

Author: Saqlain Mahin

Contact Email: Saqlainmahin72@gmail.com, Saqlain.mahin54@bcmail.cuny.edu

Semester: Spring 2021

Section: VC1B

Supervisor name: Harry Goldberg

Organization/Department: CIS Faculty

Contact Info: Harry.Goldberg@brooklyn.cuny.edu

E-commerce Store

Abstract

E-commerce, which currently a huge industry and everyone is trying to mine it more and more. Its a big money, merging marketing and technology system to promote retailing traditional business. It is a fast developing commerce industry which is making people more comfortable to buy and sell things with just in a matter of click. E-commerce which is also called E-business is a growing research field that knows how to amalgamate information technology and various businesses to promote all human beings' social activities. Business-to-Business (B2B), Business-to-Consumer (B2C), and Consumer-to-Consumer (C2C), in all forms, have grown rapidly.

The developed application is a Web-Application "E-Commerce Store" is designed to promote E-commerce and to use it for the people who want to buy everything under one store. The application provides the buyers with all the products which have been added by the admin to the store website. Currently, it is a small business that is like many others just started to grow step by step and reach higher goals. The products now available are small in range and will be more in near future. The designed website provides centralized security as all of the activities are to be managed by the admin. The two kinds of users i.e. Admin who controls and manages all the activities and the other one is the user who has to register himself and then reach the desired product which the one wants to buy. So, the first step to get in the store would be the registration process of the user after which further products and product details can be seen and bought.

The designed application is based on PHP as a coding language using XAMPP server with database on myphpadmin and localhost is executing the website. The database is designed to initiate with the admin details which has to manage all the website doings. The application E-Commerce will be promoting the web and IT usage for business development and for considering people's ease to buy and review products online.

Table of Contents

1.1	Objectives	2
1.1.1	To Expand a Small Business	2
1.1.2	To Reach Heavy Customers	2
1.1.3	Customer Satisfaction	2
1.1.4	Website for Users Interaction	2
1.1.5	Security of Users and Products	3
1.1.6	Boosting Services' Efficiency	3
2.1	Domain Research	4
2.1.1	Amazon.com [5]	4
2.1.2	Alibaba.com [4]	5
3.1	Software and Hardware Technology Requirements	6
3.1.1	Hardware Requirements	6
3.1.2	Software Requirements	6
3.2	Functional and Non-Functional Requirements	6
3.2	Functional requirements	6
	Tools and Technology	6
3.1.1	Features of Website	6
3.2	Non-Functional Requirements	7
3.2.1	Reliability	7
3.2.2	Availability	7
3.2.3	Security	7
3.2.4	Maintainability	7
3.2.5	Portability	7
3.2.6	Speed and Throughput	7
3.3	Methodology	8
3.3.1	Why we chose RAD [3]	8
3.3.2	Phase 1: Discussion and Requirements planning	8

Requirement Elicitation	8
Risk Identification	8
3.3.3 Phase 2: Prototyping.....	9
Develop design of system.....	9
Develop and Analyze Prototype	9
Identify deliverables	9
3.3.4 Phase 3: Rapid construction	9
Coding	9
Software Testing.....	9
3.3.5 Phase 4: Deliver Final Project.....	10
Launch project	10
Write reports	10
4.1 UML Diagrams	11
4.1.1 Use Case Diagram.....	11
4.1.2 Flow Chart.....	12
4.1.3 Sequence Diagram.....	13
4.2 Code Description.....	14
4.2.1 Index File	14
4.2.2 Login Code	16
4.2.3 Logout Code	17
4.2.4 My-Wishlist.php	17
4.2.5 My Cart.php	18
4.2.6 Payment-method.php.....	21
4.2.7 Category.php	21
4.2.8 Get-subcat.php	22
4.2.9 Check-availabilty.php.....	22
4.2.10 Pending-orders.php.....	23
4.2.10 Edit-product.php	23
4.2.11 Contact-us.php.....	24
4.2.12 Bill-ship-addresses.php.....	25
4.2.13 About-us.php	25
4.2.14 My-account.php.....	26

5.1 Testing of the Features.....	27
5.1.1 User Interface and Screenshots of running website	27
5.1.2 Menu Bar.....	27
5.1.3 Home Page	27
5.1.4 About us	28
5.1.5 Categories.....	29
5.1.6 Subcategories	29
5.1.7 First Aid.....	30
5.1.8 Personal Goods.....	30
5.1.9 Contact Us	31
5.1.10 Store Information	31
5.2 Database Testing	32
5.2.1Admin Interface.....	32
5.2.2 Signup for Account	32
5.2.3 Login user account	33
5.3 Structure of Database.....	33
5.3.1 List of All the Tables on phpMyAdmin.....	33
5.3.2 Admin Table.....	34
5.3.3 Category Table	35
5.3.4 Orders Table.....	35
5.3.5 Order Track History Table	36
5.3.6 Products Table.....	36
5.3.7 Sub Category Table.....	37
5.3.8 Users Table.....	37

Figures

Figure 1 - Use case Diagram.....	11
Figure 2 - Flow Chart.....	12
Figure 3 - Sequence Diagram	13

Introduction

This era belongs to the technological sight of everything, where robots are working in replacement of human forms and cyber-physical systems. If we look around, one can easily see from smartphones to small handheld computers, which can be taken everywhere so easily. Due to this portable ecosystem, a compact system with everything in it, the era of development is constantly rotating/shifting. From transport to grocery, studying, teaching, earning, business, shopping everything can be taken in one's hand. Most companies are operating in an online system currently. Any company can design a website to operate the systems online and around the globe. It is easier to promote a business concept by selling it through internet tools, which will help the company increase its profit/revenue. Several online websites sell the product and enable consumers to purchase it via the online method. On the other hand, certain websites function solely as a middleman between buyers and sellers.

This method enables users to sell what they have by posting the product to websites where users can view the items submitted by users and bid on them. Those that wish to purchase the product can do so by selecting it and adding it to their shopping cart. Furthermore, it helps users to save the product in his/her wish list, which is stored, and the user will later purchase the product. Today, 4 billion¹ people (or 53% of the global population) have access to the internet, and almost all of them (92.6%) do so via mobile devices. Every day, 85 percent of internet users (3.4 billion) log in and spend an average of six and a half hours online. Consumers are spending more time, and doing so more often, on a growing number of different interactive events. It is undeniable that internet connectivity, mobile devices, and technical technologies are redefining consumers' every encounter, and that they will continue to empower and disrupt many facets of consumers' lives long into the future [2].

Before designing this E-Commerce project, another project has been designed already which is ultimately related to this project. A cookie /session-based shopping cart design and implementation where users were able to save/buy products using only cookies to store users information, which is temporary, so this project an E-Commerce Store has been designed to create a website where users must be able to look for the desired products and also buy the products using a real database system that store their information. That's the reason behind developing this web application.

