



“OnlineShoppingbd.com”
A WEB APPLICATION FOR ONLINE SHOPPING

Prepared by:

MD: AL-AMIN

ID: 152-35-1201

BSc in Software Engineering

Daffodil International

University

Supervised by:

NUSRAT JAHAN

Senior Lecturer

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

Approval

I hereby declare that; my project has been complete by me in the supervision of **NUSRAT JAHAN, Senior Lecturer, Department of Software Engineering, Daffodil International University**. I also state that neither this project nor any portion of this project has been acquiesced somewhere else for the prize of any grade or certificate.



Md. Al-Amin

ID: 152-35-1201

Department of Software Engineering
Daffodil International University

Certified by:



Nusrat Jahan

Senior Lecturer

Department of Software Engineering
Faculty of Science & Information
Technology
Daffodil International University

Acknowledgement

First of all, I would like to thank and very much thankful to my supervisor **NUSRAT JAHAN, Senior Lecturer, Department of Software Engineering, Daffodil International University**. Deep Information & keen attention of our supervisor in the field of “A web app for online shopping” to carry out this project. His boundless tolerance, scholarly direction, repeated help, constant and spirited supervision, positive criticism, valued advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

I would like to express our heartiest gratitude to **Pro. Dr. Touhid Bhuiyan, Professor, and Head, Department of SWE**, for his kind help to finish my project and also to other faculty member and the staff of SWE department of Daffodil International University.

I would like to thank my whole course mate at Daffodil International University, who took part in this discussion while completing the course work. Finally, I must acknowledge with due respect the constant support and patience of my parents.

Abstract

Currently keep safety in a part is a big tricky. To preserve security, the admin must have the info about the system. My app is applied to uphold info about people. So, it will reduce a great energy near the admin and the customer. In the age of CPU science, a referent system for keeping information is an old procedure. People can help their personal info by expending their android phone. It will also protect time. Consuming my app admin can effortlessly uphold all the info at a time in a single database.

If the user seals free to use my app and receive my work in a cordial heart, then the application of the application will succeed.

Table of Contents

Project title -----	I
Approval -----	II
Acknowledgement -----	III
Abstract -----	IV
Table of Contents -----	V-XI
Chapter 01: -----	1
Introduction -----	1
1.1 Purpose Overview-----	1
1.2 Project Purpose-----	1
1.2.1 Background-----	1
1.2.2 Benefits-----	2
1.2.3 Goals-----	2
1.3 Stockholders-----	2
1.4 Proposed System Model (Block Diagram): -----	3
1.5 Project Schedule -----	4
1.5.1 Gantt Chart-----	4
1.5.2 Milestone-----	5
Chapter 2 -----	6:
SOFTWARE REQUIREMENT SPECIFICATION -----	6
2.1 Functional Requirements-----	6
2.2 Data Requirements-----	7
2.3 Performance Requirements-----	7

2.3.1 Speed and Latency Requirements-----	7
2.3.2 Accuracy Requirements-----	8
2.3.3 Capacity Requirements	8
2.4 Dependability-----	9
2.4.1 Reliability-----	9
2.4.2 Availability-----	9
2.4.3 Robustness or Fault Tolerance requirements-----	9
2.5 Maintainability and supportability requirements-----	10
2.5.1 Maintenance Requirements-----	10
2.5.2 Supportability Requirements-----	10
2.6 Security requirements-----	10
2.6.1 Access Requirements-----	10
2.6.2 Integrity Requirements-----	10
2.6.3 Privacy Requirements-----	10
2.7 Usability and human-interaction requirements-----	10
2.7.1 Ease of Use Requirements-----	11
2.7.2 Personalization and Internationalization Requirements-----	11
2.7.3 Understandability and politeness Requirements-----	11
2.7.4 Accessibility Requirements-----	11
2.7.5 User Documentation Requirements-----	11
2.8 Look and feel requirements-----	11
2.8.1 Appearance Requirements-----	11
2.8.2 Style Requirements-----	11

Chapter 3: System Design.....	12
3.1 Use Case Diagram-----	12
3.2 Use Case Diagram-----	13
3.2 Use Case Description-----	14
3.2.1 Customer Signup-----	14
3.2.2 Customer Sign in-----	15
3.2.3 Customer search category-----	16
3.2.4 Customer search product-----	17
3.2.5 Customer Search Product by Category-----	18
3.2.6 Customer Search product by Price range-----	19
3.2.7 Customer Add Product in Cart-----	20

3.2.8	Customer Remove product from cart-----	21
3.2.9	Customer Place Order-----	22
3.2.10	Customer sign out-----	23
3.2.11	Admin Signup-----	24
3.2.12	Admin Sign in-----	25
3.2.13	Admin add product category-----	26
3.2.14	Admin Add product-----	27
3.2.15	Admin delete, edit product-----	28
3.2.16	Admin Sign out-----	29
3.3	Activity Diagram-----	30
3.3.1	Customer Sign up in Activity Diagram-----	30
3.3.2	Customer Sign in Activity Diagram-----	31
3.3.3	Customer Search Product Diagram-----	32
3.3.4	Customer Search Product Category-----	33
3.3.5	Customer search product by category-----	34
3.3.6	Customer Search Product by Price Range-----	35
3.3.7	Customer Add Product on Cart-----	36
3.3.8	Customer Remove Product from Cart-----	37
3.3.9	Customer Give Order-----	38
3.3.10	Admin Signup-----	39
3.3.11	Admin Sign in-----	40
3.3.12	Admin Add Product-----	41
3.3.13	Admin Add Category-----	42
3.3.15	Admin edit Product-----	43
3.3.16	Admin Delete Product-----	44
3.3.17	Admin Order confirmation-----	45
3.3.4	Sequence Diagram-----	46
3.3.5	Customer perspective sequence diagram-----	47
3.3.6:	Data flow diagram-----	48
3.3.7	Entity relationship diagram-----	49

CHAPTER4-----	50
SYSTEM DESIGN SPECIFICATION-----	50
4.1 Class Responsibilities Collaboration (CRC) Cards-----	50
4.2 Development Tools & Technology-----	51
4.2.1 User Interface Technology-----	51
CHAPTER 5-----	52
SYSTEM TESTING-----	52
5.1 Testing Features-----	52
5.1.1 Features to be tested-----	52
5.1.2 Features not to be tested-----	52
5.2 Testing strategies-----	52
5.2.1 Test Approach-----	52
5.2.2 Pass/Fail criteria-----	53
5.2.3 Suspension & Resumption-----	53
5.3 Testing Environment-----	53
5.4 Test Case Description-----	55
5.4.1 Test Case for Admin Login-----	55
5.4.2 Test Case for verifying customer-----	55
5.4.3 Test Case for customer Sign in-----	56
5.4.4 Test Case for customer buy product-----	57
5.4.5 Test Case for customer add to cart-----	58
Chapter 6: User Manual-----	59
6.1 Home Page-----	59
6.2 Product Page-----	60
6.3 Dashboard Page-----	61
6.4 Signup Page-----	62
6.5 Sign in Page-----	63
6.6 Admin Page-----	64
6.7 Admin product create-----	65
6.8 Admin create category-----	66
6.9 User Dashboard after sign in-----	67
6.10 Customer Cart Page-----	68
6.11 Remove Cart Page-----	69
6.12 Search Product, Category Page-----	70

6.13 Database User Table-----	71
6.14 Database Product Table-----	72
6.15 Database Category Table-----	73
CHAPTER 7-----	74
PROJECT SUMMARY-----	74
7.1 GitHub Link-----	74
7.2 Critical Evolution-----	74
7.3 Limitations-----	74
7.4 Obstacles & Achievements-----	74
7.5 Future Scope-----	74
7.6 Discussion and Conclusion-----	75
REFERENCES-----	76

List of figures

Figure 1.1: Block Diagram-----	13
Figure 1.2: Gantt Chart-----	14
Figure 3.1: Use Case diagram -----	23
Figure 3.3.1 Customer signup activity-----	40
Figure 3.3.2 Customer sign in diagram-----	41
Figure 3.3.3 Customer search product diagram-----	42
Figure 3.3.4 Customer search category-----	43
Figure 3.3.5 Customer search product by category-----	44
Figure 3.3.6: Customer search product by price range-----	45
Figure 3.3.7 Customer add product on card-----	46
Figure 3.3.8: Customer Remove product from cart-----	47
Figure 3.3.9: Customer give Order-----	48
Figure 3.3.10 Admin signup-----	49
3.3.11 Admin sign in-----	50
Figure 3.3.12 Admin add product-----	51
Figure 3.3.14 Admin create category-----	52
Figure 3.3.15 Admin edit product-----	53
Figure 3.3.16 Admin delete product-----	54
Figure 3.3.17 Admin order confirmation-----	55
Figure 3.3.18: Admin perspective sequence diagram-----	56
Figure 3.3.5: Customer perspective sequence diagram-----	57
Figure 3.3.6: DFD diagram-----	58
Figure 3.3.7 ERD diagram-----	59

List of table

Table 1.1: Milestone-----	15
Table 2.1: Admin Registration-----	16
Table 2.2: Add to cart-----	16
Table 2.3: buy product-----	16
Table 2.6: Speed and Latency Requirement-----	17
Table 2.7: Accuracy Requirements-----	17
Table 2.8: Capacity Requirements-----	18
Table 2.9: Reliability Requirements-----	18
Table 2.4.2 Availability Requirements-----	19
Table 3.1: Use Case Description of Customer signup-----	24
Table 3.2: Use Case Description of customer sign in-----	25
Table 3.3: Description of Customer search category-----	26
Table 3.4: Use Case Description of Customer search product-----	27
Table 3.4: Use Case Description of Customer search product-----	28
Table 3.5: Use Case Description of Customer search product by category-----	29
Table 3.5: Use Case Description of customer search product by price range-----	30
Table 3.5: Use Case Description of customer Add product in cart-----	31
Table 3.5: Use Case Description of customer remove product from cart-----	32
Table 3.5: Use Case Description of customer give order-----	33
Table 3.5: Use Case Description of customer sign out-----	34
Table 3.5: Use Case Description of admin signup-----	35
Table 3.5: Use Case Description of admin sign in-----	36
Table 3.5: Use Case Description of admin add category-----	37
Table 3.5: Use Case Description of admin add product-----	38
Table 3.5: Use Case Description of admin delete, edit product-----	39
Table 3.5: Use Case Description of admin sign-out-----	40
Table 4.1: Admin Responsibilities and collaboration-----	60
Table 4.3: customer Responsibilities and collaboration-----	60
Table 5.1: Test Case for Admin Login-----	65
Table 5.2: Test Case to verifying the admin-----	65
Table 5.3: Test Case for customer message-----	66
Table 5.4: Test Case for customer buy product-----	67
Table 5.5: Test Case for owner sell product-----	68

CHAPTER 1

INTRODUCTION

1.1 Project Overview:

A Web application can provide the best solution by offering the ability to sell and buy products and information between admin and customer which lead to rapid issue resolution and less misinterpretation. The goal of the website is to create better relationship between admin and customer.

The onlineshopping.com website is design to support customers and. project will help customer to find the perfect product. Also an opportunity for who wants to sell their product in a nice amount of price. For all the people who love to buy product in online this app will help them a lot.

1.2 Project Purpose:

The Actual purpose of this project is to make digital e-commerce system. Where customer can complete buying process easier. Also, admin can easily sell their product. My project is only for those who wants to buy product in online. And who try to buy choice able product.

1.2.1 Background:

There is some web app bit similar to this web application but have many differences with my web application. Some applications are only for product accessories. But my project will contain all the brands, design and also all kind of products. On the other hand, my project will give a customer all the necessary information about the product, category, buy, sell option. Also, provide my Facebook group link and message option.

That both customers and admin can deal with each other so comfortably. admin will upload the product's. Our admin seriously response all the Customer request.

1.2.2 Benefits:

Without benefit, there is no self-fulfillment of any system. this system has some particular benefits. They are given below:

- This is user-friendly system.
- Customers can without difficulty buy a product through the system.
- Admin can easily sell the product and receive a well amount of price.
- No one can be able to do kind of harassment.

1.2.3 Goals:

I want to make this web app. This web app will have contained these features.

- To keep website user-friendly.
- To keep legal way of business.
- To provide high security to both customer and admin.
- To maintained high security in the business.
- Admin can response customers and update website, and customer check product's information.

1.3 Stockholders:

A system of course has some stakeholders. System has no demand without the relationship of stakeholder with the scheme. Our systems stakeholders exist:

- **Customer:** Customer is the key internal stakeholder of our system. Since they Will purchase product.
- **Admin:** Admin will stand the main stakeholder. Admin has the specialist or power to governor the whole system. Customer will be permitted by the Admin. He will observer the system and movement.

1.4 Proposed System Model (Block diagram):

This is a future system of OnlineShoppingBd Block Diagram. [1]

When an ordinal complex system is screening through a diagram in a blueprint way from the general planning then it is called a Block Diagram.

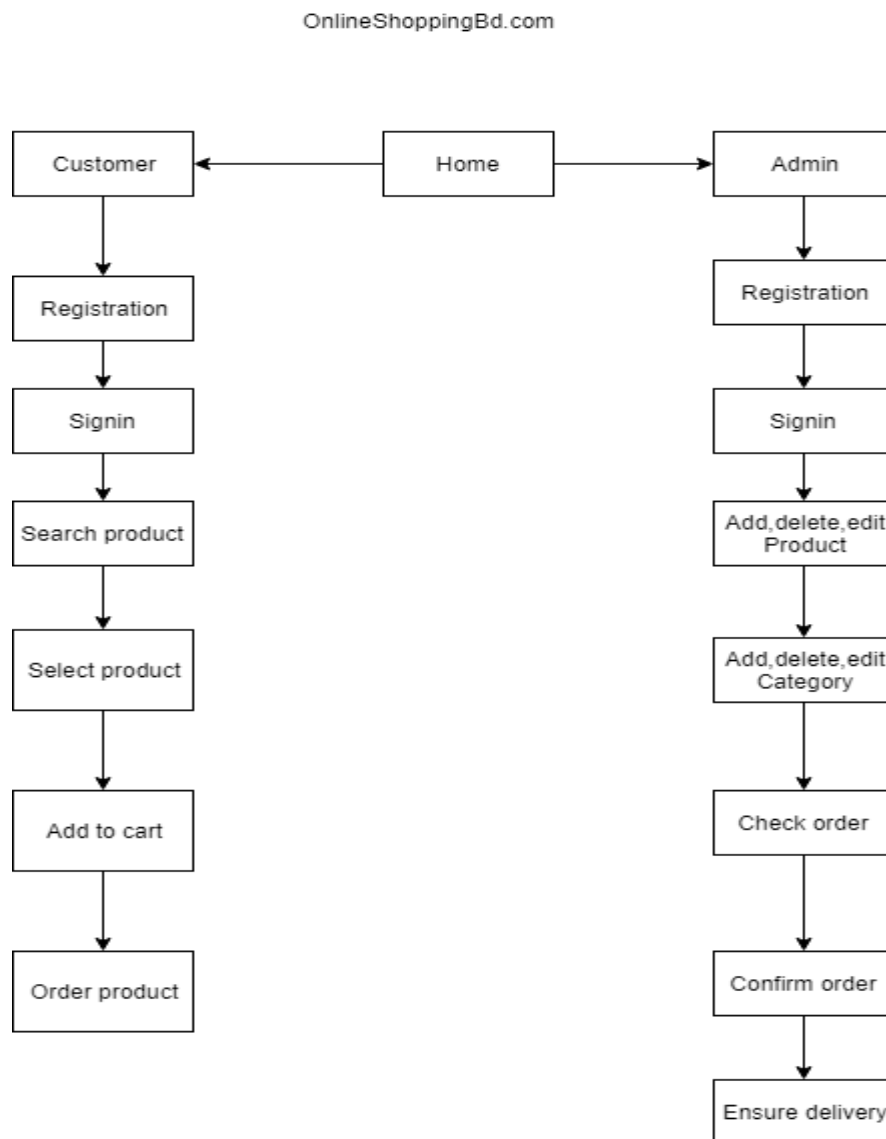


Figure 1.1: OnlineShoppingBd Block Diagram

1.5 Project Scedule:

Full satisfying the required requirements and whole the project in the period I retain the project schedule. I sort a project schedule to end the project fittingly in time.

1.5.1 Gantt Chart:

A Gantt chart is a kind of bar chart that shows a project schedule.

