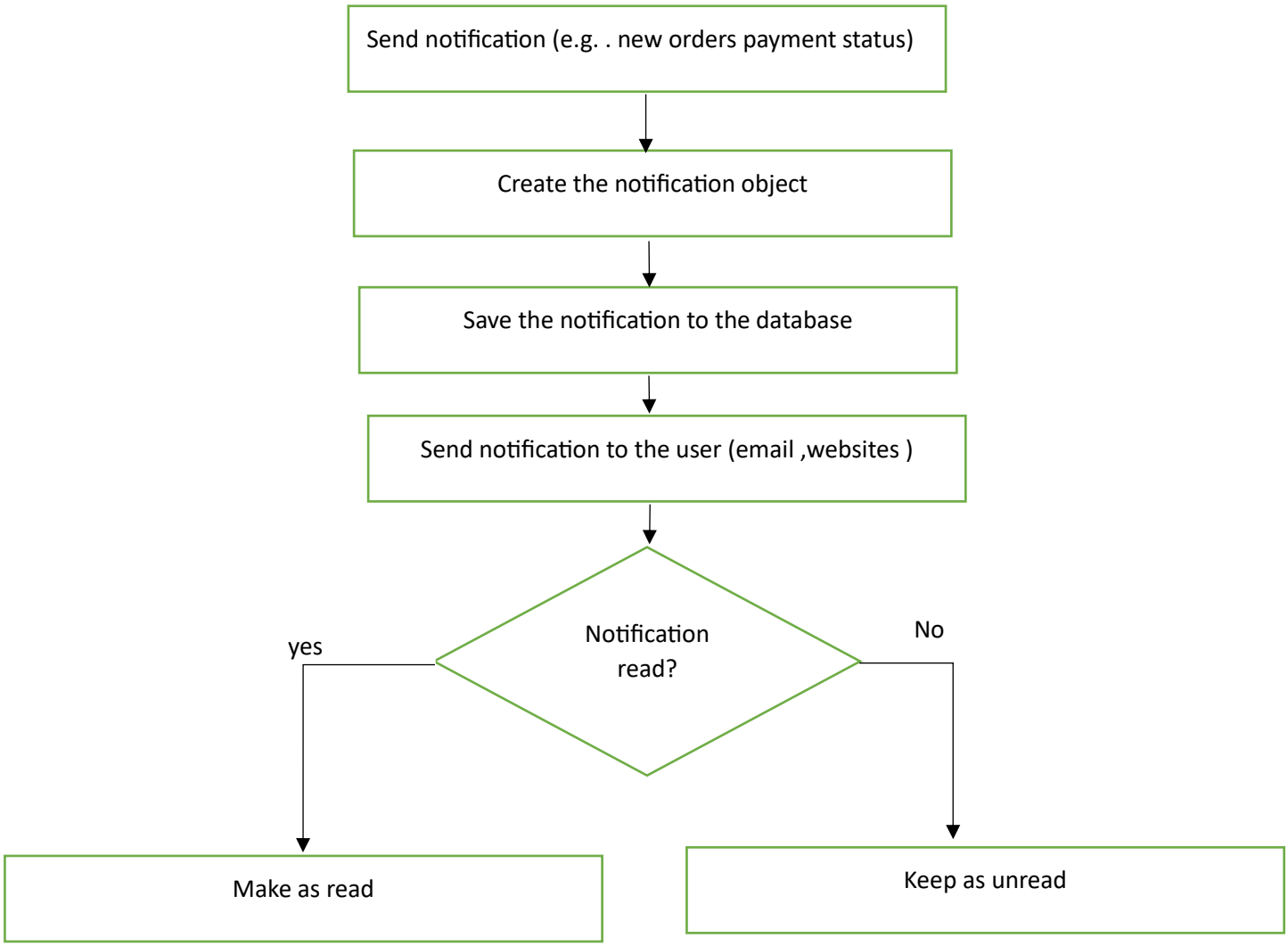
Er diagram



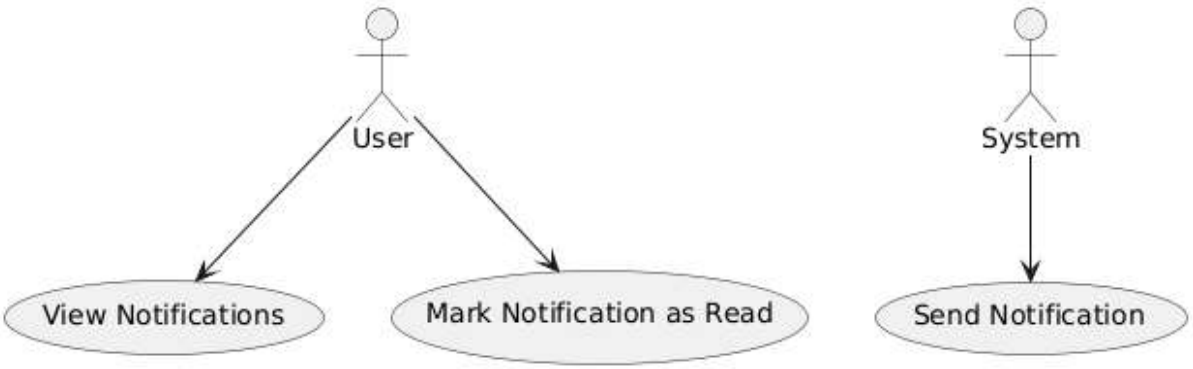
Class diagram