1.1 Objectives

With evolving trends of Internet Marketing and IoT, Ecommerce is a service that lets companies market their goods or services to consumers around the world through an electronic network. E-commerce is known as Electronic Commerce. As the term means, e-commerce encompasses all types of companies that use the internet for data sharing and/or money exchange. It is successfully used in a variety of applications, including supply chain management, electronic data interchange, mobile banking, internet marketing, data storage, online transactions, and electronic fund transfers. The e-commerce platform you choose for building your online store should be cost-effective and assist your company in growing and evolving as required. Ecommerce is a component of our business.

E-Commerce Store, the designed application is providing a core objective to promote E-Commerce as it is the merger of technological advancements related to IT and Marketing simultaneously. Certain other objectives are residing in the development of this web application, which is as follows:

1.1.1 To Expand a Small Business

E-commerce is used to start with small-scale retails to attain large-scale business. E-commerce is designed with best-in-class features to help small-scale retailers expand into large-scale businesses. Simply put, it is a massive chance for local retailers to reach a large number of buyers.

1.1.2 To Reach Heavy Customers

To quickly reach millions of consumers and boost company profits. It raises a lot of money in the online industry because the audiences are now the audience every day.

1.1.3 Customer Satisfaction

To gain customers' satisfaction, there is an option of reviews for improvements of the products given in the store.

1.1.4 Website for Users Interaction

This website is developed to have an up and running frontend/backend design of the website which can interact with the database/ backend systems. With all products displayed and ready to view and interact with the users.

1.1.5 Security of Users and Products

The developed website allows the admin to add new products / generate reports/view all products available for sale and interact with its users and products.

1.1.6 Boosting Services' Efficiency

This means the developed E-commerce store provides the customers where they are. More than 70% of smartphone users want to purchase goods and services online because of the comfort. This website provides the users an easy and manageable approach to buy goods. For example, this website is generating receipts and also provides services to track the order, this service helps the users to find where the ordered products have reached and how much time is left to arrive at the user's doorstep.

2. Literature Review

It is a technological epoch in which we are living. Nowadays, everything is done through the internet. The internet has evolved into the most important medium for conducting any kind of enterprise. Any company that sells goods or services uses the internet to expand their business even more quickly and efficiently than ever. It is simple to advertise or grow your company using an online framework. Anyone with a product to sell can do so via the online framework. To conduct any business online, a mechanism or website that can create the identity of any type of business on the internet is required. The network assists the company is growing and selling its goods through an online method. Several other outlets gain popularity, such as social media, which aids in the growth of businesses, as well as some sources that may aid in the sale of any product via social media. According to a report Ecommerce Statistics for 202, with consumers increasingly relying on online shopping, it is estimated that 95% of purchases will be made online by 2040, e-commerce is opening the doors of opportunity to countless entrepreneurs. And, those e-commerce sales opportunities are rapidly growing. In 2017, e-commerce was responsible for \$2.3 trillion in sales, which is expected to nearly double to \$4.5 trillion by 2021. In the U.S. alone, online shopping already accounts for 10% of retail sales and is expected to grow at a year-on-year rate of 15% [1].

2.1 Domain Research

Many online systems act as e-commerce portals, where anybody can sell their products and any buyer can purchase the seller's items. When a buyer orders a product online, the balance can be paid using an online process such as PayPal or by using credit cards, and the product can be sent to the purchaser using courier systems. The web interface functions in this manner, as it can be more convenient than physically purchasing items from a retailer. There are as many E-commerce websites already running around the globe which is providing many services as their needs. A few of them of top-rated with details are given below:

2.1.1 Amazon.com [5]

Amazon.com is the world's most popular marketplace for buying and selling goods. Amazon is a large corporation with operations in nearly every country on the planet. Any user can use the Amazon website to set up their online shop, and any user can use the Amazon website to run.

Amazon.com allows users to sell their goods. To buy or sell something on Amazon.com, you must first register, and payment is made by an online system [5].

2.1.2 Alibaba.com [4]

Alibab.com is an online e-commerce marketplace where anybody can create an account and sell any product in units or single pieces. Users may market goods in packs, such as wholesale, as well as a single small item through this method. Both Amazon and Alibaba operate in the same way when it comes to selling and buying items of some sort. Users must register with the website to buy any product from it, and a company can register with the website to gain access to a large number of clients from all over the world, and the company can then sell their product to the customers [4].

3. Scope and Methodology

3.1 Software and Hardware Technology Requirements

There are two parts of the system first is the design and the other is the backend coding of the website. The design of the system is being developed using HTML, CSS, and Bootstrap. For animation JavaScript and jQuery is used. For the server-side coding of the website, PHP programming language is used for development.

3.1.1 Hardware Requirements

To develop this project, its required system is XAMPP Server and MySQL for the database. notepad++, VScode /or any other coding platform used to work for coding of the website.

3.1.2 Software Requirements

This project has been developed in PHP so only XAMPP is needed to install it and it also contains the Apache Server and MySQL for the database.

3.2 Functional and Non-Functional Requirements

The developed website worked on the framework concerning two types of requirements i.e. Functional Requirements and Non-Functional Requirements.

3.2 Functional requirements

Tools and Technology

Scope of this project is to develop a website mainly using web languages i.e. Html, CSS, and Php.

3.1.1 Features of Website

1. The designed website includes 8 web pages with simple interface which is easy to use for users.
2. Website is easy to use and navigate for users.
3. Users are easily able to access, view, review and read website's content and products.

4. Customers are easily able to browse goods and services on website to purchase and are also able to search prices, amount and availability of products as well.
5. Website allows users to register themselves for reviews about improvements and suggestions.
6. Website facilitates users to place their order easily.
7. Customers are able to Register and Login our website using their account.
8. User's account information is used for home delivery payment details and other details.

3.2 Non-Functional Requirements

3.2.1 Reliability

Website is reliable with respect to operating setup and environment also give accurate and consistent results with different kind of inputs.

3.2.2 Availability

This website should take less processing and rendering time i.e. time to get website load and time of website's response after user input.

3.2.3 Security

Security is important part of most of the system so designed website is secured on web by all means that is in terms of user's data and website management data.

3.2.4 Maintainability

Maintainability is important in the designed project as it is basic need to maintain website and has kept it updated by providing multiple useful patches, modules or components.

3.2.5 Portability

This website is light weight to run it on all kinds of web browsers. So, the compatibility problems are not to be faced.

3.2.6 Speed and Throughput

Website works fast with high speed and strong throughput.

3.3 Methodology

There are different kinds of software development processes and can be applied to development and implementation phase of software systems. After analyzing the nature of proposed solution it has been decided to conduct implementation process by using 'Rapid Application development' approach because RAD model [3] distributes the analysis, design, build and test phases into a series of short, iterative development cycles and to develop project rapidly without any fault and issue.

3.3.1 Why I chose RAD [3]

Following are the reasons why RAD model has been selected, this model helped to deliver software project very fast and within given time frame [3].

1. This model allows to do changes quickly which makes it easy to do some changes during and even after the development of website which allowed me to test during the development process.
2. By using this model, the testing has made it possible to identify risk at very early stage of development process.

To follow Rapid Application Development process, the project has been developed step-by-step through the different Phase of RAD model, described below.