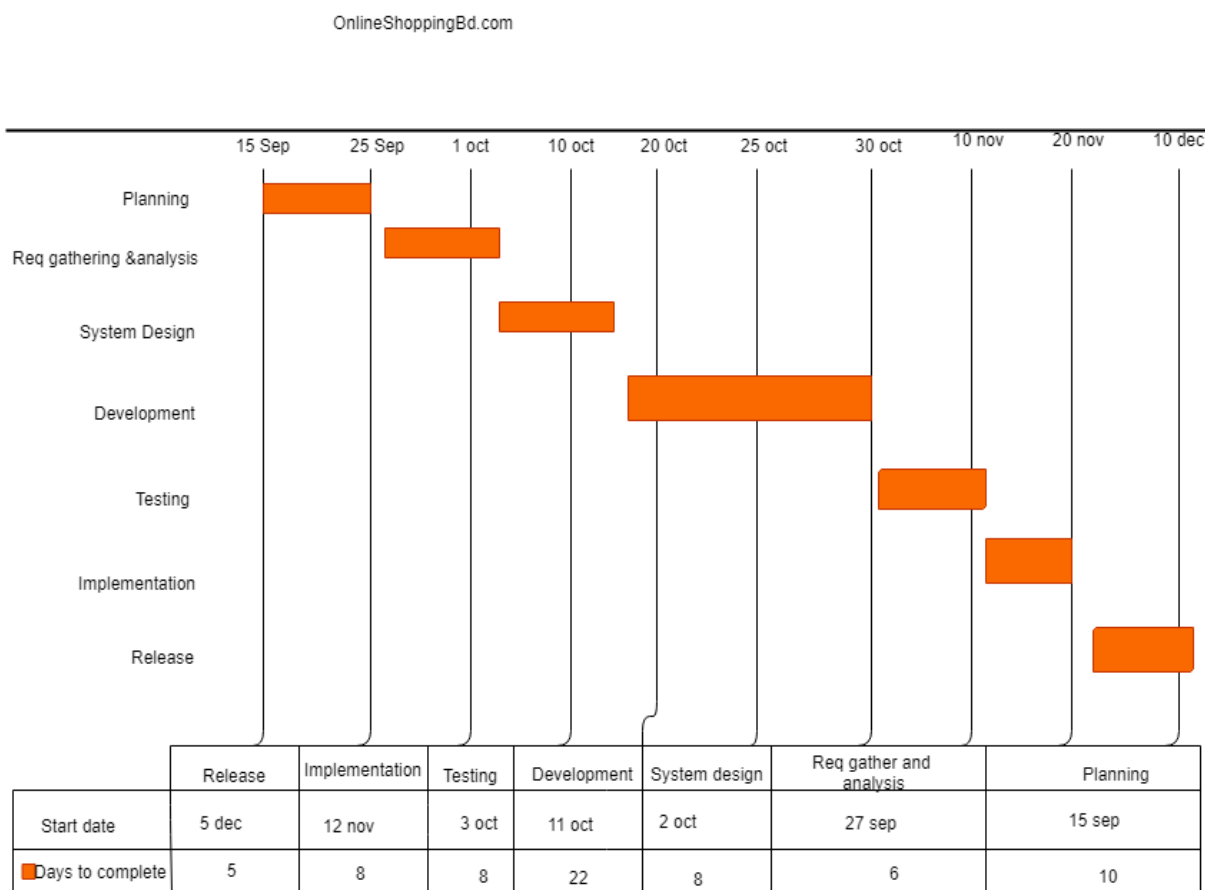


Figure 1.2: Gantt Chart OnlineShoppingBd.

1.5.2 Milestone:

This is a OnlineShoppingBD project milestone that covers the project timeline. Milestone, it is a time setting of the project. That will describe the project task. How much time I took to complete this project. Project milestone are as follows:

Table 1.1: Milestone

Task no.	Task Name	Start Date	End Date	Duration
01	Planning	15-09-19	25-09-19	11 days
02	Requirements Gathering & Analysis	27-09-19	02-10-19	6 days
03	System Design	03-10--19	10-10-19	8 days
04	Development	11-10-19	31-10-19	22 days
05	Testing	03-11-19	10-11-19	08 days
06	Implementation	12-11-19	20-11-19	08 days
07	Release	05-12-19	10-12-19	05 days
	Total			69 days

CHAPTER 2

SOFTWARE REQUIREMENT SPECIFICATION

Requirement analysis is the procedure of classifying user fulfilment in the most important part of project management. Better requirement knowledge will give project immense security from risk.

2.1 Functional Requirements:

this table contains the full system of OnlineShoppingBD functional Requirement.

Admin Registration:

Table No 2.1: Admin Registration

Fr-01	Admin Registration
Descriptions	Admin will be commender whole system after Registration.
Stakeholder	Admin

Add to cart:

Table No 2.2: Add to cart

Fr -02	Add to cart
Description	Customer after choice the product they will add to cart.
Stakeholders	Customer & admin.

Buy Product:

Table No 2.3: buy product

Fr -03	Buy product
Description	After finishing all procedure customer can buy product which they increase in their cart
Stakeholders	customer, admin

2.2 Data requirement:

In this phase, have to understand the type of rally data to enhance our system.

- Linking with the central database.
- Info about customer.
- Product information.
- Order product system.
- Confirmation of order.
- The admin will up product info.

2.3 Performance Requirements:

It's very necessary to bear the act of the project. To convince the better performance, this project has to see some requirements which will provide better performance. Without proper performance project will be in trouble. For Better performance better requirements need.

2.3.1 Speed and Latency Requirements:

Whereas the user will ride our project in the browser, the system essentials a minimum total of speed to execute the task. System performance also depends on speed and latency requirements.

Table No 2.6: Speed and Latency Requirements

SLR-01	The handling speed of the system will be faster.
Description	When consumer will run our system rapidity will be depended on their internet speed & the server network speed.
Stakeholders	customer, admin.

2.3.2 Accuracy Requirements:

The system has to settle the Legibility and Correctness of the data.so that further there will no problem happen. Accuracy requirements is so important in requirement specification.

Table 2.7: Accuracy Requirements

AR-01	Essential proper info of every user.
Description	The contribution records should be the right and accurate shape data, else the involvement field display blunder message, email, pass, etc. the input info is not effective, the data never except.
Stakeholders	customer, Admin.

2.3.3 Capacity Requirements:

Table No 2.8: Capacity Requirements

CR-01	Copes all the data in database correctly
Description	All data similar product's data, categories, customer information etc. will be stored in database.
Stakeholders	Customer, Admin.

2.4 Dependability Requirements:

Dependability means it measures system reliability, availability, robustness, safety, etc. Here, dependability means the running time of this project.

2.4.1 Reliability Requirements:

Table 2.9: Reliability Requirements

RR-01	The system is reliable
Description	customer information, other information will be safe and secured in our system.
Stakeholder	Users as customer, Admin.

2.4.2 Availability Requirements:

Table 2.10: Availability Requirements

AR-01	The system will be available 24x7.
Description	It is available 24 hours in a day and 7 days in a week The system will be updated regularly.
Stakeholder	Users as customer, Admin.

2.4.3 Robustness or Fault Tolerance Requirements:

Table 2.11: Availability Requirements

FTR-01	Well robustness of the system
Description	If any problem occurs the system will show error message and the fault tolerance are handled properly.
Stakeholder	Users as customer, Admin.

2.5 Maintainability and supportability requirements:

Consultant would take gave some Admins and expert for the preservation of the system and care the system. If any problem, happen they will take care. support system is necessity.

2.5.1 Maintenance Requirements:

Consultant would here to give some specialists for maintaining the project. The system can have produced incorrect results and the authorities must be able to replicate the data movement over the system. They will keep eye on system 24 hours if anything gets wrong.

2.5.2 Supportability Requirements:

Specialist would have to convert some admins for supportability of the system. They take care if anything went wrong as soon as possible.

2.6 Security Requirements:

Around are two safety structures as per log in as Admin & contact website as a customer or get contact to this scheme or an exact component of the system must deliver a verification instrument. This will sure that there will be no problem in security to customer or admin. nowadays security is, major problem in website. Lots of data can get hampered for this.

2.6.1 Access Requirements:

This system delivers accesses the unlike module, by access in a verification way to the reliable user. Without authentic user and admin no one can get into this system. For that user and admin must have to be sign in as far as requirement needed to access in system.

2.6.2 Integrity Requirements:

Permit information of users' will be kept harmless. User info and their account will be safe in this system. Have to assure that they can't get any harm. User and their info will be in keep safe for further great relationship between them and system.

2.6.3 Privacy Requirements:

Totally the passwords and individual information will be saved safe and securely in the system. Nowadays user wants secure system for business. This system privacy will be kept in safe.

2.7 Usability and Human-interaction requirements:

This system is actual user-friendly with humble user-interface. System will be sure about that easily user can understand functionality. Because our county people still have no idea about online business. Is will being assure by system.

2.7.1 Ease of Use Requirements: user easily can sign up and sign. it will be easy for them.

2.7.2 Personalization and internalization Requirements:

established this system for only our people. So, there are no international requirements. Further we will make for whole world.

2.7.3 Understandability and politeness Requirements:

This system is actual cool to use and know with simple user-interface. no need to be well educated.

2.7.4 Accessibility Requirements:

This structure is very simply available for the positive user in the definite element.

2.7.5 User Documentation Requirements:

Customer info and histories will be kept and reserved in the system correctly.

2.8 Look and Feel Requirements:

Allowing to the customer's belief look means the graphical user interface, strategy, design, forms, shades, etc. and sense means the conduct of different basics like the menu, home, shop, buttons, etc.

2.8.1 Appearance Requirements:

Required familiarity about NODE with EXPRESS.JS Framework and algorithm.

2.8.2 Style Requirements:

Knowledge about CSS, JavaScript, React.js and bootstrap.

CHAPTER 3

SYSTEM ANALYSIS

3.1 Use Case Diagram:

Use case Diagram is the modest way of representative in a graphical representation of a difficult system's user connections between the fundamentals of the system. Use case diagram is one of the main diagram of uml. This diagram will help to easy understanding of this system. Any one can understand the syatem if they see use case diagram. OnlineShoppingBD's use case diagram is specified below:

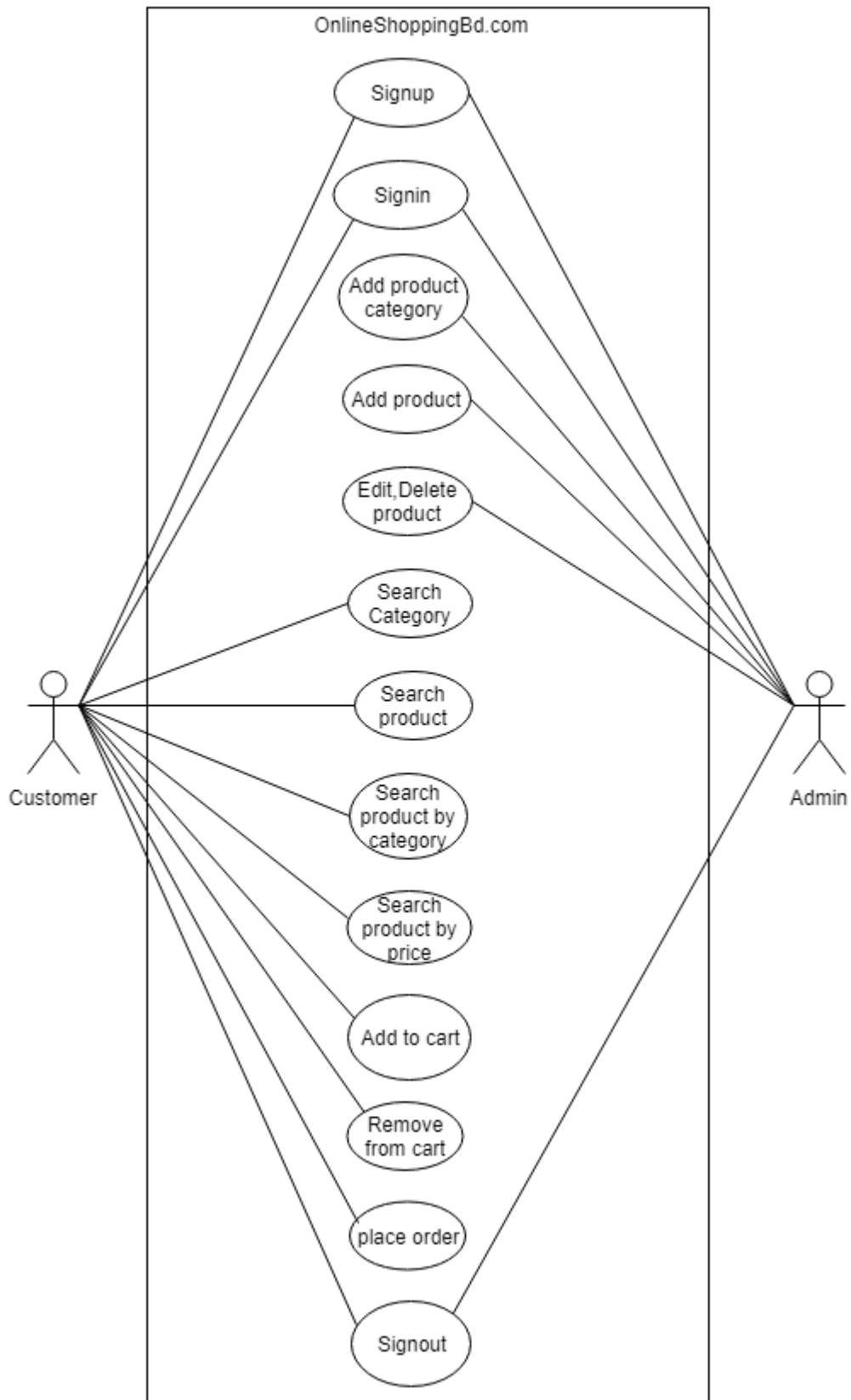


Figure 3.1: Use Case diagram

3.2 Use Case Description:

In this portion, here is defined briefly how the customers will execute jobs on the onlineshoppingbd.com system.

3.2.1 Customer Signup:

Table No 3.1: Use Case Descriptions of Customer signup

Use case's name	Customer signup	
Scenarios	Customer have to sign up for sign in this website.	
Brief descriptions	Customer have to sign up for sign in in this project. However, he can view, select product. But if he wants to make account he has to sign up.	
Actors	Customer	
Pre-condition	Needed info have to be provide.	
Post condition	Admin answer to customer. Admin directs the customer a response message.	
Flow of events	Actor	Systems
	The customer sends his email, password.	Reply for a message.
Disaster results	If system not reply then show zero.	

3.2.2 Customer Sign in:

Table No 3.2: Use Case Descriptions of customer sign in

Name	customer sign in.	
Scenarios	Customer will send email, password which he sign in.	
Brief description	When admin response his sign up, then customer have to sign in by correct email and password.	
Actors	Customer	
Pre-condition	Already have to be signup	
Post conditions	Customer have to provide valid email and password.	
Flow of event	Actor	Systems
	Customer will provide valid email and password	Reply with showing proper info.
Failures result	If system not reply then show zero.	

3.2.3 Customer search category:

Table 3.3: Use Case Descriptions of Customer search category

Name	Customer search category	
Scenarios	Customer can search category of product.	
Brief description	Customer can search product category. If their search category is available they can see on display	
Actors	Customer	
Pre-conditions	Customer have to search right way	
Post conditions	A successful message will be shown if category available. If category is not available then not found message will be shown.	
Flow of events	Actor	Systems
	Customer search category	Reply with showing a positive message and
Failures result	If system not reply then show zero.	

3.2.4 Customer search product:

Table No 3.4: Use Case Descriptions of Customer search product

Name	Customer search product	
Scenarios	Customer can search of product which they want.	
Brief descriptions	Customer can search product. If their search product is available they can see on display.	
Actors	Customer	
Preconditions	Customer have to search right way	
Postconditions	A successful message will be shown if product available. If product is not available then not found message will be	
Flow of events	Actor	Systems
	Customer will search product of their own choice	Reply with showing proper info.
Failure results	If system not response then show nothing.	

3.2.5 Customer Search Product by Category:

Table No 3.5: Use Case Descriptions of Customer search product by category

Name	Customer search product by category	
Scenarios	search product by direct selecting category and product.	
Brief descriptions	Customer can search both category and product together by selecting both.	
Actors	Customer	
Pre-conditions	Selecting category then have to search product.	
Post conditions	If category and its product available then it will be shown on display.	
Flow of event	Actor	Systems
	Customer can search product by its category also	Reply with showing success message.
Failure result	If system not response then show nothing.	

