



Daffodil
International
University

SE-431

Bike and Accessories Online Store

Submitted by

Fartun Said Abdisalam

191-35-2753

Department of Software Engineering

Daffodil International University

Supervised by

Ms. Tapushe Rabaya Toma

Assistant professor

Department of Software Engineering

Faculty Of Science and Information Technology

Daffodil International University

Spring – 2024

APPROVAL

APPROVAL

This thesis titled on “Bike and Accessories Online Store”, submitted by **Fartun Said Abdissalam (ID: 191-35-2753)** 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 Bachelor of Science in Software Engineering and approval as to its style and contents.

BOARD OF EXAMINERS

Fazla Elahi 9.7.24

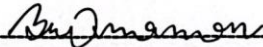
Chairman

Dr. Md. Fazla Elahi
Assistant Professor & Associate Head
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University



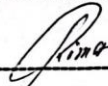
Internal Examiner 1

Tapushe Rabaya Toma
Assistant Professor
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University



Internal Examiner 2

Khalid Been Md. Badruzzaman Biplob
Lecturer (Senior Scale)
Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University



External Examiner

Md Mostafiz Khan
Managing Director
Tecognize Solutions Limited

DECLARATION

DECLARATION

It here by declares that this project has been completed by me under the supervision of Tapushe Rabaya Toma, Assistant Professor, Department of Software Engineering (SWE), Daffodil International University. It also declares that neither this work nor any part of this has been submitted else where for award of any degree by me.



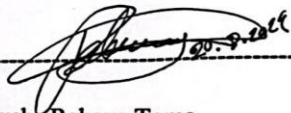
Fartun Said Abdisalam

Student ID: 191-35-275

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University



Tapushe Rabaya Toma

Assistant Professor

Department of Software Engineering

Faculty of Science & Information Technology (FSIT)

Daffodil International University (DIU)

ABSTRACT

The project of “**Bike and Accessories Online Store**” is a website that sells bikes, helmets and sports shoes through online. The customers are able to access the site globally, Sign up, sign in, add items to their cart, remove items from their cart and place order successfully. On the other hand the admin is able to login, logout, add products, update products, and delete products from the store. The purpose of this project is to make the business accessible and give wider exposure and the benefits that came with it and to eliminate the limitations that come from in person only sell and buy. The objects-oriented analysis and design methodology (OOADM) was therefore used to analyse the system in order to discover the various objects involved and how they interact with one another so that a new and improved system can be defined. This project will enhance the follow of the business and can be easily managed

Table Of Contents

Chapter 1: introduction	1-2
1.1 Project Descripton	1
1.2 Projct Purpose	1
1.3 Imtended Audience	1
1.4 Project Scope	1
1.5 Project Schdedule	2
Chapter 2: Functional Requirement	3-9
2.1 Descripton	3
2.2 User Roles	3
2.3 Use Case Diagram	3
2.4 Use Case Description	4
2.4.1 Customer	4
2.4.1.1 Sign Up	4
2.4.1.2 Sign In	4
2.4.1.3 Add Items To Cart	5
2.4.1.4 View Cart	5
2.4.1.5 Remove Items From Cart	6
2.4.1.6 Payment	6

2.4.2. Admin	7
2.4.2.1 Add Product	7
2.4.2.2 Delete Product	7
2.4.2.3 Update Product	8
2.4.2.4 View Order's Placed	8
2.4.2.5 Delete Order's Delivered	9
Chapter 3: Non-Functional Requirement	10
Chapter 4: Software Analysis Design	11-27
4.1 Activity Diagram	11
4.1.1 Activity Diagram For Customer Sign Up	11
4.1.2 Activity Diagram For Customer Sign In	12
4.1.3 Activity Diagram For View Shop & Add To Cart	13
4.1.4 Activity Diagram For Remove Item From Cart	14
4.1.5 Activity Diagram For Add products	15
4.1.6 Activity Diagram For Delete products	16
4.1.7 Activity Diagram For Update products	17
4.2 Sequence Diagram	18
4.2.1 Sequence Diagram For Sign Up	18
4.2.2 Sequence Diagram For Sign In	19
Sequence diagram for product management:	20

4.2.3 Add Product	20
4.2.4 Update Product	21
4.2.5 Delete Product	22
4.3 Entity Relationship Diagram	23
Chapter 5: Development Tools and Technologies	24
5.1 Programming Languages	24
5.2 User Interface Design	24
5.3 Database	24
5.4 Development Environment	24
5.5 Deploy and Hosting	24
Chapter 6: User Manual	25-28

List of Figures

FIGURES	page
Fig 1: Use case diagram	3
Fig 2: Activity Diagram for Sign Up	11
Fig 3: Activity Diagram for Sign In	12
Fig 4: Activity Diagram for View Shop & Add To Cart	13
Fig 5: Activity Diagram for Remove Item From Cart	14
Fig 6: Activity Diagram for Add Product	15
Fig 7: Activity Diagram for Delete Product	16
Fig 8: Activity Diagram for Update Product	17
Fig 9: Sequence Diagram for Sign Up	18
Fig 10: Sequence Diagram for Sign In	19
Fig 11: Sequence Diagram for Add Product	20
Fig 12: Sequence Diagram for Update Product	21
Fig 13: Sequence Diagram for Delete Product	22
Fig 14: Entity Relationship Diagram	23

CHAPTER 1: INTRODUCTION

1.1 Project Description:

The project is an ecommerce website where the seller can sell products online and buyers can place an order through online as well. The kismayu ecommerce website sells specific products such as bicycles, helmets for cycling and shoes. It's safe to say that this website is designed and prepared for people who enjoy cycling sport.

1.2 Project purpose:

In this time and age access and reach is just a matter of one finger click away, The purpose of this project is to show every single business in small town with big purpose in future can shine bright and sell it's products nationwide. It's not so common these kinda website in near market in my city.

1.3 Intended Audience:

The kismayu ecommerce website is designed for two users only:

1. 3.1) Business Manager

1.3.2) Customer

1.4 project Scope:

The Kismayu Ecommerce Website is a website that sells bicycles, helmets and shoes. the website will have a home page, three product pages, each product will have it's own page, Shopping Cart page where the customer can view what is in it's cart, contact us page and user sign in and sign up page .

The customer should be able to view all pages that is accessible to user. The customer should be able to sign up and sign in, the customer should be able to add products to it's shopping cart, remove products from it's shopping cart, get total price of the items in the cart and proceed to checkout and successfully place and order.

The manager of the store should be able to login into the system, add new products, update an existing product and delete product. The manager should also get the orders placed by the customer, and manage the states of the order, if delivered or not yet delivered.

1.5 Project Schedule:

1.5.1 gantt chart:

Activities	4 Week	8 Week	12 Week	16 Week	20 Week	24Week
Planing						
Design & Analysis						
Documenta tio						
Implementa tion						
Testing						
Deploy						

CHAPTER 2: FUNCTIONAL REQUIRMENT

2.1 Description:

Functional requirement describes functionalities that is necessary for a system to run. In order to develop a functioning system we need to define the functional requirments that the system must have.

