



Daffodil
International
University

Project Documentation

Multi-Client

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A project submitted in partial fulfilment of the requirement for the degree of
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Chapter 1

Introduction

1.1 Project Overview

‘Multi-Client Project’ is basically kind of updated version of this ongoing e-commerce industry. In this project seller, customer and employee will be given enough priority.

Seller can sell their product through us by their name and customer will be assured by our employee. Employee will be always there for their help, like delivery and other staff. Also in this project, customer can see seller shop location and contact directly with seller.

Product could be anything. There will be no specific product recommended. Any seller can sell anything.

1.2 Purpose

- Seller could get recognition.
- Customer can be assure that they will not be fraud.
- No product specified so every product will be available.
- It will be customer-seller relation. Which is more beneficial than customer-company relation.

1.2.1 Background

In this e-commerce industry physical shop getting affected. Mostly consumer don't know where their product coming from.

Shop owners don't get enough attention now-a-day. Everything is online. So what if we bring them in this digital platform and they can sell their product online as well as offline. And people can make sure their food is okay. And if anything needed to change or return they can go by themselves or they can request return. This whole process will be happen under supervision of employee. They will make sure of everything.

1.2.2 Goals

- To bring every local shop owner online.
- To know customer where their things coming from and where they want to order.
- Make a beautiful collaboration between customer and shop owner like old days through online.

1.3 Stakeholders

- Admin
- Employee
- Shop Owner
- Customer

1.4 Definition and Acronyms

- Admin: Manage and monitor the system.
- Employee: Manage and monitor customer and shop owner things.
- Shop Owner: Those who sell items.
- Customer: Consumer of the items.

1.5 Project Schedule

Table: 3.1 Time Schedule

SL	Task	Start Date	End Date	Working Days
1.	Project proposal	06-06-2021	07-06-2021	2 Days
2.	Requirement Analysis	08-06-2021	17-06-2021	10 Days
3.	System design	18-06-2021	17-08-2021	2 months
4.	Implementation	18-08-2021	16-12-2019	4 Months
5.	Testing and Result	17-12-2021	23-12-2021	7 Days
6.	Project Report	24-12-2021	05-01-2022	11 Days

Chapter 2

Software Requirement Analysis

2.1 Software Requirement Specification

Table: 2.1 Software Requirement Specification

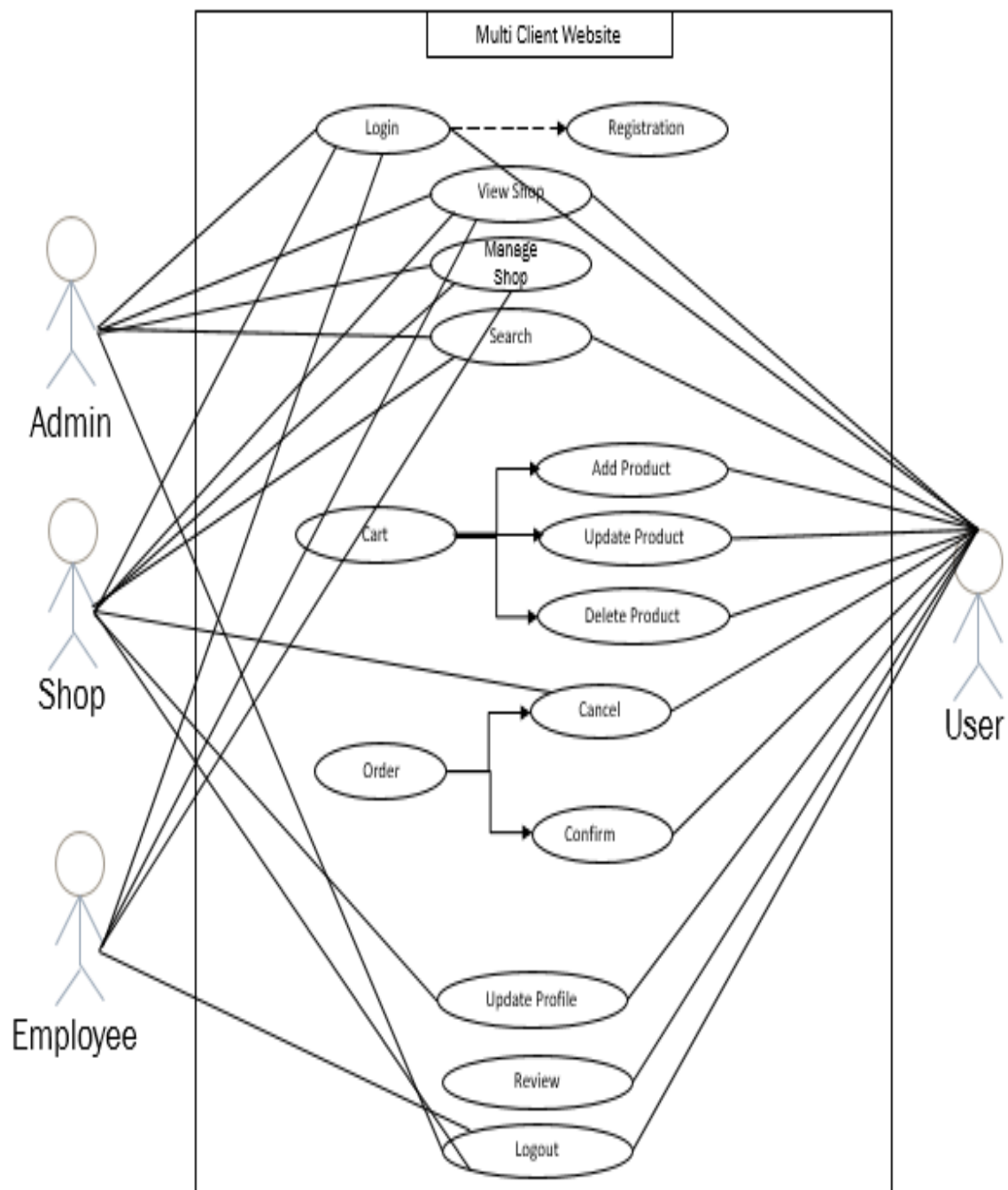
Id	Name	Description	Type	Priority
SRS-001	User login	Users must be logged in with validate credential.	Functional	High
SRS-002	User Registration	All users need to register before they want to use their account.	Functional	High
SRS-003	Logout	Users must have their own choice to clear their session.	Functional	Low
SRS-004	View shop	Users can view all shop registered to the system.	Functional	High
SRS-005	Manage shop	Admin & seller can manage shop related actions as company policy.	Functional	High
SRS-006	Search	All user can search product by the product name.	Functional	Low
SRS-007	Cart	Customers can create their own cart and can add, delete & update quantity of the product.	Functional	High

