



Daffodil
International
University

Gayerhat E-commerce Website

By

Md. Raisul Islam

Id: 161-35-1468

This Project report has been submitted in fulfillment of the requirements

For the Degree

Of

Bachelor of Science in Software Engineering.

Department of Software Engineering

DAFFODIL INTERNATIONAL UNIVERSITY

Fall – 2019



Daffodil
International
University

Gayerhat E-commerce Website

Submitted to

Mr. MdFahad Bin Zamal

Assistant Professor & Associate Head (In-Charge)

Department of SWE

Daffodil International University

Submitted by

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DECLARATION

It hereby declares that this project has been done by me under the supervisor of , Lecturer, Department of Software Engineering, Daffodil International University. It is also declared that neither this thesis nor any part of this has been submitted elsewhere for award of any degree.



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APPROVAL

This **project** titled “**Gayerhat E-commerce**”, submitted by **Raisul Islam, ID: 161-35-1468** 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 B.Sc in Software Engineering and approved as to its style and contents.

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ABSTRACT

Electronic Commerce is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products.

Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for human to reduce physical work and to save time.

E-Commerce which was started in early 1990's has taken a great leap in the world of computers, but the fact that has hindered the growth of e-commerce is security. Security is the challenge facing e-commerce today & there is still a lot of advancement made in the field of security.

The main advantage of e-commerce over traditional commerce is the user can browse online shops, compare prices and order merchandise sitting at home on their PC.

For increasing the use of e-commerce in developing countries the B2B e-commerce is implemented for improving access to global markets for firms in developing countries. For a developing country advancement in the field of e-commerce is essential. The research strategy shows the importance of the e-commerce in developing countries for business applications.

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Chapter 1:Introduction

1.1Project Overview:

Gayerhat(□□□□□□□□) is established with a view to providing pure food product to the customer. Gayerhat has special mission and they are committed to provide fresh and pure food to the customer.

1.2Project Purpose:

The main purpose of Gayerhat e-commerce website is to enable Gayerhat team to show their product to their customer so that customer can see product details and order them afterwards. This will also help expansion of Gayerhat as a business.

1.3Background:

Gayerhat(□□□□□□□□) is established with a view to providing pure food product to the customer. Gayerhat has special mission and they are committed to provide fresh and pure food to the customer. I am willing to build this project with a view to help and spread good will of the Gayerhat(□□□□□□□□) so that mass people can enjoy fresh food.

1.4Benefits & Beneficiaries:

Benefits:

1. Gayerhat can spread their products to mass people so that their business can increase.
2. Mass people can enjoy fresh and pure products.

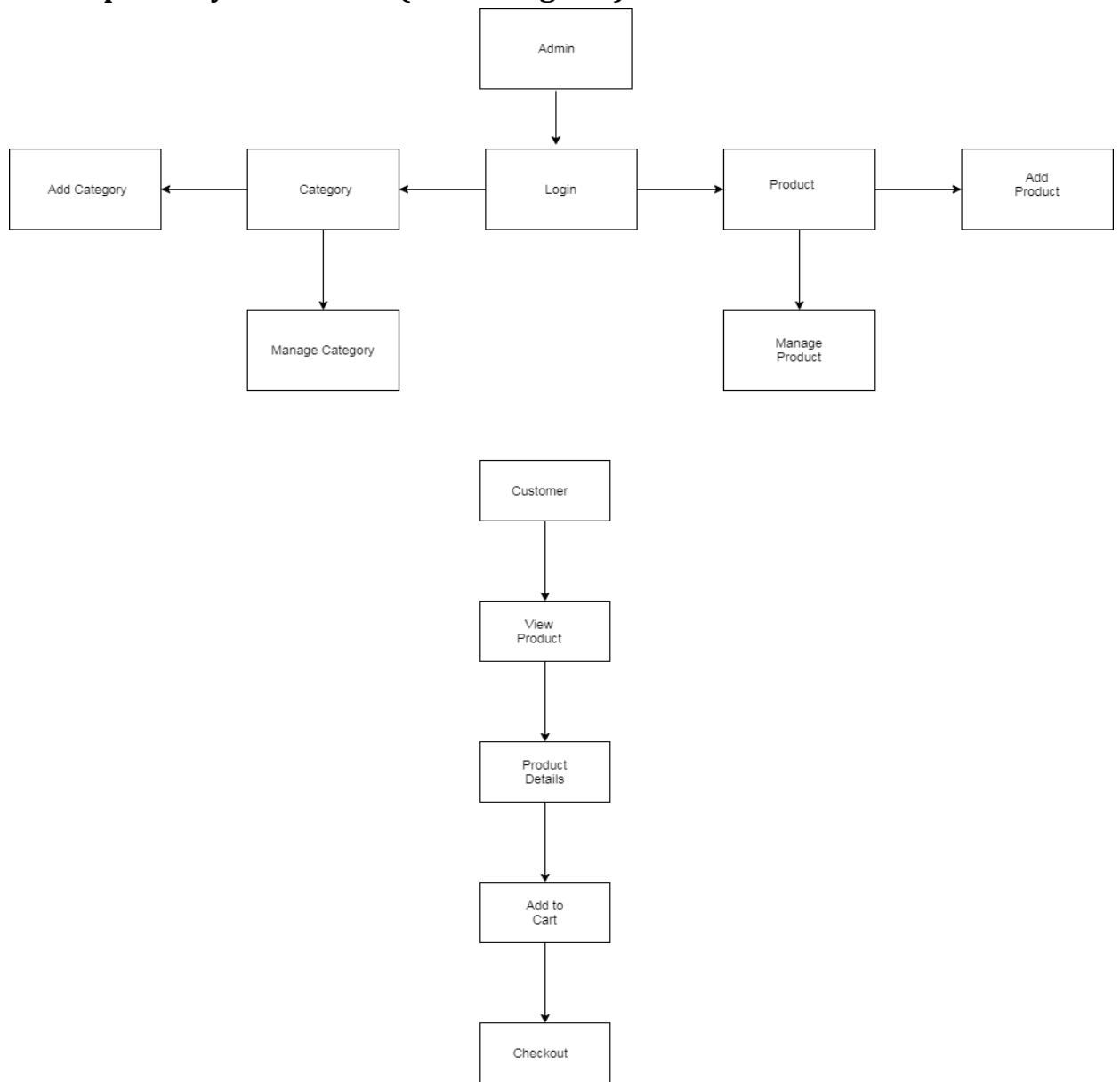
Beneficiaries:

1. Gayerhat(company itself)
2. Mass people who want enjoy pure food.

1.5Goals:

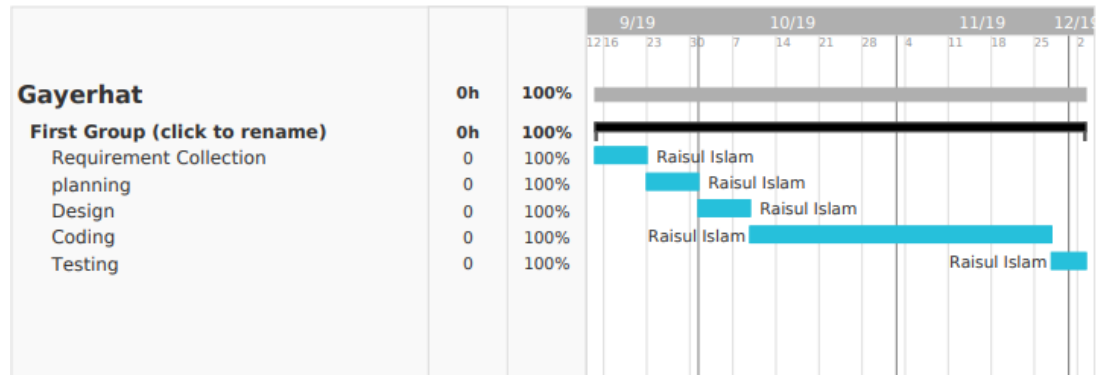
1. To provide a medium so that company can show product to mass people.
2. Expansion of Gayerhat business.

1.6 Proposed System Model (block diagram):



1.7Project Schedule:

Gantt Chart:



Chapter 2: Software Requirement Specification

2.1 Functional Requirements:

1. Admin must be able to log in to the system.
2. Admin must be able to add category to the software.
3. Admin must be able to manage category ,that is edit, update and delete category.
4. Admin must be able to add product to the system.
5. Admin must be able to manage product to the system.
6. Customer must be able to see all products on the webpage.
7. Customer must be able to see product name, price, quantity on the product details page when clicked on the 'product details' button.
8. When clicked on the 'Add to cart' button, customer must be able to see Item, price, quantity, total price.

2.2 Data Requirements:

Defining data requirements for need to build a model. Our system maximum data would be

loaded from internal user. For this cause we need to focus some kind of major points.