3.3.2 Phase 1: Discussion and Requirements planning

Tasks i need to do during this phase are given as:

Requirement Elicitation

In this phase the need was to gather and identify requirements and of proposed solution such as project goals, expectations, timelines through different requirement elicitation techniques like brainstorming, task analysis, user scenarios and supervisor discussions. After I reviewed the gathered data, finalized the requirements and written software a requirement specification.

Risk Identification

When it comes to requirement gathering, it was also needed to find risk factors in project along with the solution and methods to avoid them throughout project development.

This model has allowed to do risk assessment of project.

3.3.3 Phase 2: Prototyping

Tasks we need to do during this phase are given as:

Develop design of system

To create and finalize the design of system using the requirements gathered in previous phase. Necessary diagrams prepared to enhance clarity of system requirements.

Develop and Analyze Prototype

After settings goals of project the developing phase has started and the prototype in various iterations.

To develop prototype of website without proper polish just to show certain features to find that which feature is right and how it should be created. This prototype includes screen objects and layouts.

Design and prototype of system has been analyzed to find any missing functionality or feature in system. Also ensuring that if there are bugs in prototype those bugs have been fixed and encountered easily and timely.

Identify deliverables

Deliverables of system and functionalities of system must be identified, including features and functionalities that should be done in different deliverables.

3.3.4 Phase 3: Rapid construction

Tasks needed to do during this phase are given as:

Coding

In this stage refining, modification and enhancement the prototype and used the tools and technology for coding the website to deliver the final working product. Since all bugs and errors has been identified prior in prototyping stage, so it has been an easy process for developers to construct final working product rapidly.

Software Testing

After development of website and design of data base, testing has been conducted of designed website.

To start testing, it has been written that the Test plan used for software requirements. This test plan has identified test approach, test strategy, test objectives, test environment and most importantly test cases.

After gathering all test data to use during testing and setting up a testing environment to perform different testing on system. Resultantly, no functionality and feature have been remained unverified and untested.

3.3.5 Phase 4: Deliver Final Project

Tasks which have been needed to do during this phase are given as:

Launch project

In this last stage the final project is to be delivered in given time span and set the developed website project in live production and launch after successful discussion and approval from our supervisor.

Write reports

This is the last part in which project report to describe in detail about our complete project, design and architecture of system. Another task is to prepare final presentation of this project in this phase so that we will present our final solution during evaluation of project.

5. Work Done

4.1 UML Diagrams

4.1.1 Use Case Diagram

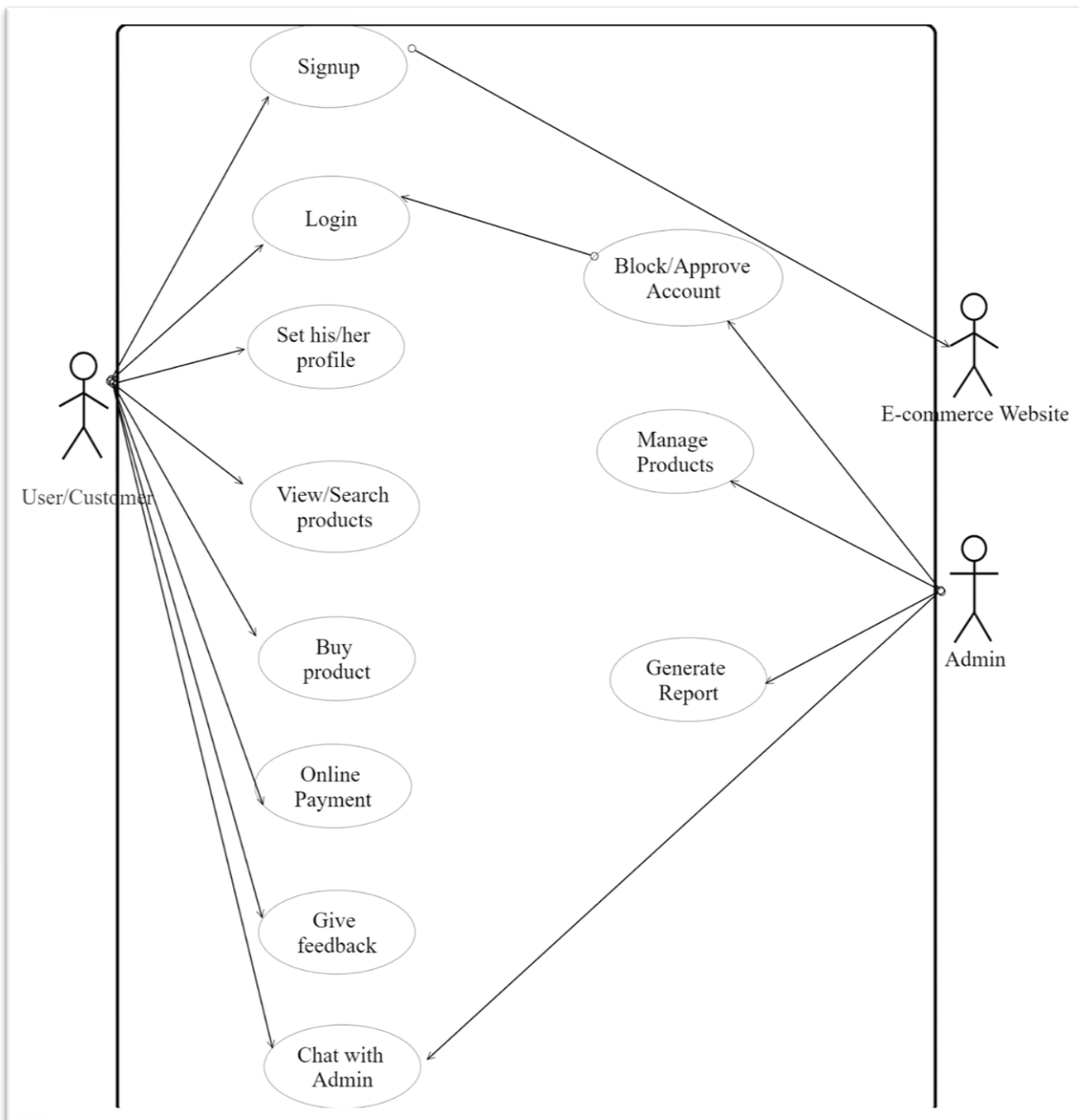


Figure 1 - Use case Diagram

The three acting users has been shown in the Use Case Diagram. The main management of the website is being done by the Admin whther it is User Accounts Manangement, Products Managementetc. On the other hand, user is there to register himself first and then move to the viewing the products, reviewing the products and purchasing items by adding items to cart.