3.2.6 Customer Search product by Price range:

Table No 3.5: Use Case Descriptions of customer search product by price range

Name	customer search product by price range	
Scenarios	search product by direct selecting price range.	
Brief descriptions	By selecting price range, they can also search product	
Actor	Customer	
Pre-conditions	Have to select price which is displaying on website	
Post condition	If price range and its product available then it will be shown on display.	
Flow of event	Actor	Systems
	Customer search product by category	Reply with showing accomplishment message.

3.2.7 Customer Add Product in Cart:

Table No 3.5: Use Case Descriptions of customer Add product in cart

Use case name	Add product to cart	
Scenario	Selected product customer can add in their cart.	
Brief	In Cart their chainable product can add, later they can buy	
Actor	Customer.	
Preconditions	Customer have to select product to add in cart.	
Postconditions	After adding product this will be available in cart with product information.	
Flow of events	Actor	Systems
	Add product to cart	Reply with showing success message.
Failure results	If system not reply then show zero.	

3.2.8 Customer Remove product from cart:

Table No 3.6: Use Case Descriptions of customer remove product from cart

Use case names	Customer remove product from cart.	
Scenarios	Customer can remove product from cart.	
Brief description	Adding product customer can easily remove from cart	
Actor	Customer.	
Pre-conditions	Product must be existing in cart.	
Post conditions	Customer remove product so that this is not available in cart.	
Flow of events	Actor	Systems
	Customer remove product from cart.	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.2.9 Customer Place Order:

Table No 3.7: Use Case Descriptions of customer give order

Use case names	customer give order of product.	
Scenarios	Customer selected product they can order.	
Brief description	For buy product customer have to give order.	
Actor	Customer.	
Pre-condition	The product has to be existed.	
Post condition	Customer have to be provided their address.	
Flow of event	Actor	Systems
	customer give order of product	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.2.10 Customer sign out:

Table NO 3.8: Use Case Descriptions of customer sign out

Name	customer sign out	
Scenarios	After visit the website customer can sign out.	
Brief descriptions	If customer want to out from website they can sign out	
Actor	Customer.	
Pre-condition	They have to be sign in.	
Post condition	After sign out if they want to again active they have to sign in	
Flow of event	Actor	Systems
	Customer can sign out	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.2.11 Admin Signup:

Table No 3.10: Use Case Descriptions of admin signup

Name	Admin signup.	
Scenarios	Admin at first signup.	
Brief Description	Admin first signup to the system.	
Actor	Admin	
Pre-Condition	The website must exist.	
Post Condition	Admin signup to the system	
Flow of event	Actor	Systems
	Admin Register to the System.	Reply with showing success message.
Failure results	If system not reply then show zero.	

3.2.12 Admin Sign in:

Table No 3.11: Use Case Descriptions of admin sign in

Name	Admin sign in	
Scenarios	Admin sign in to the system	
Brief Description	Admin first signup then sign in to the system	
Actor	Admin	
Pre-condition	The website must exist.	
Post Condition	Admin gives username and password to login system.	
Flow of event	Actor	Systems
	Admin signup To the System then sign in in to the system.	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.2.13 Admin add product category:

Table No 3.12: Use Case Descriptions of admin add category

Name	admin add category	
Scenarios	Admin sign in to system to add category of product	
Brief Description	Admin first registration then login to the system and then Add different product category.	
Actor	Admin	
Pre-condition	The website must exist.	
Post Condition	Admin add product category info.	
Flow of event	Actor	Systems
	Admin Register To the System then Sign in to the system then adds product category	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.2.14 Admin Add product:

Table No 3.13: Use Case Descriptions of admin add product.

Name	Admin add product.	
Scenarios	Admin add different product of different category	
Brief Description	Admin first registration then login to the system and then Add product	
Actor	Admin	
Pre-condition	The category must exist.	
Post Condition	Admin add product of different category	
Flow of events	Actor	System
	Admin Register To the System then Sign in to the system then add product of different category	Response with displaying success message.
Failure results	If system not response then show nothing.	

3.2.15 Admin delete, edit product:

Table No3.14: Use Case Descriptions of admin delete, edit product.

Name	Admin delete, edit product	
Scenarios	Admin can delete, edit any of product	
Brief Description	Admin can edit, delete product which exist in this website.	
Actor	Admin.	
Pre-condition	Product have to exist.	
Post conditions	Edited, deleted product won't be same as before	
Flows of event	Actor	Systems
	Admin can edit, delete product	Reply with showing success message.
Failure results	If system not reply then show zero.	

3.2.16 Admin Sign out:

Table No 3.15: Use case Descriptions of admin sign out

Name	Admin can sign out.	
Scenarios	Admin can sign out from system	
Brief Description	Admin can sign out whenever they want	
Actor	Admin	
Pre-condition	Another admin must have to in sign in	
Post Conditions	Again, if admin want to enter they have to be sign in.	
Flows of event	Actor	Systems
	Admin can sign out from system	Reply with showing success message.
Failure result	If system not reply then show zero.	

3.3 Activity Diagram:

Activity diagram is a very significant diagram in UML. Essentially, it is a stream chart. It can define the flow of the action in a graphical illustration. Activity diagram is a reflection of what we did in use case. Every use case activity will be shown in there.