SRS-008	Order	Customer & shop sellers can confirm orders and if they needed can cancel order also.	Functional	High
SRS-009	Review	Customers can give product review and if they need any kind of support they can find in this section.	Non-functional	Medium
SRS-010	Update profile	All users can update their profile information except employee.	Non-functional	Low

Chapter 3

System Analysis

3.1 Use Case Diagram



3.2 Use Case Description

3.2.1 Login

Table: 3.1 Login

Use Case Title	Login	
Goal	Admin, Employee, Customer & Seller have to login with the System.	
Preconditions	- Employee, Seller have to registered by the Admin. - Customer first have to register then they can login to the system.	
Success End Condition	Login done by users.	
Failure End Condition	Login is Unsuccessful.	
Primary Actors:	Seller, Employee, Admin.	
Secondary Actors:	Customer.	
Trigger	After Click to Login Button, it will bring to the Home page.	
Description Main Success Scenario	Step	Action
	1.	If users are registered then the second step will be Login.
	2.	Login with Valid Confidentiality
	3.	If not registered or login with non-valid Confidentiality then it won't be logged in.
Alternative flows	Step	Branching Action
	1.	There has no alternate without being registered.
Quality Requirements	Step	Requirements
		N/A

3.2.2 Logout

Table: 3.2 Logout

Use Case Title	Logout	
Goal	User can clear their session.	
Preconditions	Users must be logged on.	
Success End Condition	Sign out by the users.	
Failure End Condition	Session not flushed.	
Primary Actors:	Admin, Employee, Seller.	
Secondary Actors:	Customer	
Trigger	After Click to Logout Button, it will flush the session to access out from the system.	
Description Main Success Scenario	Step	Action
	1.	User has to be logged in.
	2.	Click the button to access out.
	3.	If user is not in logged in state, then logout button will not appear.
Alternative flows	Step	Branching Action
	1.	There has no alternate without being logged in.
Quality Requirements	Step	Requirements
		N/A

3.2.3 View Shop

Table: 3.3 View Shop

Use Case Title	View Shop	
Goal	All user can view shop details.	
Preconditions	N/A.	
Success End Condition	All user can see the details successfully.	
Failure End Condition	User can't access the shop pages.	
Primary Actors:	Admin, Employee, Seller.	
Secondary Actors:	Customer.	
Trigger	User need to click on shop button to access the shop details.	
Description Main Success Scenario	Step	Action
	1.	Page shown successfully.
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.2.4 Manage Shop

Table: 3.4 Manage Shop

Use Case Title	Manage Shop	
Goal	Add or remove shop and shop product	
Preconditions	Admin has to log in first.	
Success End Condition	Shop and shop product will be added or removed.	
Failure End Condition	Can't add a new shop and shop product because of existing record.	
Primary Actors:	Admin	
Secondary Actors:	Seller	
Trigger	To add shop just need to fill up some required information or to delete an existing admin just need to choose the option to delete for specific shop.	
Description Main Success Scenario	Step	Action
	1.	Log in as admin/seller.
	2.	Add/Remove a shop.
Alternative flows	Step	Branching Action
	1.	Admin also can Update the shop Information
Quality Requirements	Step	Requirements
		N/A

3.2.5 Search

Table: 3.5 Search

Use Case Title	Search	
Goal	Show filtered product or shop by specific keyword	
Preconditions	N/A	
Success End Condition	Shop or product exist.	
Failure End Condition	Shop or product don't exist.	
Primary Actors:	Admin, Seller	
Secondary Actors:	Customer	
Trigger	Input keyword and click search button.	
Description Main Success Scenario	Step	Action
	1.	Product or shop exist
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.2.6 Cart

Table: 3.6 Cart

Use Case Title	Cart	
Goal	To make order.	
Preconditions	Customer needs to select product.	
Success End Condition	Product added.	
Failure End Condition	Product couldn't be add for some reason.	
Primary Actors: Secondary Actors:	Customer N/A	
Description Main Success Scenario	Step	Action
	1.	Select product
	2.	Click on 'Add to Cart'
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.2.7 Order

Table: 3.7 Order

Use Case Title	Order	
Goal	Buy product.	
Preconditions	Customer has to login and there should be product added on cart.	
Success End Condition	Order delivered successfully.	
Failure End Condition	Order canceled for some reason.	
Primary Actors:	Customer, Seller	
Secondary Actors:	N/A	
Description Main Success Scenario	Step	Action
	1.	Create Cart
	2.	Login
	3.	Checkout by selecting payment method
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.2.8 Review

Table: 3.8 Review

Use Case Title	Review	
Goal	To justify user experience.	
Preconditions	Need to have a profile and made to do some action based on that action, they can give review.	
Success End Condition	Review submitted successfully to the admin	
Failure End Condition	Couldn't make review due to some action policies	
Primary Actors:	Customer	
Secondary Actors:	Admin	
Description Main Success Scenario	Step	Action
	1.	Login
	2.	Create review
	3.	Submit
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.2.9 Update Profile