4.1.2 Flow Chart

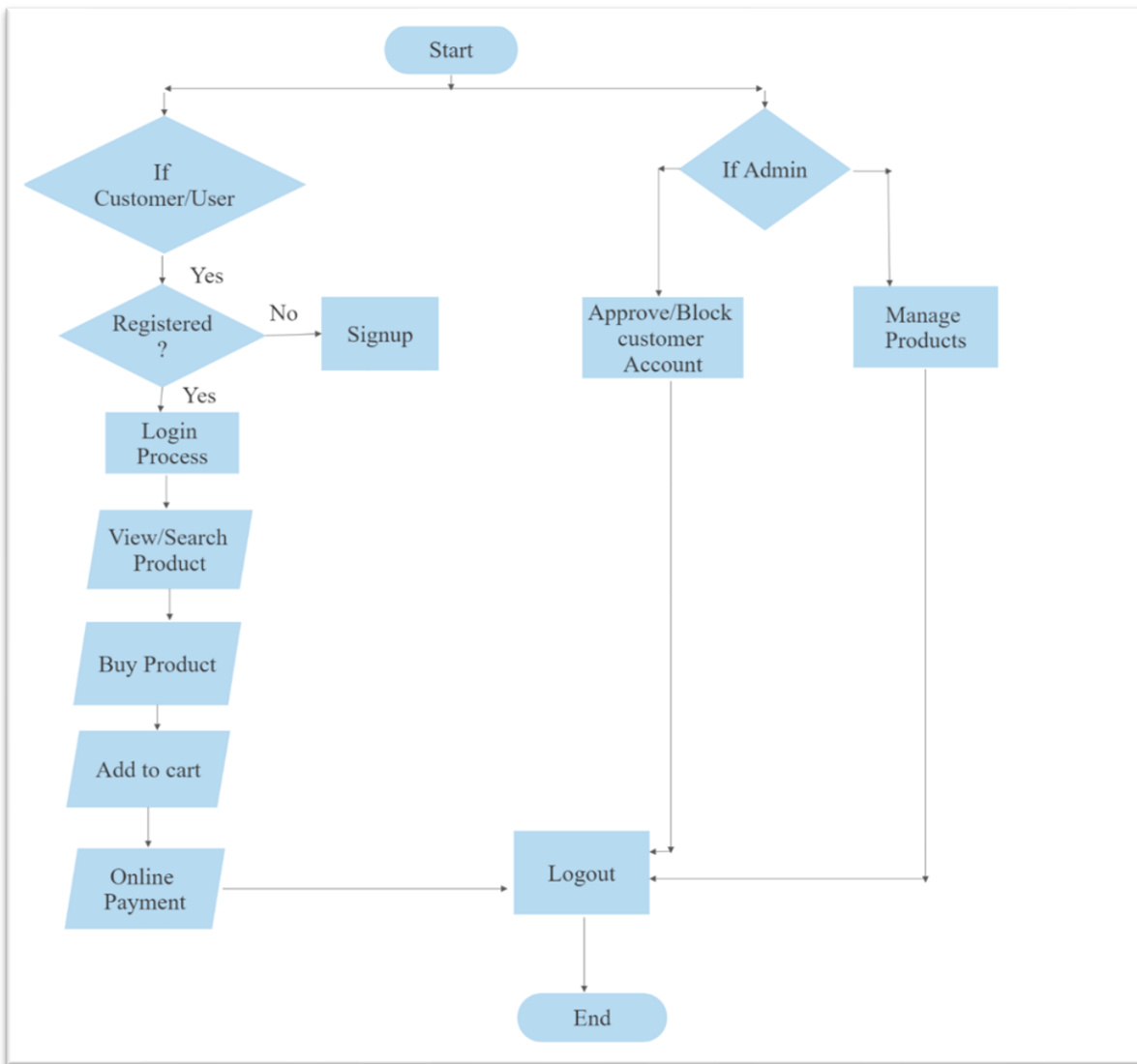


Figure 2 - Flow Chart

Flow chart is describing the flow of the all the processes of the E-Commerce Store. How the website initiates and flows with all the terms and conditions of operations.

4.1.3 Sequence Diagram

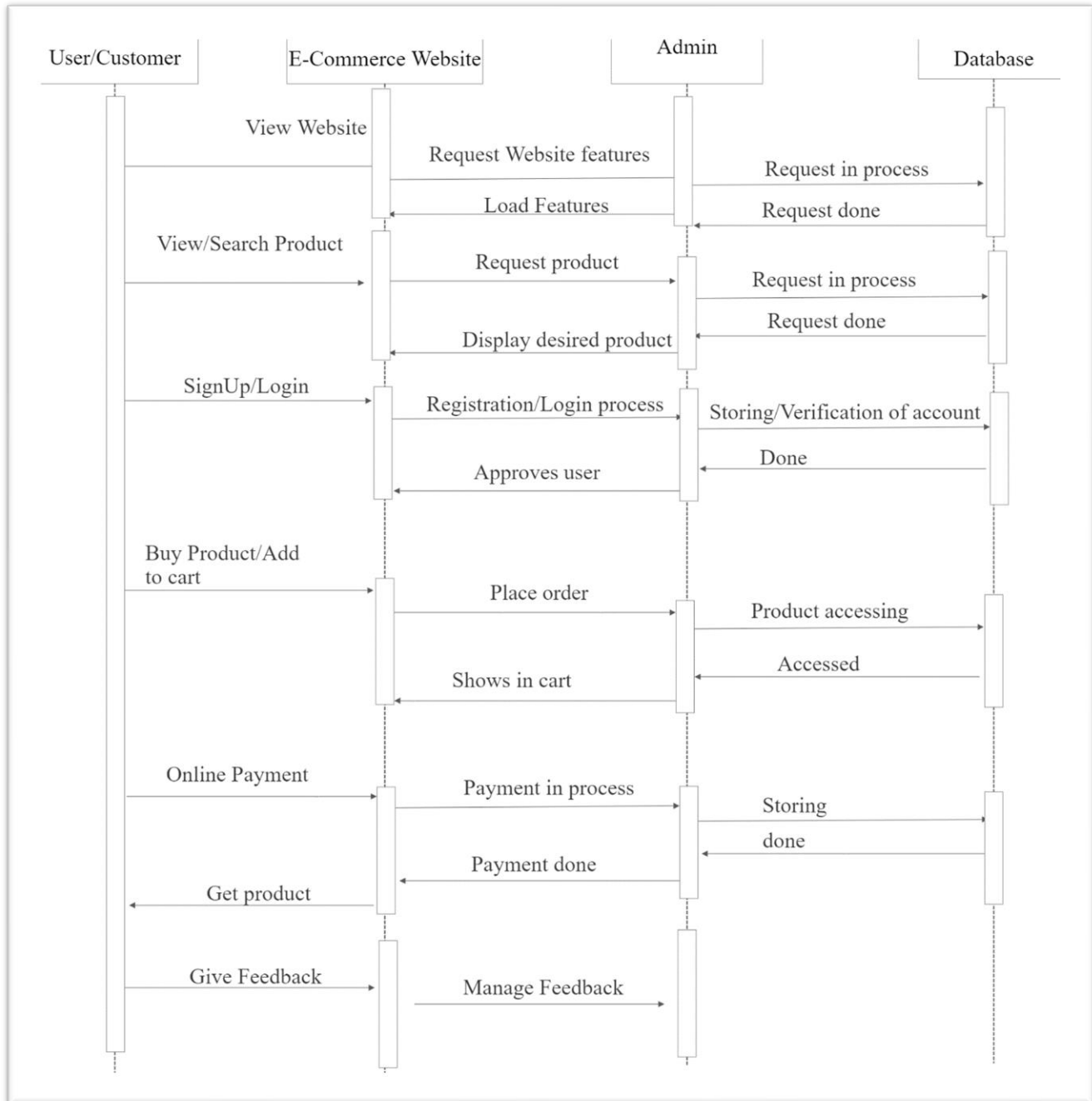


Figure 3 - Sequence Diagram

4.2 Code Description

This section describes complete programming of the system that how this website has designed, and which programming language has used to develop this website. Different organized functions have been programmed to run the system in proper way.