2.2 User Roles:

There are two user roles:

- Adminstratore and customer
- There are specific set of actions that each user can perform

2.3 Use Case diagram:

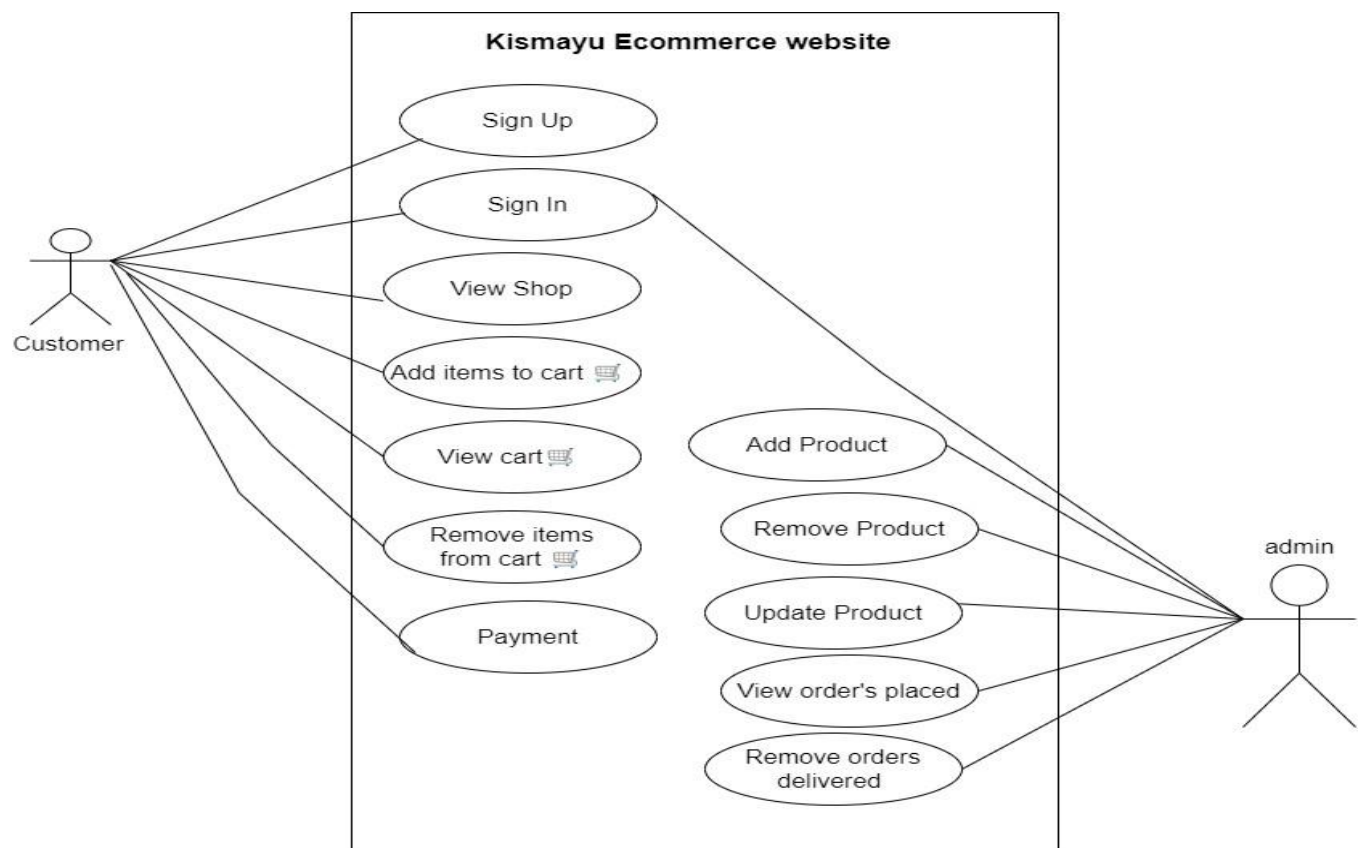


Figure 1 Use case diagram

2.4 Use Case Descriptions:

2.4.1 Customer

2.4.1.1 Sign up

Use Case	Sign Up
Description	The customer should be able to sign up into the system. The customer must fill the sign up form and click the sign up button. The system will validate and record this information into the database.
Primary Actor	Customer
Secondary Actor	None
Precondition	The user must fill the sign up form
Postcondition	The system displays the sign in form next

2.4.1.2 Sign in

Use Case	Sign in
Description	This function allows the user to login into the system and have access to the features and functions relevant to that user's role. All users must give valid information for the login, to enter into the system.
Primary Actor	Customer
Secondary Actor	Administrator
Precondition	The user has to have a valid account
Postcondition	The system displays the relevant interface

2.4.1.3 Add items to cart

Use Case	Add Items To Cart
Description	The customer must be able to view the shop and add items into their shopping cart. This function allows the user to make shopping online easy and place items into their cart. Just like the traditional way but through online now.
Primary Actor	Customer
Secondary Actor	None
Precondition	The user has to view the shop
Postcondition	The system adds that item into the customer's cart

2.4.1.4 View cart

Use Case	View Cart
Description	This function allows the user to know what is in their cart and the total cost of the all items in their cart. This feature allows the user to be informed and well known of what is in their cart.
Primary Actor	Customer
Secondary Actor	None
Precondition	The user must click view cart button
Postcondition	The system displays the shopping cart to the user

2.4.1.5 Remove item from cart

Use Case	Remove Items From Cart
Description	In order to remove an item from the cart, there must be at least one item in the cart. If the shopping cart is empty the system will not provide this feature to the user.
Primary Actor	Customer
Secondary Actor	None
Precondition	There must be an item in the user's shopping cart
Postcondition	The system removes the item from the cart and updates the total cost

2.4.1.6 Payment

Use Case	payment
Description	The user can not place an order successfully without payment method. The user can choose cash on deliever (COD) method and the order will be placed successfully.
Primary Actor	Customer
Secondary Actor	None
Precondition	The user must click check out button
Postcondition	The system displays the payment options

2.4.2 Admin

2.4.2.1 Add product

Use Case	Add Product
Description	The admin can add new products into the online store. The admin must enter the product information with an image and then click “add product” button. The rest will be taken care by the system
Primary Actor	None
Secondary Actor	Admin
Precondition	The admin needs to fill up the required fields
Postcondition	The system adds the product into the database and displays in the store menu.

2.4.2.2 Delete product

Use Case	Delete Product
Description	The admin can easily delete any product from the store completely by just clicking “delete product” button that is displayed right next to each product.
Primary Actor	None
Secondary Actor	Admin
Precondition	The admin must login into the system as an admin
Postcondition	The system deletes the product from the database and the store menu. Effective immediate

2.4.2.3 Update product

Use Case	Update Product
Description	The admin can update products in the online store. This functionality allows products can be updated as needed. The admin enters the new info and clicks update button and the product will be updated.
Primary Actor	None
Secondary Actor	Admin
Precondition	The admin needs to fill up the required fields
Postcondition	The system updates the product info in the database and displays in the store menu.

2.4.2.4 View order's placed

Use Case	View Order's Placed
Description	The admin gets the order that has been placed by the customers and can view it any time. The system will display the order's placed to the admin along with info about the customer who placed the order.
Primary Actor	None
Secondary Actor	Admin
Precondition	The admin must login into the system as an admin to view it
Postcondition	The system displays the orders to the admin

2.4.2.5 Delete order's delivered

Use Case	Delete Order's Delivered
Description	The admin have the access and the means to delete orders that has already been delivered from the order's database
Primary Actor	None
Secondary Actor	Admin
Precondition	The admin selects manage order tab
Postcondition	The system deletes the order from the database.

CHAPTER 3: NON-FUNCTIONAL REQUIREMENTS

None-functional requirement ensures the quality and user experience of the software or the system. It defines how a system performs a certain action.

NFR1	Usability
Description	The interface is easy to understand and use it. It's adaptable. It's similar to the existing products of its kind that is out there.
Stakeholder	Customer

NFR2	Performance
Description	I have optimized the code of the project to the best of my ability to enhance the performance of the code
Stakeholder	Admin, Customer

NFR3	Accessibility
Description	It should be accessible globally where the internet connection is available
Stakeholder	Customer

CHAPTER 4: SOFTWARE ANALYSIS DESIGN

4.1 Activity Diagram:

Activity diagram shows the workflow from a start point to the finish point detailing the many decision paths that exist in the progression of events contained in the activity. They may be used to where parallel processing may occur in the execution of some activities.