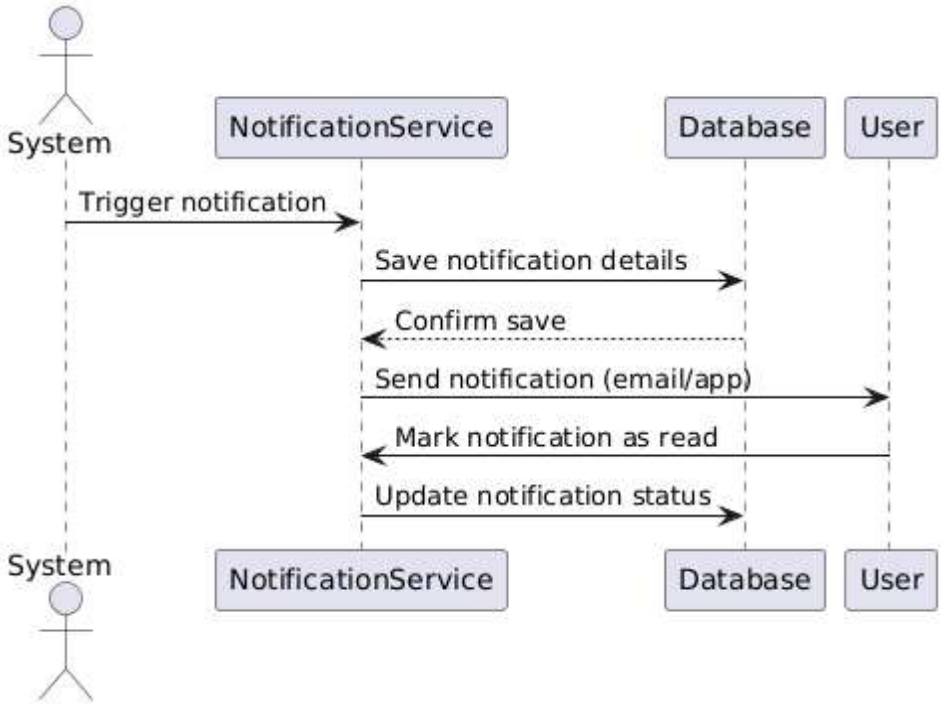
Activity Diagram



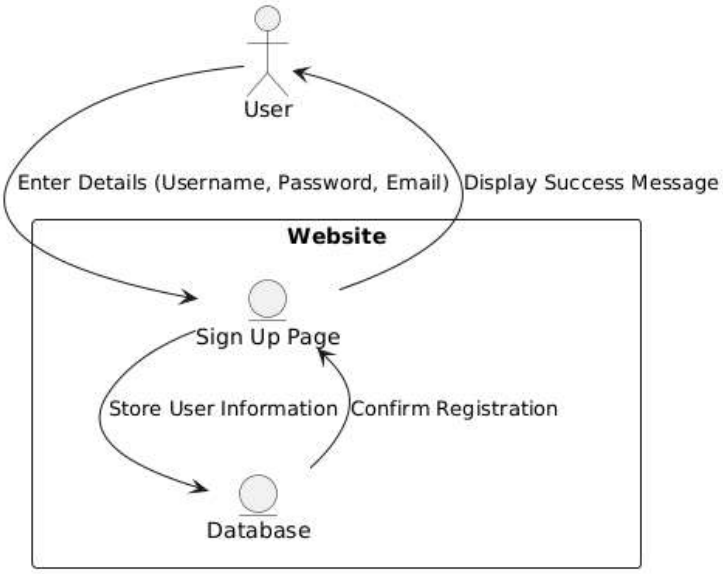