Such as:

- 1.Types of entity of the system
- 2.Route data locations
- 3.Capacity and resources of the data requirements
- 4.Data source sequence
- 5.Data availability schedules
- 6.Quantity of data
- 7.Availability of data

2.3 Performance Requirements:

To maintain performance of a software system it is very important. To ensure performance, as a developer we need to manage and maintain some steps. Now, I try to discuss about perspective by going to enhance the performance of this system project.

2.3.1Speed and Latency Requirements:

For software development process it is very important for speed and latency must be ensured

while retrieving data from the cloud server.

SLR-1 Data generate result must be faster.

Description When Admin access the software, it's generating report based on cloud database very quickly.

Stakeholders All users.

2.3.2Precision or Accuracy Requirements:

Result of a software system to be to the end user is must be needed to be accurate. Wrong information might be ruined the whole business process.

2.3.3Capacity Requirements:

We must developed a system which be capable to handle user, provide accurate information, Handling database, manage http request etc.

2.4Dependability Requirements:

The term dependability is measured based on four dimensions. Such as:

- ☐ Availability
- ☐ Reliability
- ☐ Safety
- ☐ Security

When we want to say our system is dependable and safe then we must say that we can fulfill the

four above dimension. We also want to say that there is no way to make any kind of mistakes of

our system. Besides that, it is also very important to limit the damage which might be caused by

system failure.

2.4.1 Reliability Requirements

Now, I will mention requirements which are related to reliability and availability.

2.4.2 Availability Requirements

Quantity of the products should be available for customers to purchase.

2.4.3 Safety-Critical Requirements

Admin must be valid and authenticated before login.

2.5 Maintainability and Supportability Requirements

2.5.1 Maintenance Requirements

Website should be uploaded to web server with proper rules.

2.5.2 Supportability Requirements

Web server should be authentic where the website is going to be uploaded.

2.6 Security Requirements

Security requirements are one of the most common requirements for my content management system.

2.6.1 Access Requirements

There is no registration system for visitor. This is why there is no security issue for visitor. Admin have to be registered. System verifies user email when register. System also authenticates user email and password when login.

2.6.2 Integrity Requirements

No fields can be left empty when updating product details and category details.

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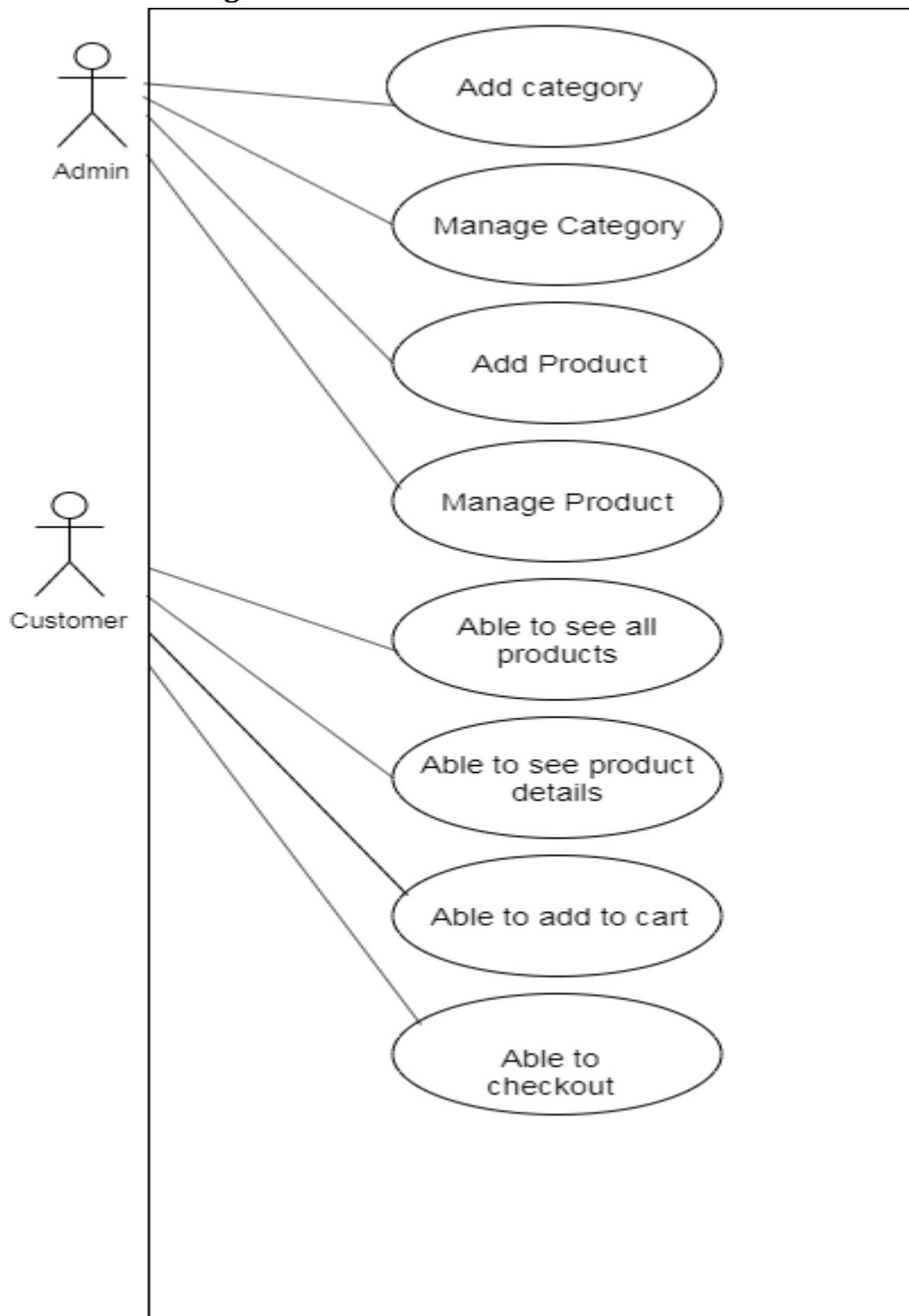
2.7Legal Requirements

2.10.1Compliance Requirements

Customer can submit complain about faulty checkout and products.

Chapter 3: System Analysis

3.1 Use Case Diagram



3.2 Use Case Description

Add Category:

Use case name	Add Category:	
Scenario	Admin can add category.	
Triggering Event	Different categorized items need to be added for the purpose of business.	
Brief Description	Admin should be able to add different categorized product with category name, category short description, category long description.	
Actors	Admin	
Related Use Case		
Stakeholders	Admin, company	
Pre-conditions	Admin must be authorized and logged in to the system	
Post-conditions	Category must be added to the software.	
Flow of activities	Admin	
	1. Admin clicked on the 'Add category' button. 2. A form opens and admin put category name, category long description. 3. After all necessary inputs admin clicks on the "save changes" and all the information saved in the database.	
Exception conditions	1. Other person hacked admin password and username.	

Manage Category:

Use case name	Manage Category
Scenario	Admin can edit, delete category.
Triggering Event	New category need to be edited for business purpose.
Brief Description	Admin should be able to edit, delete category.
Actors	Admin

Related Use Case		
Stakeholders	Admin,company	
Pre-conditions	Admin must be authorized and logged in to the software. A category needs to be edited.	
Post-conditions	Category is edited.	
Flow of activities	Admin	
	1. A category needs to be edited. 2. Admin clicks on the edit button. 3. After clicking on the edit button, admin is redirected to the edit category page. Then admin can edit category details.	
Exception conditions	1. Category is Edited with wrong information.	

Add Product:

Use case name	Add Product	
Scenario	Admin can add product.	
Triggering Event	A product needs to be added to the software.	
Brief Description	For business purpose a product needs to be added to the software.	
Actors	Admin	
Related Use Case		
Stakeholders	Admin,Company	
Pre-conditions	Admin must be authorized and logged in to the software. A category needs to be edited.	
Post-conditions	A product is edited	
Flow of activities	Admin	

	<ol style="list-style-type: none"> 1. A product needs to be added. 2. Admin clicks on the add product button. 3. After clicking on the add product button, admin is redirected to the add product page. Then admin can add product details. 	
Exception conditions	1. Wrong product details added to the system.	

Manage Product:

Use case name	Manage Product	
Scenario	Admin can product.	
Triggering Event	A product needs to be edited to the software.	
Brief Description	For business purpose a product needs to be added to the software.	
Actors	Admin	
Related Use Case		
Stakeholders	Admin	
Pre-conditions	Admin must be authorized and logged in to the software. A product needs to be edited.	
Post-conditions	A product is edited	
Flow of activities	Admin	
	<ol style="list-style-type: none"> 1. A category needs to be edited. 2. Admin clicks on the edit button. 3. After clicking on the edit button, admin is redirected to the edit category page. Then admin can edit category details. 	