Customer signup activity diagram for onlineshoppingbd

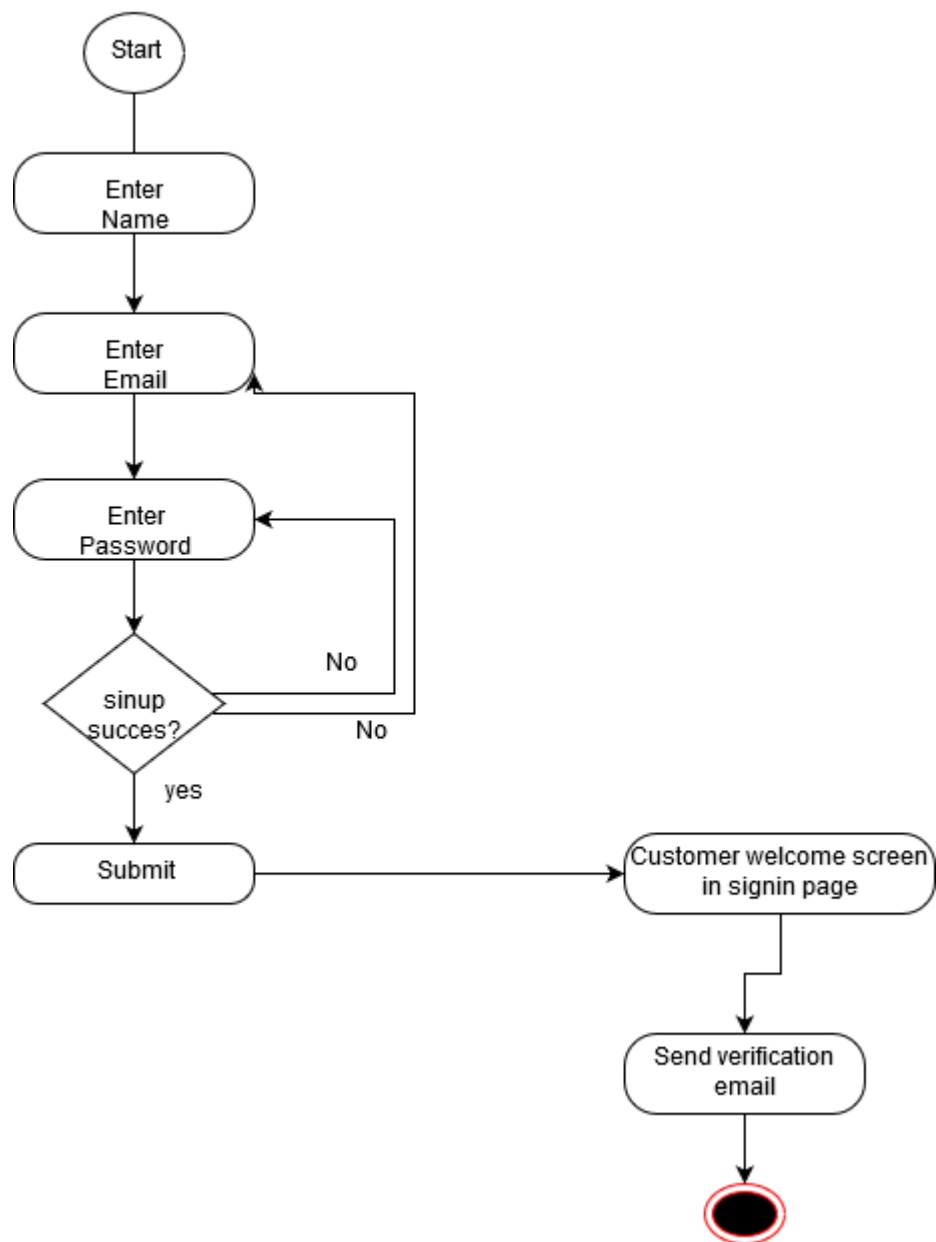


Figure 3.3.1 Customer signup activity

3.3.2 Customer Sign in Activity Diagram:

customer signin activity

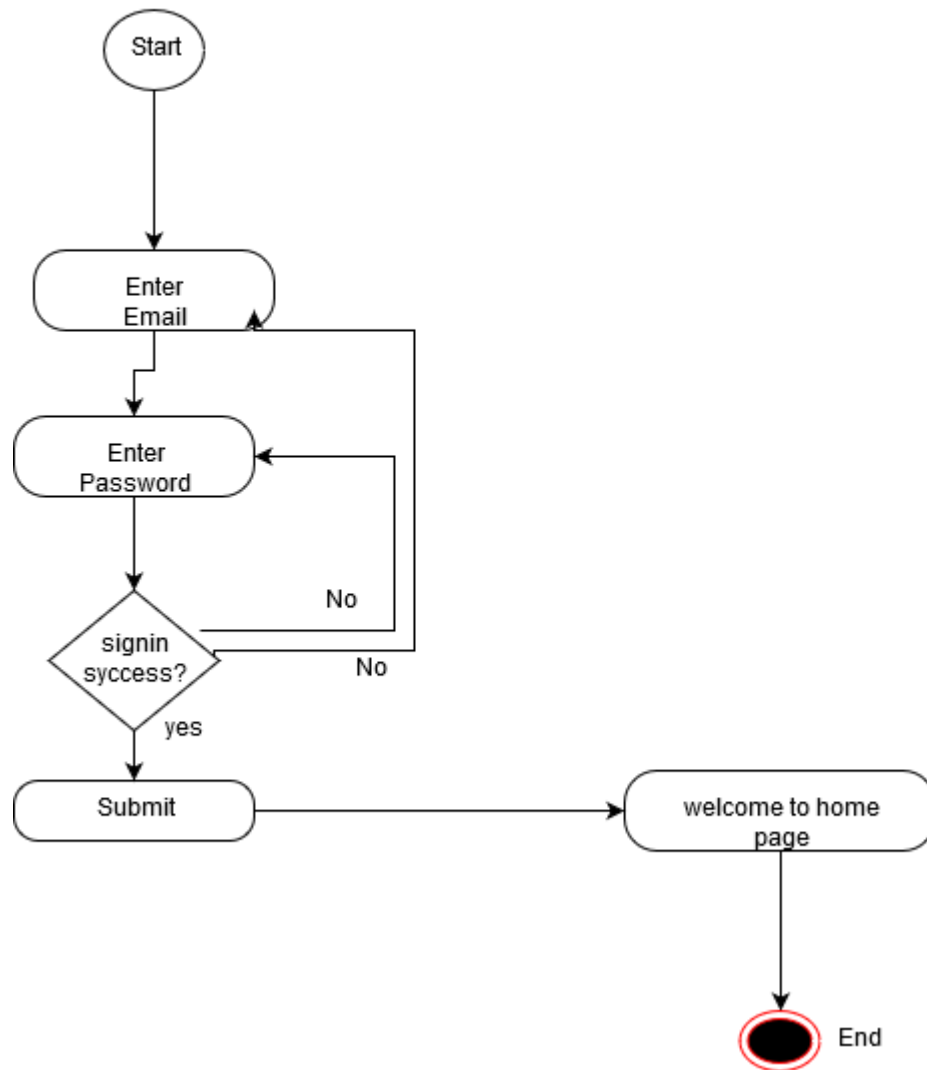


Figure 3.3.2 Customer sign in diagram

3.3.3 Customer Search Product Diagram:

user search product

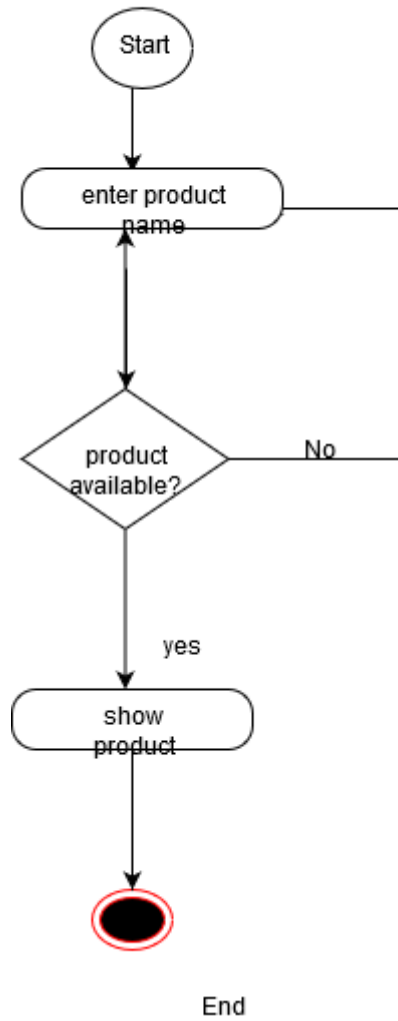


Figure 3.3.3 Customer search product diagram

3.3.4 Customer Search Product Category:

customer search category

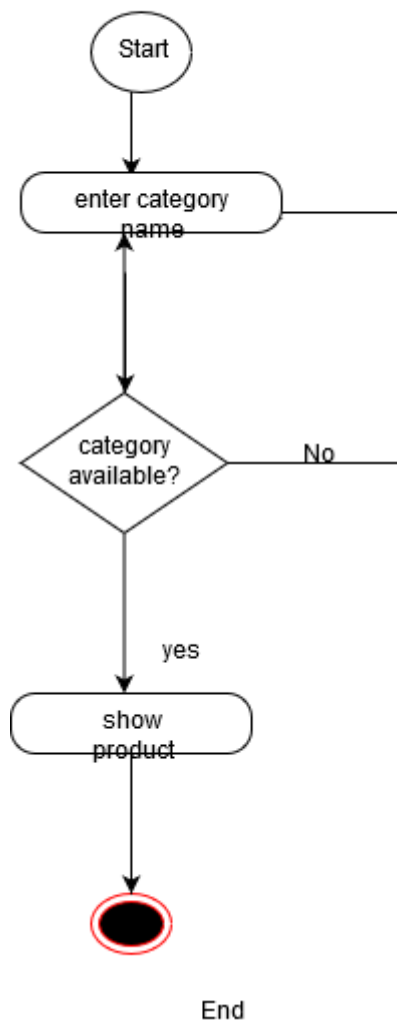


Figure 3.3.4 Customer search category

3.3.5 Customer search product by category:

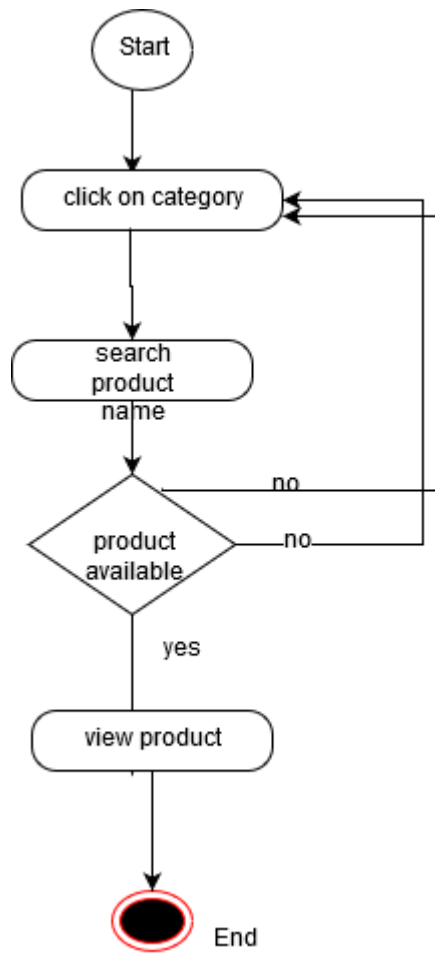


Figure 3.3.5 Customer search product by category

3.3.6 Customer Search Product by Price Range:

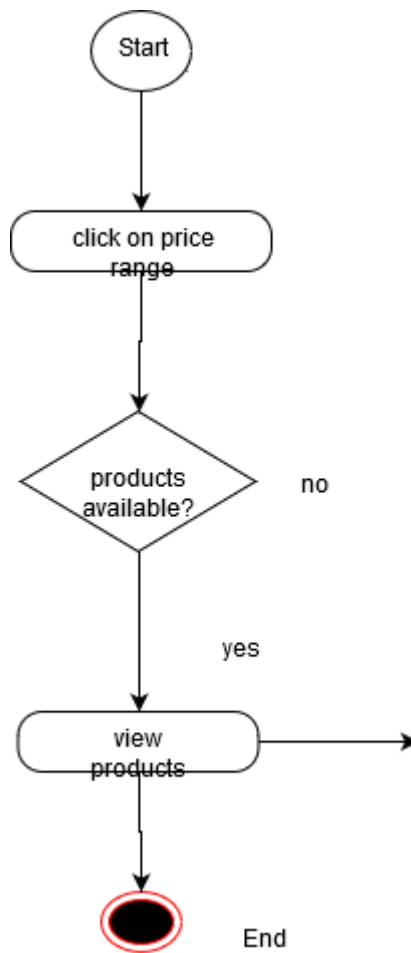


Figure 3.3.6: Customer search product by price range

3.3.7 Customer Add Product On Cart:

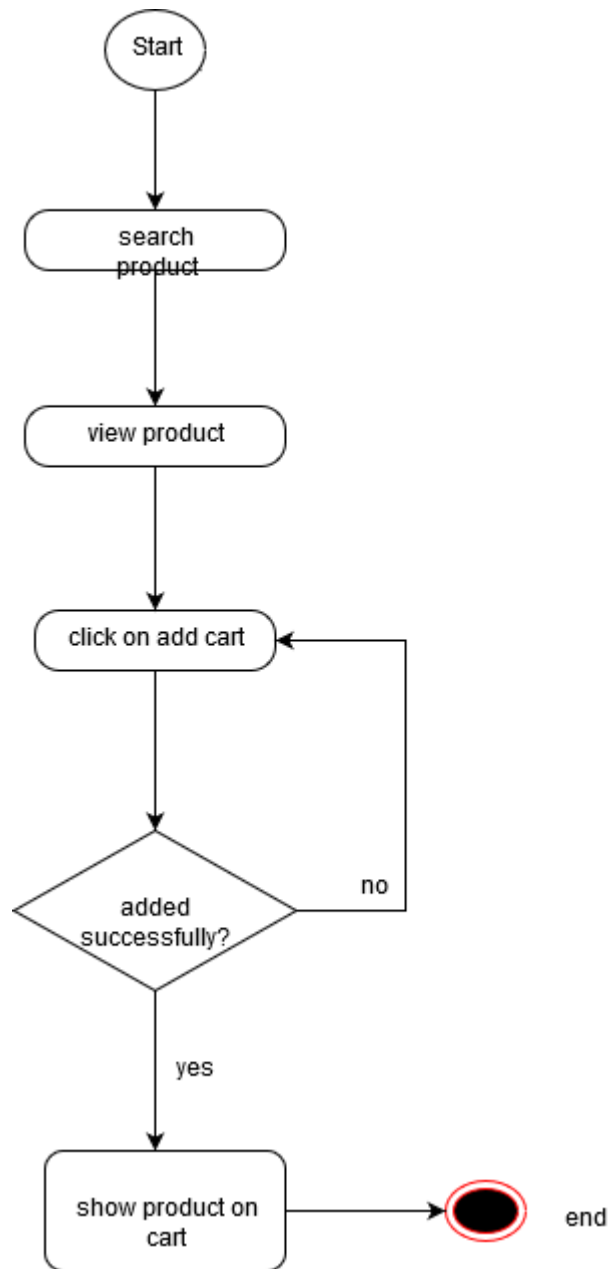


Figure 3.3.7 Customer add product on card

3.3.8 Customer Remove Product from Cart:

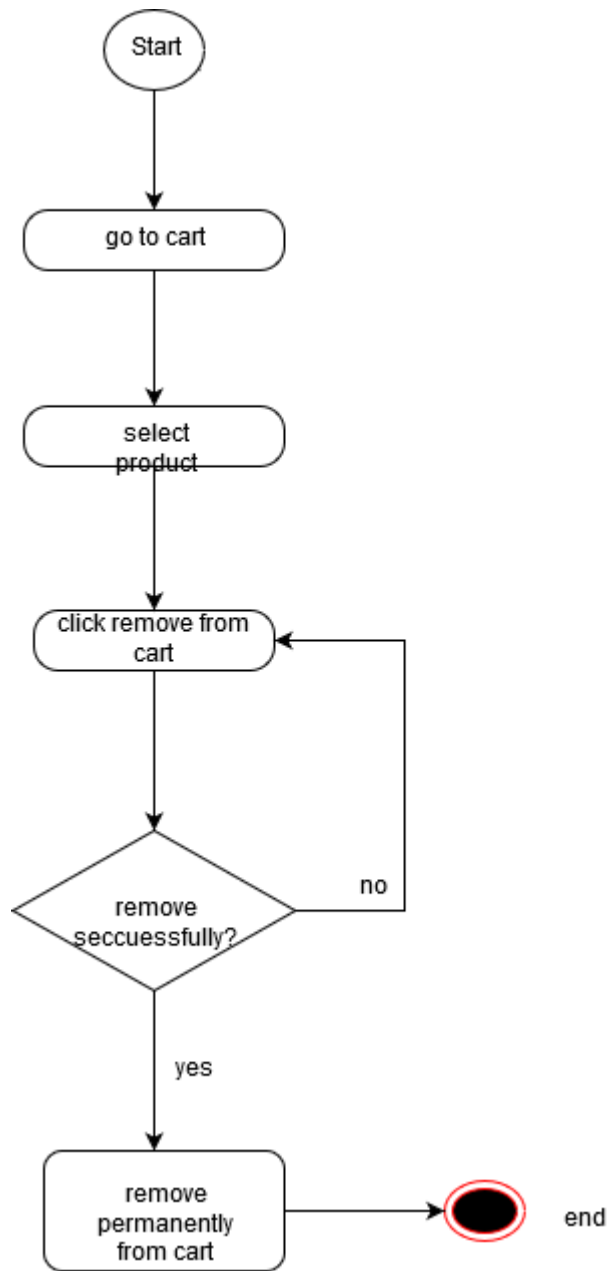


Figure 3.3.8: Customer Remove product from cart

3.3.9 Customer Give Order:

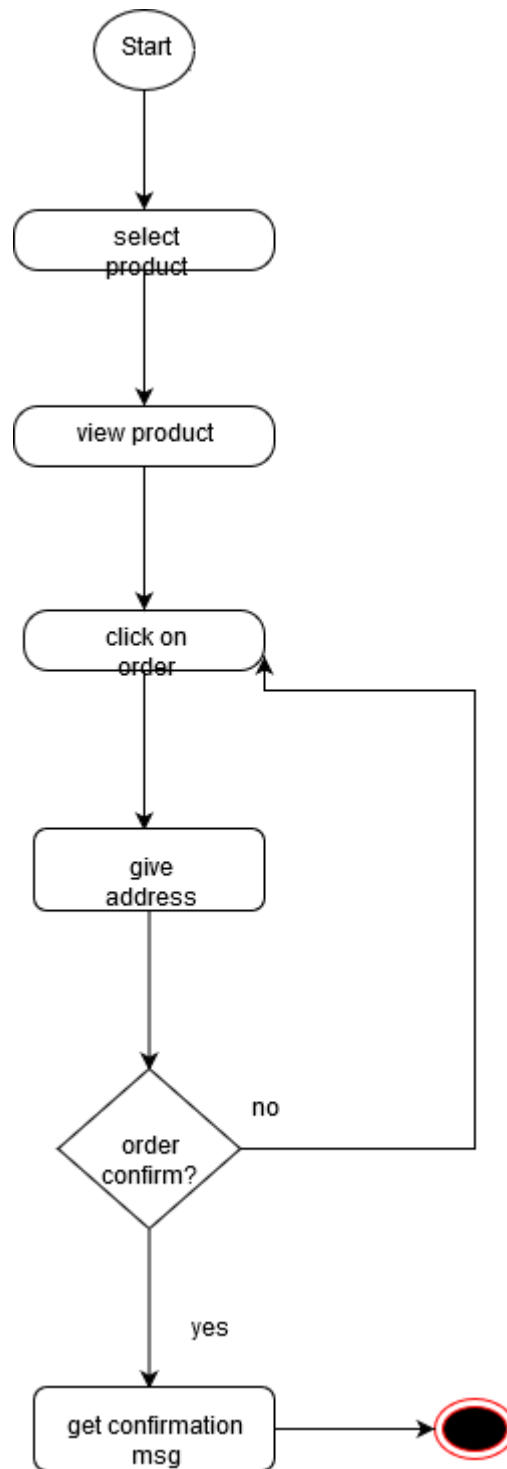


Figure 3.3.9: Customer give Order

3.3.10 Admin Signup:

admin signup activity diagram

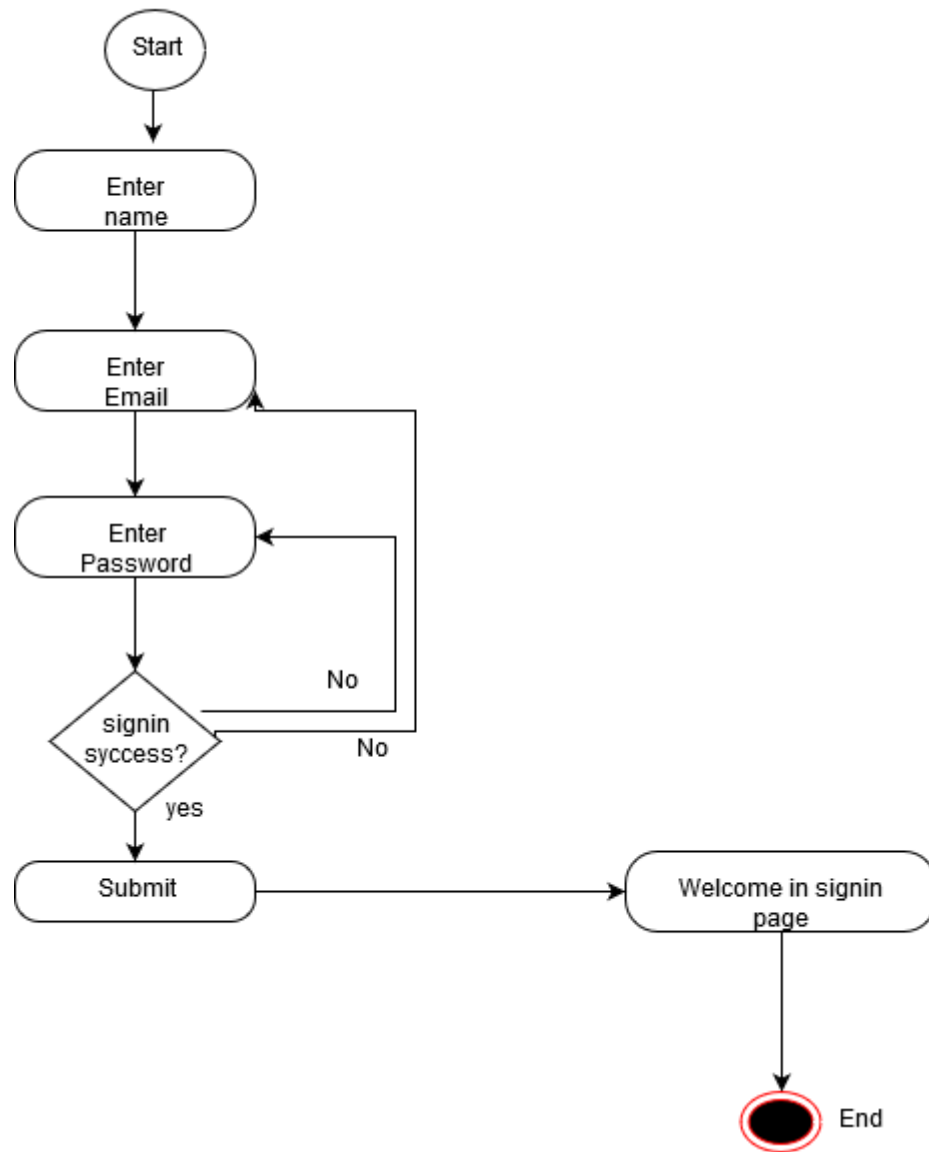
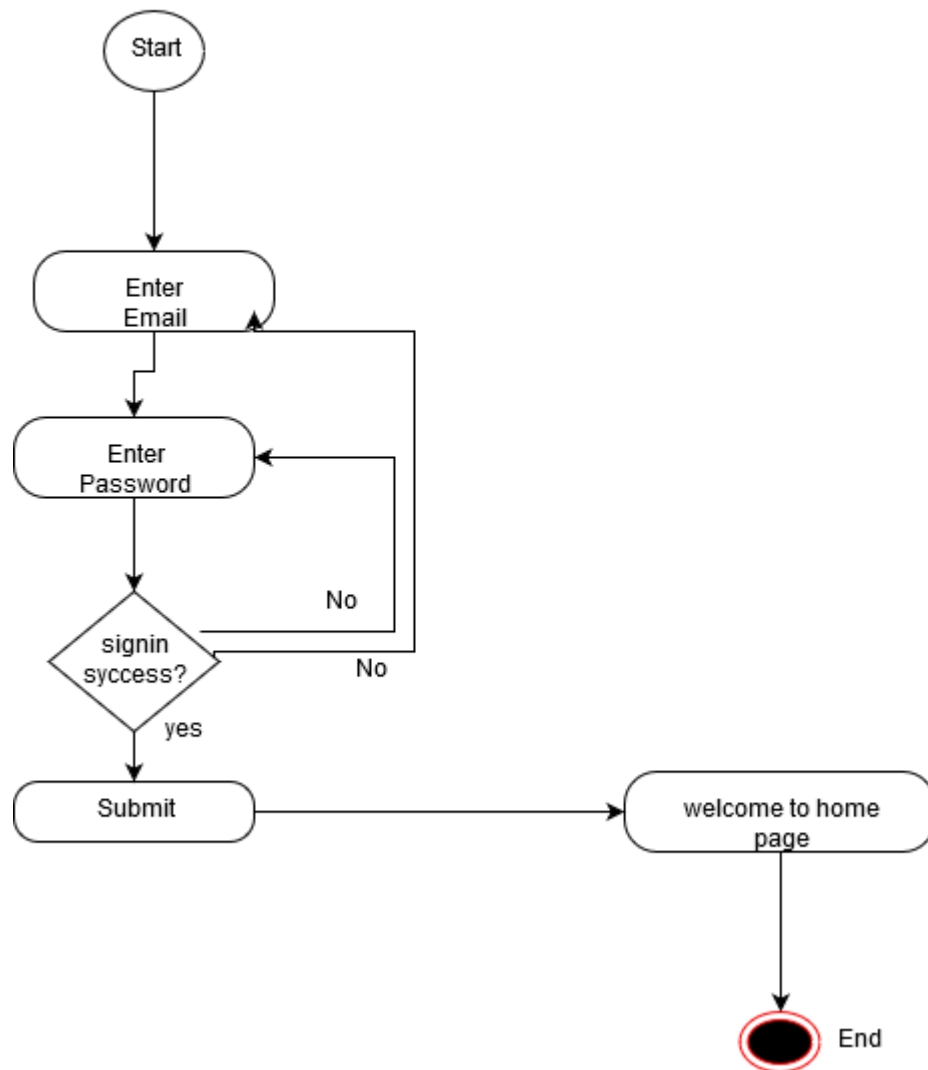