Use case Diagram



Sequence diagram



Artefact Design



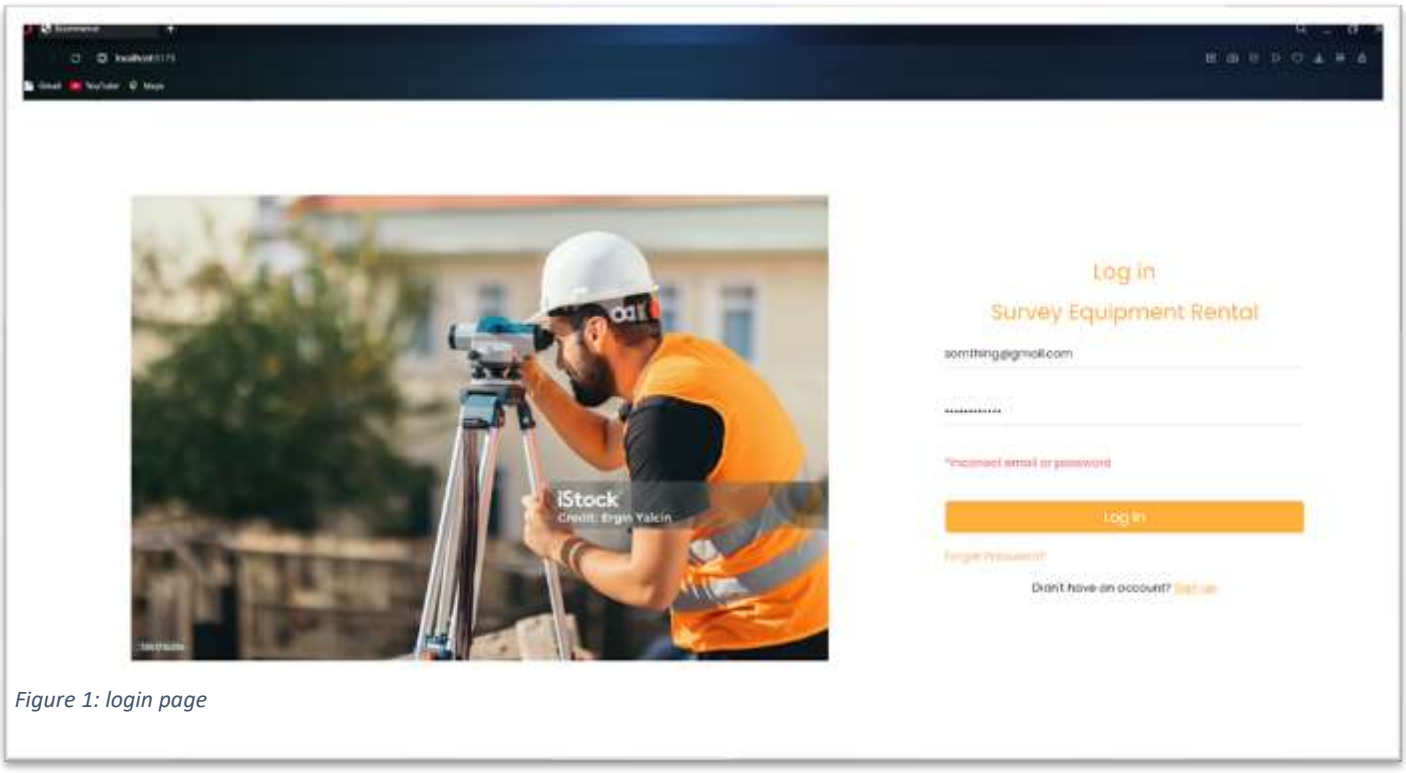


Figure 1: login page