4.2.1 Index File

```
index.php  id passwords.txt
1  <?php
2      session_start();
3      error_reporting(0);
4      include('includes/config.php');
5      if(isset($_GET['action']) && $_GET['action']=="add"){
6          $id=intval($_GET['id']);
7          if(isset($_SESSION['cart'][$id])){
8              $_SESSION['cart'][$id]['quantity']++;
9          }else{
10             $sql_p="SELECT * FROM products WHERE id={$id}";
11             $query_p=mysqli_query($con,$sql_p);
12             if(mysqli_num_rows($query_p)!=0){
13                 $row_p=mysqli_fetch_array($query_p);
14                 $_SESSION['cart'][$row_p['id']]=array("quantity" => 1, "price" => $row_p['productPrice']);
15             }else{
16                 $message="Product ID is invalid";
17             }
18         }
19         echo "<script>alert('Product has been added to the cart')</script>";
20         echo "<script type='text/javascript'> document.location ='my-cart.php'; </script>";
21     }
22 }
23 ?>
24 <!DOCTYPE html>
25 <html lang="en">
```

```
125 <br><br>
126 <div class="tab-pane id="electronics">
127 <div class="tab-pane id="electronics">
128 <div class="tab-pane id="electronics">
129 <div class="tab-pane id="electronics">
130 <div class="tab-pane id="electronics">
131 $ret=mysqli_query($con,"select * from products where category=4 and status='active'");
132 while ($row=mysqli_fetch_array($ret))
133 {
134 <div class="item item-carousel">
135 <div class="products">
136 <div class="product">
137 <div class="product-image">
138 <div class="image">
139 <a
140 href="product-details.php?pid=?php echo htmlentities($row['id']);?>
141 ?php echo htmlentities($row['productImage']);?>"
143 width="180" height="300" alt="">
144 </div><!-- /.image -->
145 </div><!-- /.product-image -->
146 <div class="product-info text-left">
147 <h3 class="name"><a
148 href="product-details.php?pid=?php echo htmlentities($row['id']);?>?php echo htmlentities($row['productName']);?></a>
149 </h3>
150 <div class="rating rateit-small"></div>
151 <div class="description"></div>
152 <div class="product-price">
153 <span class="price">
154 $?php echo htmlentities($row['productPrice']);?></span>
155 <span
156 class="price-before-discount"> $?php echo htmlentities($row['productPrice']);?>
157 </span>
158 </div><!-- /.product-price -->
159 </div><!-- /.product-info -->
160 <?php if($row['productAvailability']=='In Stock'){?>
161 <div class="action">
162 <a
163 href="index.php?page=product&action=add&id=?php echo $row['id']; ?>
164 class="lnk btn btn-primary">Add to Cart</a></div>
165 <?php } else {?>
166 <div class="action" style="color:red">Out of Stock</div>
167 <?php } ?>
168 </div><!-- /.product -->
169 </div><!-- /.products -->
170 </div><!-- /.item -->
171 <?php } ?>
172 </div><!-- /.home-owl-carousel -->
```

```

index.php  id passwords.txt
188
189 <div class="tab-pane" id="firstaid">
190 </div>
191 $ret=mysqli_query($con,"select * from products where category=7 and status='active'");
192 while ($row=mysqli_fetch_array($ret))
193 {
194     <div class="item item-carousel">
195         <div class="products">
196             <div class="product">
197                 <div class="product-image">
198                     <div class="image">
199                         <a
200                             href="product-details.php?pid=<?php echo htmlentities($row['id']);?>"
201                             /<?php echo htmlentities($row['productImage1']);?>"
203                             width="180" height="300" alt=""></a>
204                         </div><!-- /.image -->
205                     </div><!-- /.product-image -->
206                 </div>
207                 <div class="product-info text-left">
208                     <h3 class="name"><a
209                         href="product-details.php?pid=<?php echo htmlentities($row['id']);?>"><?php echo htmlentities($row['productName']);?></a>
210                     </h3>
211                     <div class="rating rateit-small"></div>
212                     <div class="description"></div>
213                     <div class="product-price">
214                         <span class="price">
215                             <?php echo htmlentities($row['productPrice']);?></span>
216                         <span
217                             class="price-before-discount"><?php echo htmlentities($row['productPrice']);?>
218                         </span>
219                     </div><!-- /.product-price -->
220                 </div><!-- /.product-info -->
221                 <?php if($row['productAvailability']=='In Stock'){?>
222                 <div class="action">
223                     <a
224                         href="index.php?page=product&action=add&id=<?php echo $row['id'];?>"
225                         class="lnk btn btn-primary">Add to Cart</a></div>
226                 <?php } else {?>
227                 <div class="action" style="color:red">Out of Stock</div>
228                 <?php } ?>
229             </div><!-- /.product -->
230         </div><!-- /.products -->
231     </div><!-- /.item -->
232 }
233 </div>

```

```

index.php  id passwords.txt
248 <div class="sections prod-slider-small outer-top-small">
249 <div class="row">
250 </div>
251 $ret=mysqli_query($con,"select * from products where category=4 and subCategory=2 and status='active'");
252 while ($row=mysqli_fetch_array($ret))
253 {
254     <div class="item item-carousel">
255         <div class="products">
256             <div class="product">
257                 <div class="product-image">
258                     <div class="image">
259                         <a
260                             href="product-details.php?pid=<?php echo htmlentities($row['id']);?>">/<?php echo htmlentities($row['productImage1']);?>"
263                             width="180" height="300"></a>
264                         </div><!-- /.image -->
265                     </div><!-- /.product-image -->
266                 </div>
267                 <div class="product-info text-left">
268                     <h3 class="name"><a
269                         href="product-details.php?pid=<?php echo htmlentities($row['id']);?>"><?php echo htmlentities($row['productName']);?></a>
270                     </h3>
271                     <div class="description"></div>
272                     <div class="product-price">
273                         <span class="price">
274                             <?php echo htmlentities($row['productPrice']);?></span>
275                         <span
276                             class="price-before-discount"><?php echo htmlentities($row['productPrice']);?>
277                         </span>
278                     </div><!-- /.product-price -->
279                 </div><!-- /.product-info -->
280                 <?php if($row['productAvailability']=='In Stock'){?>
281                 <div class="action">
282                     <a
283                         href="index.php?page=product&action=add&id=<?php echo $row['id'];?>"
284                         class="lnk btn btn-primary">Add to Cart</a></div>
285                 <?php } else {?>
286                 <div class="action" style="color:red">Out of Stock</div>
287                 <?php } ?>
288             </div>
289         </div>
290     </div>
291 </div>
292 </div>
293 </div>
294 </div>