Table: 3.9 Update Profile

Use Case Title	Update Profile	
Goal	All users can update profile except employee.	
Preconditions	Need to have a profile to update	
Success End Condition	Profile update successfully	
Failure End Condition	Profile didn't update as the information is as same as before	
Primary Actors:	Customer, Seller	
Secondary Actors:	N/A	
Description Main Success Scenario	Step	Action
	1.	Login
	2.	Edit profile
	3.	Update profile
Alternative flows	Step	Branching Action
		N/A
Quality Requirements	Step	Requirements
		N/A

3.3 Activity Diagram

3.3.1 Login

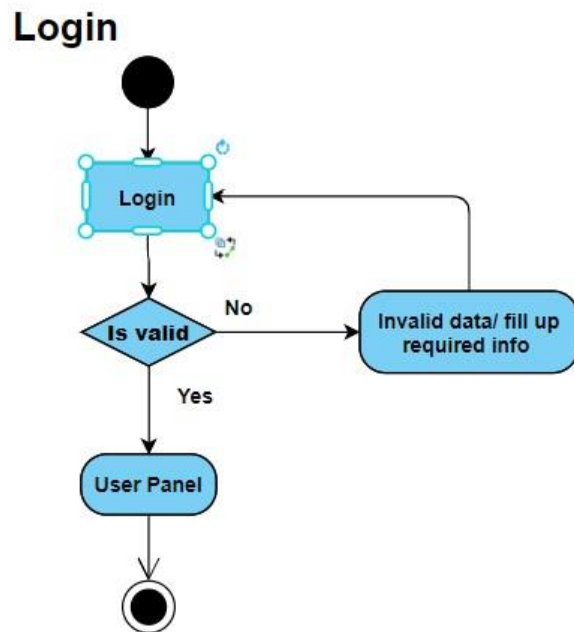


Fig: 3.1 Login Activity Diagram

3.3.2 Registration

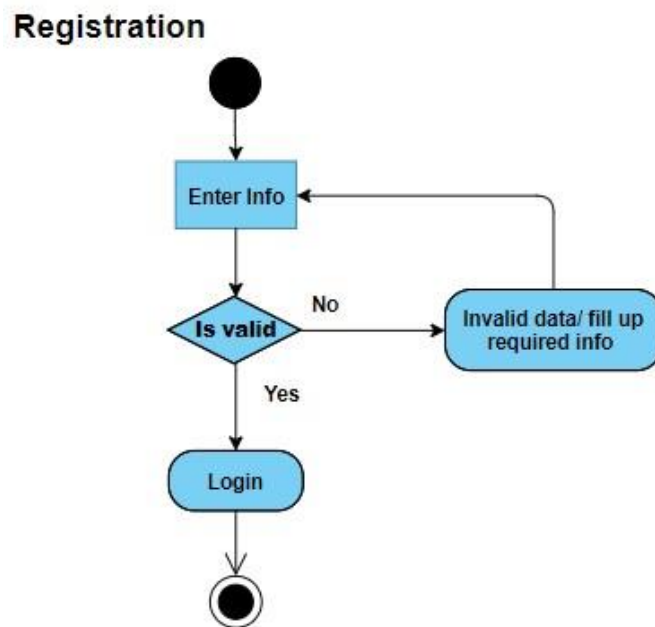


Fig: 3.2 Registration Activity Diagram

3.3.3 Search

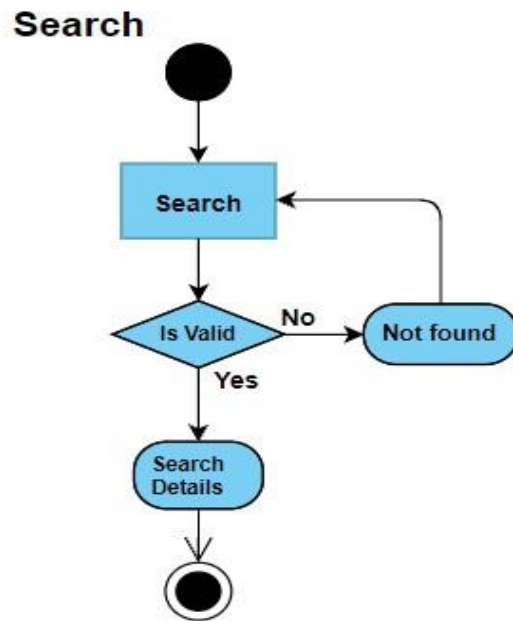


Fig: 3.3 Search Activity Diagram

3.3.4 Add To Cart

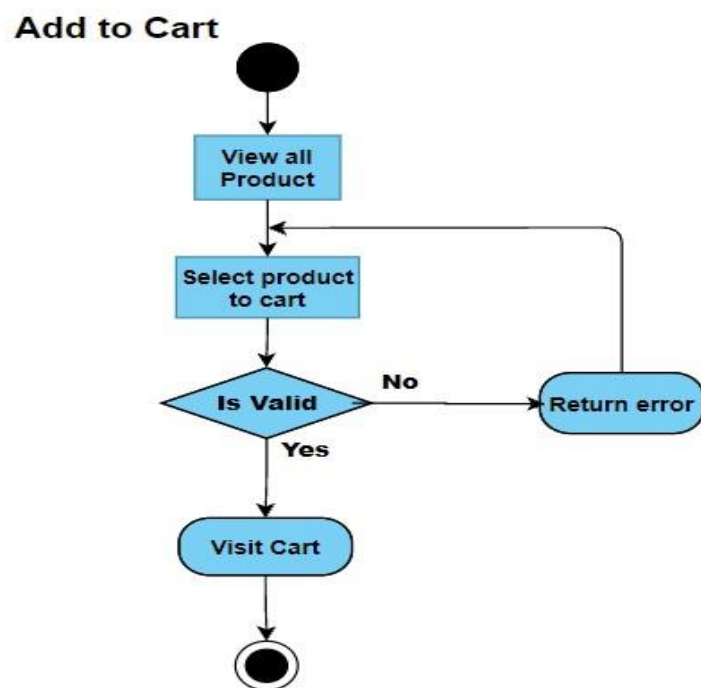


Fig: 3.4 Add to cart Activity Diagram

3.3.5 Update Cart

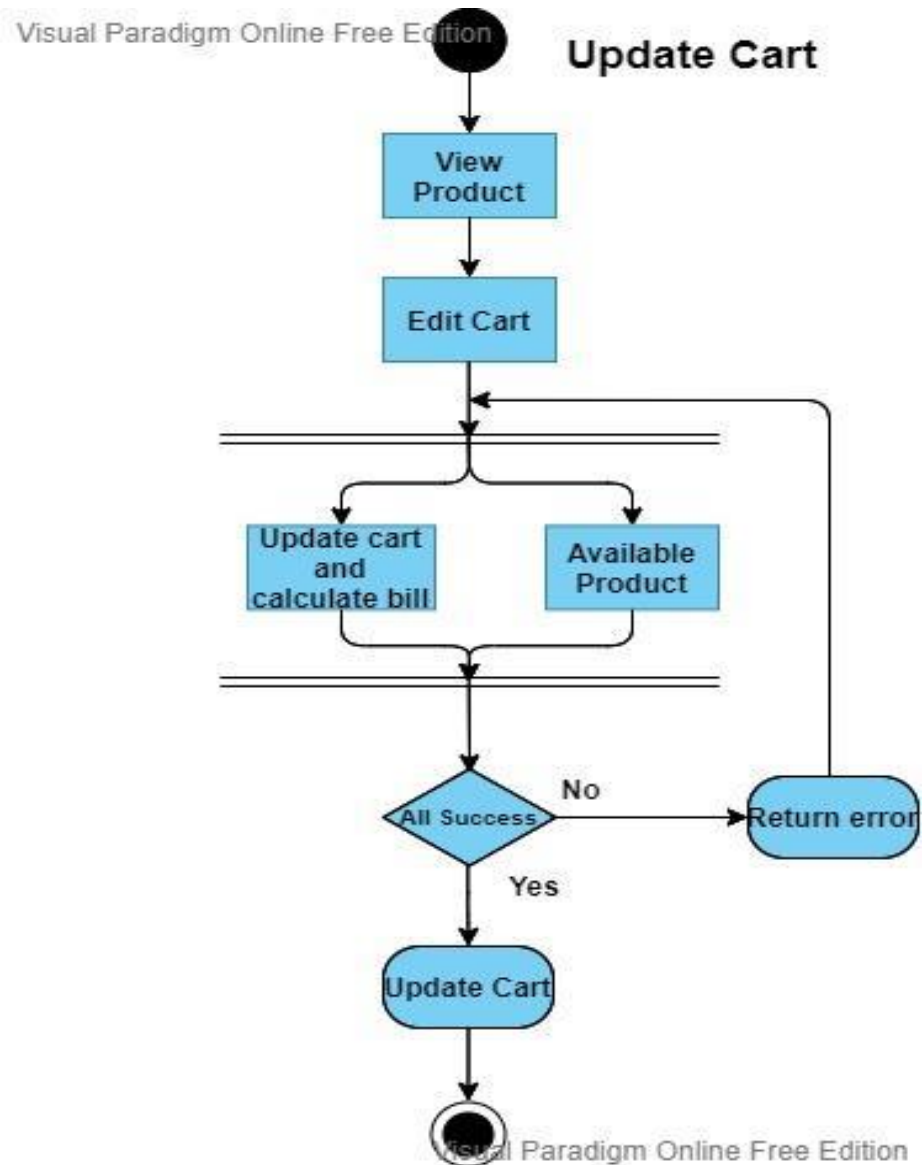