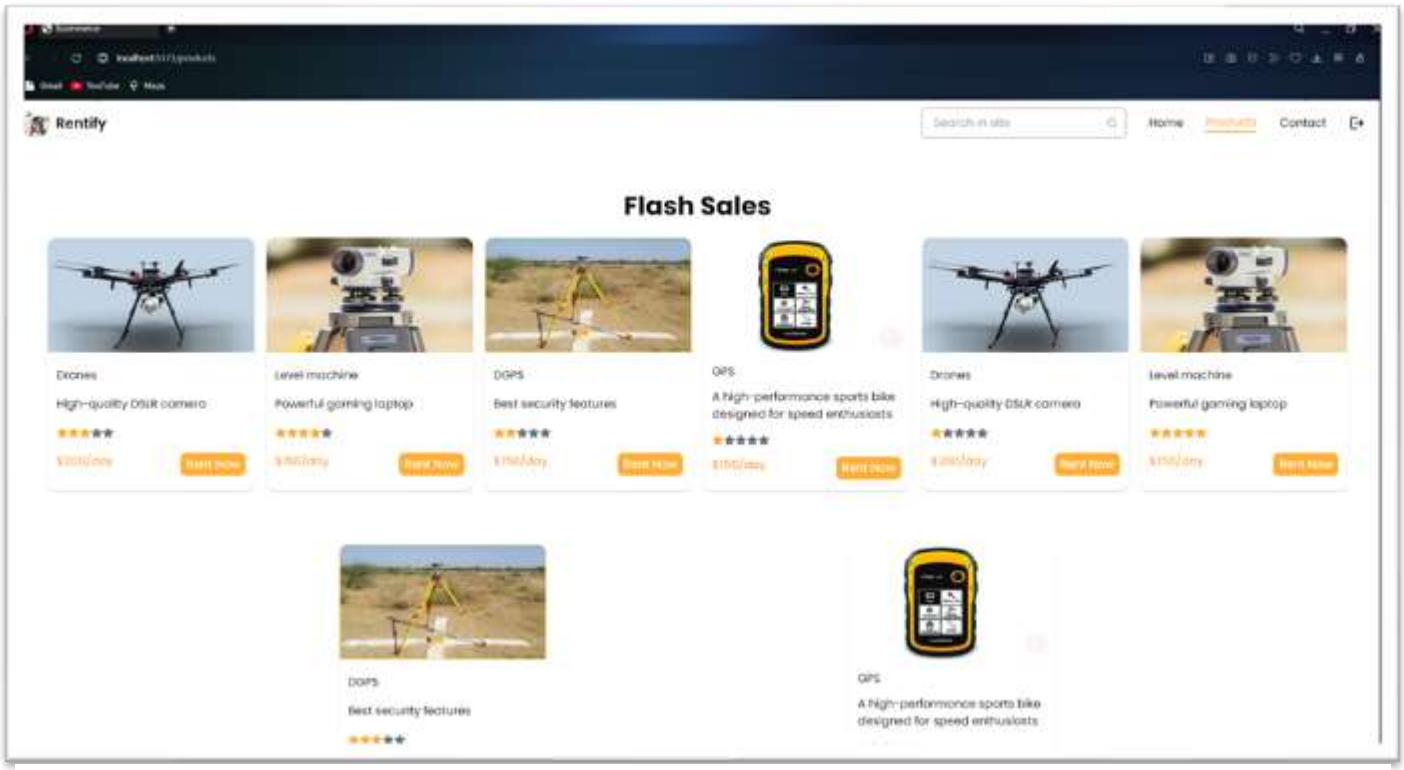


Figure 2: Product page

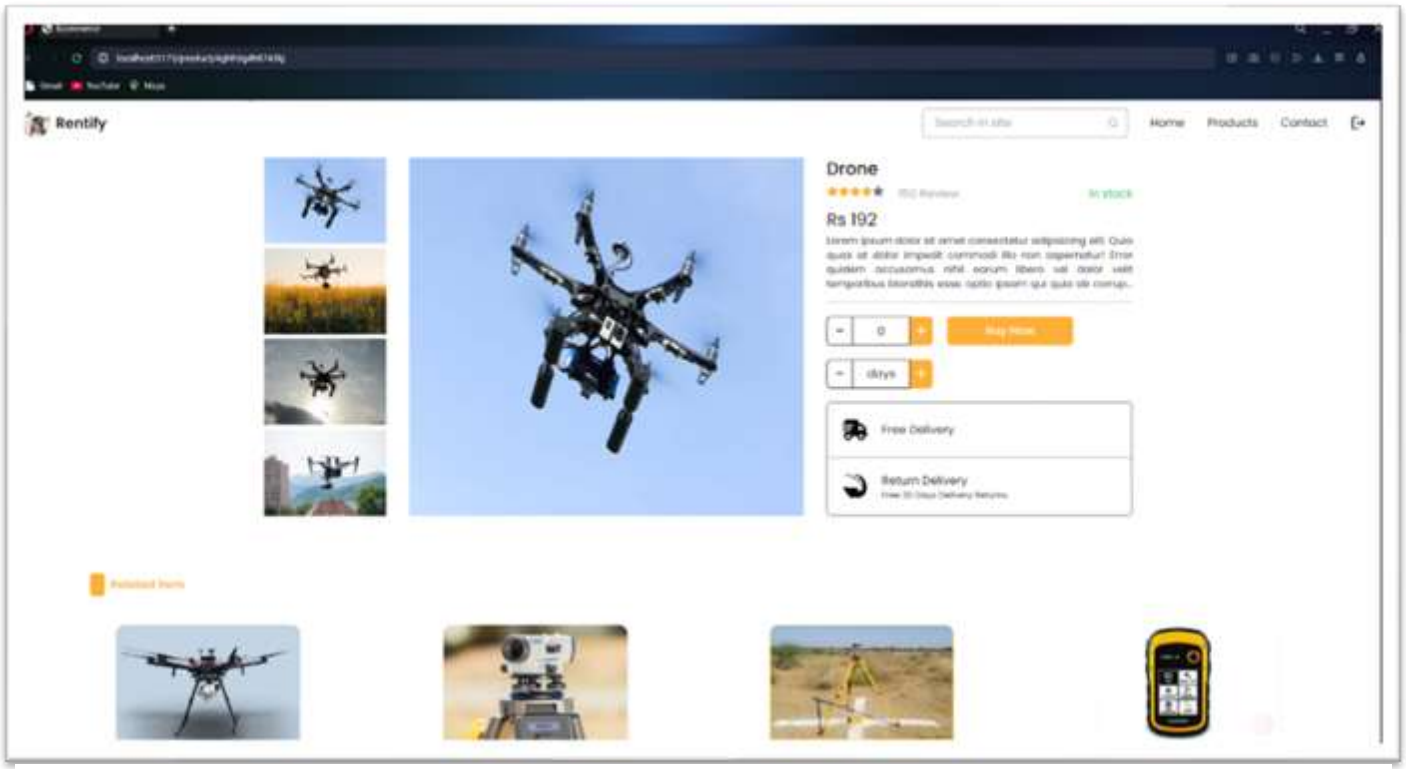