```

4.2.2 Login Code

```
login.php  X logout.php
5 // Code user Registration
6 if(isset($_POST['submit']))
7 {
8     $name=$_POST['fullname'];
9     $email=$_POST['emailid'];
10    $contactno=$_POST['contactno'];
11    $password=md5($_POST['password']);
12    $username=$_POST['username'];
13    $usertype='user';
14    $query=mysqli_query($con,"insert into users(user_name,user_password,user_email,user_phone, user_type) values('$name','$password','$email','$contactno','$usertype')");
15    if($query)
16    {
17        echo "<script>alert('You are successfully register');</script>";
18    }
19    else{
20        echo "<script>alert('Not register something went wrong');</script>";
21    }
22 }
23 // Code for User Login
24 if(isset($_POST['login']))
25 {
26     $email=$_POST['email'];
27     $password=md5($_POST['login_password']);
28     $query=mysqli_query($con,"SELECT * FROM users WHERE user_email='$email' and user_password='$password' and user_type='user'");
29     $num=mysqli_fetch_array($query);
30     if($num>0)
31     {
32         $extra="index.php";
33         $_SESSION['login']=$email;
34         $_SESSION['id']=$num['id'];
35         $_SESSION['username']=$num['user_name'];
36         $uip=$_SERVER['REMOTE_ADDR'];
37         $status=1;
38         $host=$_SERVER['HTTP_HOST'];
39         $uri=trim(dirname($_SERVER['PHP_SELF']),'/\\');
40         header("location:http://$host$uri/$extra");
41         exit();
42     }
43     else
44     {
45         $extra="login.php";
46         $email=$_POST['email'];
47         $uip=$_SERVER['REMOTE_ADDR'];
48         $status=0;
49         // $log=mysqli_query($con,"insert into userlog(userEmail,userip,status) values('$email','$uip','$status')");
50         $host = $_SERVER['HTTP_HOST'];
51         $uri = trim(dirname($_SERVER['PHP_SELF']),'/\\');
52         header("location:http://$host$uri/$extra");
53         $_SESSION['errmsg']="Invalid email id or Password";
54         exit();
55     }
56 }
57 }
58 <!DOCTYPE html>
59 <html lang="en">
60
61 <head>
62     <meta charset="utf-8">
63     <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
64     <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
65     <title>E Commerce | Signi-in | Signup</title>
66     <?php include('includes/header-files-css.php');?>
67     <script type="text/javascript">
68     function valid() {
69         if (document.register.password.value != document.register.confirmpassword.value) {
70             alert("Password and Confirm Password Field do not match !!");
71             document.register.confirmpassword.focus();
72             return false;
73         }
74         return true;
75     }
76     </script>
77     <script>
78     function userAvailability() {
79         $("#loaderIcon").show();
80         jQuery.ajax({
81             url: "check_availability.php",
82             data: 'email=' + $("#email").val(),
83             type: "POST",
84             success: function(data) {
85                 $("#user-availability-status1").html(data);
86                 $("#loaderIcon").hide();
87             },
88             error: function() {}
89         });
90     }
91     </script>
92 </head>
93 <body class="cnt-home">
94     <header class="header-style-1">
95         <?php include('includes/top-header.php');?>
96         <?php include('includes/main-header.php');?>
97         <?php include('includes/menu-bar.php');?>
98     </header>
99     <div class="breadcrumb">...</div>
100     <div class="body-content outer-top-bd">...</div>
101     <div>
102         <?php include('includes/footer.php');?>
103         <?php include('includes/footer-files-script.php');?>
104     </div>
105 </body>
106 </html>
```


4.2.3 Logout Code

```
logout.php  + X
1  <?php
2  session_start();
3  include("includes/config.php");
4  $_SESSION['login']=="";
5  session_unset();
6  $_SESSION['errmsg']="You have successfully logout";
7  ?>
8  <script language="javascript">
9  document.location = "index.php";
10 </script>
```

4.2.4 My-Wishlist.php

```
my-wishlist.php  + X  my-cart.php
1  <?php
2  session_start();
3  error_reporting(0);
4  include 'includes/config.php';
5  if (strlen($_SESSION['login']) == 0) {
6  header('location:login.php');
7  } else {
8  // Code forProduct deletion from wishlist
9  $swid = intval($_GET['del']);
10 if (isset($_GET['del'])) {
11     $query = mysqli_query($con, "delete from wishlist where id='$swid'");
12 }
13
14 if (isset($_GET['action']) && $_GET['action'] == "add") {
15     $id = intval($_GET['id']);
16     $query = mysqli_query($con, "delete from wishlist where productId='$id'");
17     if (isset($_SESSION['cart'][$id])) {
18         $_SESSION['cart'][$id]['quantity']++;
19     } else {
20         $sql_p = "SELECT * FROM products WHERE id={$id}";
21         $query_p = mysqli_query($con, $sql_p);
22         if (mysqli_num_rows($query_p) != 0) {
23             $row_p = mysqli_fetch_array($query_p);
24             $_SESSION['cart'][$row_p['id']] = array("quantity" => 1, "price" => $row_p['productPrice']);
25             header('location:my-wishlist.php');
26         } else {
27             $message = "Product ID is invalid";
28         }
29     }
30 }
31
32 ?>
33 <!DOCTYPE html>
34 <html lang="en">
35
36 <head>...
43 </head>
```