Fig: 3.5 Update Cart Activity Diagram

3.3.6 Confirm/Checkout

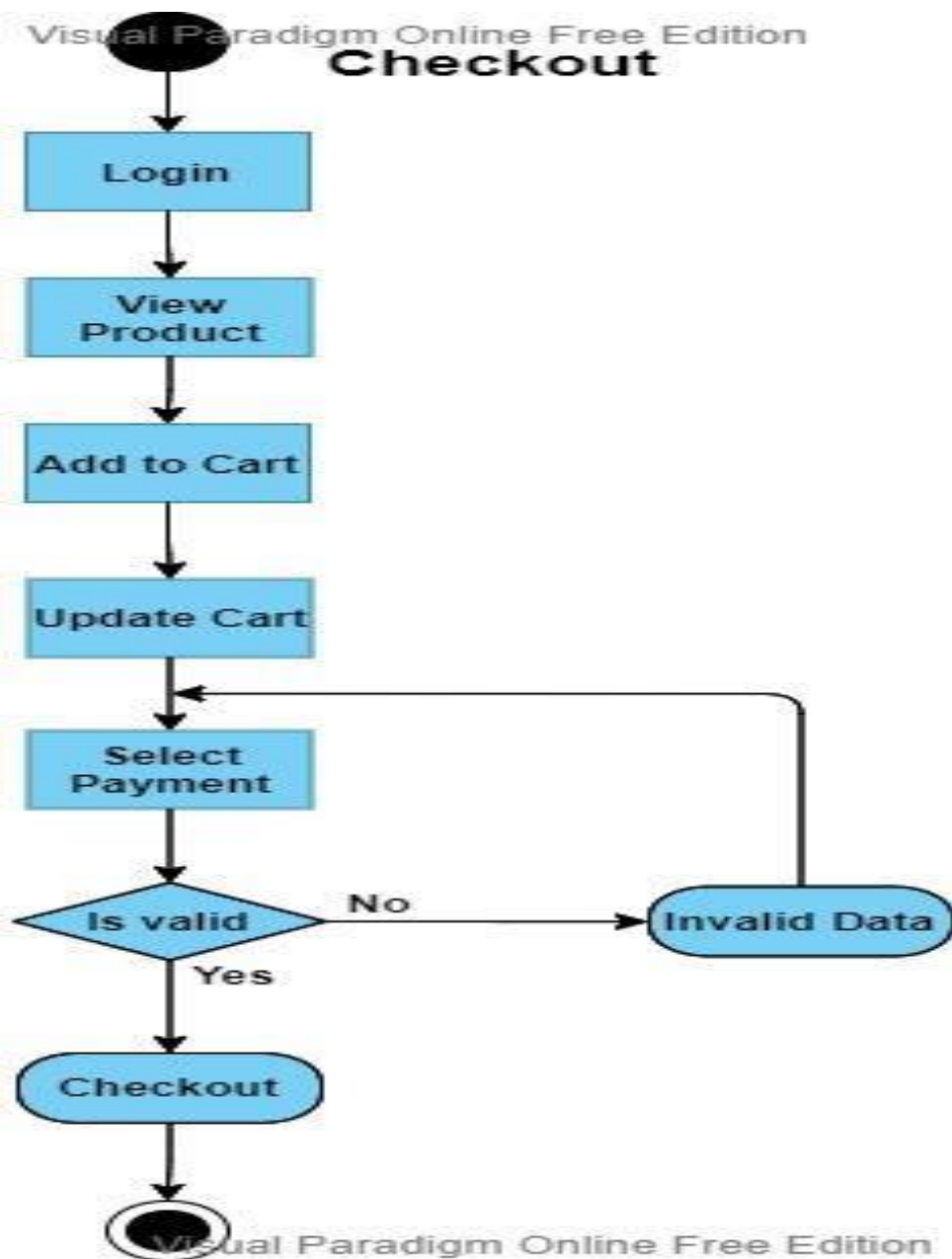


Fig: 3.6 Confirm/Checkout Activity Diagram

3.3.7 Update Profile

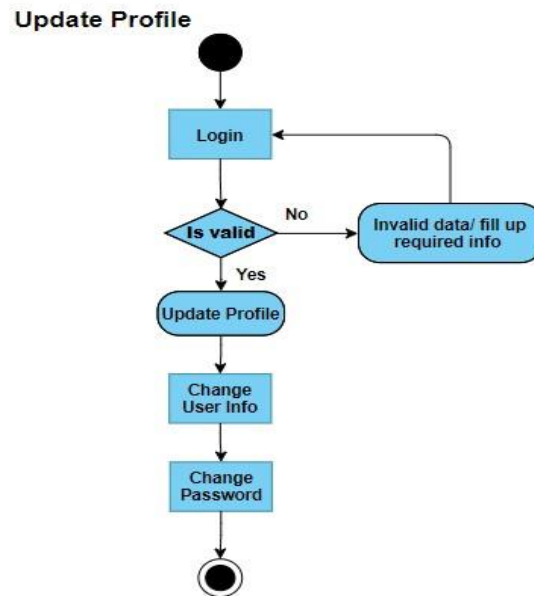


Fig: 3.7 Update Profile Activity Diagram

3.3.8 Logout

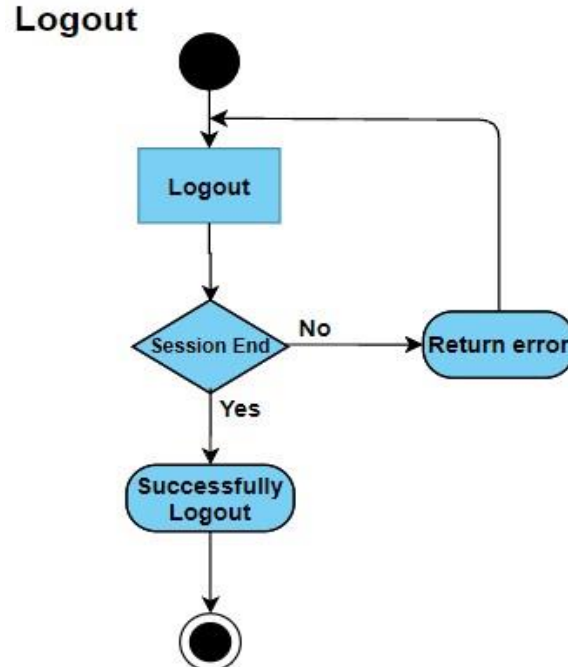


Fig: 3.8 Logout Activity Diagram

Chapter 4

System Design Specification

4.1 User Sequence Diagram

4.1.1 Login

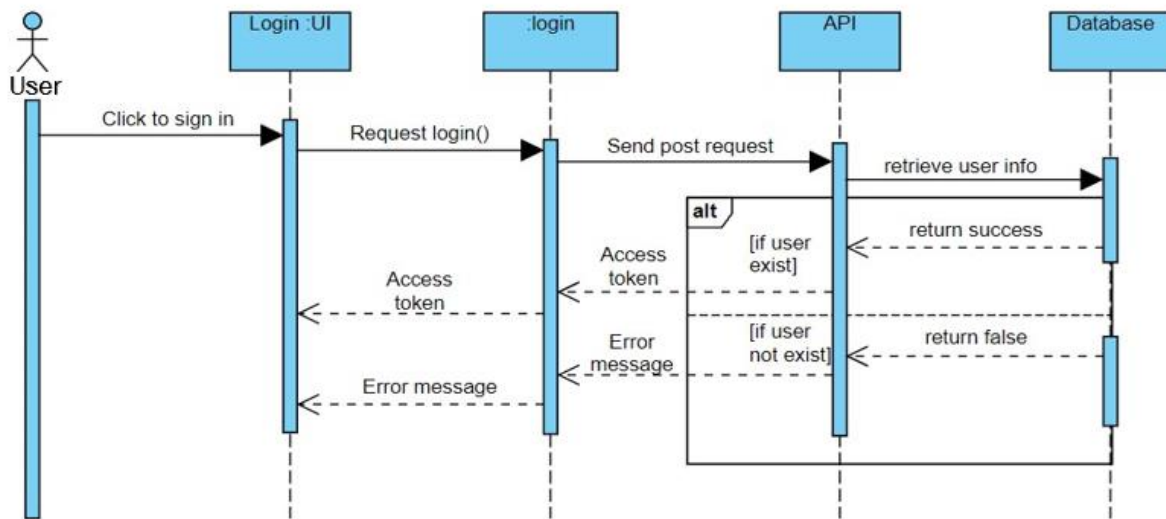


Fig: 4.1 Login Sequence

4.1.2 Registration