Figure 3: Rent pages

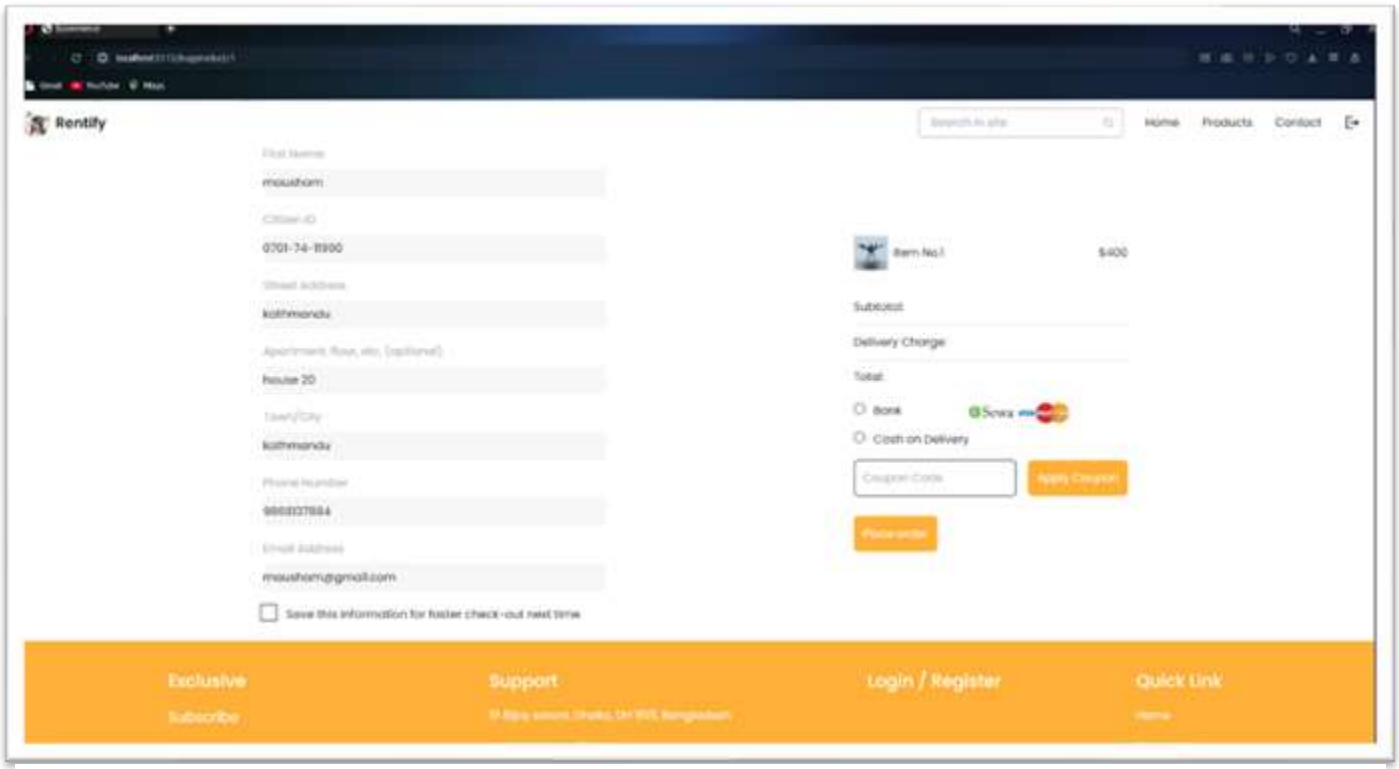
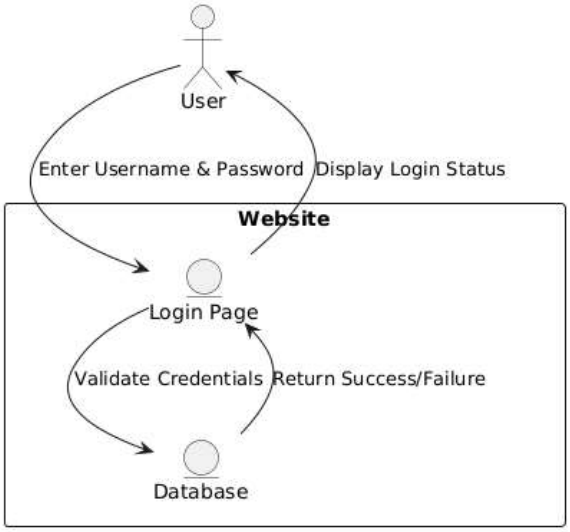