Figure 3.3.10 Admin signup

3.3.11 Admin Sign in:

admin signin



3.3.11 Admin sign in

3.3.12 Admin Add Product:

admin add product

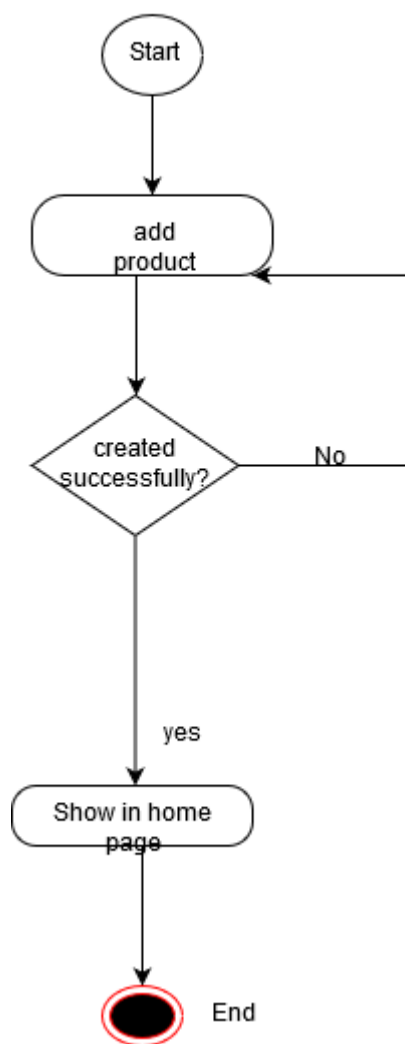


Figure 3.3.12 Admin add product

3.3.13 Admin Add Category:

admin create category

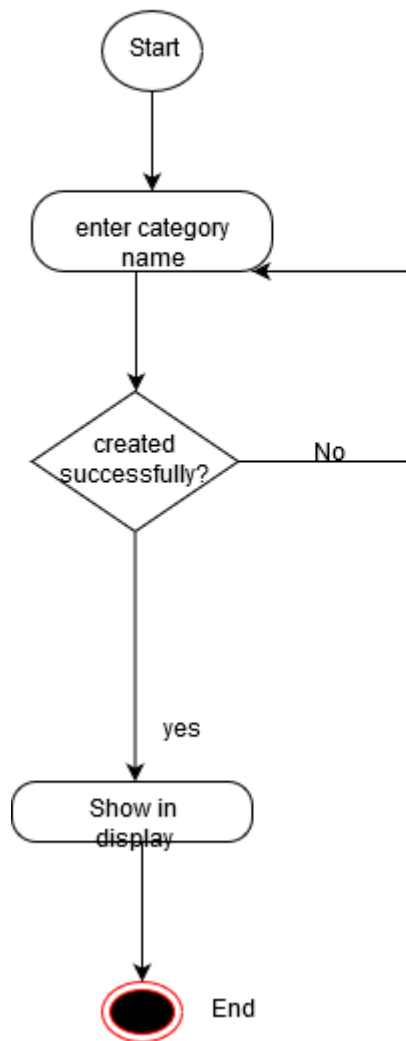


Figure 3.3.14 Admin create actegory

3.3.15 Admin edit Product:

admin edited product

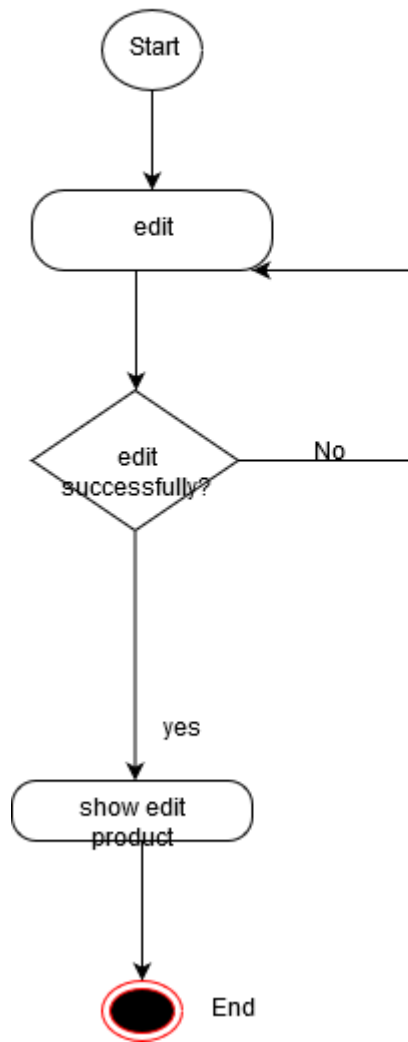


Figure 3.3.15 Admin edit product

3.3.16 Admin Delete Product:

admin delete product

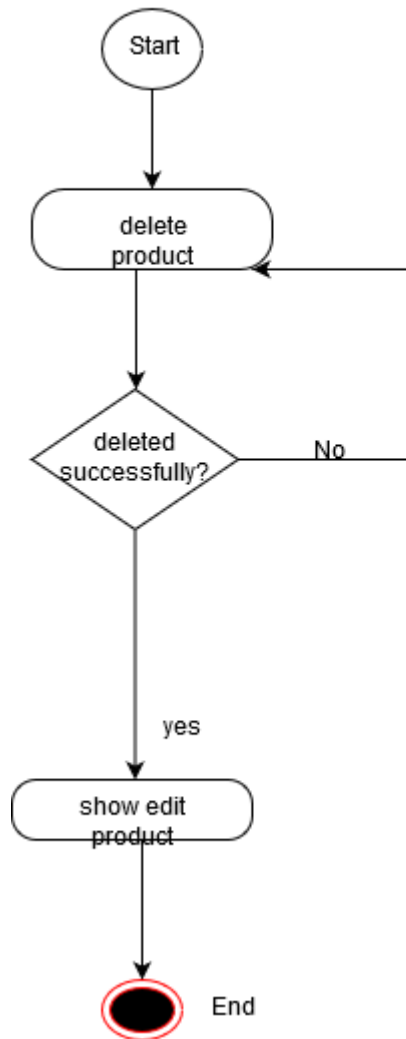


Figure 3.3.16 Admin delete product

3.3.17 Admin Order confirmation:

admin confirm order

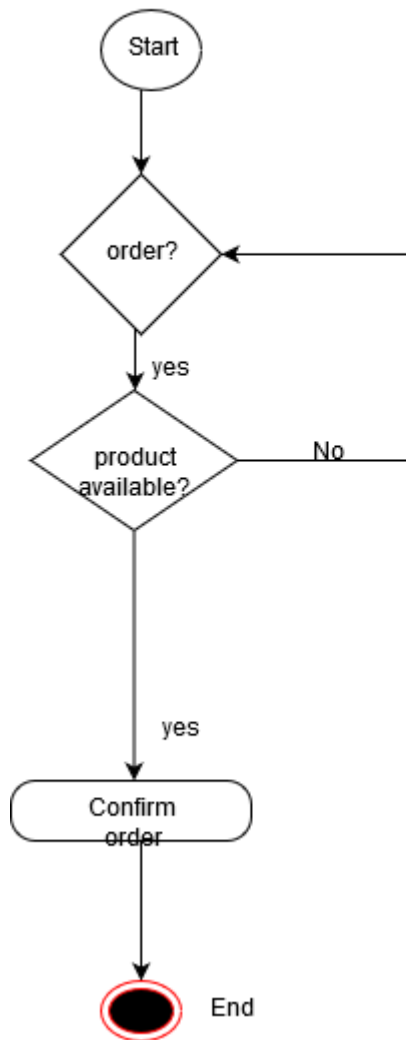


Figure 3.3.17 Admin order confirmation

3.3.4 Sequence Diagram:

Sequence diagram is one more very significant UML diagram of software. Sequence diagram can define the working procedure of a scheme as to in what way it works and what instruction is succeeding it to whole a process

Admin viewpoint sequence diagram

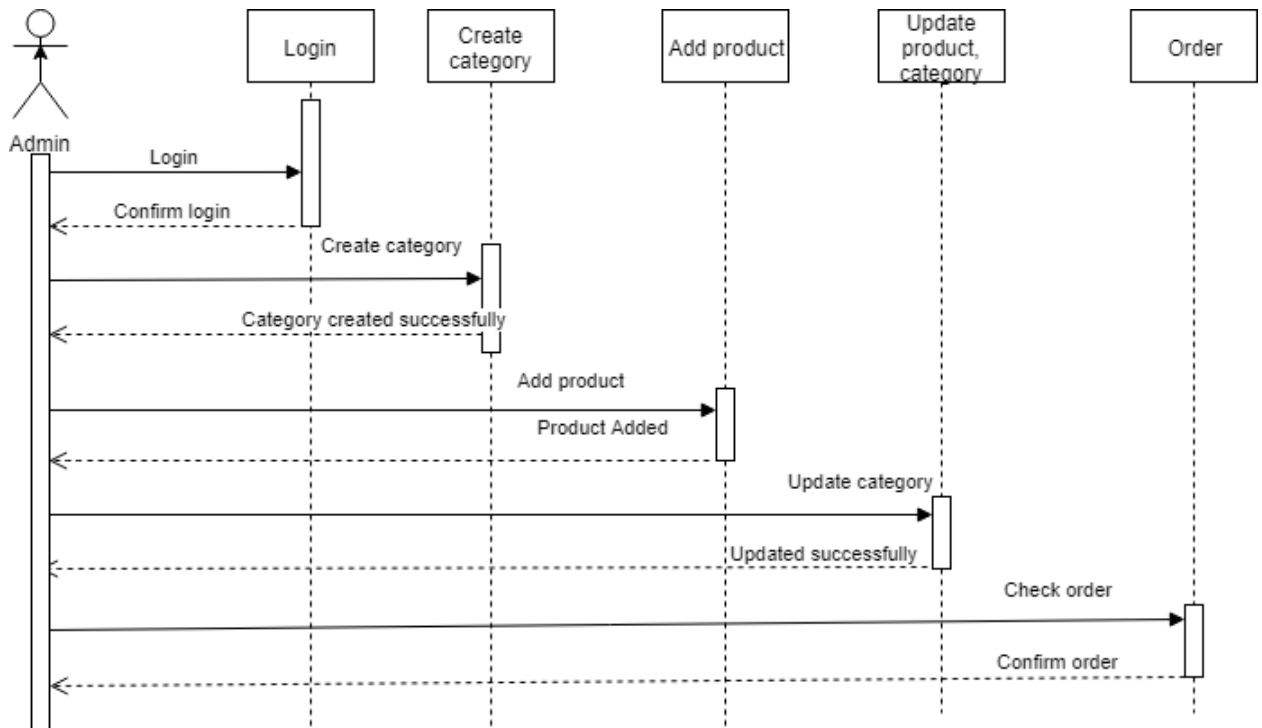


Figure 3.3.4: Admin perspective sequence diagram

3.3.5 Customer perspectives sequence diagram

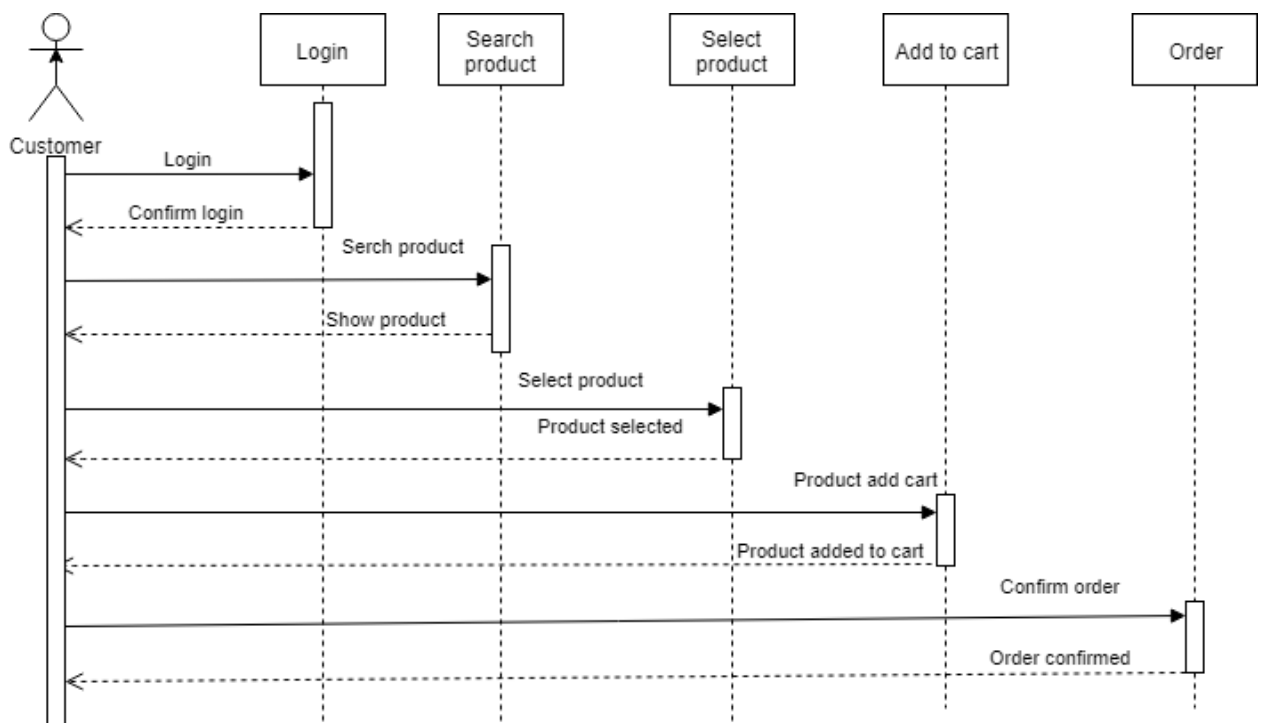


Figure 3.3.5: Customer perspective sequence diagram

3.3.6 Data Flow Diagram:

The data flow diagram is shortened as DFD is a method that castoff to expressing system condition in graphical form. It ran to a modular strategy and also known as simmer chart

DFD 0.0 symbol given below

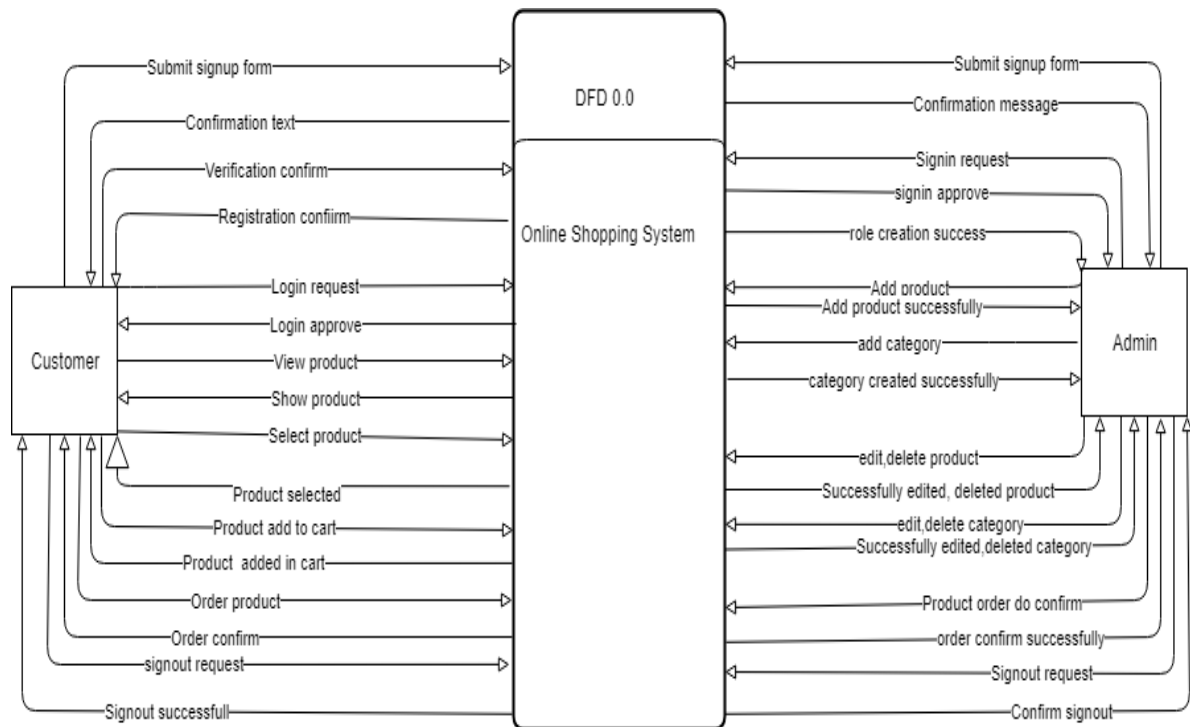


Figure 3.3.6: DFD diagram OnlineShoppingBD.

3.3.7 Entity relationship diagram:

An entity relationship drawing shows the association of entity circles kept in a database. An entity hip this setting is a constituent of data.

ERD diagram symbol given below.