4.2.5 My Cart.php Cart

```
my-cart.php 4 X
1 <?php
2 session_start();
3 error_reporting(0);
4 include 'includes/config.php';
5 if(isset($_POST['submit'])){
6     if(!empty($_SESSION['cart'])){
7         foreach($_POST['quantity'] as $key => $val){
8             if($val==0){
9                 unset($_SESSION['cart'][$key]);
10            }else{
11                $_SESSION['cart'][$key]['quantity']=$val;
12            }
13        }
14    }
15    echo "<script>alert('Your Cart hasbeen Updated');</script>";
16 }
17 }
18 // Code for Remove a Product from Cart
19 if(isset($_POST['remove_code'])){
20     {
21
22     if(!empty($_SESSION['cart'])){
23         foreach($_POST['remove_code'] as $key){
24             unset($_SESSION['cart'][$key]);
25         }
26         echo "<script>alert('Your Cart has been Updated');</script>";
27     }
28 }
29 }
30 // code for insert product in order table
31
32 if(isset($_POST['ordersubmit']))
33 {
34     if(strlen($_SESSION['login'])==0)
35     {
36         header('location:login.php');
37     }
38 }
39 }
40 else{
41     $quantity=$_POST['quantity'];
42     $pdd=$_SESSION['pid'];
43     $value=array_combine($pdd,$quantity);
44     foreach($value as $qty=> $val34){
45
46
47
48
49
50     mysqli_query($con,"insert into orders(userId,productId,quantity) values('".$_SESSION['id']."','$qty','$val34')");
51     header('location:payment-method.php');
52 }
53 }
54 }
55 }
56
57 // code for billing address updation
58 if(isset($_POST['update'])){
59     {
60         $baddress=$_POST['billingaddress'];
61         $bstate=$_POST['bilingstate'];
62         $bcity=$_POST['billingcity'];
63         $bpincode=$_POST['billingpincode'];
64         $query=mysqli_query($con,"update users set billingAddress='$baddress',billingState='$bstate',billingCity='$bcity',billingPincode='$bpincode'
65         if($query)
66         {
67             echo "<script>alert('Billing Address has been updated');</script>";
68         }
69     }
70 }
71
72 // code for Shipping address updation
73 if(isset($_POST['shipupdate'])){
74     {
75         $saddress=$_POST['shippingaddress'];
76         $sstate=$_POST['shippingstate'];
```



```

44 function popUpWindow(URLStr, left, top, width, height)
45 {
46     if(popUpWin)
47     {
48         if(!popUpWin.closed) popUpWin.close();
49     }
50     popUpWin = open(URLStr, 'popUpWin', 'toolbar=no,location=no,directories=no,status=no,menubar=no,scrollbars=yes,resizable=no,copyhistory=yes,width=600,height=600,left=+left+, top=+top+,screen=+left+,screen=
51     );
52
53 </script>
54 <header class="header-style-1">
55 <?php include('includes/top-header.php');>
56 <?php include('includes/main-header.php');>
57 <?php include('includes/menu-bar.php');>
58 </header>
59 <!-- ===== HEADER : END ===== -->
60 <div class="breadcrumb">
61 </div><!-- /.breadcrumb -->
62
63 <div class="body-content outer-top-xs">
64 <form name="cart" method="post">
65 <?php
66 $orderid=$_POST['orderid'];
67 $email=$_POST['email'];
68 $ret = mysql_query($con,"select t.email,t.id from (select usr.email,odrs.id from users as usr join orders as odrs on usr.id=odrs.userId) as t where t.email='$email' and (t.id='$orderid')");
69 $num=mysql_num_rows($ret);
70 if($num==0)
71 {
72     $query=mysql_query($con,"select products.productId as pid,products.productName as pname,orders.productId as opid,orders.quantity as qty,products.productPrice as pprice,orders.paymentMethod as pays,orders.orderDa
73     );
74     while($row=mysql_fetch_array($query))
75     {
76     <tr>
77         <td class="cart-image">
78             <a class="entry-thumbail" href="detail.html"
79             ?php echo $row['pname'];>?php echo $row['pid'];>? alt="" width="84" height="146"
80             </a>
81         </td>
82         <td class="cart-product-name-info">
83             <a href="product-details.php?pid=<?php echo $row['opid'];>"
84             <?php echo $row['pname'];></a></td>
85         </td>
86         <td class="cart-product-quantity">
87             <?php echo $qty=$row['qty']; >
88         </td>
89         <td class="cart-product-sub-total"><?php echo $price=$row['pprice']; > </td>
90         <td class="cart-product-grand-total"><?php echo $qty*$price;></td>
91         <td class="cart-product-sub-total"><?php echo $row['pays']; > </td>
92         <td class="cart-product-sub-total"><?php echo $row['odate']; > </td>
93     </tr>
94     <tr>
95         <td colspan="7"><a href="javascript:void(0);" onClick="popUpWindow('track-order.php?oid=<?php echo htmlentities($row['orderid']);>');" title="Track order">
96             Track</td>
97     </tr>
98     <?php $cnt=$cnt+1; } else { >
99     <tr>
100         <td colspan="7"><?php >
101         <?php >
102     </td><!-- /tbody -->
103 </table><!-- /table -->
104
105 </div>
106 <?php echo include('includes/brands-slider.php');>
107 <!-- ===== BRANDS CAROUSEL : END ===== --> </div><!-- /.container -->
108 </div><!-- /.body-content -->
109 <?php include('includes/footer.php');>
110
111 <script src="assets/js/jquery-1.11.1.min.js"></script>
112
113 <script src="assets/js/bootstrap.min.js"></script>
114
115 <script src="assets/js/bootstrap-hover-dropdown.min.js"></script>
116 <script src="assets/js/owl.carousel.min.js"></script>
117
118 <script src="assets/js/echo.min.js"></script>
119 <script src="assets/js/jquery.easing-1.3.min.js"></script>
120 <script src="assets/js/bootstrap-slider.min.js"></script>
121 <script src="assets/js/jquery.ratelt.min.js"></script>
122 <script type="text/javascript" src="assets/js/lightbox.min.js"></script>
123 <script src="assets/js/bootstrap-select.min.js"></script>
124 <script src="assets/js/wow.min.js"></script>
125 <script src="assets/js/scripts.js"></script>
126
127 <!-- For demo purposes - can be removed on production -->
128
129 <script src="switchstylesheet/switchstylesheet.js"></script>
130
131 <script>
132     $(document).ready(function(){
133         $(".change-color").switchstylesheet( { separator:"color" } );
134         $(".show-theme-options").click(function(){
135             $(this).parent().toggleClass('open');
136             return false;
137         });
138     });
139
140     $(window).bind("load", function() {
141         $(".show-theme-options").delay(2000).trigger('click');
142     });
143 </script>
144 <!-- For demo purposes - can be removed on production : End -->
145 </body>
146 </html>

```


4.2.6 Payment-method.php

```

payment-method.php -u X order-history.php
3 error_reporting(0);
4 include('includes/config.php');
5 if(strlen($_SESSION['login'])==0)
6 {
7     header('location:login.php');
8 }
9 else{
10     if (isset($_POST['submit'])) {
11
12         mysql_query("con,update orders set paymentMethod='".$_POST['paymentMethod']."' where userId='".$_SESSION['id']."' and paymentMethod is null ");
13         unset($_SESSION['cart']);
14         header('location:order-history.php');
15     }
16 }
17 }
18 <!DOCTYPE html>
19 <html lang="en">
20 <head>
21 <!-- Meta -->
22 <meta charset="utf-8">
23 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
24 <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
25 <meta name="description" content="">
26 <meta name="author" content="">
27 <meta name="keywords" content="MediaCenter, Template, eCommerce">
28 <meta name="robots" content="all">
29
30 <title>Shopping Portal | Payment Method</title>
31 <link rel="stylesheet" href="assets/css/bootstrap.min.css">
32 <link rel="stylesheet" href="assets/css/main.css">
33 <link rel="stylesheet" href="assets/css/green.css">
34 <link rel="stylesheet" href="assets/css/owl.carousel.css">
35 <link rel="stylesheet" href="assets/css/owl.transitions.css">
36 <!--<link rel="stylesheet" href="assets/css/owl.theme.css">-->
37 <link href="assets/css/lightbox.css" rel="stylesheet">
38 <link rel="stylesheet" href="assets/css/animate.min.css">
39 <link rel="stylesheet" href="assets/css/ratelt.css">
40 <link rel="stylesheet" href="assets/css/bootstrap-select.min.css">
41 <link rel="stylesheet" href="assets/css/config.css">
42 <link href="assets/css/green.css" rel="alternate stylesheet" title="Green color">
43 <link href="assets/css/blue.css" rel="alternate stylesheet" title="Blue color">
44 <link href="assets/css/red.css" rel="alternate stylesheet" title="Red color">
45 <link href="assets/css/orange.css" rel="alternate stylesheet" title="Orange color">
46 <link href="assets/css/dark-green.css" rel="alternate stylesheet" title="Darkgreen color">
47 <link rel="stylesheet" href="assets/css/font-awesome.min.css">
48 <link href="http://fonts.googleapis.com/css?family=Roboto:300,400,500,700" rel="stylesheet" type="text/css">
49 <link rel="shortcut icon" href="assets/images/favicon.ico">
50 </head>