Figure 4: Payment Pages

Login pages



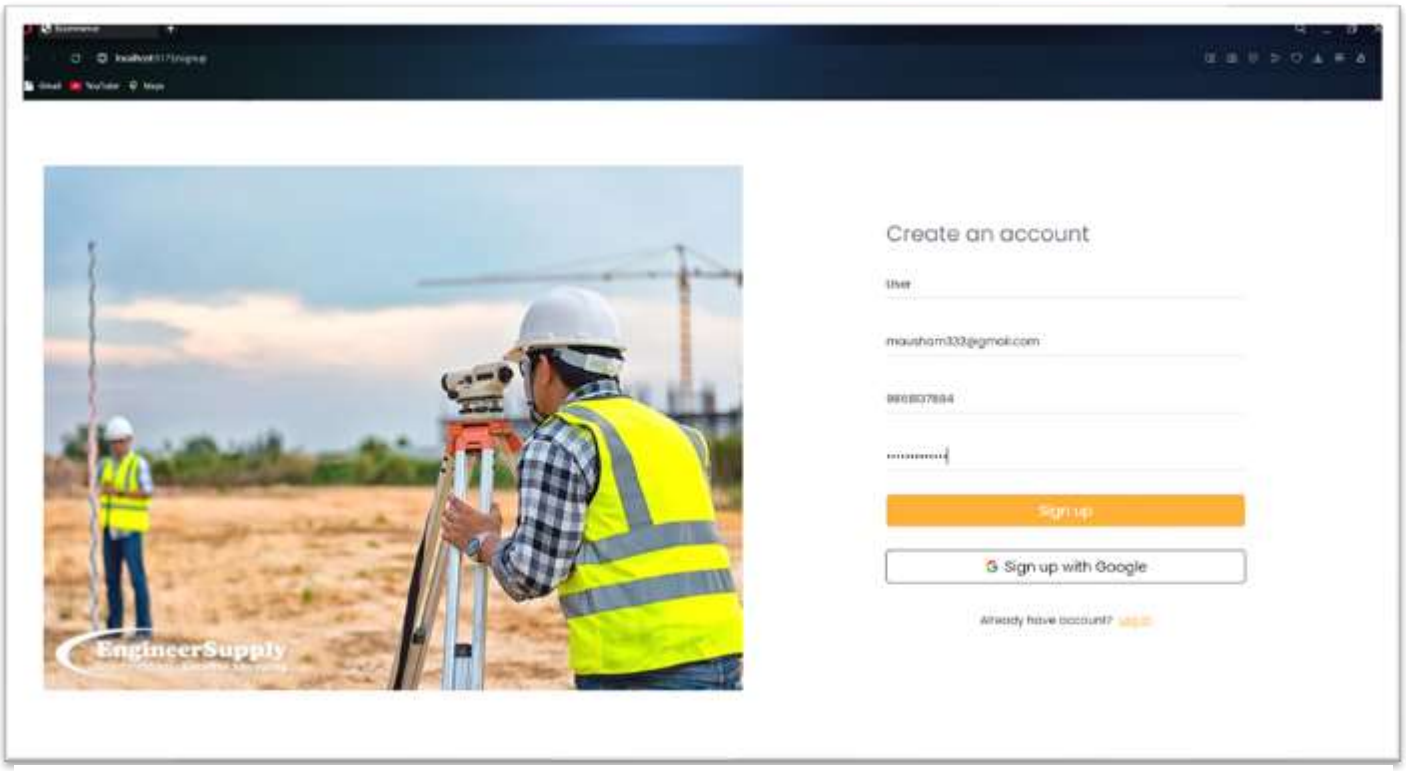


Figure 5: Sign up page