4.1.1 Activity diagram for customer Sign up:

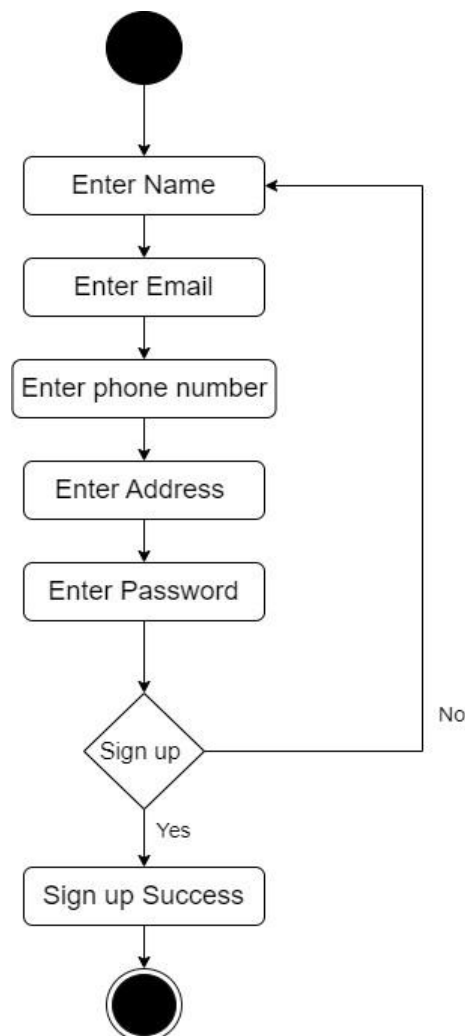


Figure 2 activity diagram for customer sign up

4.1.2 Activity diagram for Sign in:

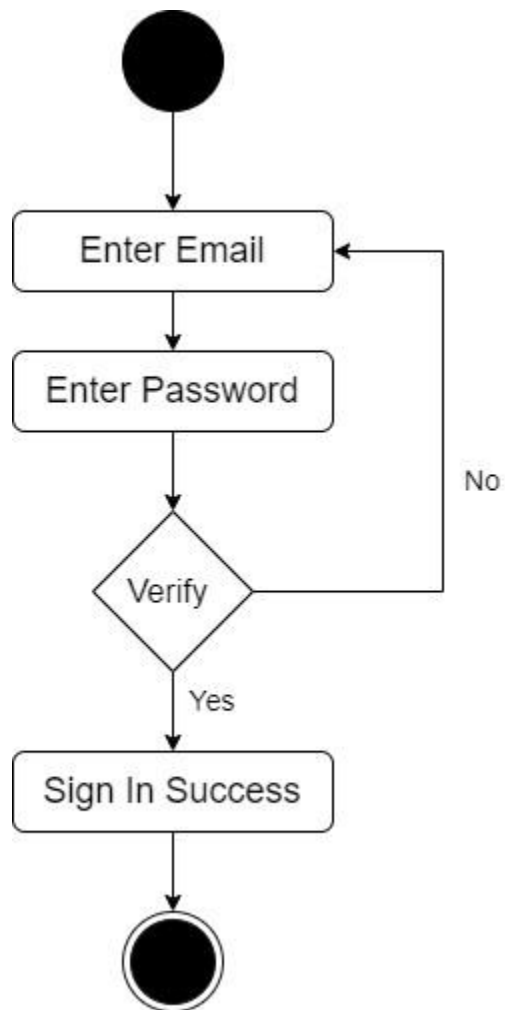


Figure 3 Activity diagram for sign in

4.1.3 Activity diagram for view shop and add to cart:

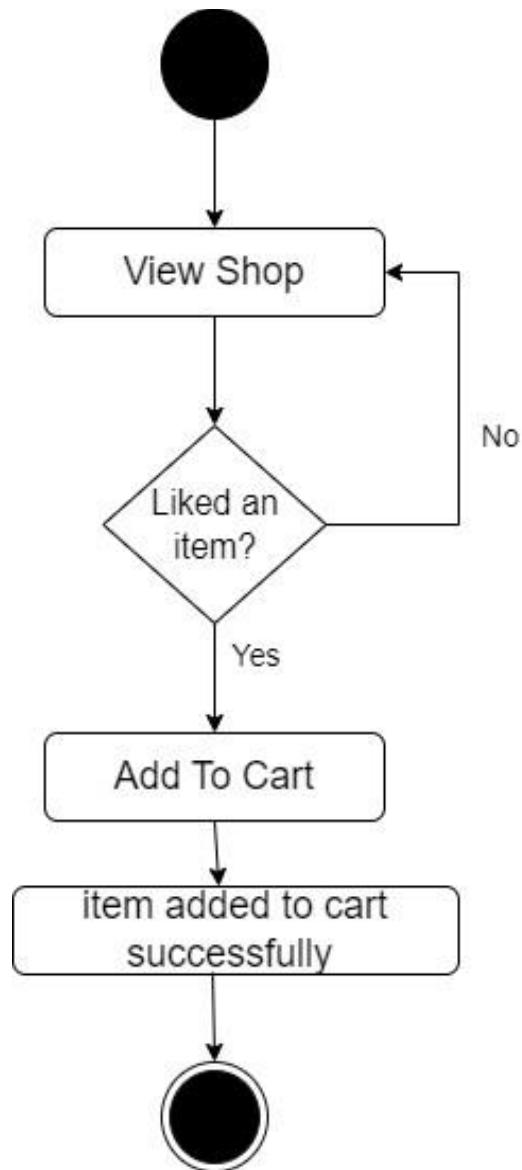


Figure 4 Activity diagram for view shop & add to cart