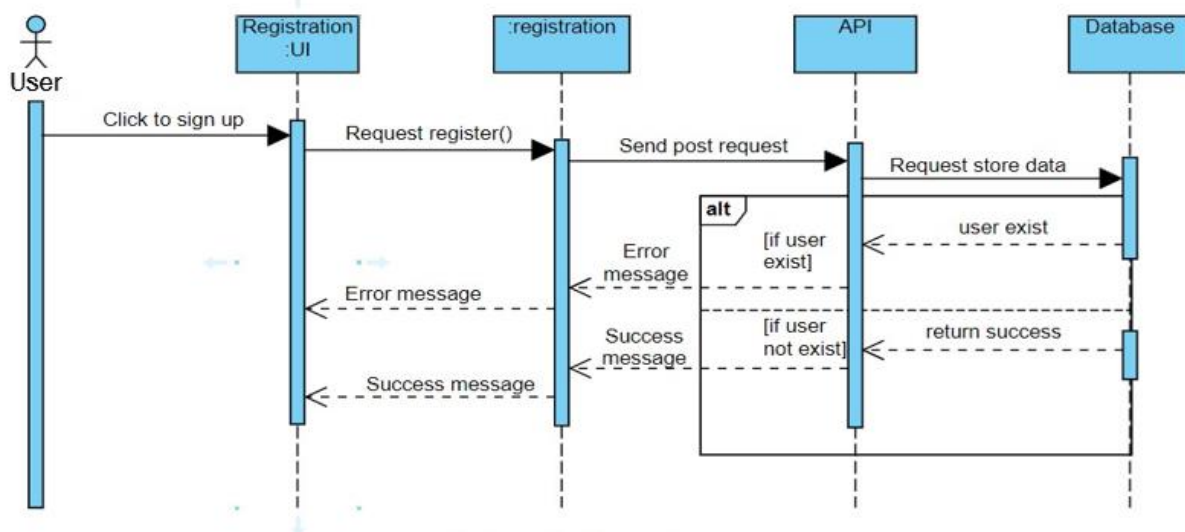


Fig: 4.2 Registration Sequence

4.1.3 Search

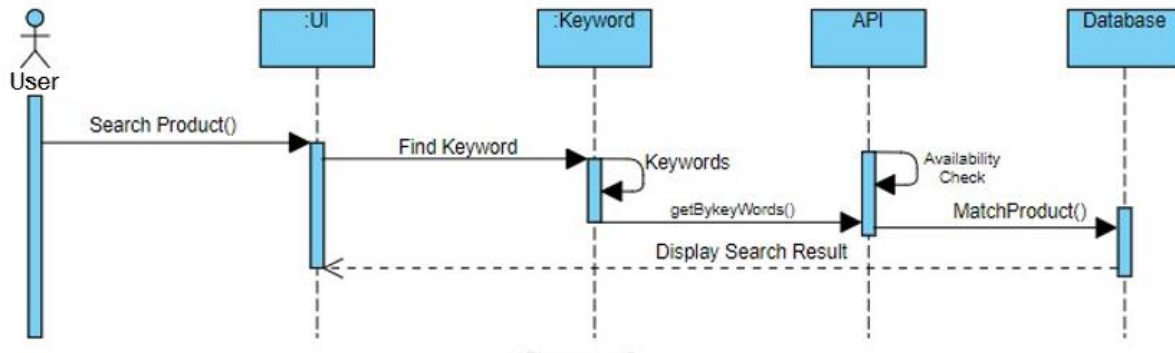


Fig: 4.3 Search Sequence

4.1.4 Add To Cart

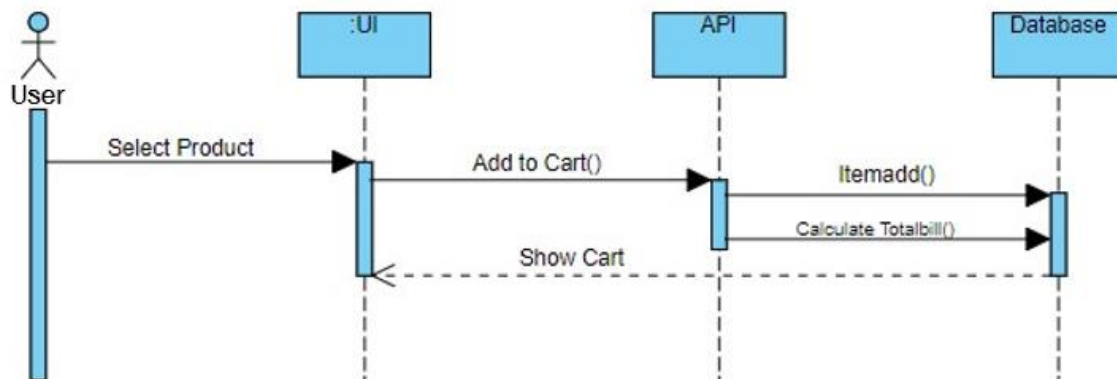


Fig: 4.4 Add to cart Sequence

4.1.5 Confirm/Checkout

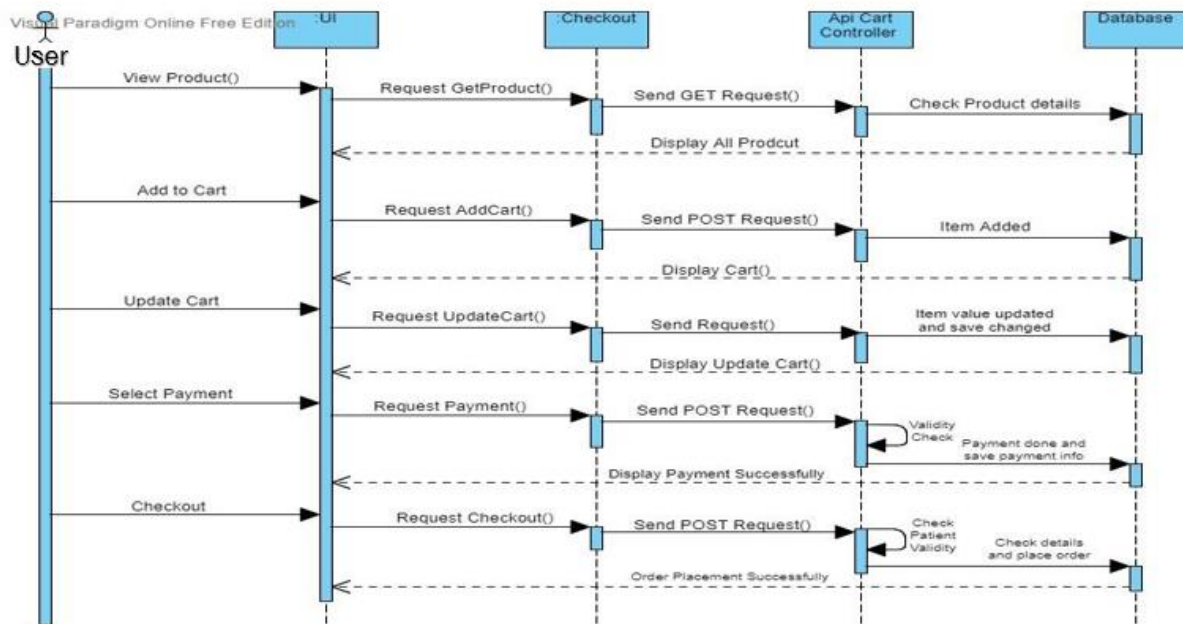


Fig: 4.5 Confirm/Checkout Sequence

4.2 E-R Diagram

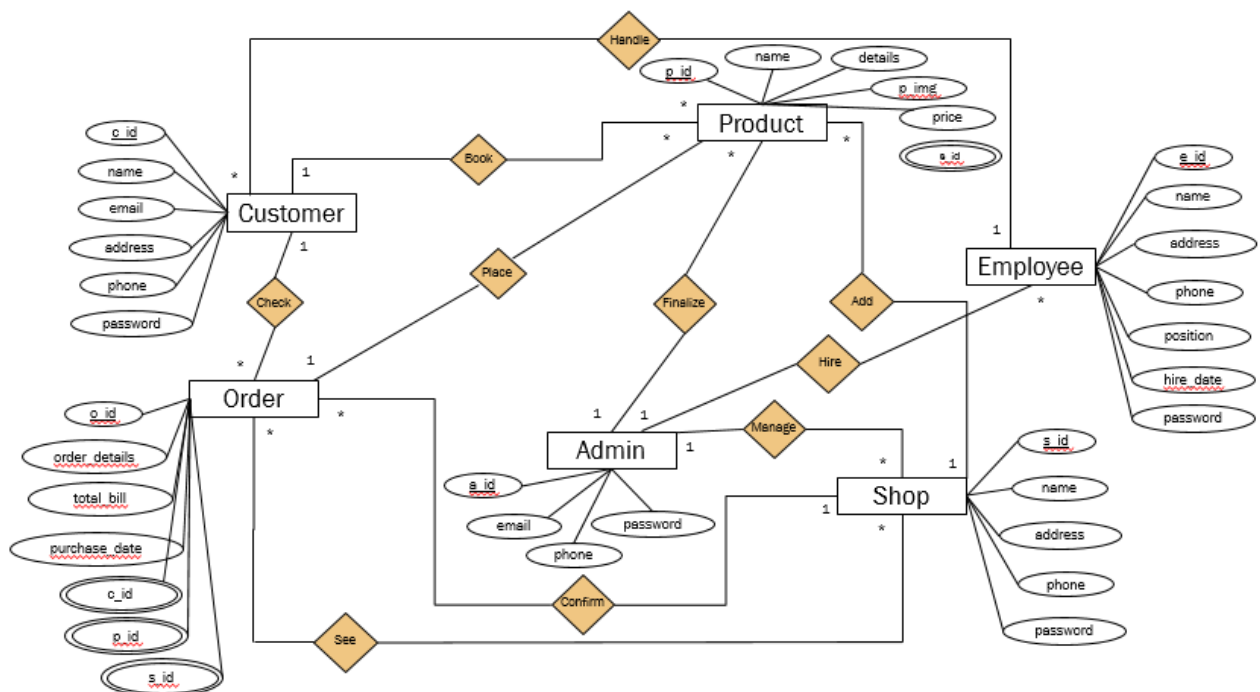


Fig: 4.5 E-R Diagram

4.3 Development Tools and Technology

4.3.1 User interface Technology

- Bootstrap
- ReactJS
- Redux

4.3.2 Implemented Tools and Platform

- **Framework:** NodeJS
- **Database:** MongoDB
- **Server:** localhost
- **Payment:** Stripe

Chapter 5

System Testing

5.1 Testing Feature

5.1.1 Tested Features

- Login
- Registration
- Cart
- Payment
- Product

5.2 Testing Strategy

5.2.1 Unit Testing

A unit is the smallest testable part of an application like function, classes, procedures, interfaces. Unit testing is created and executed by software developer during the development process.