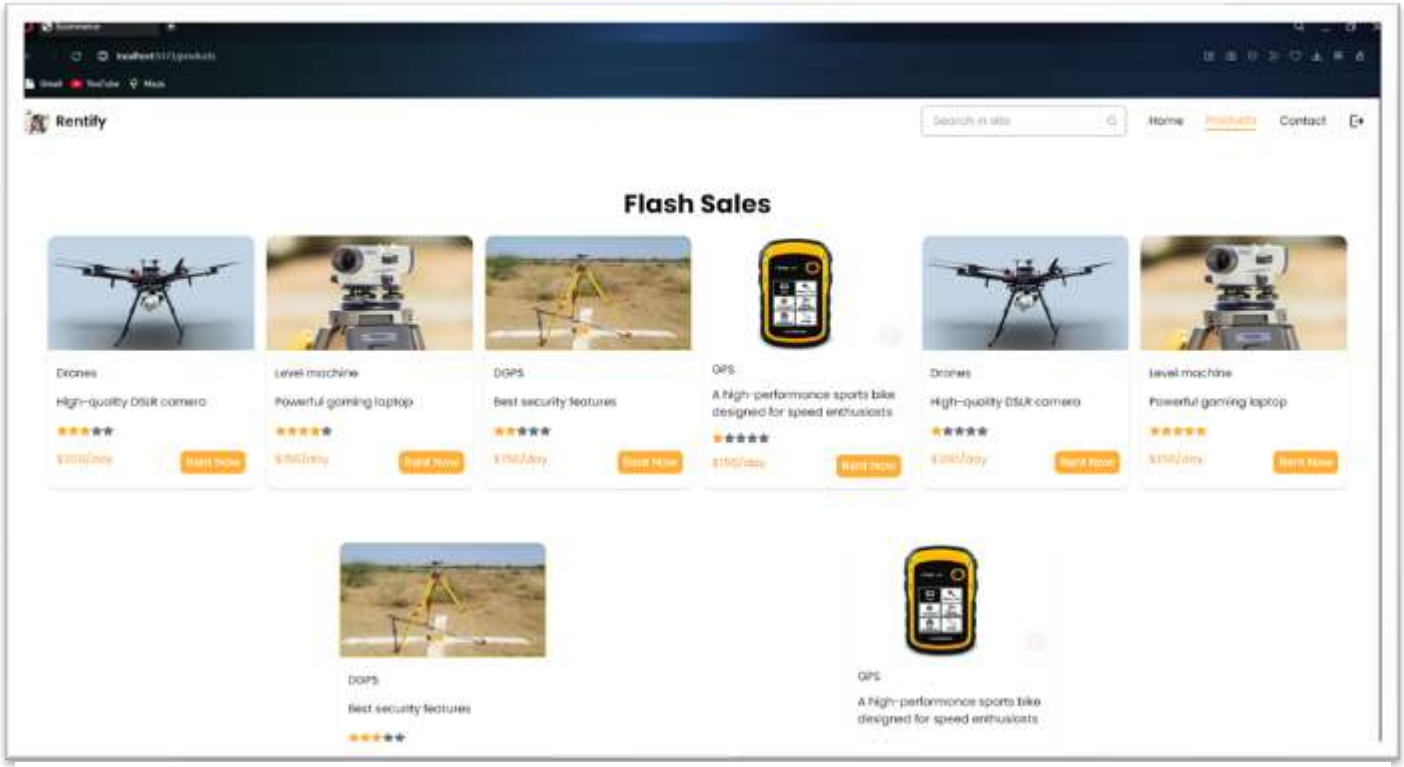


Figure 6: product page

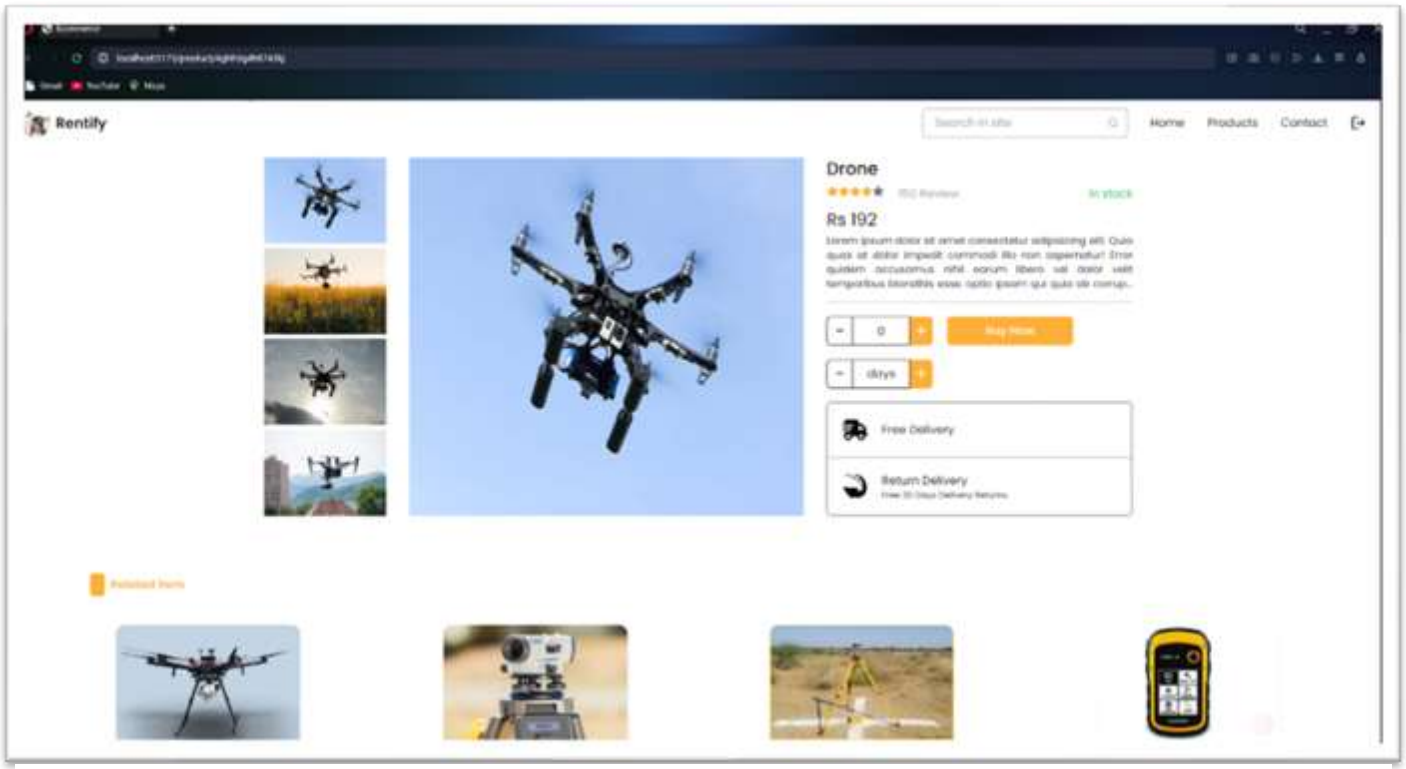


Figure 7: rent page