4.1.4 Activity diagram for remove an item from cart:

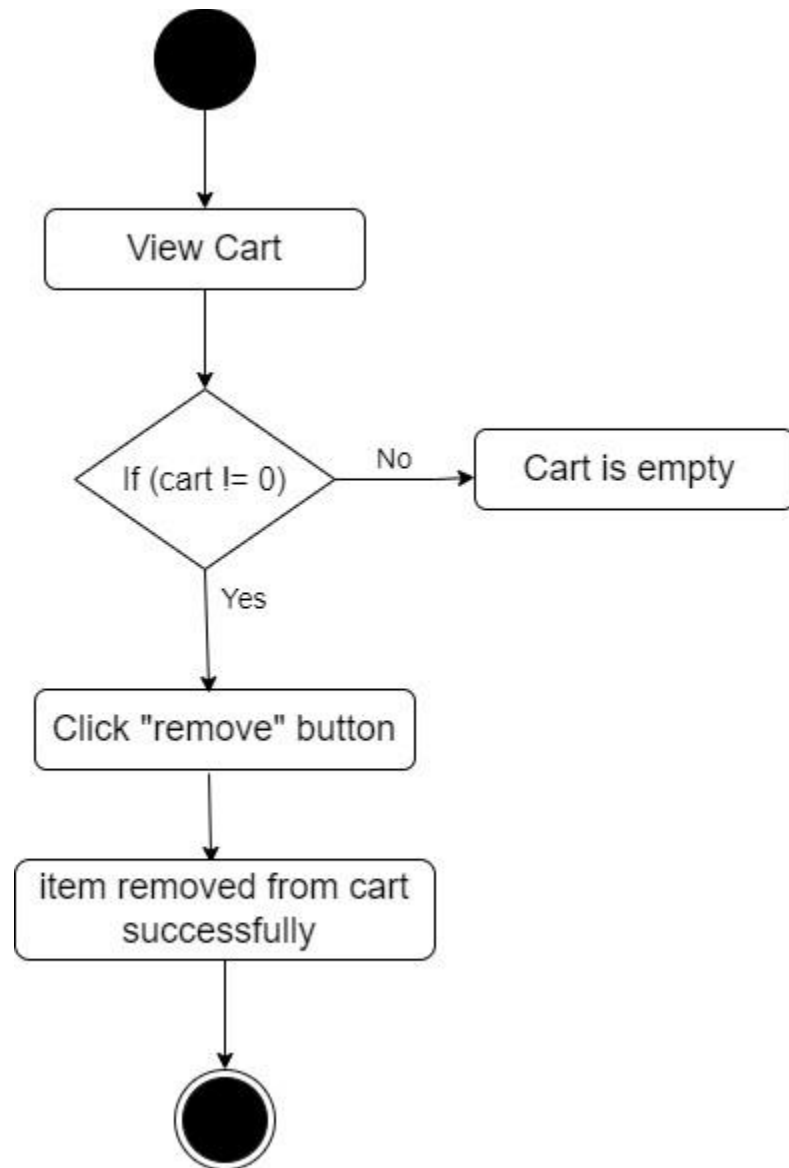


Figure 5 Activity diagram for remove an item from cart

4.1.5 Activity diagram for Add Products :

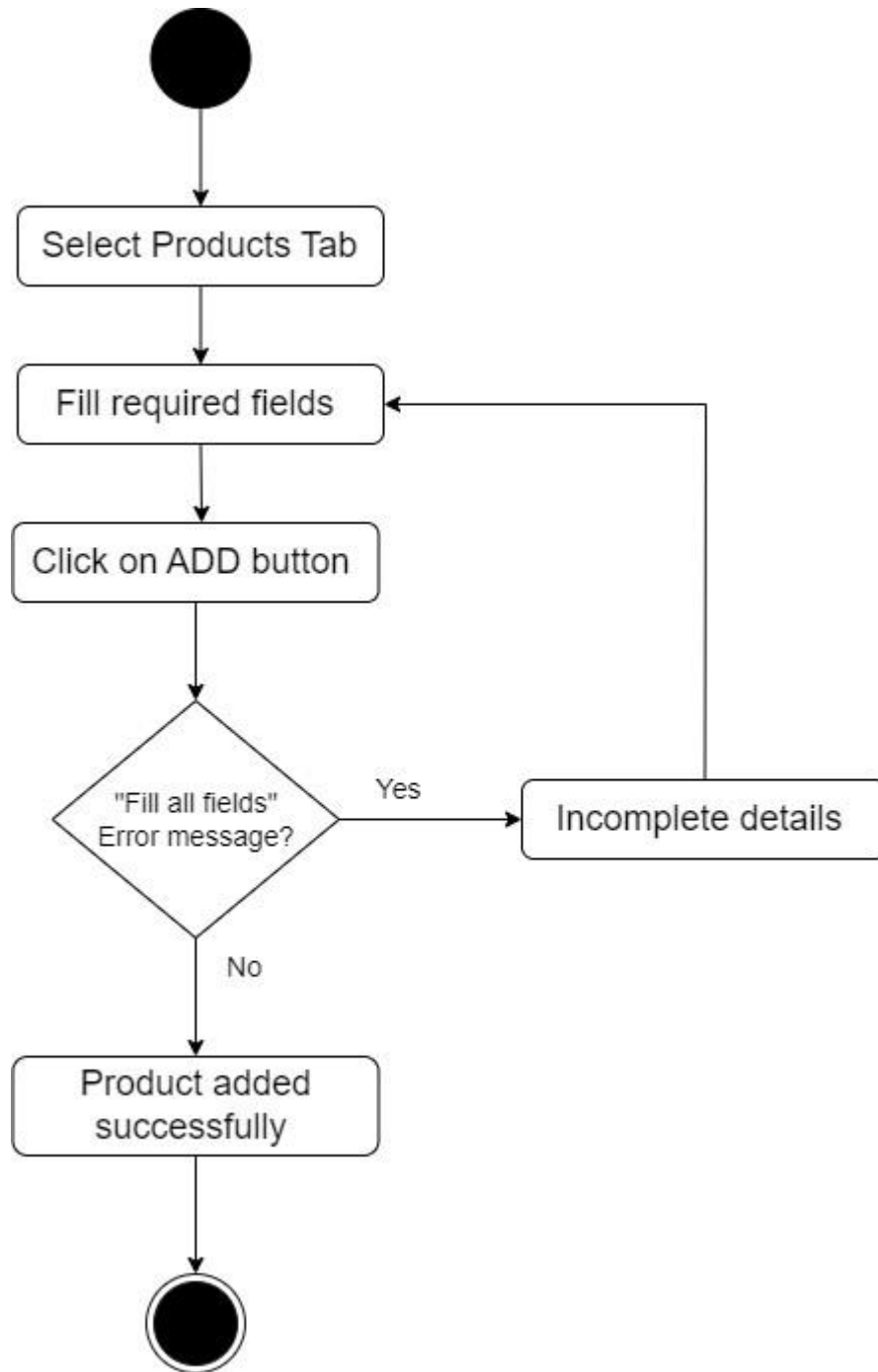
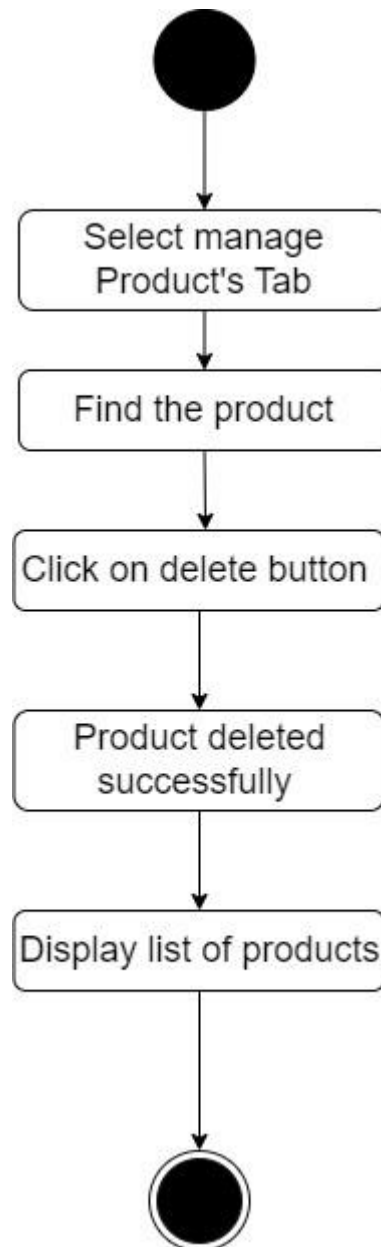


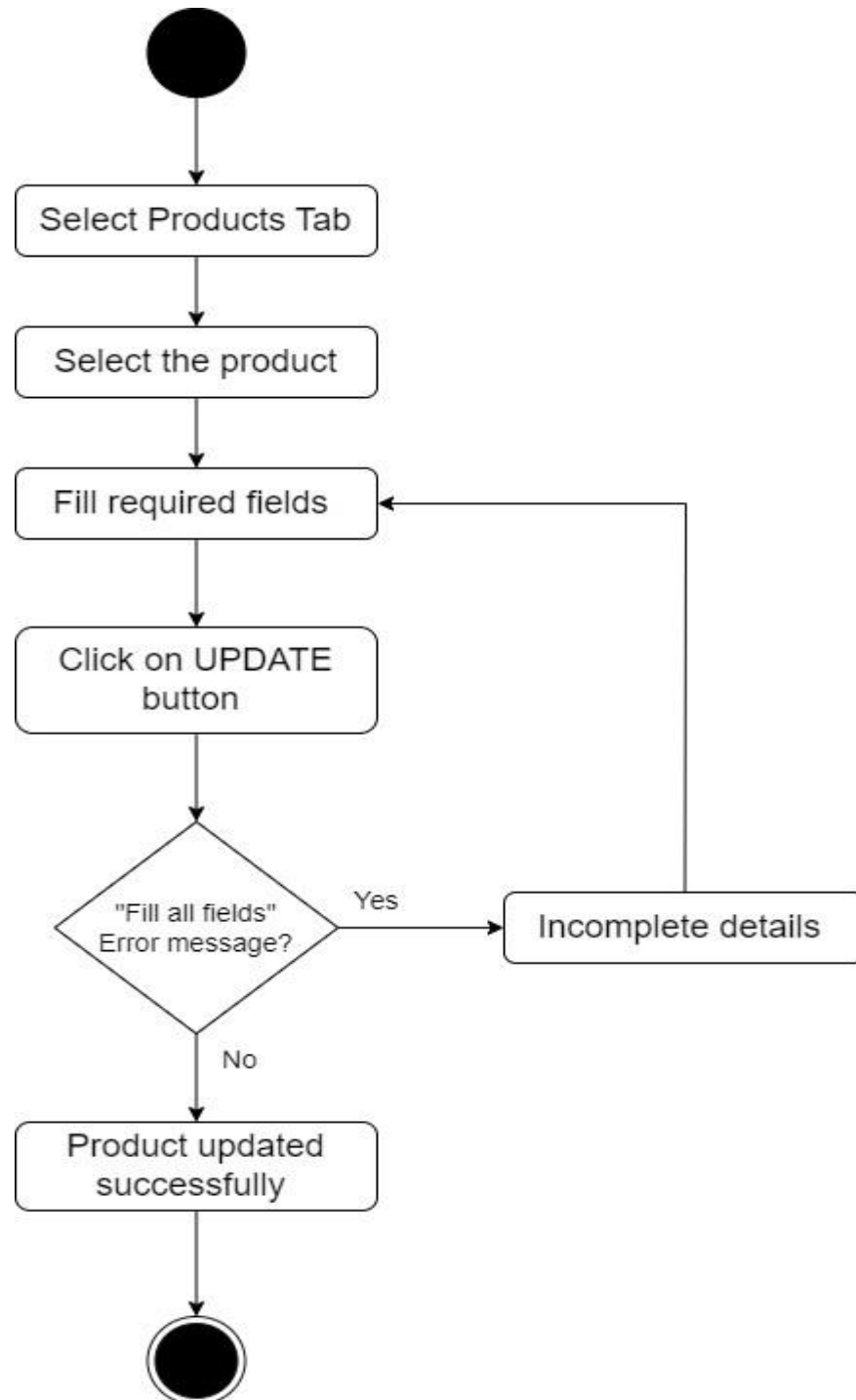
Figure 6 activity diagram for add product