- **Login**

Table: 5.1 Login

Test case: TC 001	Test Designed by: Mahmudul Hasan
Test priority: High	Test design date: 23-12-2021
Module name: Login	Test execute by: Mahmudul Hasan
Description: Users have	Test execute date: 23-12-2021

- **Registration**

Table: 5.2 Registration

Test case: TC 002	Test Designed by: Mahmudul Hasan
Test priority: High	Test design date: 23-12-2021
Module name: Registration	Test execute by: Mahmudul Hasan
Description: Admin can assign seller and employee except customer.	Test execute date: 23-12-2021

- **Cart**

Table: 5.3 Cart

Test case: TC 003	Test Designed by: Mahmudul Hasan
Test priority: High	Test design date: 23-12-2021
Module name: Cart	Test execute by: Mahmudul Hasan
Description: Customer can add, edit and delete cart.	Test execute date: 23-12-2021

- **Payment**

Table: 5.4 Payment

Test case: TC 004	Test Designed by: Mahmudul Hasan
Test priority: High	Test design date: 23-12-2021
Module name: Payment	Test execute by: Mahmudul Hasan
Description: Customer needs to put valid information to pay.	Test execute date: 23-12-2021

- **Product**

Table: 5.5 Product

Test case: TC 005	Test Designed by: Mahmudul Hasan
Test priority: High	Test design date: 23-12-2021
Module name: Product	Test execute by: Mahmudul Hasan
Description: Admin can add, edit and delete product.	Test execute date: 23-12-2021

Chapter 6

User Manual

6.1 Customer

Login

The screenshot shows the Login page of a web application. The header is a dark red bar with the 'MULTI CLIENT' logo on the left, a search bar with the placeholder 'Enter Product Name ...' in the center, and a 'Cart 1' indicator and a 'Login' button on the right. On the left side, there is a 'Categories' sidebar with a list of categories: Electronics, Cameras, Laptop, Accessories, Headphones, Beauty, and Home, each with a dropdown arrow. The main content area features a white 'Login' form with a title 'Login'. It contains two input fields: 'Email' and 'Password'. Below the 'Password' field is a link for 'Forgot Password?'. At the bottom of the form is an orange 'LOGIN' button and a link for 'New User?'.

Registration

The screenshot shows the Register page of a web application. The header is identical to the Login page, featuring the 'MULTI CLIENT' logo, a search bar, and a 'Cart 1' indicator with a 'Login' button. The 'Categories' sidebar on the left is also identical. The main content area features a white 'Register' form with a title 'Register'. It contains four input fields: 'Name', 'Email', 'Password', and 'Avatar'. The 'Avatar' field includes a blue atom icon, a 'Choose Avatar' button, and a 'Browse' button. At the bottom of the form is an orange 'REGISTER' button.

Homepage



Enter Product Name ...

Cart **1**  Mahmud

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home



Products



Cosrx Salicylic Acid Daily Gentle



3w Clinic Green Tea Cleansing Foam-



UiiSii Wired Headset Mobile



fdsafgfjh

Cart



Enter Product Name ...

Cart **1** [Login](#)

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home

Your Cart: 1 items



[Cosrx Salicylic Acid Daily Gentle Cleanser](#) (150ml) **\$99**

 1 



Order Summary

Subtotal:	1 (Units)
Est. total:	\$99.00

Check out

Confirm/Checkout





Cart **1**

 Mahmud

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home

Shipping

Confirm Order

Payment

Shipping Info

Address

City

Phone No

Postal Code





Cart **1**

 Mahmud

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home

Shipping

Confirm Order

Payment

Shipping Info

Name: Mahmud

Phone: 01310272288

Address: Tali Office, Dhaka, 1228, Bangladesh

Your Cart Items:

	Cosrx Salicylic Acid Daily Gentle Cleanser (150ml)	1 x \$99 = \$99.00
---	--	---------------------------

Order Summary

Subtotal:	\$99
Shipping:	\$30
Tax:	\$4.95
Total:	\$133.95

Proceed to Payment

Payment



Enter Product Name ...



Cart **1**

 Mahmud

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home

Shipping

Confirm Order

Payment

Card Info

Card Number

1234 1234 1234 1234

Card Expiry

MM / YY

Card CVC

CVC

Pay - 133.95

6.2 Admin

Login



Enter Product Name ...



Cart **1**

Login

Categories

- Electronics
- Cameras
- Laptop
- Accessories
- Headphones
- Beauty
- Home

Login

Email

Password

[Forgot Password?](#)

LOGIN

[New User?](#)

Dashboard

MULTI
CLIENT

Enter Product Name ...

Q

Cart 0

 sadat

Dashboard

Products

Orders

Users

Reviews

Dashboard

Total Amount
\$5046.45

Products
5
View Details

Orders
4
View Details

Users
11
View Details

Out of Stock
1

Add Product

MULTI
CLIENT

Enter Product Name ...

Q

Cart 0

 sadat

Dashboard

Products

Orders

Users

Reviews

New Product

Name

Price

Description

Edit Product

MULTI
CLIENT

Enter Product Name ...

Q

Cart 0

 sadat

Dashboard

Products

Orders

Users

Reviews

All Products

Show entries

10

Search

ID	Name	Price	Stock	Actions
617e35c8248a1fd7b9acc3a	Cosrx Salicylic Acid Daily Gentle Cleanser (150ml)	\$99	8	 
617fd1c144760650abee0eba	3w Clinic Green Tea Cleansing Foam- 100ml	\$350	0	 
6186ba93606356063d818a94	UiiSii Wired Headset Mobile Phone Dedicated Music Earphones	\$160	9	 
61ab4369d038d119e3ae7260	fdsafgfh	\$586	10	 
61ccaf0ca4cdfec47e66fc83	asdsdsgs	\$69	6	 

ID	Name	Price	Stock	Actions
----	------	-------	-------	---------

Check Order

MULTI
CLIENT

Enter Product Name ...

Q

Cart 0

 sadat

Dashboard

Products

Orders

Users

Reviews

All Orders

Show entries

10

Search

Order ID	No of Items	Amount	Status	Actions
61867e65b193d55101c0c26c	1	\$549.75	Delivered	 
6186c032606356063d818c30	1	\$198	Delivered	 
618a286daffafa43265058a7	1	\$623.7	Delivered	 
618a8dc5f4415c0d47018dcf	1	\$3675	Delivered	 

Order ID	No of Items	Amount	Status	Actions
----------	-------------	--------	--------	---------

Chapter 7

Project Summary

7.1 Limitation

- Seller and Employee part didn't executed yet.
- SSL-Commerz payment gateway didn't implemented.

7.2 Future Scope

- Execute those features which didn't executed.
- Add SSL-Commerz as payment gateway.