Exception conditions	1. Category is Edited with wrong information	

Able to see Products:

Use case name	Able to see Products	
Scenario	Customers can be able to see products.	
Triggering Event	Customers want to see Gayerhat product on the website.	
Brief Description	Customers want to see Gayerhat product on the website. Therefore customers go to Gayerhat website and see different products.	
Actors	Admin	
Related Use Case		
Stakeholders	Customer, Gayerhat	
Pre-conditions	Customer must type valid Gayerhat website on browser address bar.	
Post-conditions	Gayerhat website on valid page.	
Flow of activities	Customer	
	1. Customer types valid Gayerhat URL on address bar. 2. Gayerhat website appears with Gayerhat products.	
Exception conditions	1.Customer types wrong url. 2.WrongGayerhat website appears.	

see product details:

Use case name	see product details	
Scenario	Customer go to Gayerhaturl and see Gayerhat products.	
Triggering Event	Customer wants to see Gayerhat products.	
Brief Description	Customer wants to see Gayerhat products and types Gayerhaturl on the browser's address bar.	
Actors	Customers	
Related Use Case		
Stakeholders	Customers	
Pre-conditions	Customer types valid url on browsers address bar.	
Post-conditions	Customers see valid Gayerhat webpage and products.	
Flow of activities	Customer	
	1.Customer wants to see Gayerhat products. 2.Customers type valid Gayerhaturl on the browser address. 3.Gayerhat website appears with various products. 4.Within various products customer clicks on the 'Product details' button. 5.Then customer is redirected to the 'Product details' page.	
Exception conditions	1.Customer types invalid url 2.Customer does not able see valid Gayerhat products.	

Able to add to cart:

Use case name	Add to cart	
Scenario	Desired product customer wants to buy and Click on “add to cart” button.	
Triggering Event	Customer wants to buy desired product.	
Brief Description	Customer wants to buy desired product and click on the “Add to cart” button.	
Actors	Customer	
Related Use Case		
Stakeholders	Customer,company	
Pre-conditions	Customer must go to product details page.	
Post-conditions	Customer added to cart successfully	
Flow of activities	Customer	
	1.In the “product details” page, after selecting the desired product. 2.Customer able to add to cart the product that they want to buy.	
Exception conditions	1.Customer don’t able to ‘add to cart’ the product that they want to buy.	

Able to checkout:

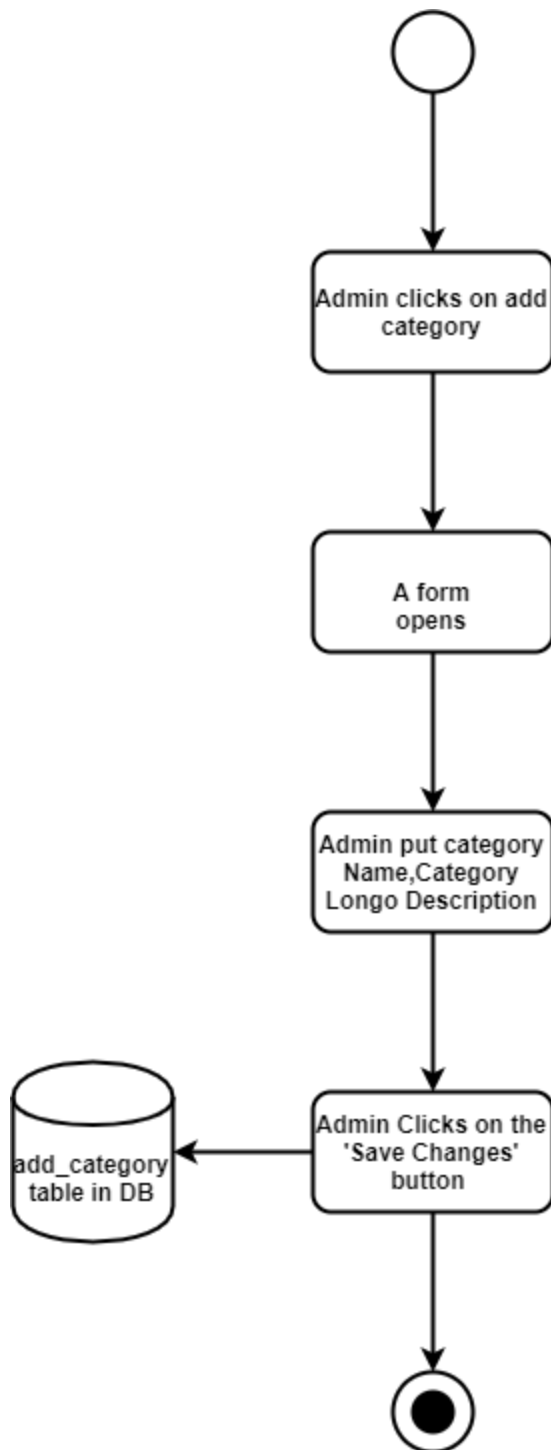
Use case name	Able to checkout	
Scenario	Customer able to checkout after selecting the product, they want to buy.	
Triggering Event	Customer wants to buy product.	
Brief Description	Customer wants to buy product and they add to cart the product	
Actors	Customer	
Related Use Case		
Stakeholders	Customer, Company	

Pre-conditions	Customer should add to cart product that they want to buy.	
Post-conditions	After added to cart customer must be able to see what product they want to checkout.	
Flow of activities	Customer	
	1. Customer clicks on the add to cart button on the 'product details' page and then redirected to the 'checkout' page. 2. Then customer clicks the 'checkout' button and customer checks out.	
Exception conditions	1. The product customer wants buy is not coming on the 'add to cart' page.	

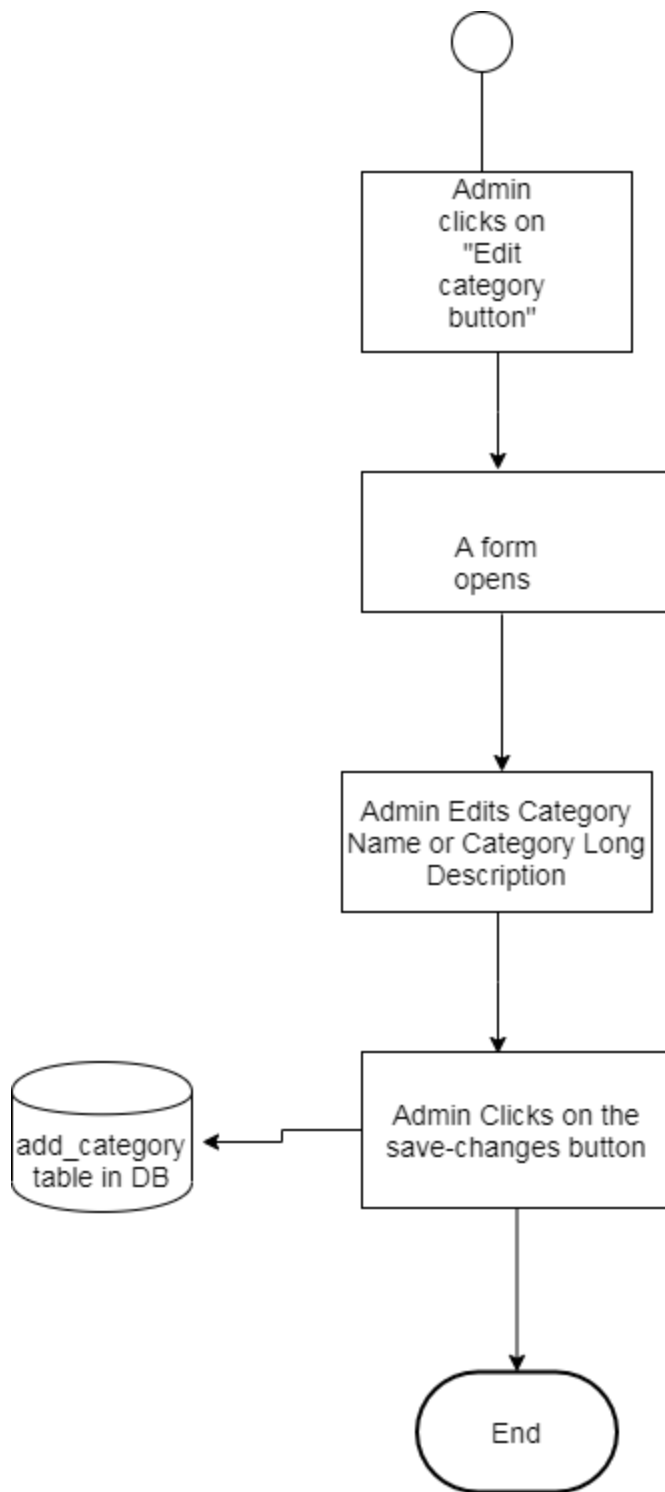
3.3Activity Diagram (for each use case)

Add Category:

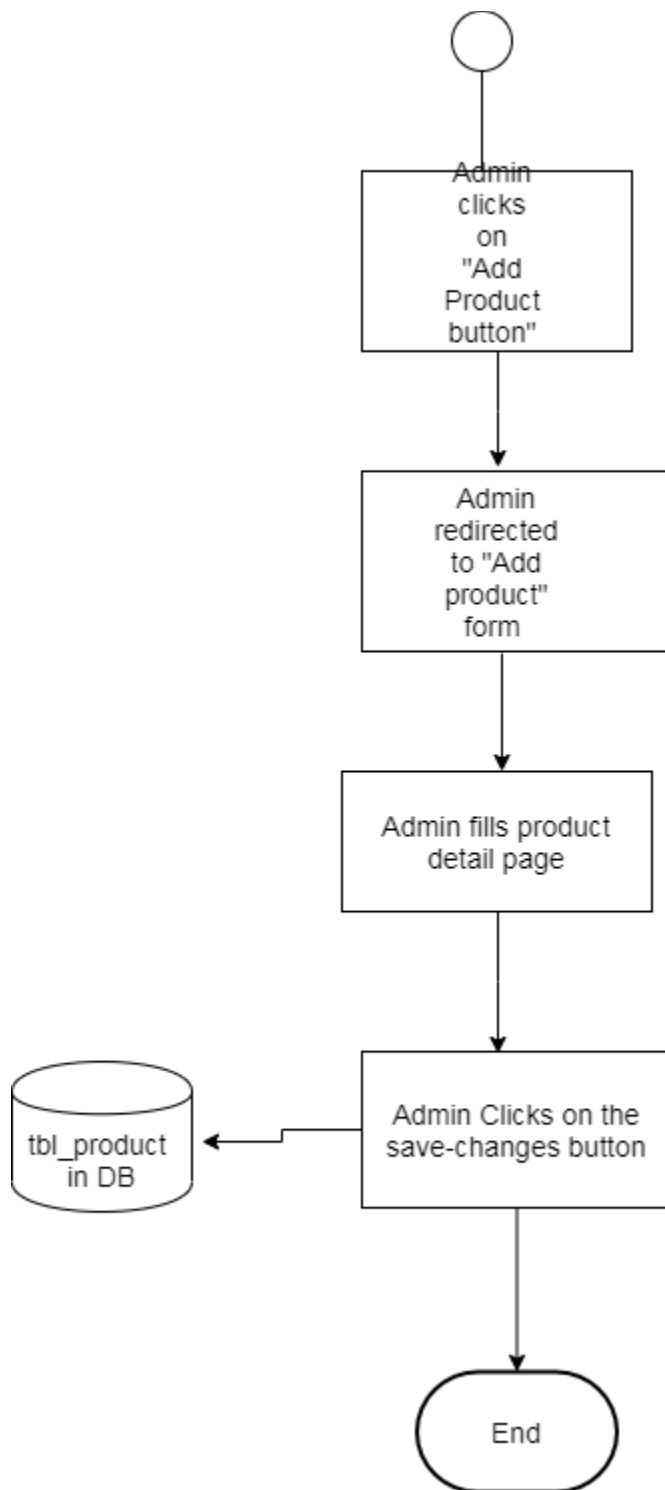
©Daffodil International University



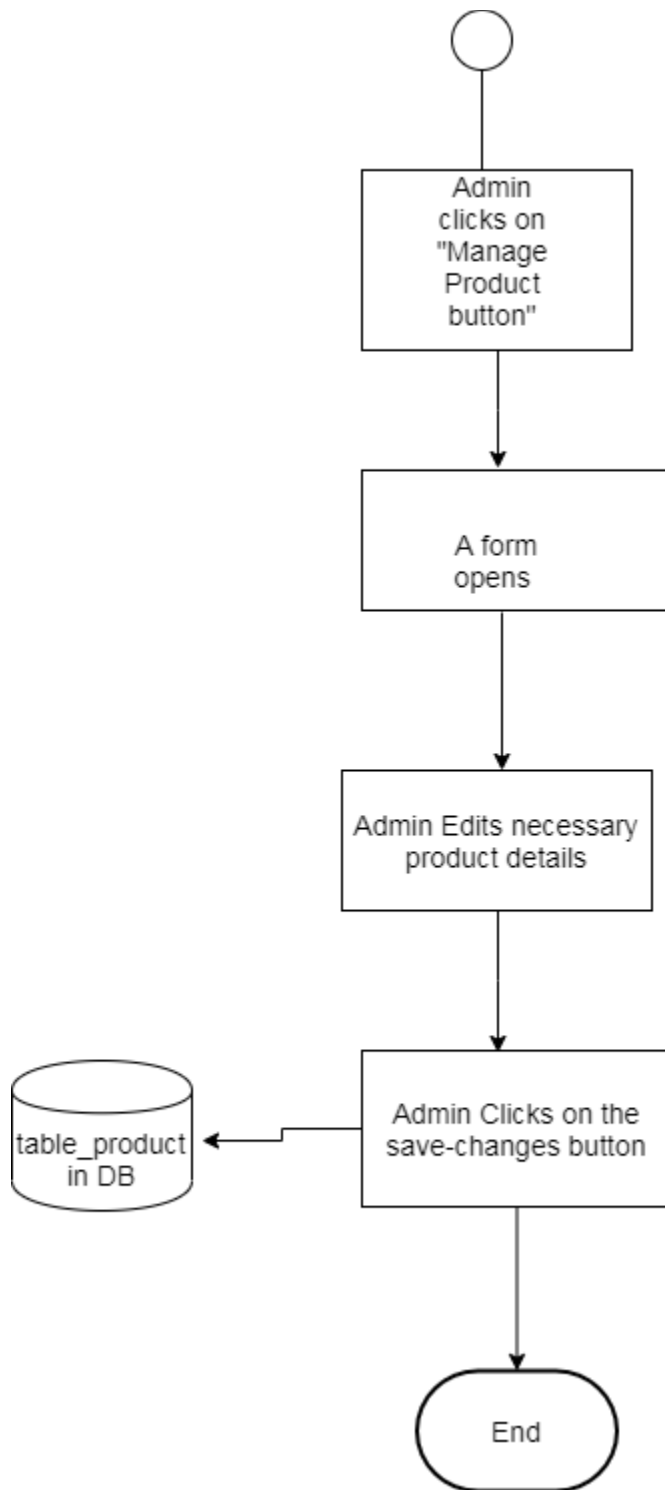
Manage Category:



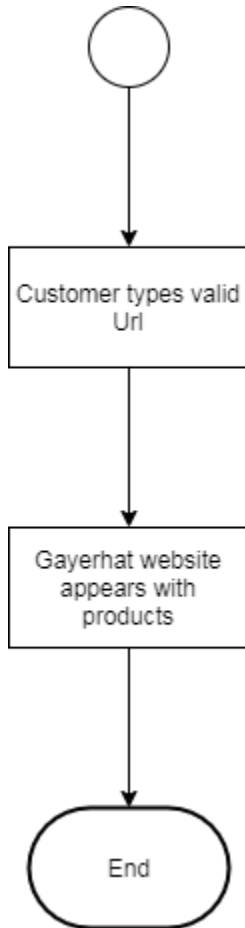
Add Product:



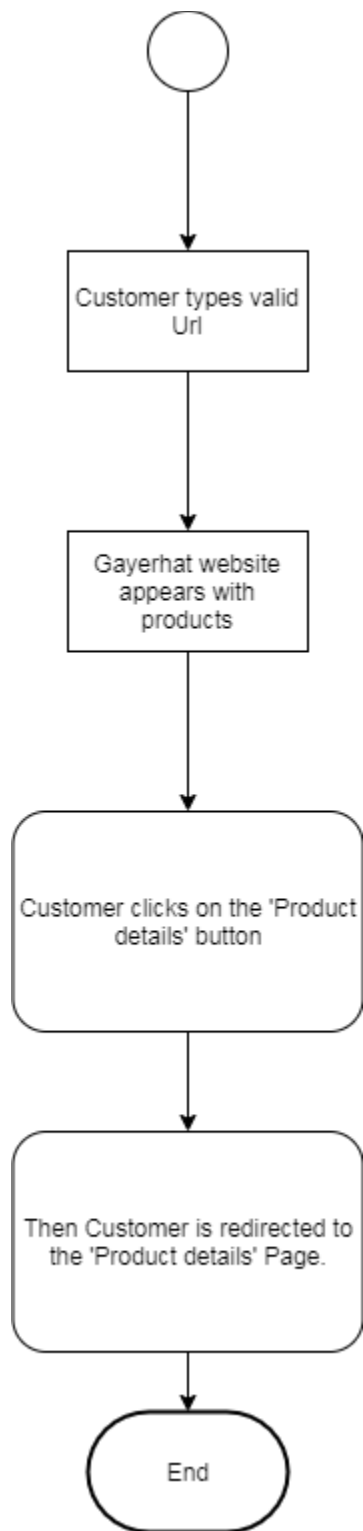
Edit Product:



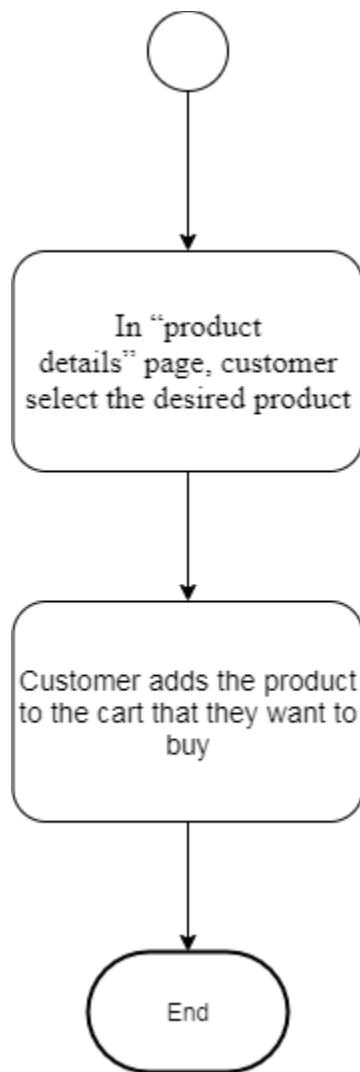
See Product:



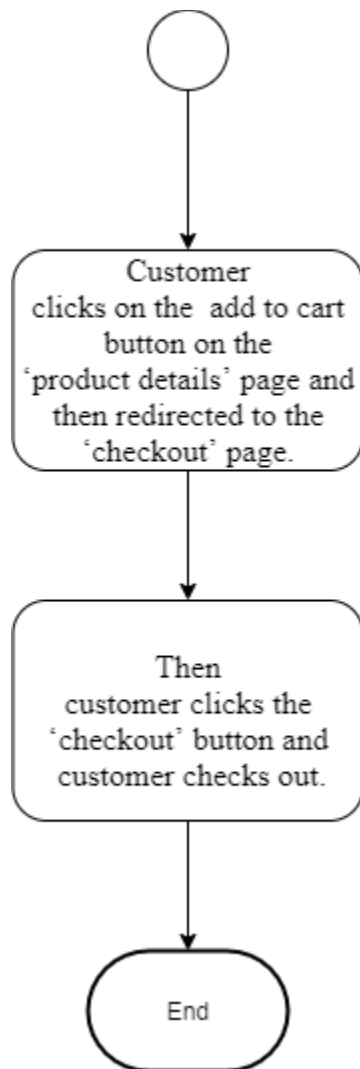
see product details:



add to cart:

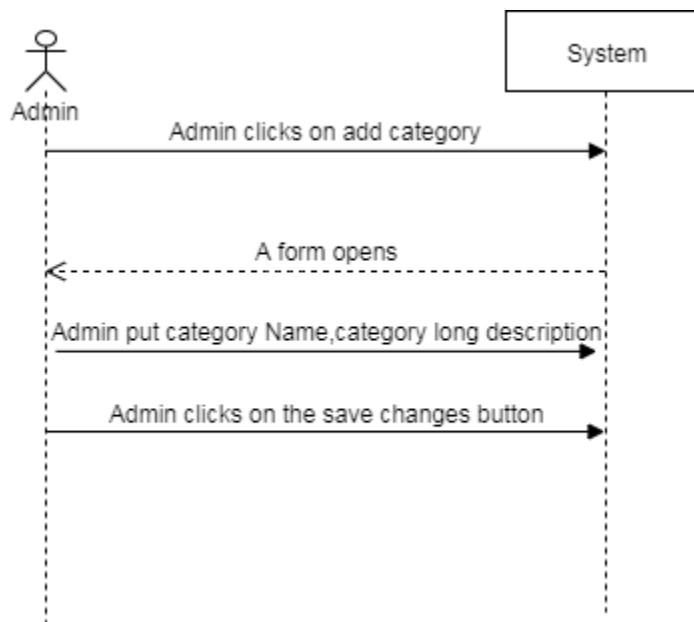


Checkout:



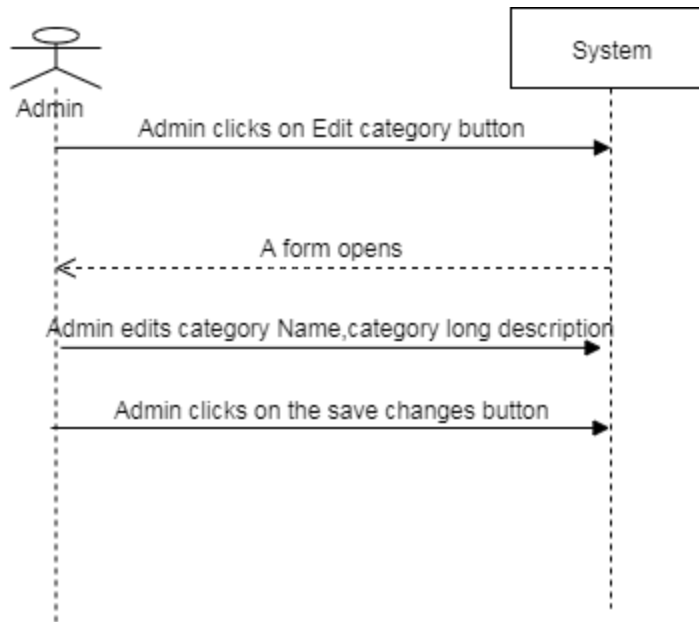
3.4 System Sequence Diagram (for each use case)

1. Add category:

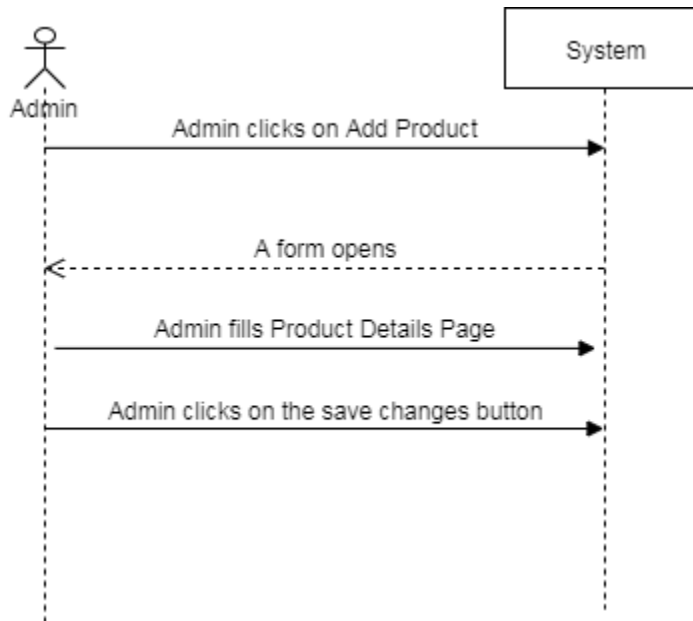


Manage Category:

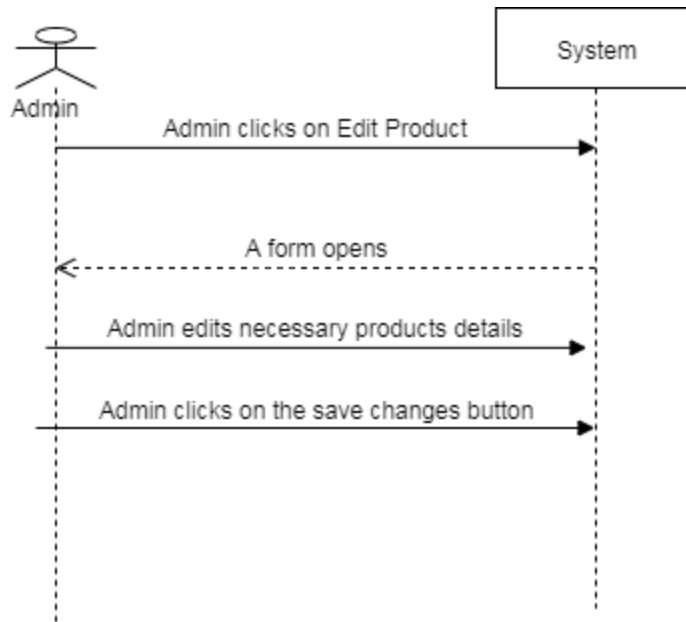
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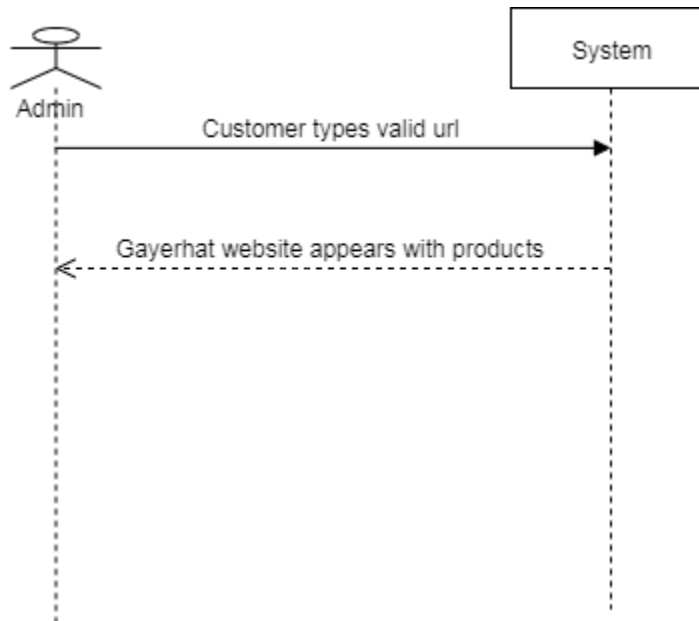
Add Product:



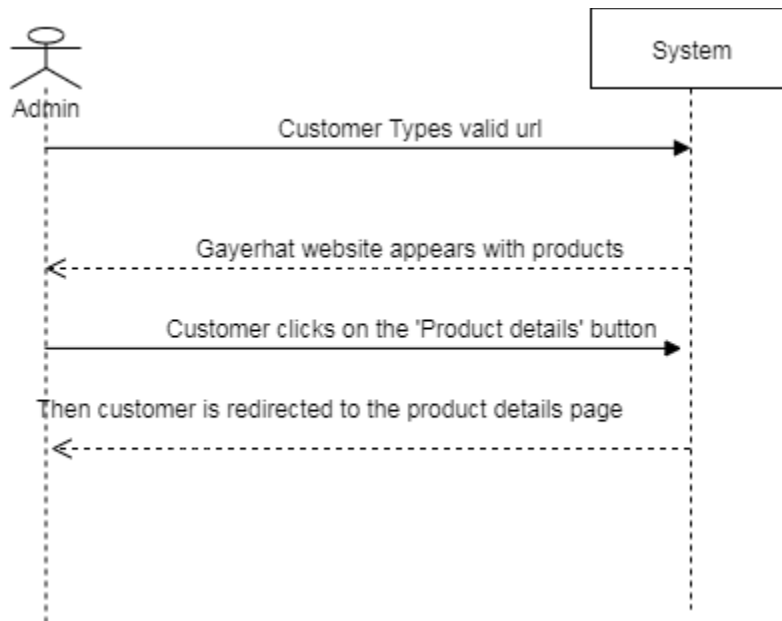
Manage Product:



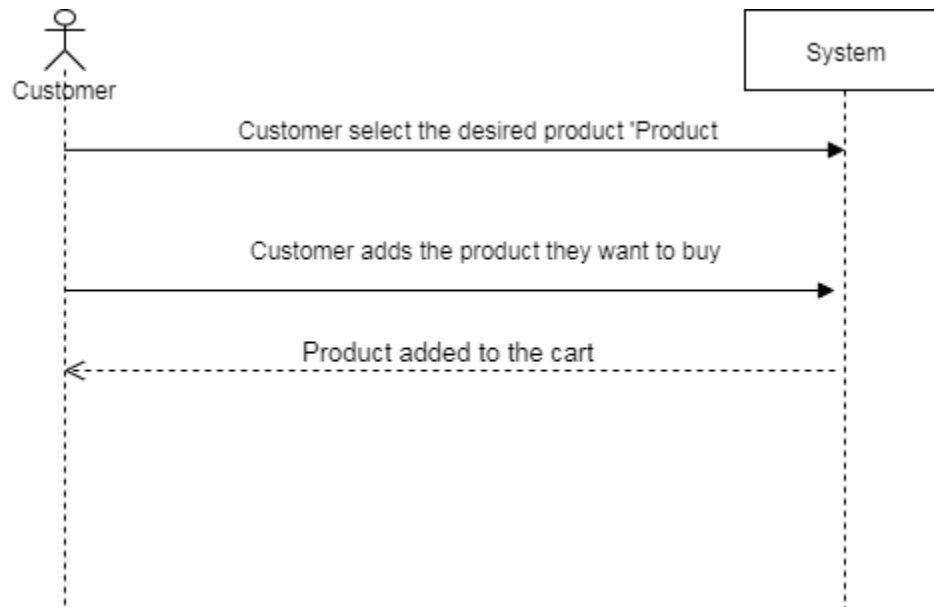
See all Products:



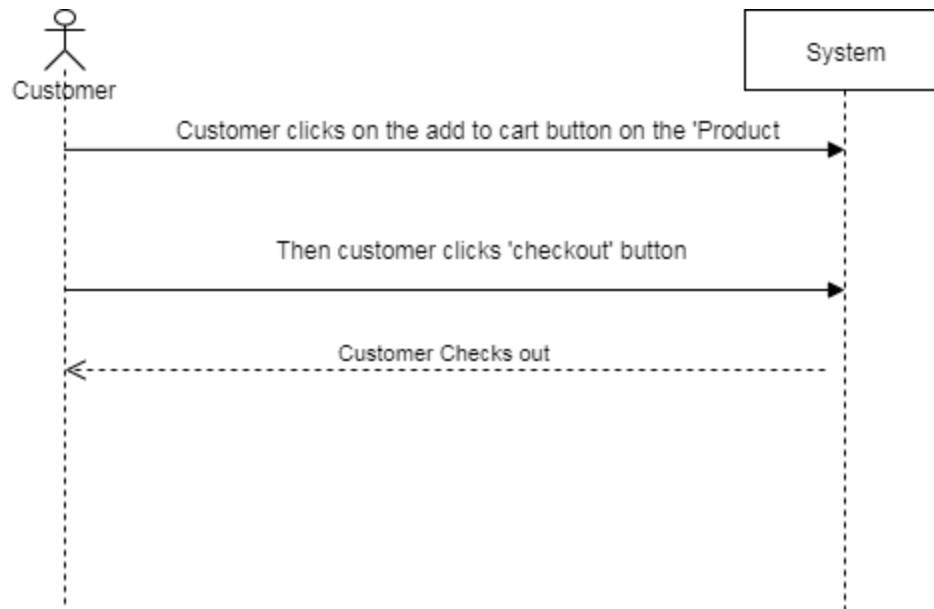
See product details:



Add to cart:



Able to check out:



Chapter 4: System Design Specification

4.1 Class Responsibilities Collaboration (CRC) Cards

Admin	
Show dashboard	Admin_model

Admin_login	
check_admin_login check_admin_logout admin_login_check	Admin_model

Cart	
add_to_cart show_cart	Cart_model

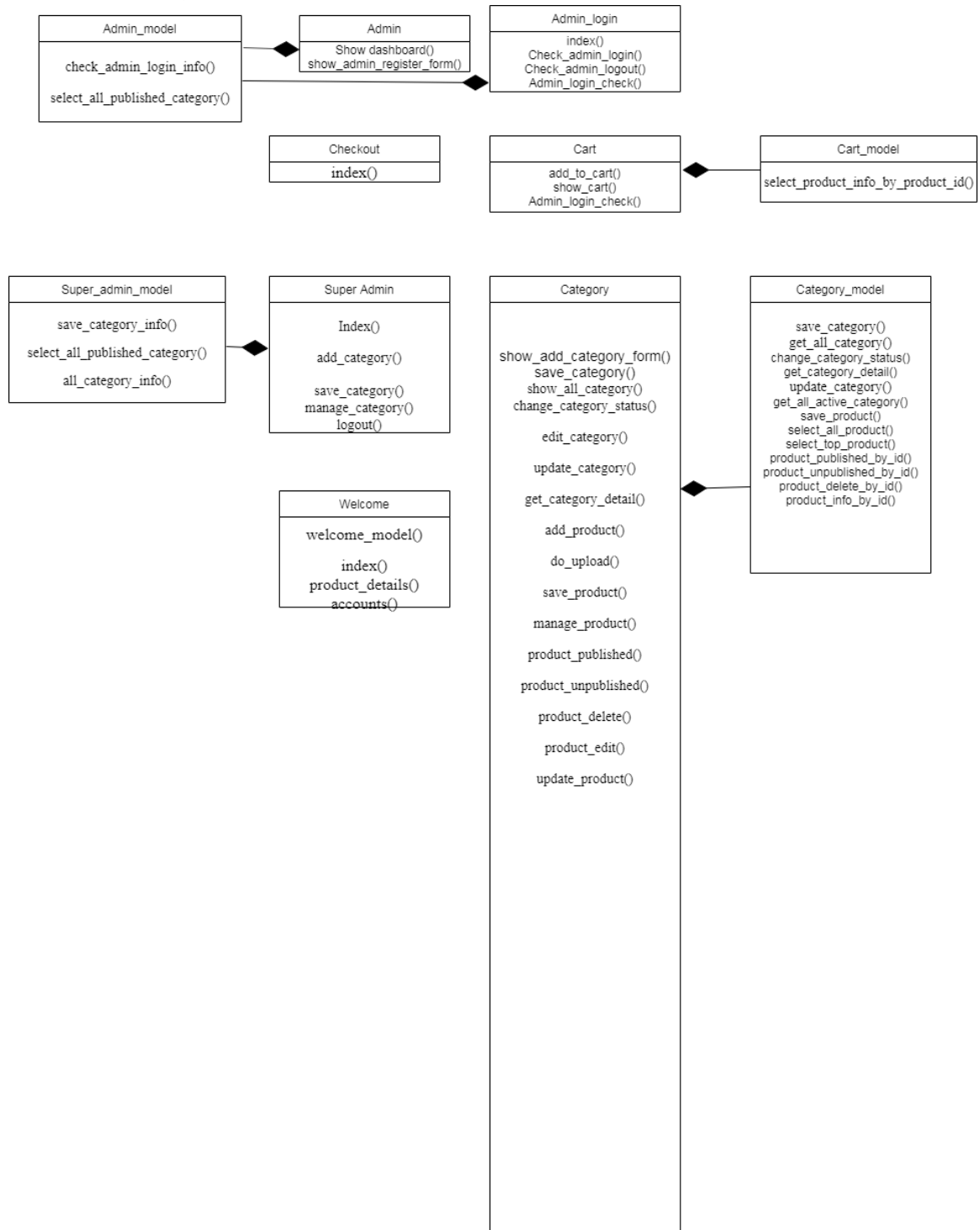
Category	
show_add_category_form save_category show_all_category change_category_status edit_category update_category get_category_detail add_product do_upload save_product manage_product product_published product_unpublished product_delete product_edit update_product	Category_model