4.1.6 Activity diagram for delete product :



Figur 7 activity diagram for delete product

4.1.7 Activity diagram for update product :

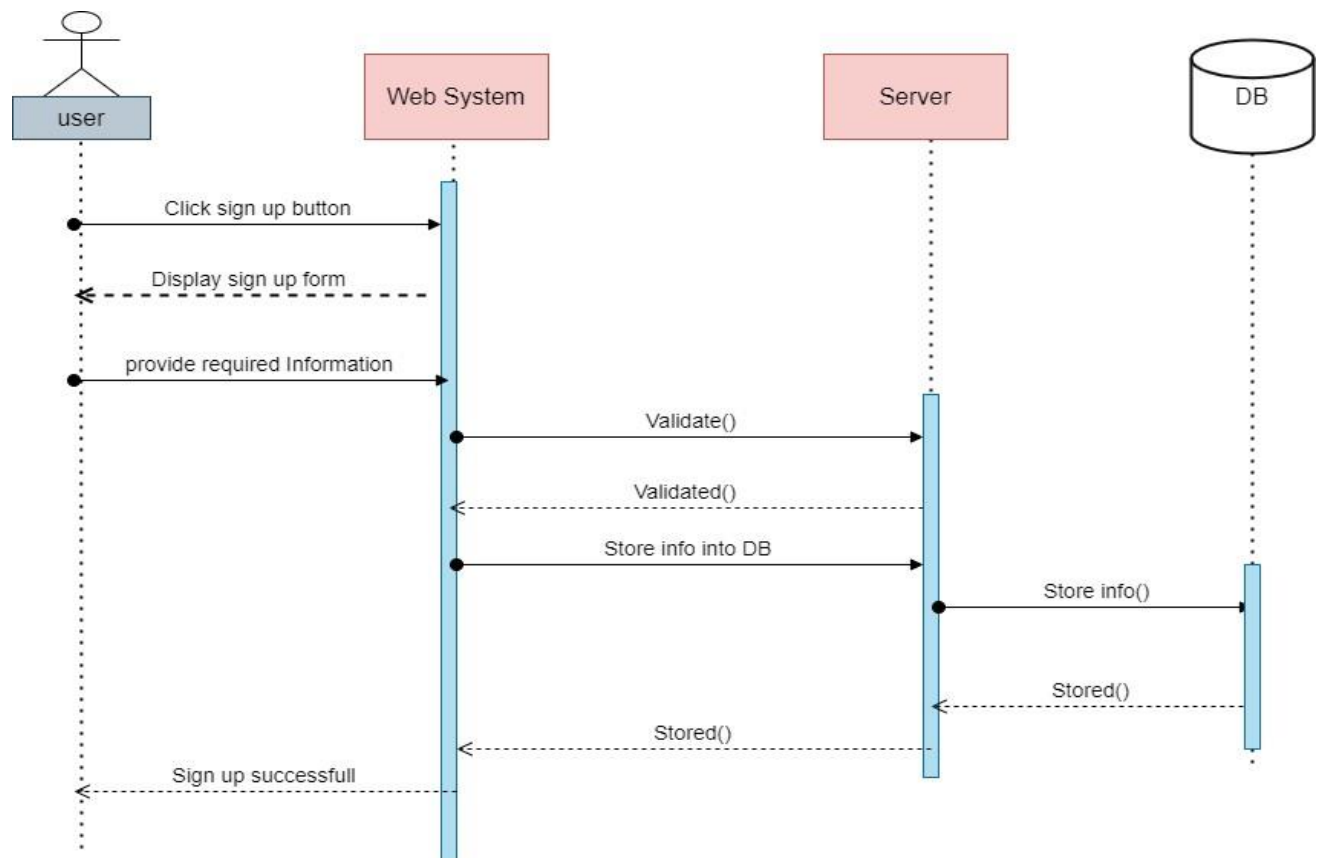


Figur 8 activity diagram for update product

4.2 Sequence Diagram:

Sequence diagram is a type of UML diagram that shows how objects in a system or classes within code interact with each other. It also shows the sequence of events.