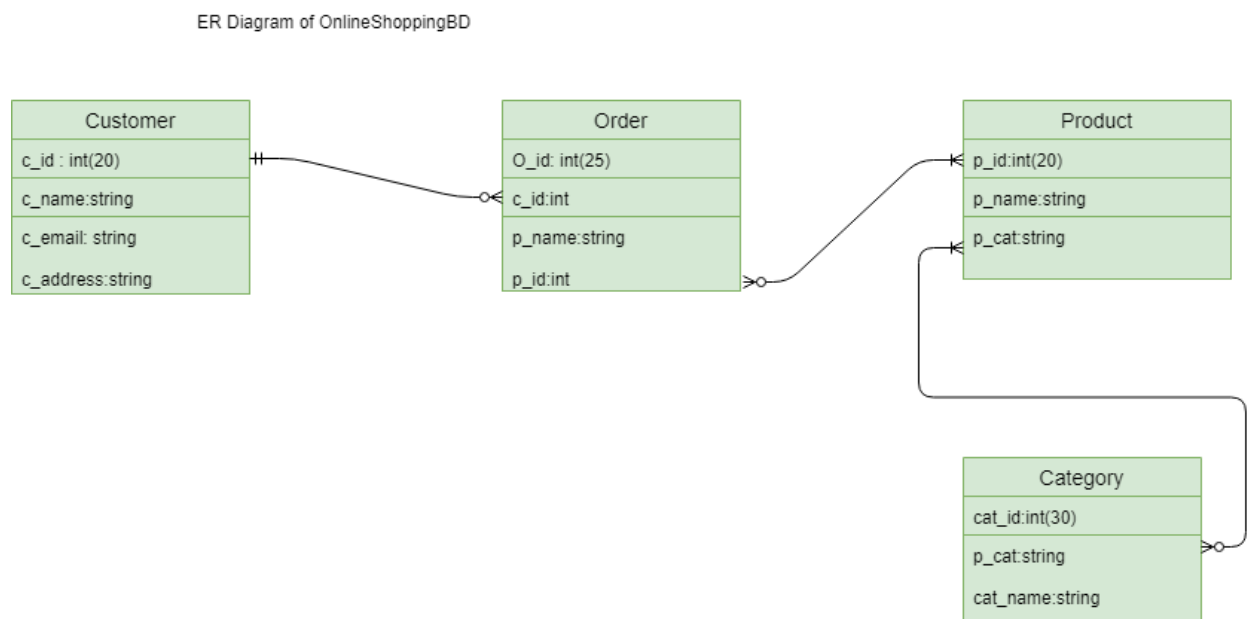


Figure 3.3.7 ERD diagram OnlineShoppingBD.

CHAPTER 4

SYSTEM DESIGN SPECIFICATION

4.1 Class Responsibilities Collaborations (CRC) Cards:

It's a thinking tool castoff to strategy any nice of object-oriented software. Following boards are given blew:

Admin:

Table No 4.1: Admin Responsibility and collaborations

Responsibility	Collaborations
Nursing the system Review about regular jobs	add, delete, update products Info.

Customer:

Table No:4.2 customer Responsibility and Collaborations

Responsibility	Collaborations
deliberate the process of buying.	Sign in ,search, add to cart then order product.

4.2 Development tools and technology:

For emerging a software scheme, choosing development tackles and technology is a spirited detail and challenge.

Development tools:

- Development IDE:
Visual studio
- Express Server: localhost
server
- Operation System:
Windows 10

Development technology:

- Programing
Language:
JavaScript
(NODE.JS)
12.13.1
Framework: EXPRESS.JSS framework.

4.2.1 User Interface Technology:

- HTML, CSS
- Bootstrap
- React.js

CHAPTER 5

SYSTEM TESTING

5.1 Testing Features:

Testing is unique of the most significant portions of testing the functionality of a software. Testing is in every important of software, testing can guarantee that the software is ready to deliver its facility.

5.1.1. Features to be Tested:

Here is assumed a list of the structures we have tested

- Admin Login
- Customer login
- Add product
- Buy product
- Add to cart
- Order product

5.1.2 Features not to be Tested:

We have to test every fields of our software.

5.2 Testing Strategies:

Here is specified the plans of our system

- Quality testing
- Measure testing.

5.2.1 Test Approach:

To contrivance a project test method is very significant. Test method has two kinds of practices:

- **Proactive** - An method in which the test plan procedure is started as early as possible.

- **Reactive:** An method in which the test is not happening till after design and coding start.

5.2.2 Pass/Fail Criteria's:

Once the predictable result is arising after trying then it is called pass.

Once an unanticipated result comes through testing then it is named fail.

5.2.3 Suspension & Resumptions:

this software is very horizontal and easy to use and uphold. There is no check and recommencement problematic.

5.3 Testing Environment:

- Testing ide: Mocha Stream
- Browser: google chrome
- processor: CoreI5. :

5.4 Test Case Description:

have verified our system many times. Now concentrating on that our system will perform properly.

5.4.1 Test Admin Login:

Table No 5.1: Test Case for Admin Login

Test Scenarios:	Admin login	Test case ID:	TC01		
Test Case description	Login case	priority:	high		
pre-requisite:	A valid account	post-Necessary:	na		
Steps:					
SL NO 1	ACTION	INPUTS	EXPECT RESULT	RESUL T	TEST Result
01	Enter correct Email and password	Email: alamin@gmail.co Password: *****	LOGIN SUCCESS	LOGIN SUCCESSFUL	Pass

5.4.2 Test for verify customer:

Table No 5.2: Test to verifying customer

Test scenario:	Verify customers	Test Id:	TC02		
Test case descriptions	Verify customers sign in	priority:	high		
Pre requisite:	An authenticate admin	Post requisite:	na		
Test Execution Steps:					
SI no	Action	Input	Expected result	Actual result	Test result

01	Enter correct product info send by admin	Product name: t-shirt	successful	Update successfully	success
----	--	-----------------------	------------	---------------------	---------

5.4.3 Test Case for customer Sign in:

Table No 5.3: test case for customer sign in

Test scenarios:	Customer sign in	Test id:	Tc03		
Test case description:	sign in test case	priority:	high		
Pre-requisite:	A valid email and pass	Post-requisite:	NA		
Steps:					
SL no	ACTION	Inputs	Expect result	Actual; result	Result
01	Enter email, pass sign in	Name: Alamin sign	Sign in successful	successful	Pass
		Email Password			

5.4.4 Test for customer buy product:

Table 5.4: Test for customer buy

Scenarios:	Customer buy product	Test ID:	TC04		
description	Customer buy product	Priority:	HIGH		
Pre-Requisite:	An authenticated customer	Post-requisite:	NA		
steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter correct name Of customer	Name: alarmin	Deal Successful	Deal Successful	Pass

5.4.5 Test Case for customer add to cart:

Table 5.5: test for add to cart

Scenario :	Add to cart	Test id:	TC05
Description:	Customer add to cart	Priority:	HIGH
Pre-requisite:	An authentic customer	Post requisite:	NA

Steps:

Sl no	Action	inputs	Expect result	Actual result	result
1	See the price	required	Successful order	Successful	success
		info			

CHAPTER 6 USER MANUAL

6.1 Home page: this is system's home page. Through the home page admin and the customer can see the project easily. And also find all the information they needed. User can find their products on the home page. There is many products info on the home page.

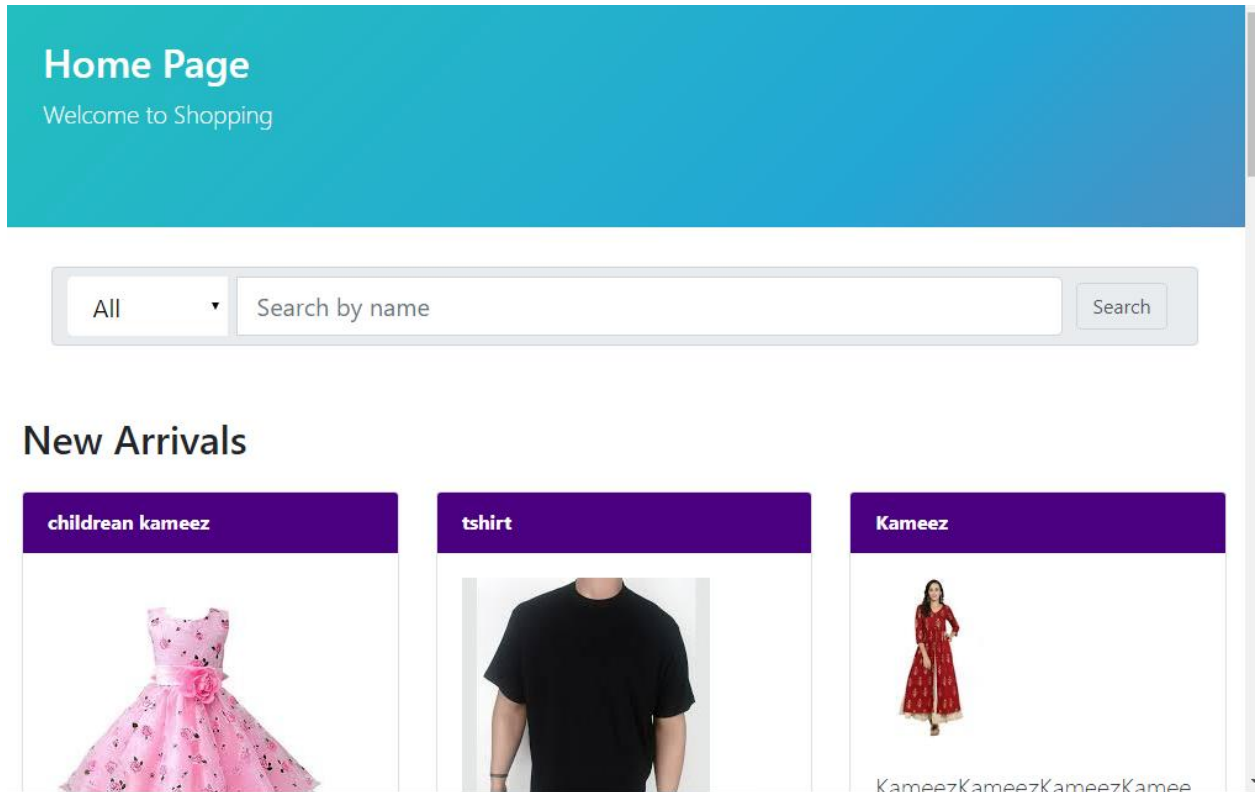



Figure 6.1: home page

6.2 Product Page:

tshirt



tshirttshirttshirttshirt

550


Category: Male

Added on 13 days ago

In Stock

[View Product](#) [Add to cart](#)

children kameez



children kameezchildren kameezchildren kameez

400

Category: Children

Added on 13 days ago

In Stock

[View Product](#) [Add to cart](#)

Figure 6.2 Product page

6.3 Dashboard Page

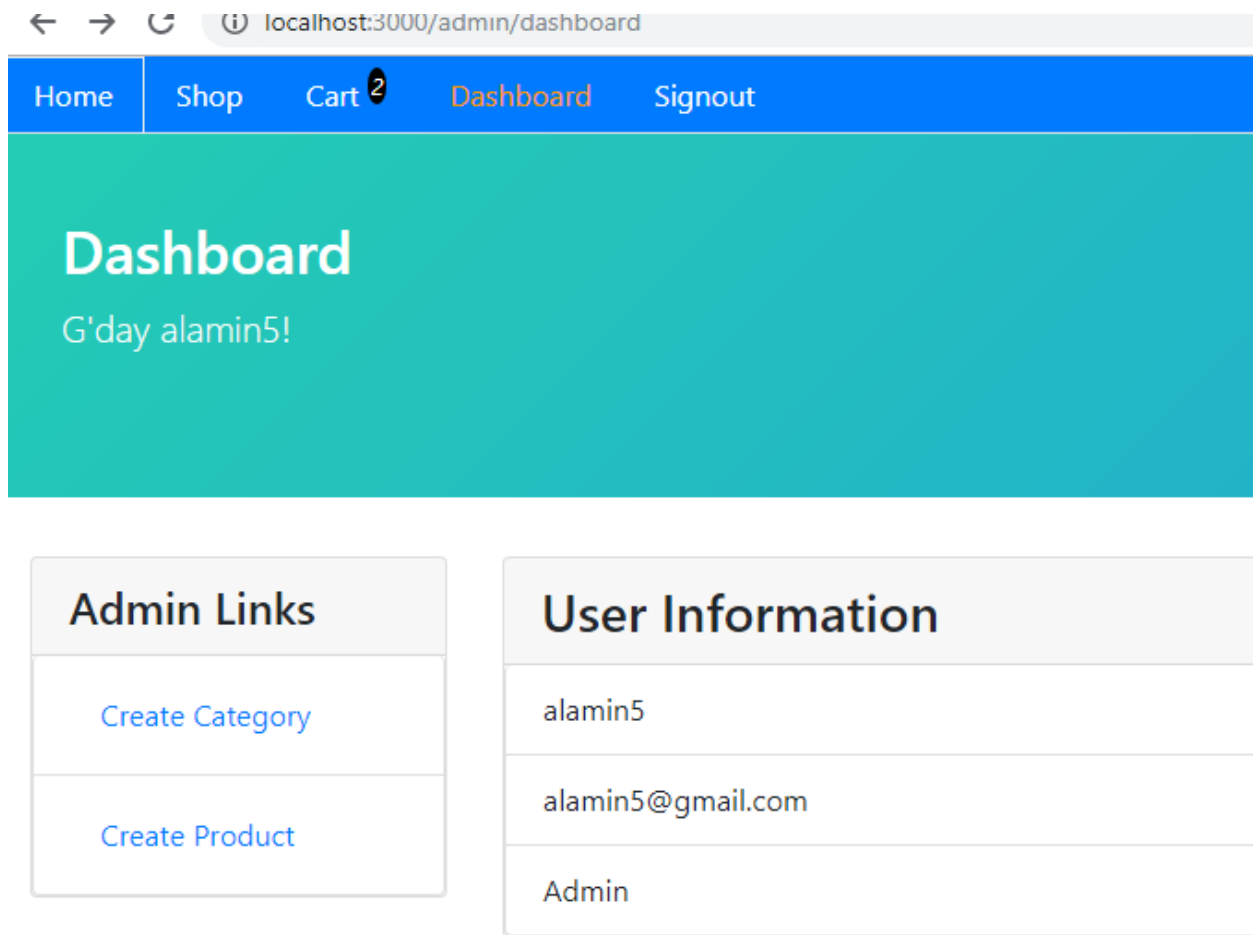
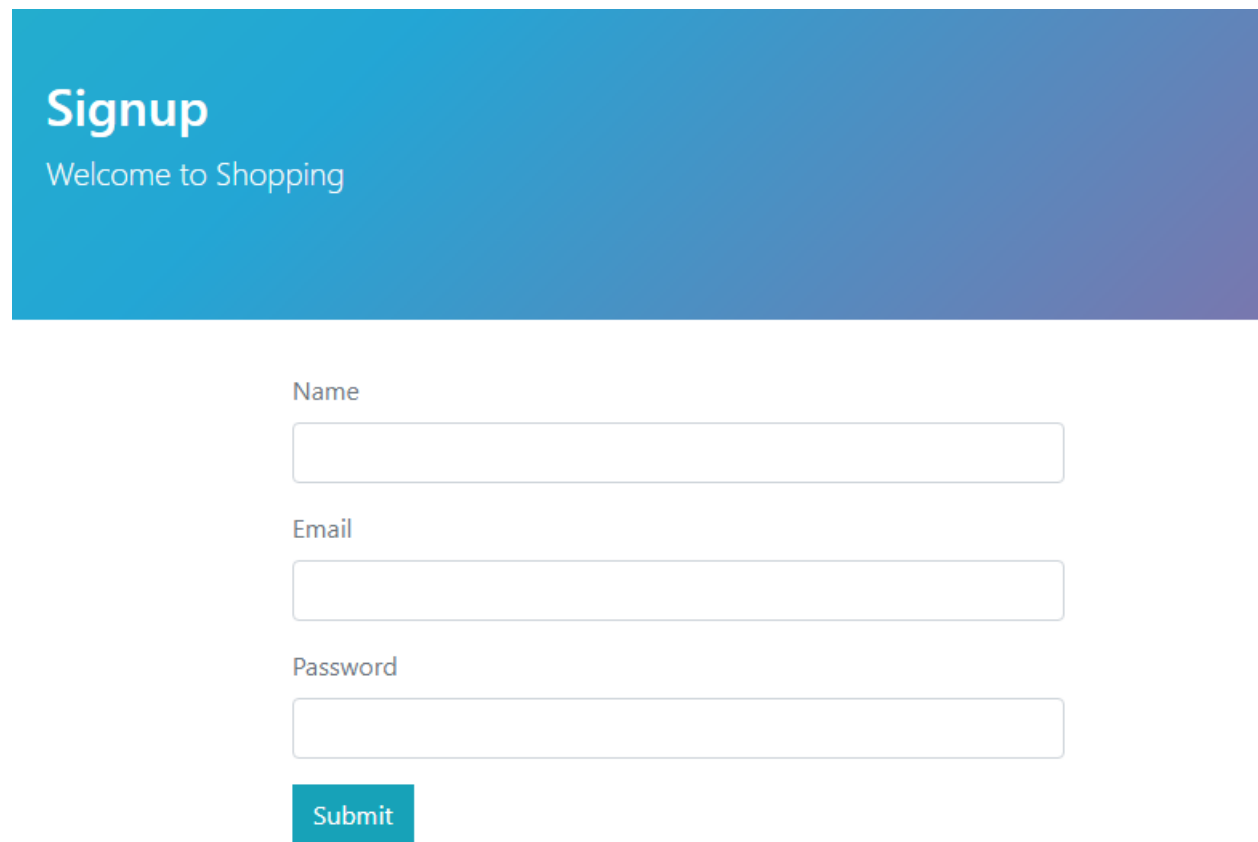


Figure 6.3 :dashboard page

6.4 Signup Page:



The image shows a signup page with a blue header. The header contains the word "Signup" in a large white font and "Welcome to Shopping" in a smaller white font below it. Below the header, there are three input fields: "Name", "Email", and "Password". Each field is a simple white rectangle with a thin grey border. Below the "Password" field is a teal-colored button with the word "Submit" in white text.