Checkout	
index	Admin_model

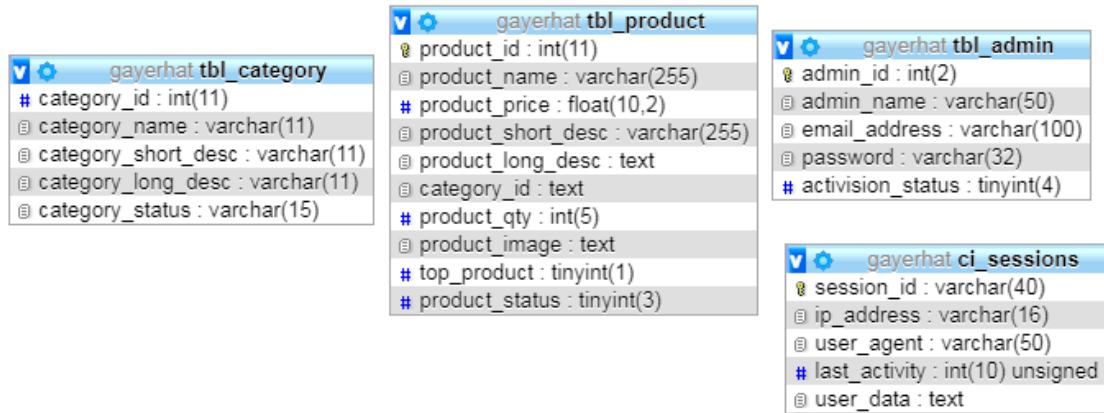
Admin	
Show dashboard	Admin_model

Super_admin	
Index add_category save_category manage_category logout	super_admin_model
Welcome	
welcome_model index product_details accounts	Welcome_model

4.2 Class Diagram



4.4 Database Design Diagram



4.5 Development Tools & Technology

4.5.1 User Interface Technology

HTML, CSS, Bootstrap, jQuery UI

Twitter Bootstrap

Font Awesome

4.5.2 Implementation Tools & Platforms

PHP and Codeigniter Framework

Netbeans IDE

phpmysql

Apache HTTP Server

Chapter 5: System Testing

System Testing is a degree of programming testing where a total and incorporated programming is tried. The reason for this test is to assess the framework's consistence with the predefined prerequisites. This is planned for distinguishing and adjusting mistake. The real targets of this action are to guarantee that the procedure done by the application is right. The test points in compelling and deliberate testing of the system.

5.1 Testing Features

5.1.1 Features to be tested

- Login
- Add category
- Manage category
- Add product
- Manage product
- See products
- See product Details
- Add to cart
- Checkout

5.1.2 Test Approach

Gayerhatcompany itself will test the software according to their need.

5.1.3 Pass/Fail Criteria

Pass:

1. Customer able to successfully checkout

Fail:

2. Customer not able to checkout

5.3 Testing Environment (hardware/software requirements)

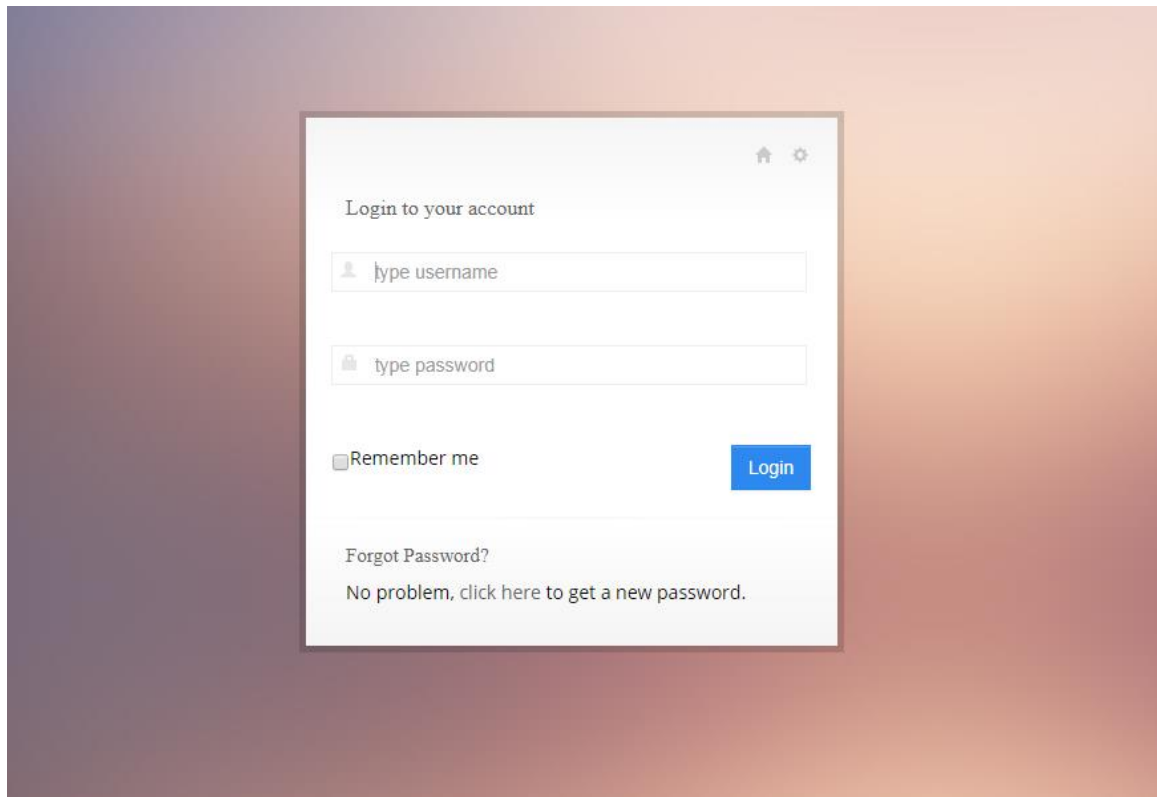
Testing should be done in live server in Gayerhat live server.