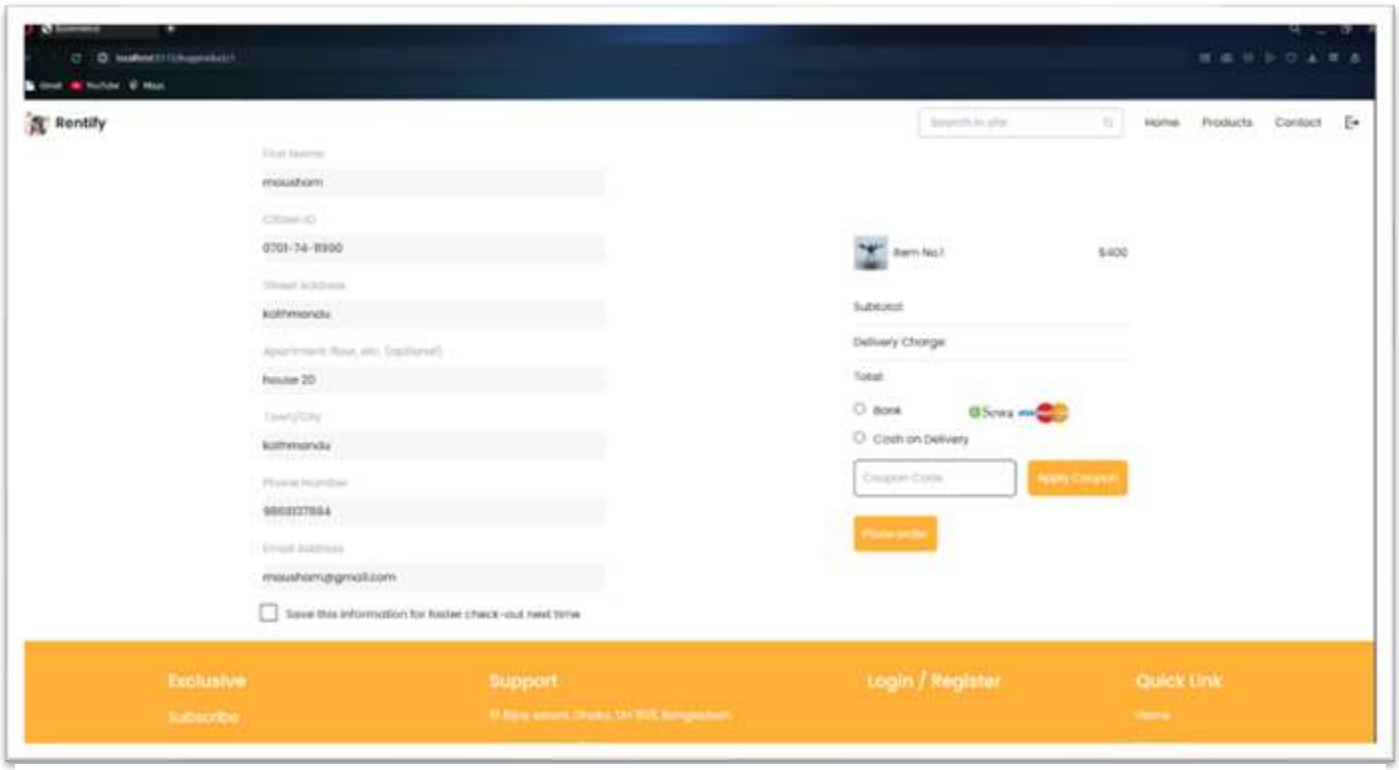


Figure 8: Payments

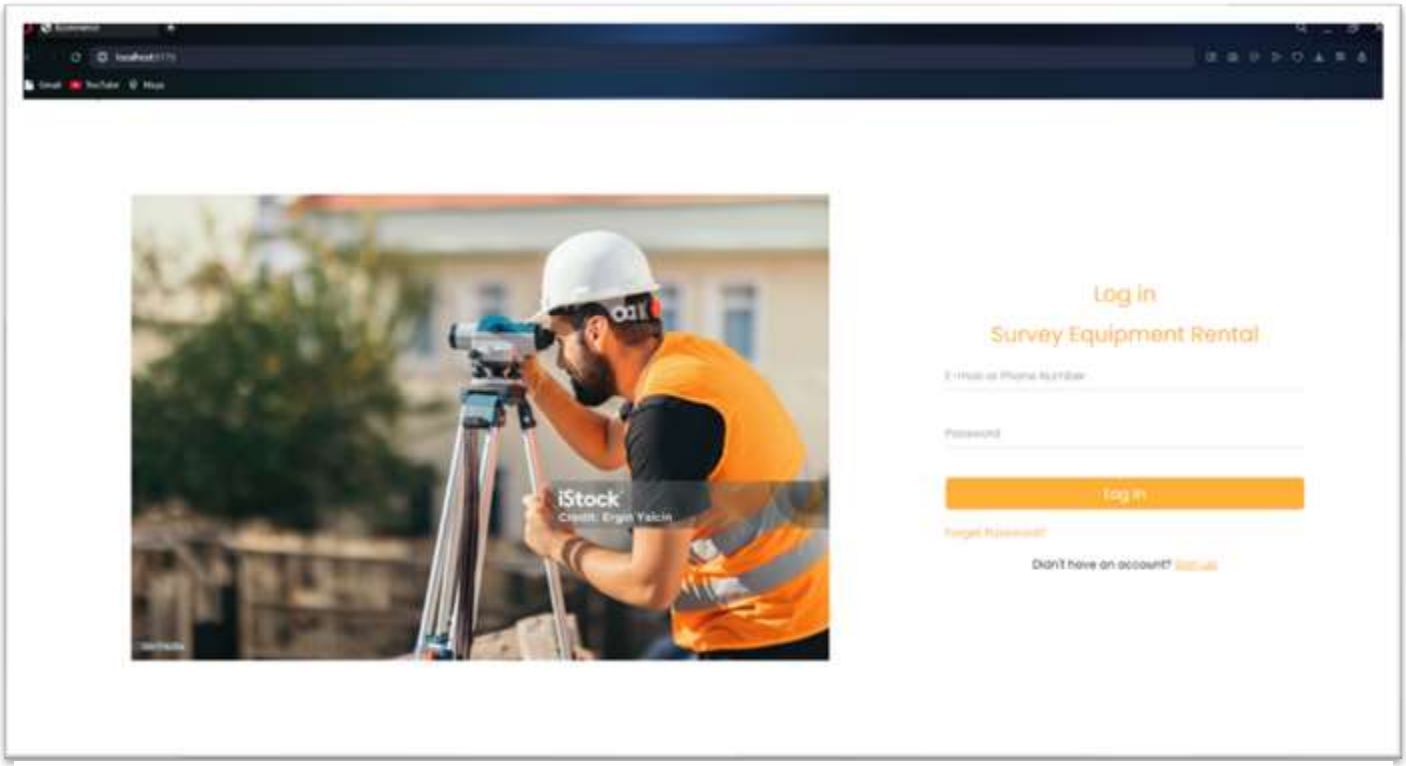


Figure 9: login pages