Signup

Welcome to Shopping

Name

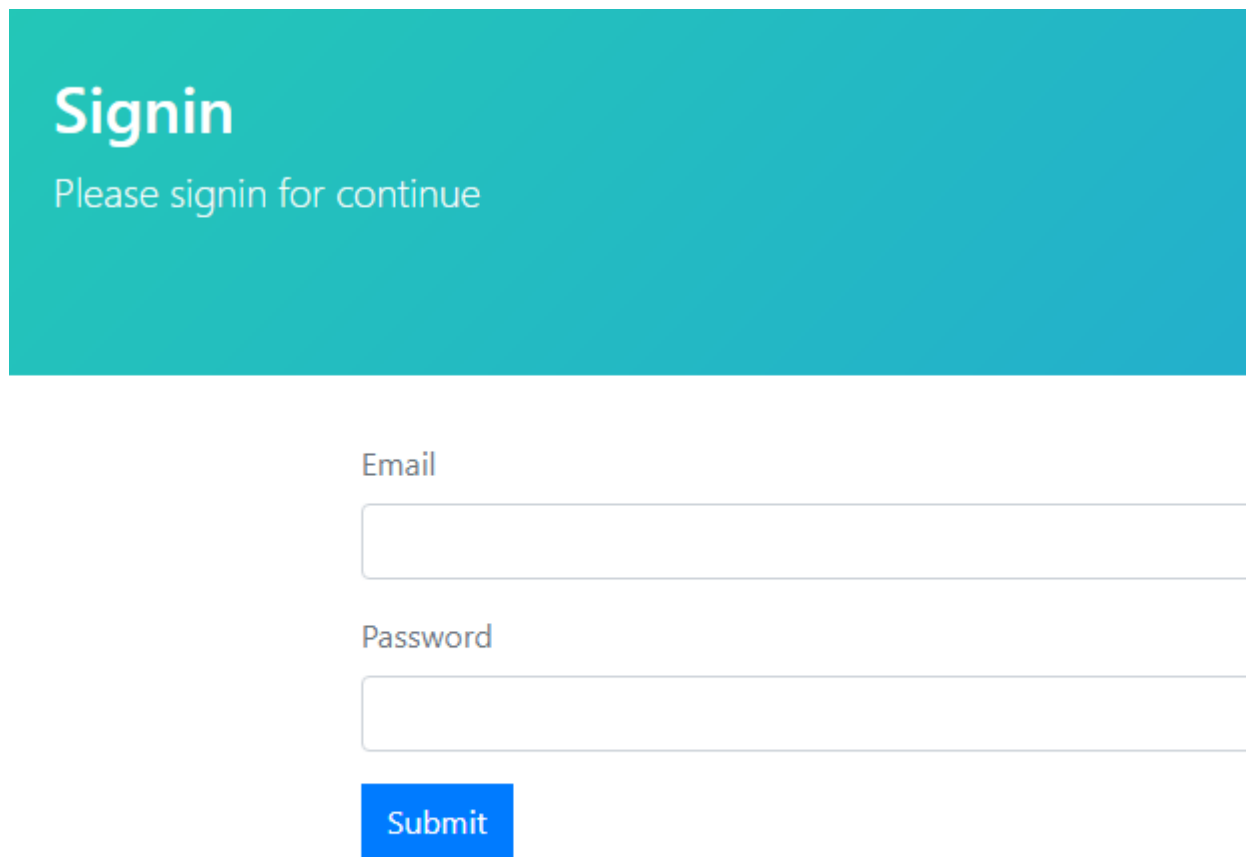
Email

Password

Submit

Figure 6.4 signup page

6.5 Sign in Page:



Signin
Please signin for continue

Email

Password

Submit

Figure 6.5 Signin page

6.6 Admin Page:

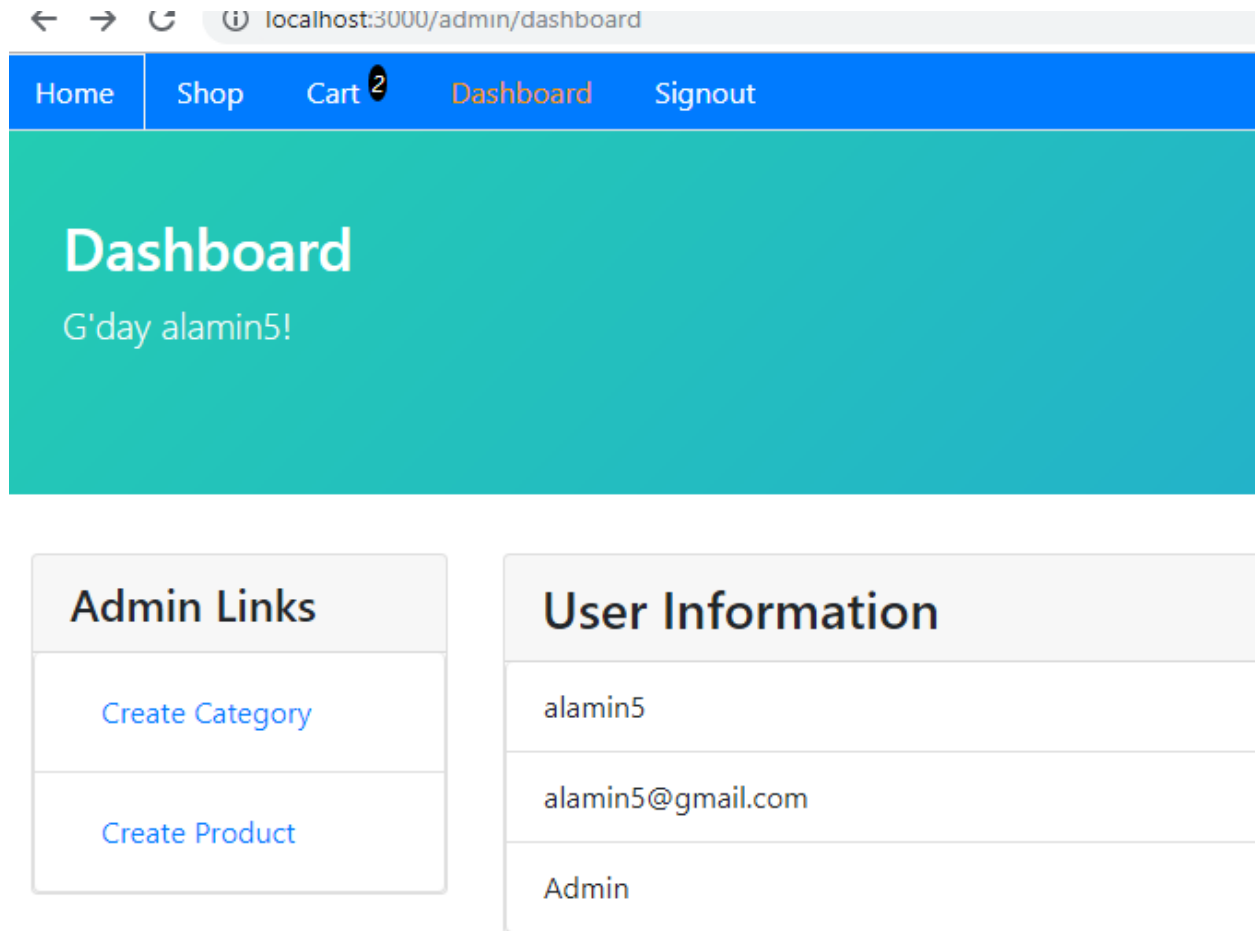


Figure 6.6 Admin page

6.7 Admin product create:

Home Shop Cart ² Dashboard Signout

Add a new product

G'day alamin5, ready to add a new product?

Post Photo

Choose file No file chosen

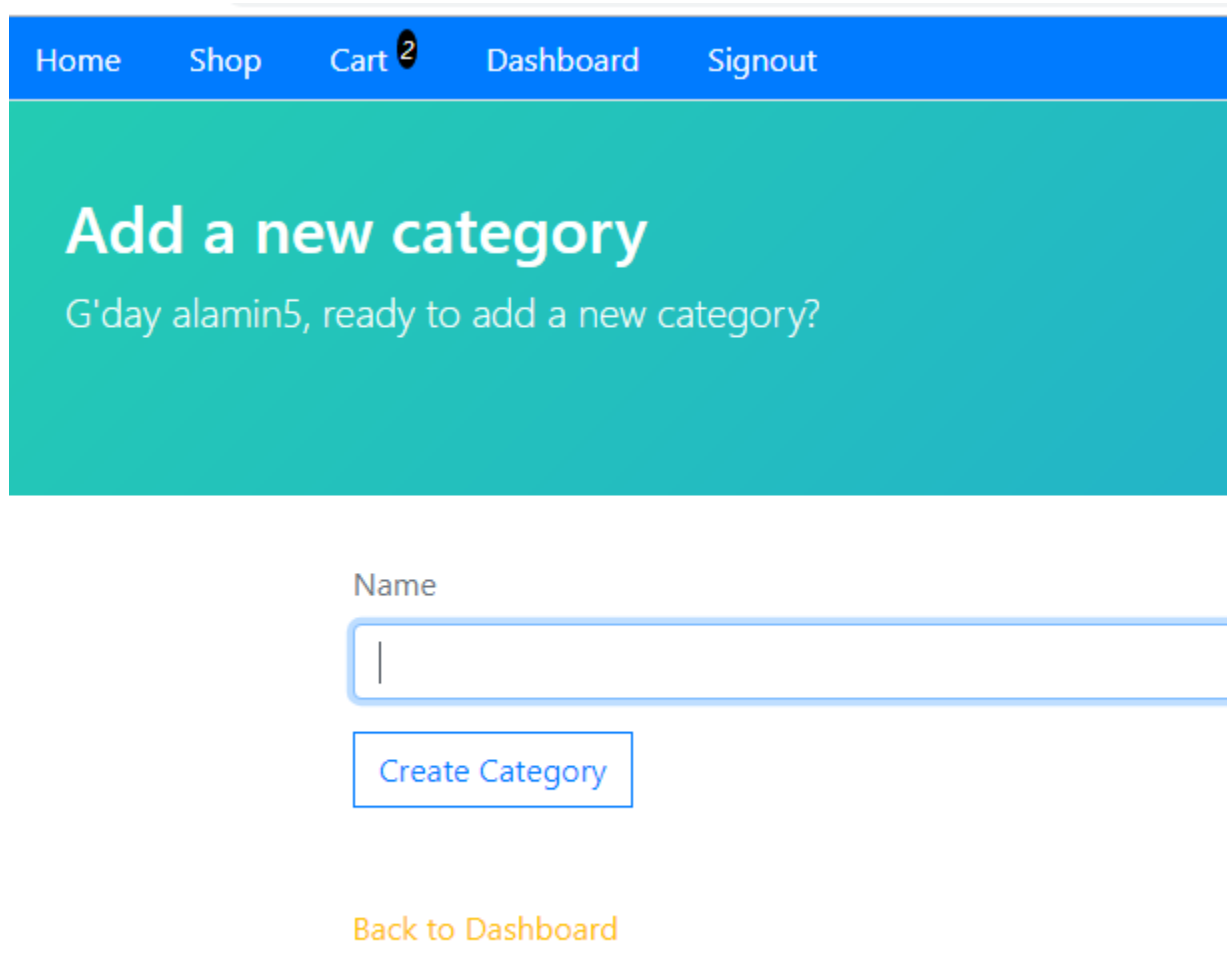
Name

Description

Price

Figure 6.7 admin add product

6.8 Admin create category:



The screenshot shows an admin dashboard with a blue navigation bar at the top containing links for Home, Shop, Cart (with a '2' notification), Dashboard, and Signout. Below the navigation bar is a teal header section with the title "Add a new category" and a personalized greeting: "G'day alamin5, ready to add a new category?". The main content area is white and contains a form with a "Name" label, a text input field with a vertical cursor, and a "Create Category" button. Below the form is a "Back to Dashboard" link.

Home Shop Cart ² Dashboard Signout

Add a new category

G'day alamin5, ready to add a new category?

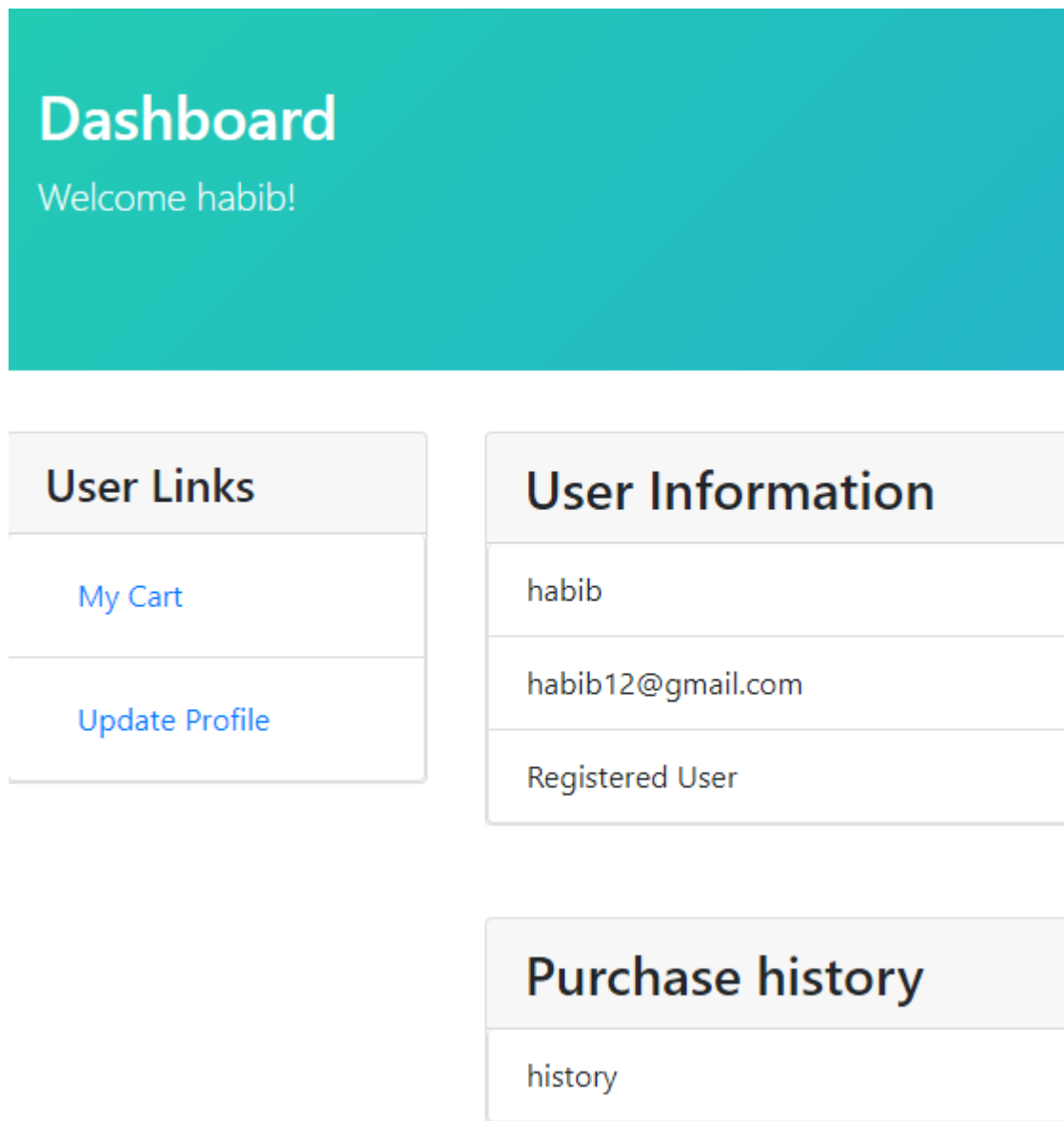
Name

Create Category

[Back to Dashboard](#)

Figure 6.8 admin create category

6.9 User Dashboard after sign in:



The dashboard features a teal header with the title 'Dashboard' and a welcome message 'Welcome habib!'. Below the header, there are three main sections: 'User Links', 'User Information', and 'Purchase history'. The 'User Links' section contains two links: 'My Cart' and 'Update Profile'. The 'User Information' section displays the user's name 'habib', email 'habib12@gmail.com', and status 'Registered User'. The 'Purchase history' section shows a link to 'history'.