Chapter 6: User Manual

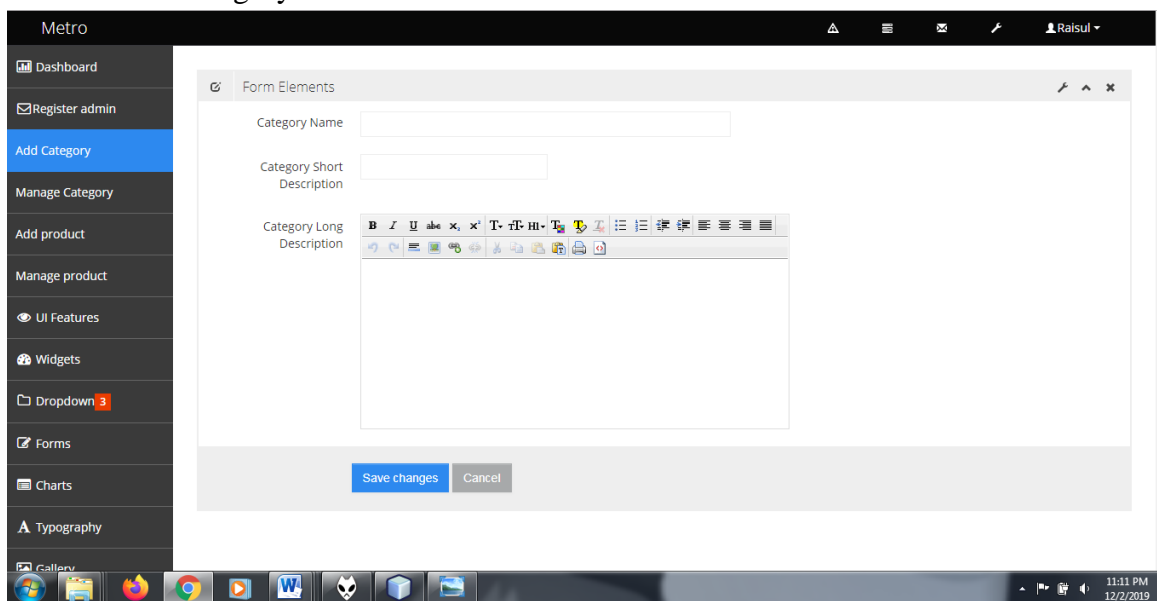
6.1 User Manual (Admin user)

For Admin:

1. Admin Login












2. Admin add category



3.Admin manage category

The screenshot shows the Metro Admin Dashboard with the 'Manage Category' page active. The sidebar on the left contains the following menu items: Dashboard, Register admin, Add Category, **Manage Category**, Add product, Manage product, UI Features, Widgets, Dropdown 3, Forms, Charts, and Typography. The main content area is titled 'Members' and shows a table with 3 entries. The table has columns for Category ID, Category Name, Category Name, and Actions. The entries are: 1 Chanachur Active, 1 Ghee Active, and 2 ddd Deleted. The Actions column contains icons for edit, delete, and add. Below the table, it says 'Showing 1 to 3 of 3 entries' and has pagination controls: 'Previous 1 Next'.

Category ID	Category Name	Category Name	Actions
1	Chanachur	Active	  
1	Ghee	Active	  
2	ddd	Deleted	  

3.Admin adds products

The screenshot shows the Metro Admin Dashboard with the 'Add product' page active. The sidebar on the left contains the following menu items: Dashboard, Register admin, Add Category, Manage Category, **Add product**, Manage product, UI Features, Widgets, Dropdown 3, Forms, Charts, and Typography. The main content area is titled 'Form Elements' and contains the following form fields: Product Name (text input), Product Price (text input), Product Quantity (text input), Product Long Description (rich text editor), Product Category (dropdown menu), and Product Image (file upload button). The Product Category dropdown is currently set to 'Select Category'.

4.Admin edits products

Form Elements

Product Name

chanachur

Product Price

70.00

Product Quantity

10

Product Long Description

B I U abc x x' T t H h T y i

Product Category

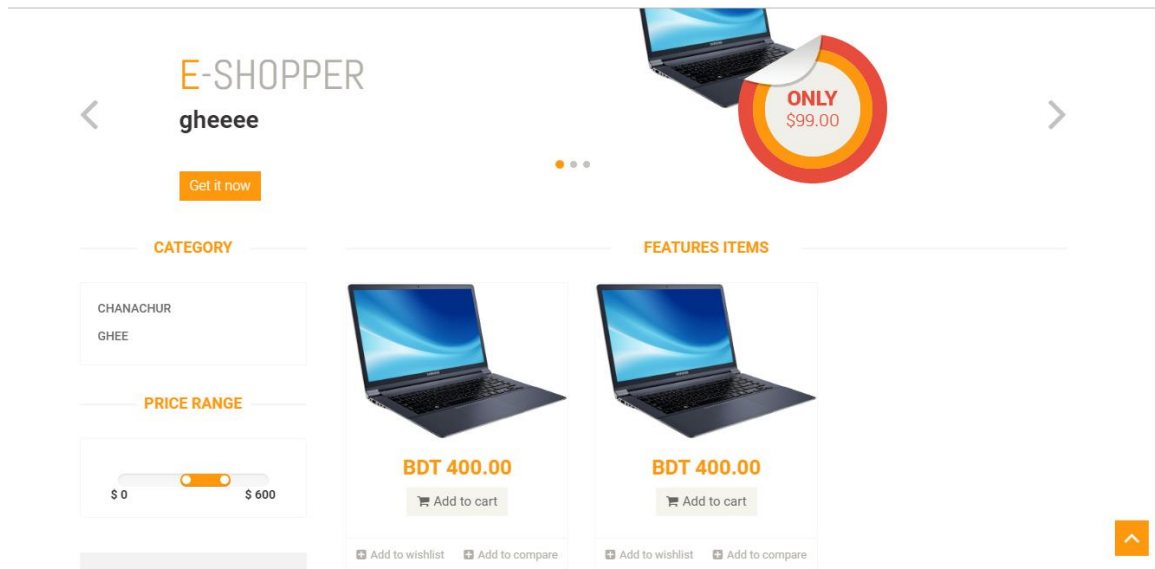
Product Image

No file selected Choose File

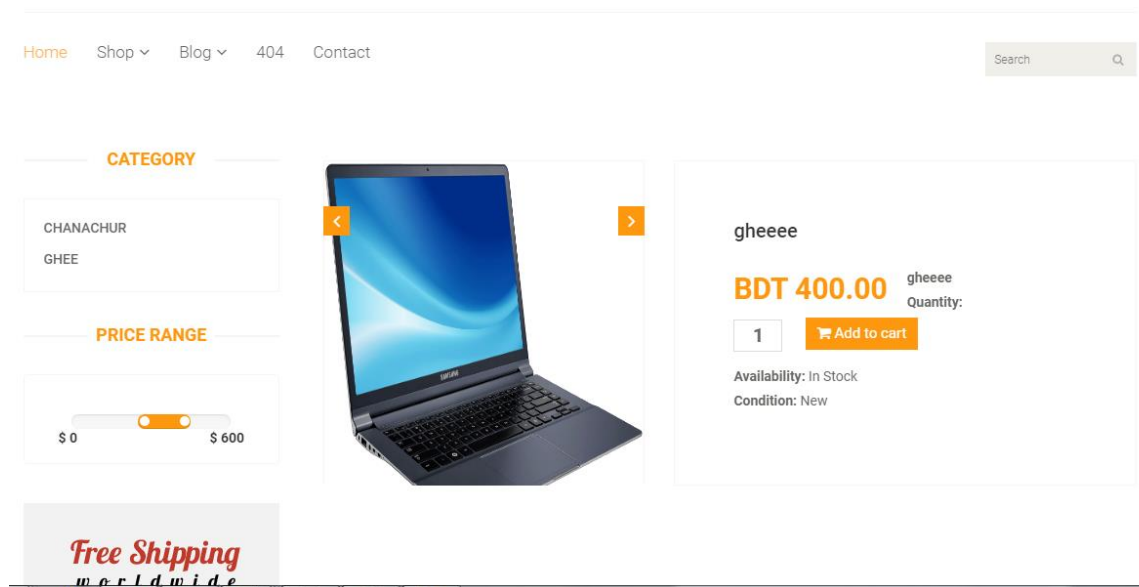
6.2 User Manual (For Customer)

For Customer:

1.Customer explore products




2.Customer explores product details



3.Customer adds to cart

[Home](#) [Shop ▾](#) [Blog ▾](#) [404](#) [Contact](#)

Search 

CATEGORY

CHANACHUR
GHEE

PRICE RANGE

\$ 0


\$ 600

Free Shipping

worldwide

Home

Shopping Cart

Item	Price	Quantity	Total
 gheeee	BDT 400.00	<div>+ 40 -</div>	BDT 16000
Colorblock Scuba Web ID: 1089772	\$59	<div>+ 1 -</div>	\$59
Colorblock Scuba Web ID: 1089772	\$59	<div>+ 1 -</div>	\$59


3.Customer Checkout

Colorblock Scuba
Web ID: 1089772

\$59

+ 1 -

\$59



What would you like to do next?

Choose if you have a discount code or reward points you want to use or would like to estimate your delivery cost.

☐ Use Coupon Code

☐ Use Gift Voucher

☐ Estimate Shipping & Taxes

Country:

Region / State:

Zip Code:

United States ▾

Select ▾

Get Quotes

Continue

Cart Sub Total

BDT 16000

Shipping Cost

BDT100

Total

BDT 16100

Update

Check Out

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Chapter 7: Project Summary

7.1 Github Link

<https://github.com/Raisul1239/Gayerhat>

7.2 Limitations

Online payments method not included.

7.3 Obstacles & Achievements

Obstacles:

Online payment method not included

Achievements:

Gayerhat can successfully show their pure product to the entire customer.

7.3 Future Scope

Online payment method and more customization will be included

Appendix

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Test case

Tools

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Executive

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Summary

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System description

Software Requirement Specification

Software Development Plan

System Design System

Overview System Software Specification

F

Functional Requirements