4.2.1 Sequence diagram for sing up:



Figur 9 sequence diagram for sign up

4.2.2 Sequence diagram for sing in:

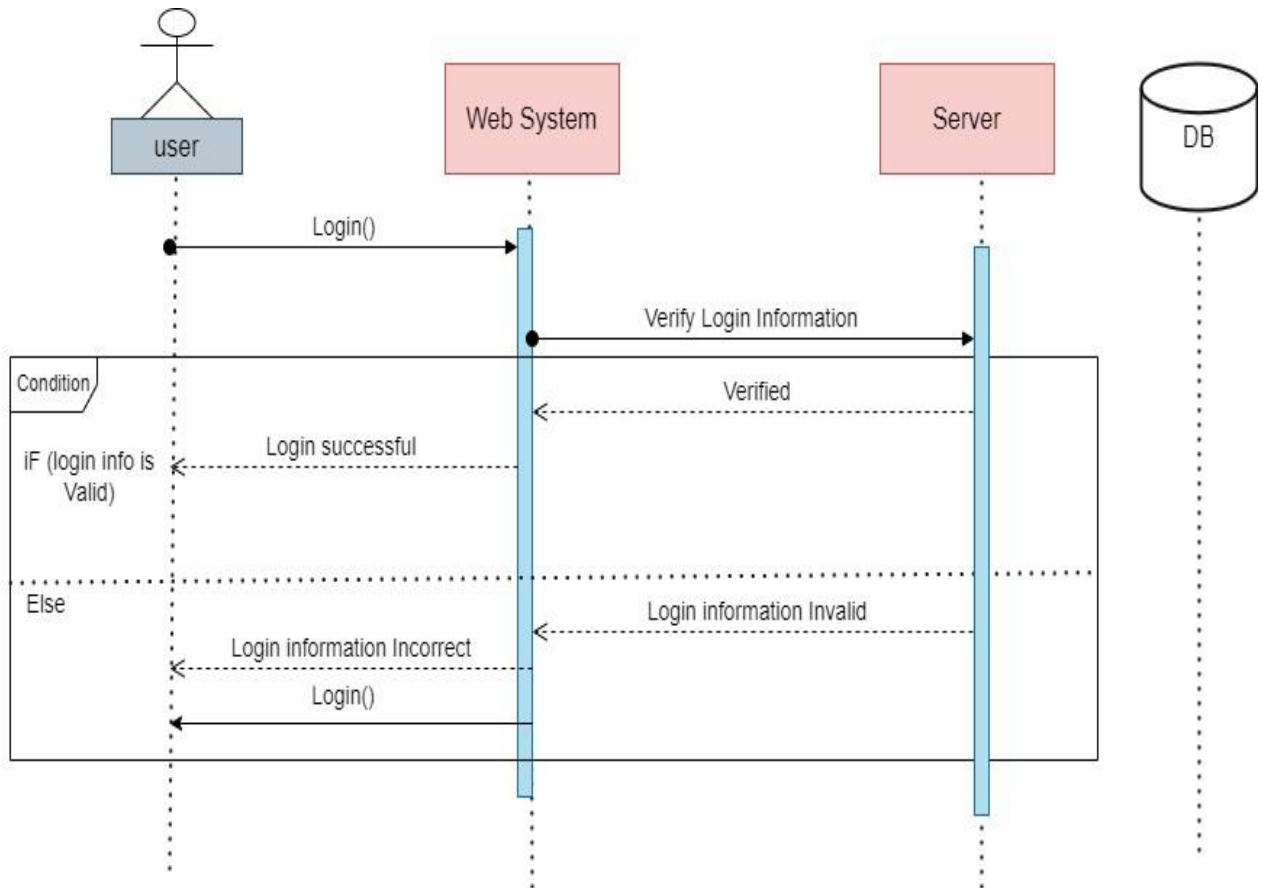


Figure 10 sequence diagram for sign in

Sequence diagram for product management

4.2.3 Add product:

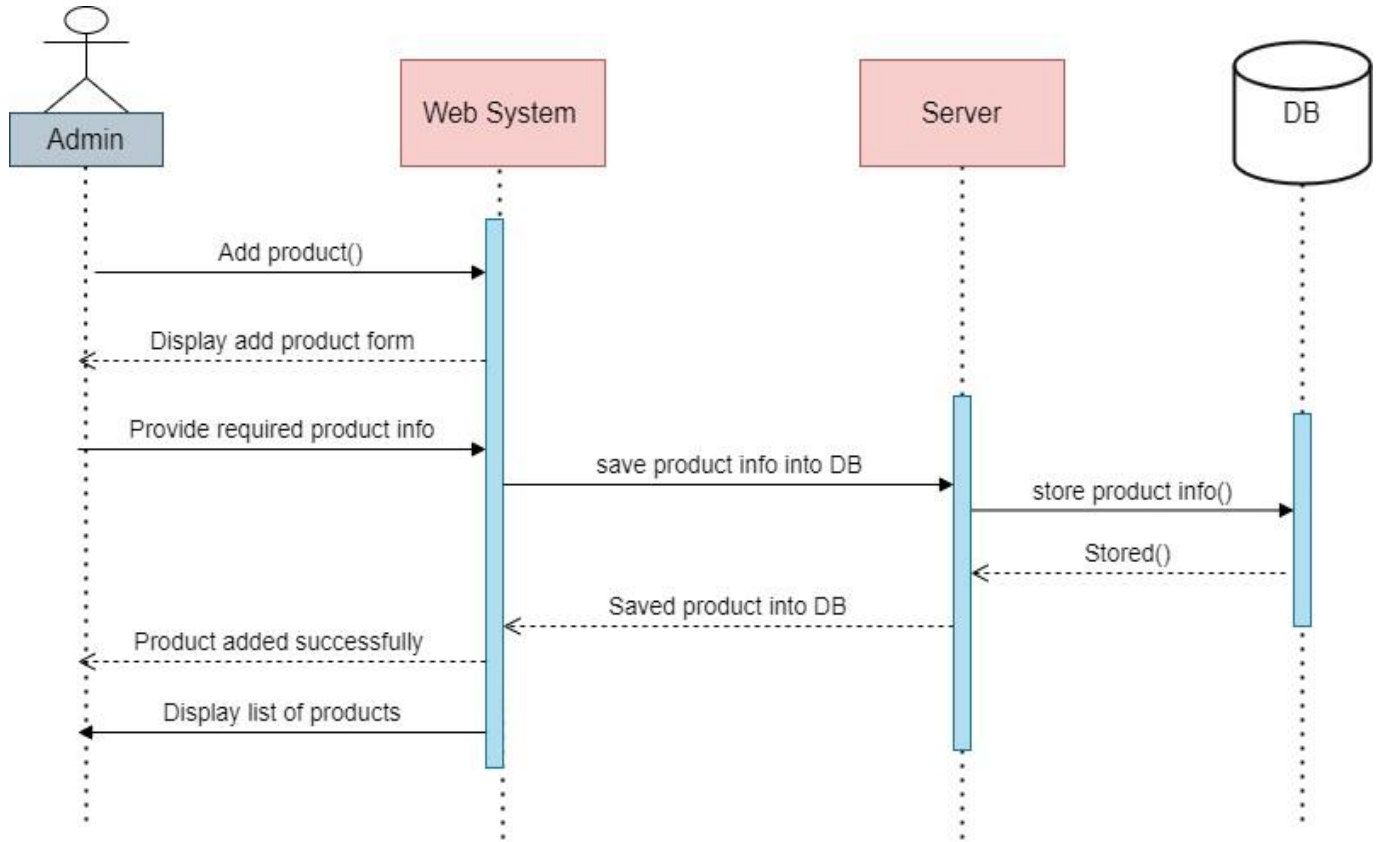


Figure 11 sequence diagram for add product

4.2.4 Update product:

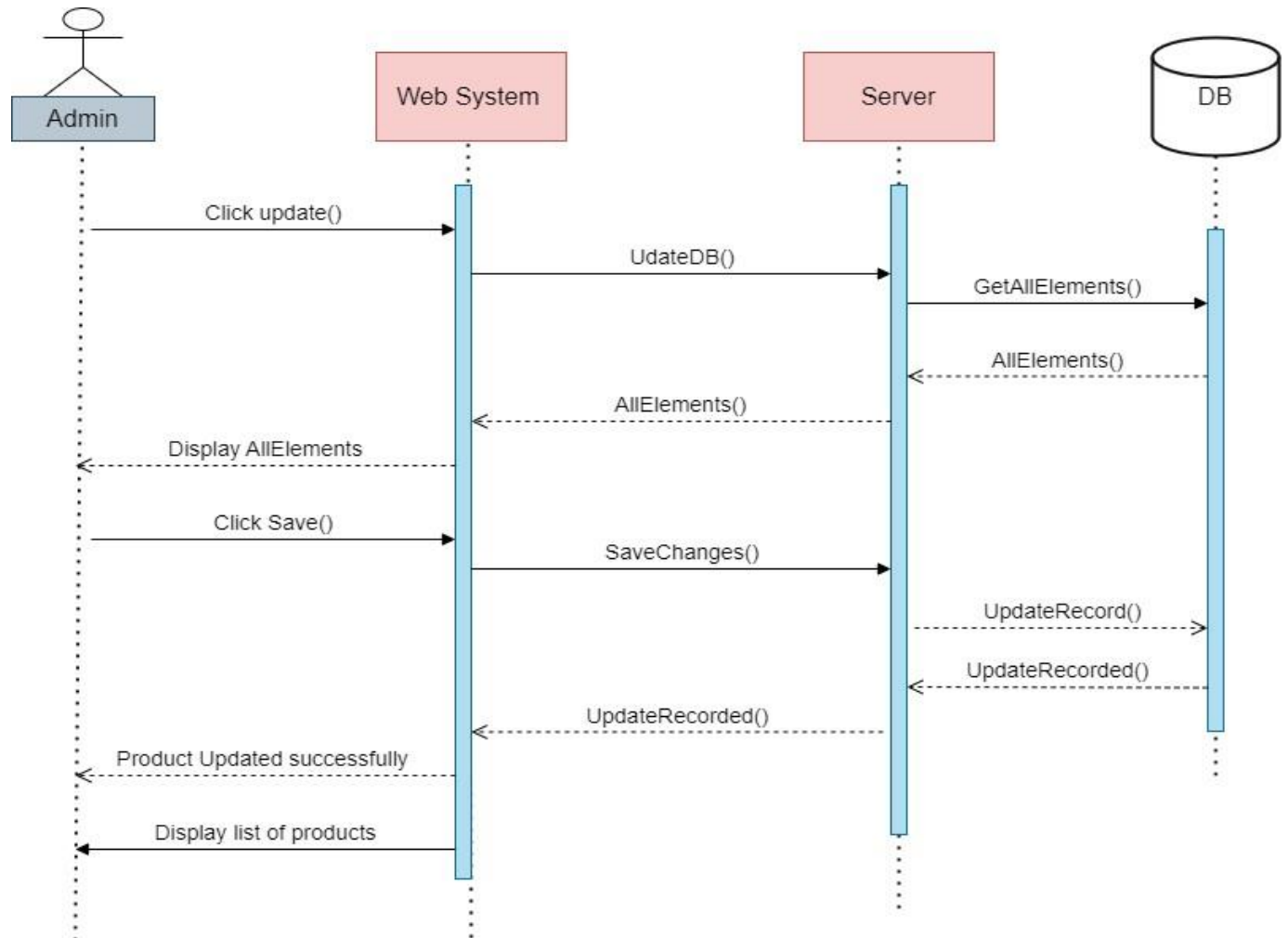


Figure 12 sequence diagram for update product

4.2.5 Delete product:

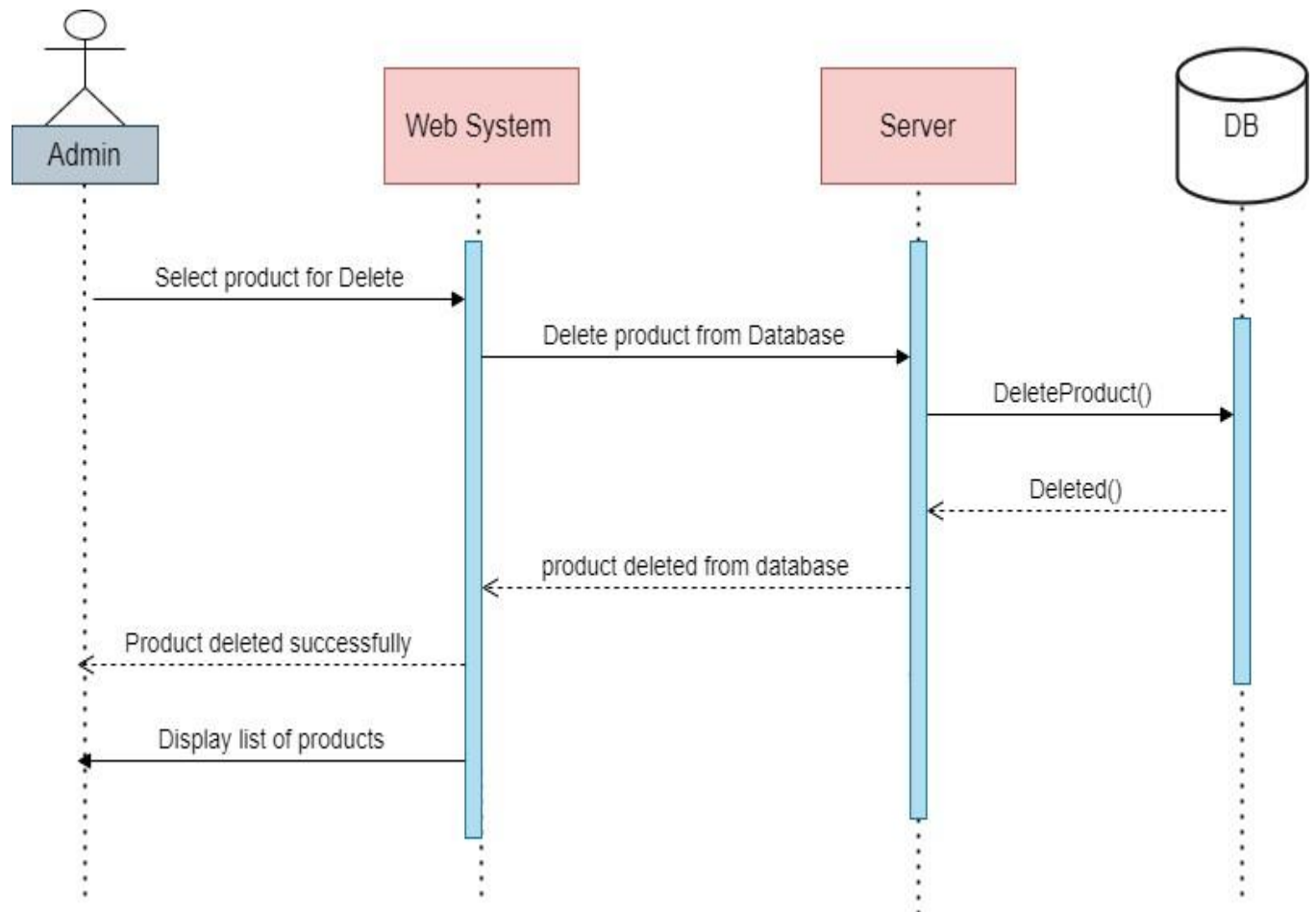


Figure 13 sequence diagram for delete product

4.3 Entity Relationship Diagram

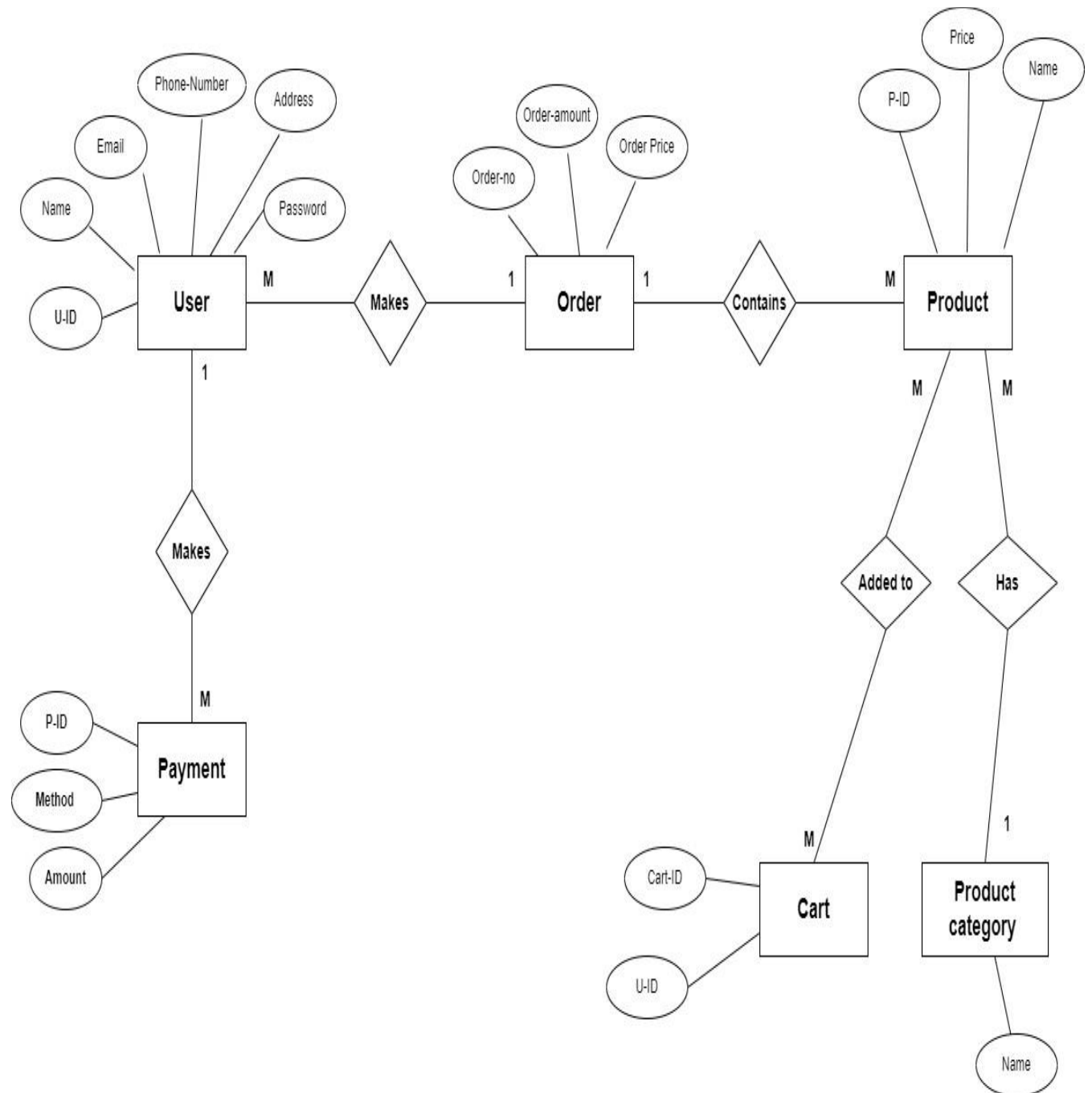


Figure 14 sequence diagram for update product

CHAPTER 5: Development Tools and Technologies

5.1 Programming Language

This project is developed in javaScript programming language. Backend is used PHP programming language.

5.2 User Inteface Design

The user interface of this project is used HTML, CSS and Bootstrap5 framework.