User Links
My Cart
Update Profile

User Information
habib
habib12@gmail.com
Registered User

Purchase history
history

Figure 6.9 User dashboard page

6.10 Customer Cart Page:

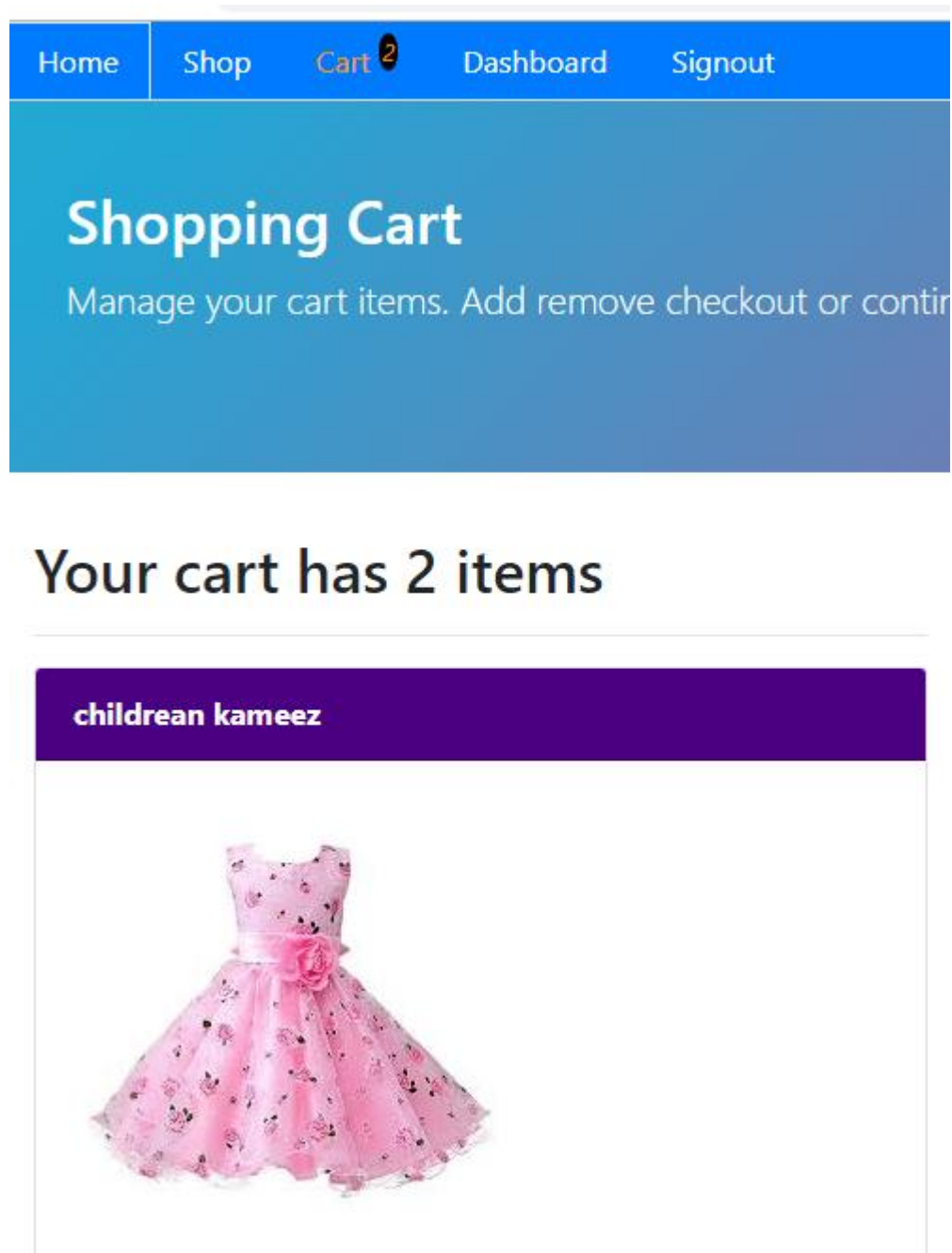
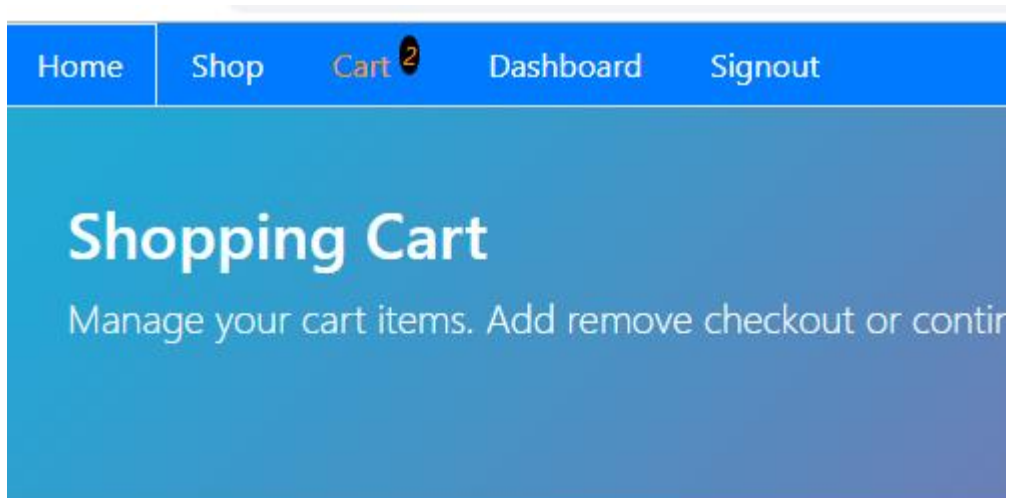


Figure 6.10 Customer cart page

6.11 Remove Cart Page:



Your cart has 2 items



Figure 6.11: remove cart page

6.12 Search Product, Category Page:

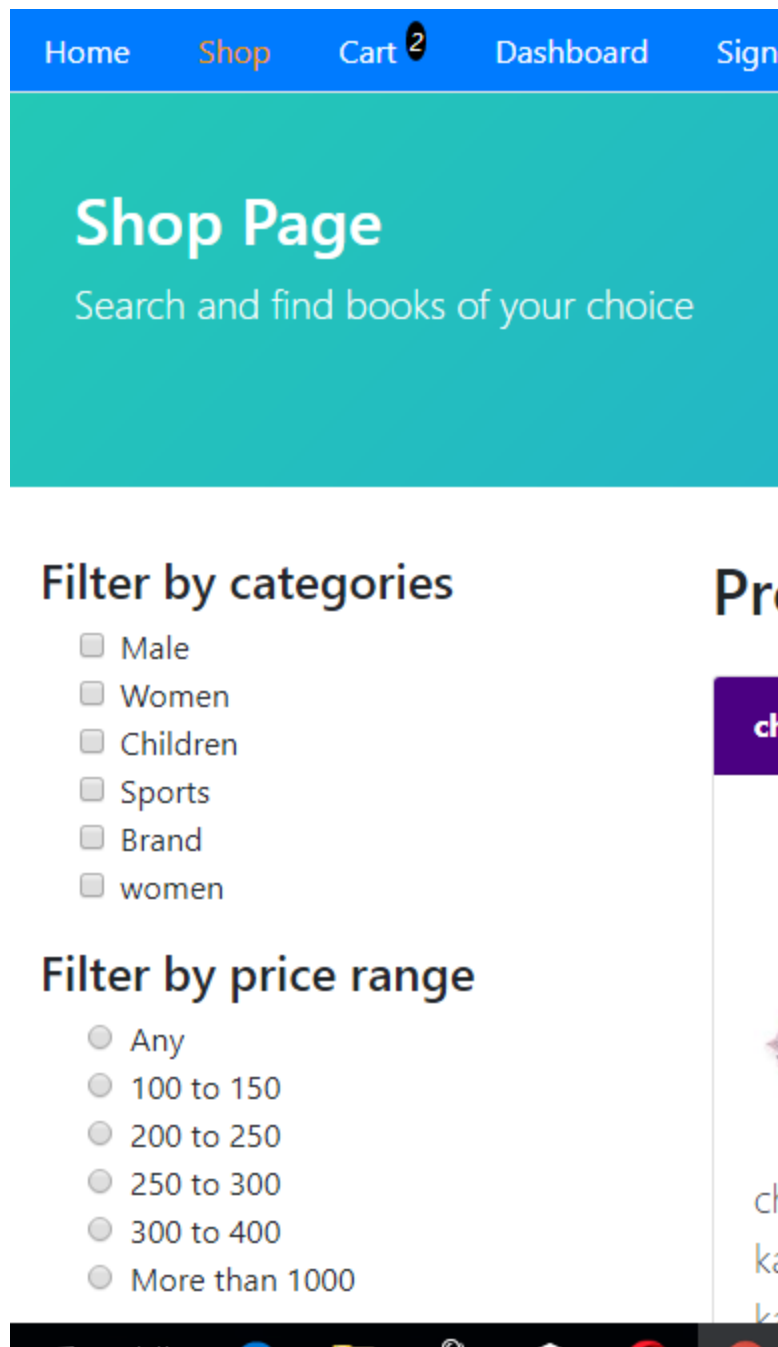


Figure 6.12 : search page

6.13 Database User Table:

The screenshot shows the MongoDB Compass interface for a cluster named 'My Cluster' at 'localhost:27017' in 'STANDALONE' mode. The left sidebar shows a tree view of databases and collections, with 'ecommerce' expanded to show 'users' selected. The main area displays the 'ecommerce.users' collection with 12 documents, a total size of 2.8KB, and an average size of 240B. The 'Documents' tab is active, showing a list of three user documents. Each document contains fields for name, email, salt, hashed_password, and __v. The first document is for 'shamim', the second for 'ramim', and the third for 'tanim'. The 'tanim' document includes 'createdAt' and 'updatedAt' timestamps.

```
name: "shamim"
email: "shamim@gmail.com"
salt: "24ff3f90-fbde-11e9-bc39-3fed36828ecc"
hashed_password: "8f0725db7a11f013e023492bfd151f1ad9376ddc"
__v: 0

_id: ObjectId("5dbadb1621c28007bc3685f4")
role: 0
> history: Array
  name: "ramim"
  email: "ramim@gmail.com"
  salt: "82ab80e0-fbde-11e9-aa79-bbd1abe04748"
  hashed_password: "cb8f771fcfb68fa3b3f7fff71b23b177b3499053"
  __v: 0

_id: ObjectId("5dbadbfa8a6dc42454182cd0")
role: 0
> history: Array
  name: "tanim"
  email: "tanimm@gmail.com"
  salt: "0ac51e00-fbdf-11e9-ba2c-2d018f722615"
  hashed_password: "a1bf8644707bda5ed4f76159589c49d8b3e8eeb0"
  createdAt: 2019-10-31 13:04:58.855
  updatedAt: 2019-10-31 13:04:58.855
  __v: 0
```

Figure 6.13: database user table

6.14 Database Product Table:

Connect View Collection Help

localhost:27017 STANDALONE

ecommerce.products DOCUMENTS 12 TOTAL SIZE 71.5KB AVG. SIZE 6.0K

Documents Aggregations Explain Plan Indexes

FILTER

INSERT DOCUMENT VIEW LIST TABLE Displaying

```
description: "XXL"
price: 300
category: ObjectId("5dc6a4a32301d61654411025")
shipping: false
quantity: 100
name: "black -shirt"
createdAt: 2019-11-12 09:35:00.943
updatedAt: 2019-11-12 09:35:00.943
__v: 0
```

```
_id: ObjectId("5dca7d5cb6c9d66954d01310")
photo: Object
sold: 0
description: "sm"
price: 1000
category: ObjectId("5dc955d7df203d36089bd2d6")
shipping: false
quantity: 100
name: "kameez"
createdAt: 2019-11-12 09:37:32.050
updatedAt: 2019-11-12 09:37:32.050
__v: 0
```

```
_id: ObjectId("5dca7dbbb6c9d66954d01312")
photo: Object
sold: 0
```

Figure 6.14: database product table

6.15 Database Category Table:

MongoDB Compass Community - localhost:27017/ecommerce.categories

Connect View Collection Help

My Cluster localhost:27017 STANDALONE

ecommerce.categories DOCUMENTS 6 TOTAL SIZE 513B AVG. SIZE 86B

Documents Aggregations Explain Plan Indexes

FILTER

INSERT DOCUMENT VIEW LIST TABLE Display

<code>updatedAt: 2019-11-10 11:39:50.196</code>
<code>__v: 0</code>
<code>_id: ObjectId("5dc955b3df203d36089bd2d5")</code>
<code>name: "Women"</code>
<code>createdAt: 2019-11-11 12:36:03.635</code>
<code>updatedAt: 2019-11-11 12:36:03.635</code>
<code>__v: 0</code>
<code>_id: ObjectId("5dc955d7df203d36089bd2d6")</code>
<code>name: "Children"</code>
<code>createdAt: 2019-11-11 12:36:39.338</code>
<code>updatedAt: 2019-11-11 12:36:39.338</code>
<code>__v: 0</code>
<code>_id: ObjectId("5dc955e5df203d36089bd2d7")</code>
<code>name: "Sports"</code>
<code>createdAt: 2019-11-11 12:36:53.308</code>
<code>updatedAt: 2019-11-11 12:36:53.308</code>
<code>__v: 0</code>

Figure 6.15: database category table

PROJECT SUMMARY

7.1 GitHub link:

Project uploaded in GitHub.

7.2 Critical Evolution:

Requirement engineering @ and new technology to use in this project was a challenge for me.

7.3 Limitations:

Each system has about limitations. As a scheme is not constructed for all facilities or not for all over the world. Similar that system has some limits certain under.

My mission is based on Bangladeshi viewpoint, instructions, and guidelines. My project is lone for who wants to buy product in online.
This is a beta version.

7.4 Obstacle and Achievements:

I take the challenge to think or do somewhat new. As I have to face some problems as difficulties to do something new. When I can complete the new thing then I can learn something new and can stunned the difficulties then these are my successes.

Gathering supplies was an unlimited task and problem.

Numerous persons are not conscious of the internet in our country.

After implementation this project, I have learned many things.

7.5 Future Scope:

I am exasperating to kind an android app for my consumers. In the upcoming, I am trying to enhance other landscapes alongside the product. Ended this project vast and release it globally. Digital compensation the system can be addition in the coming.

7.6 Discussion and Conclusion:

Currently keep safety in a part is a big tricky. To preserve security, the admin must have the info about the system. My app is applied to uphold info about people. So, it will reduce a great energy near the admin and the customer. In the age of CPU science, a referent system for keeping information is an old procedure. People can help their personal info by expending their android phone. It will also protect time. Consuming my app admin can effortlessly uphold all the info at a time in a single database.

If the user seals free to use my app and receive my work in a cordial heart, then the application of the application will succeed.

REFERENCES

- [1]. (Block diagram, 31 July,2008)
https://en.wikipedia.org/wiki/Block_diagram, 1
- [2]. (Gantt chart, 1910)
https://en.wikipedia.org/wiki/Gantt_chart,

- [3]. (Activity diagram, 20 July, 2008) https://en.wikipedia.org/wiki/Activity_diagram,

- [4]. UML Sequence diagram, <https://www.smartdraw.com/uml-diagram/>

- [5]. Database diagram.
https://en.wikipedia.org/wiki/Database_design.

- [6]. MongoDB
<https://www.Mongodb.com/en-us/Mongo-server/application-development>

- [7]. Learn UI design, <https://learnui.design/>

- [8]. <https://github.com/alamin133/OnlineShopping.com>.