5.3 Database

A database is a systemically arranged set of data stored and accessed digitally. It allows users to efficiently store, retrieve and manage data. Database management system (DBMS) provides tools for data entry, querying, updating and administration. They come in various types. This project used MySQL for database related work.

5.4 Development Environment

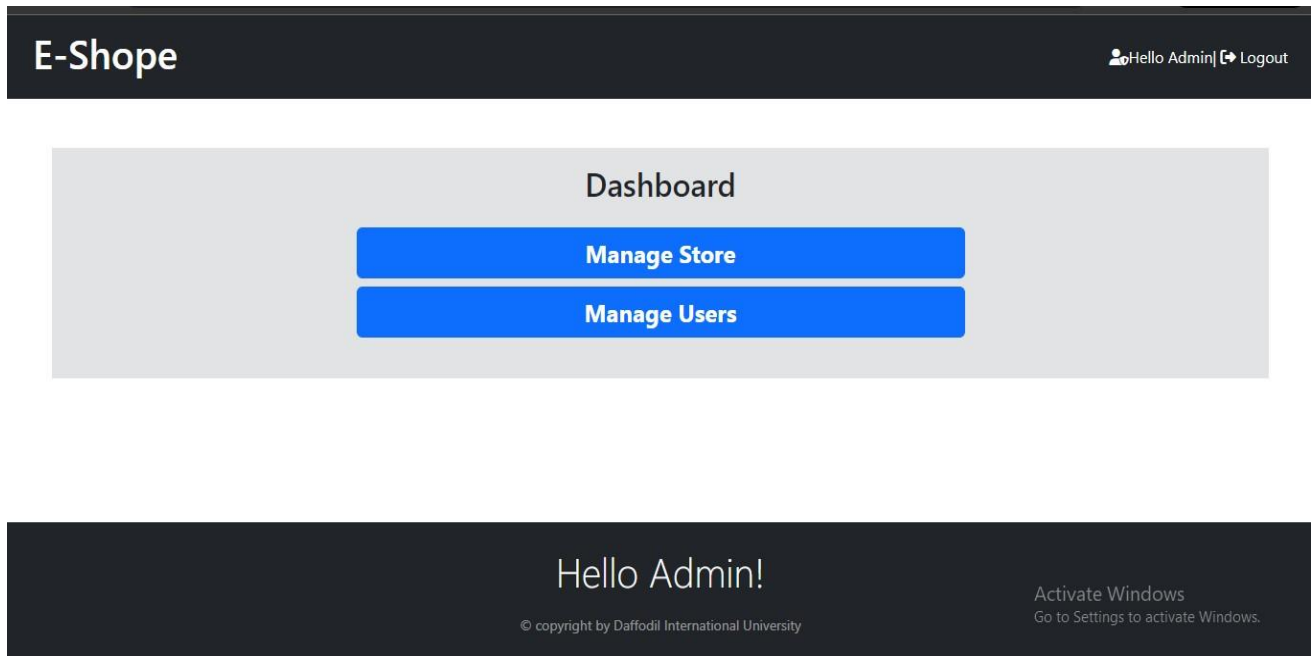
The environment of the development of this project is visual studio code and xampp which allows to run a server environment locally.

5.5 Deploy and Hosting

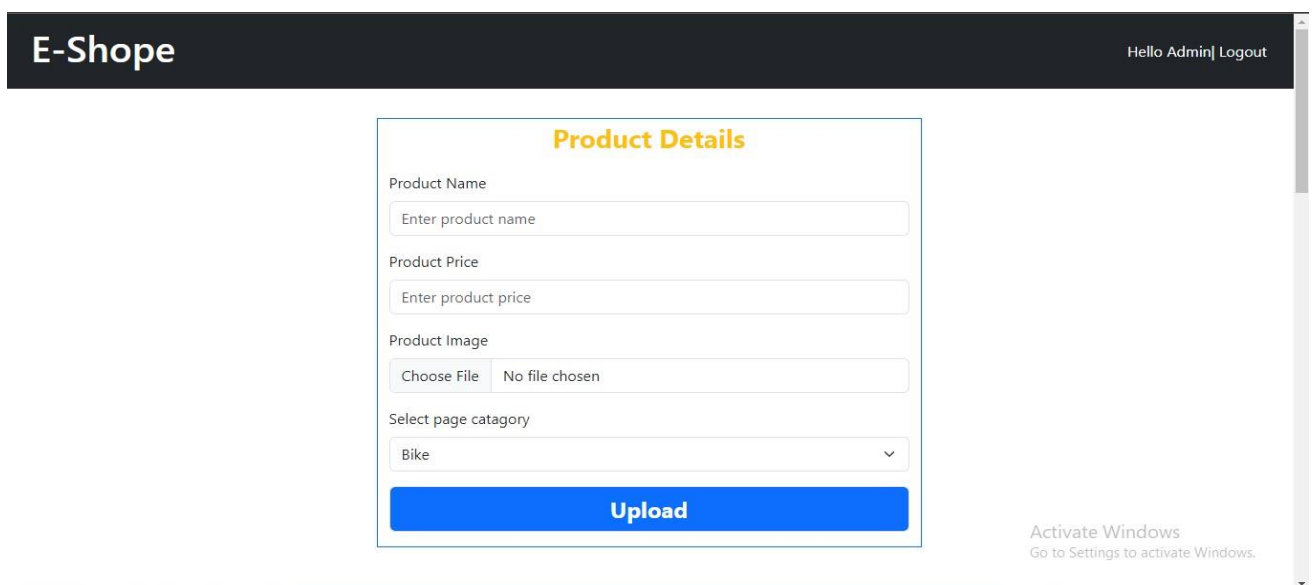
For deploy and hosting, I used GitHub.

CHAPTER 6: User Manual

6.1 Admin Dashboard



6.2 Add product page



6.3 Product UI

E-Shop						
Hello Admin Logout						
Id	Name	Price	Image	Category	Delete	Update
6	black bicyle	4000		Bike	Delete	Update
10	black shoes	2500		Shoes	Delete	Update
11	black halmet	2000		Halmet	Delete	Update
12	white halmet	2800		Halmet	Delete	Update
14	green bike	4200		Bike	Delete	Update

6.4 Product pages

 kismayu

HomeShopContactSign Upcart(0)

BICYCLEHALMETSHOES



black shoes
TAKA: 2500

add to cart



Red Elite shoes
TAKA: 6500

add to cart



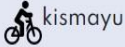
black elite
TAKA: 6500

add to cart








[Home](#)
[Shop](#)
[Contact](#)
[Sign Up](#)
[cart\(0\)](#)

[BICYCLE](#)
[HALMET](#)
[SHOES](#)



black bicycle

TAKA: 4000

add to cart



green bike

TAKA: 4200

add to cart



bike blue

TAKA: 4200

add to cart



Activate Windows

Go to Settings to activate Windows.


[Home](#)
[Shop](#)
[Contact](#)
[Sign Up](#)
[cart\(0\)](#)

[BICYCLE](#)
[HALMET](#)
[SHOES](#)



black helmet

TAKA: 2000

add to cart



white helmet

TAKA: 2800

add to cart



blue helmet

TAKA: 2300

add to cart

Activate Windows

Go to Settings to activate Windows.

6.5 Cart

Your Shopping Cart

Serial No	Item Name	Item Price	Quantity	Total Price	Remove
0	Red Elite shoes	6500	1	6500	Delete
1	white halmet	2800	1	2800	Delete
2	Yellow Bike	6000	1	6000	Delete

TOTAL

15,300.00

PLAGIARISM REPORT

Bike and Accessories Online Store

ORIGINALITY REPORT

22%	11%	2%	18%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Asia Pacific University College of Technology and Innovation (UCTI)	3%
	Student Paper	
2	Submitted to Cavendish University Zambia	2%
	Student Paper	
3	Submitted to NCC Education	1%
	Student Paper	
4	dokumen.tips	1%
	Internet Source	
5	dspace.daffodilvarsity.edu.bd:8080	1%
	Internet Source	
6	Submitted to American University of Iraq	1%
	Student Paper	
7	Submitted to Monash University	1%
	Student Paper	
8	Submitted to Gateway Business College	1%
	Student Paper	
9	Submitted to HELP UNIVERSITY	1%
	Student Paper	