```

4.2.7 Category.php

```

category.php  ✕  ✕
9
10 <head>
11     <!-- Meta -->
12     <meta charset="utf-8">
13     <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14     <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
15     <title>Product Category</title>
16     <?php include('includes/header-files-css.php');?>
17
18 </head>
19
20 <body class="cnt-home">...
21
22 while ($row = mysqli_fetch_array($sql)) {...
23 while ($row = mysqli_fetch_array($sql)) {...
24
25 $ret = mysqli_query($con, "select * from products where category='$cid' and status='active'");
26 $num = mysqli_num_rows($ret);
27
28 if ($num > 0) {
29     while ($row = mysqli_fetch_array($ret)) {...
30
31         </div><!-- /.row -->
32         </div><!-- /.category-product -->
33
34         </div><!-- /.tab-pane -->
35         </div><!-- /.search-result-container -->
36         </div><!-- /.col -->
37     </div>
38 </div>
39 <?php include 'includes/brands-slider.php';?>
40
41 </div>
42 </div>
43 <?php include 'includes/footer.php';?>
44 <?php include('includes/footer-files-script.php');?>
45
46 </body>
47
48 </html>

```

4.2.8 Get-subcat.php

```
get_subcat.php  # X
1  <?php
2  include('includes/config.php');
3  if(!empty($_POST["cat_id"]))
4  {
5      $id=intval($_POST['cat_id']);
6      $query=mysqli_query($con,"SELECT * FROM subcategory WHERE categoryid=$id");
7      ?>
8      <option value="">Select Subcategory</option>
9      <?php
10     while($row=mysqli_fetch_array($query))
11     {
12         ?>
13         <option value="">?php echo htmlentities($row['id']); ?>">?php echo htmlentities($row['subcategory']); ?></option>
14     }
15     ?>
16 }
17 ?>
```

4.2.9 Check-availability.php

```
check_availability.php  # X
1  <?php
2  require_once "includes/config.php";
3  if (!empty($_POST["email"])) {
4      $email = $_POST["email"];
5      $result = mysqli_query($con, "SELECT user_email FROM users WHERE user_email='$email'");
6      $count = mysqli_num_rows($result);
7      if ($count > 0) {
8          echo "<span style='color:red'> Email already exists .</span>";
9          echo "<script>$('#submit').prop('disabled',true);</script>";
10     } else {
11         echo "<span style='color:green'> Email available for Registration .</span>";
12         echo "<script>$('#submit').prop('disabled',false);</script>";
13     }
14 }
15 }
16 }
```

4.2.10 Edit-product.php

```
edit-product.php 1 x
1  <?php
2      session_start();
3      error_reporting(0);
4      include('includes/config.php');
5      if (strlen($_SESSION['login']) == 0) {
6          header('location:login.php');
7      } else {
8          $pid=intval($_GET['pid']);
9          if (isset($_POST['submit'])) {
10
11              $productname = $_POST['productName'];
12              $productcompany = $_POST['productCompany'];
13              $productprice = $_POST['productprice'];
14              $productdescription = $_POST['productDescription'];
15              $category = $_POST['category'];
16              $subcat = $_POST['subcategory'];
17              $productavailability = $_POST['productAvailability'];
18              $soldout=$_POST['soldout'];
19
20              $sql = mysqli_query($con, "update products set productName='$productname',productCompany='$productcompany',productPrice='$productprice',productDescription='$productdescription',category='$category',subcategory='$subcat',productAvailability='$productavailability',soldout='$soldout' where pid=$pid");
21              $_SESSION['msg'] = "Product Inserted Successfully !!";
22          }
23      }
24
25  ?>
```



```
edit-product.php X
27 <html lang="en">
28
29 <head>
30   <meta charset="utf-8">
31   <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
32   <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
33   <title>E Commerce</title>
34   <?php include('includes/header-files-css.php');?>
35   <script>
36     function getSubcat(val) {
37       $.ajax({
38         type: "POST",
39         url: "get_subcat.php",
40         data: 'cat_id=' + val,
41         success: function(data) {
42           $("#subcategory").html(data);
43         }
44       });
45     }
46
47     function selectCountry(val) {
48       $("#search-box").val(val);
49       $("#suggestions-box").hide();
50     }
51   </script>
52 </head>
53
54 <body class="cnt-home">...
119 $cnt=1;
120 while($row=mysqli_fetch_array($query))
121 {...
248 </body>
249
250 </html>
```

4.2.11 Contact-us.php

```
contact-us.php X
1 <?php
2 session_start();
3 error_reporting(0);
4 include 'includes/config.php';
5
6 <?>
7 <!DOCTYPE html>
8 <html lang="en">
9
10 <head>
11   <!-- Meta -->
12   <meta charset="utf-8">
13   <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14   <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
15   <title>My Account</title>
16   <?php include('includes/header-files-css.php');?>
17   <script type="text/javascript">
18     function valid() {
19       if (document.chngpwd.cpass.value == "") {
20         alert("Current Password Filed is Empty !!");
21         document.chngpwd.cpass.focus();
22         return false;
23       } else if (document.chngpwd.newpass.value == "") {
24         alert("New Password Filed is Empty !!");
25         document.chngpwd.newpass.focus();
26         return false;
27       } else if (document.chngpwd.cnfpass.value == "") {
28         alert("Confirm Password Filed is Empty !!");
29         document.chngpwd.cnfpass.focus();
30         return false;
31       } else if (document.chngpwd.newpass.value != document.chngpwd.cnfpass.value) {
32         alert("Password and Confirm Password Field do not match !!");
33         document.chngpwd.cnfpass.focus();
34         return false;
35       }
36       return true;
37     }
38   </script>
```

4.2.12 Bill-ship-addresses.php

```
bill-ship-addresses.php
1 <?php
2 session_start();
3 //error_reporting(0);
4 include('includes/config.php');
5 if(strlen($_SESSION['login'])==0)
6 {
7     header('location:.php');
8 }
9 else{
10     // code for billing address updation
11     if(isset($_POST['update']))
12     {
13         $baddress=$_POST['billingaddress'];
14         $bstate=$_POST['billingstate'];
15         $bcity=$_POST['billingcity'];
16         $bpincode=$_POST['billingpincode'];
17         $query=mysqli_query($con,"update users set billingAddress='$baddress',billingState='$bstate',billingCity='$bcity',billingPincode='$bpincode'");
18         if($query)
19         {
20             echo "<script>alert('Billing Address has been updated');</script>";
21         }
22     }
23 }
24
25 // code for Shipping address updation
26 if(isset($_POST['shipupdate']))
27 {
28     $saddress=$_POST['shippingaddress'];
29     $sstate=$_POST['shippingstate'];
30     $scity=$_POST['shippingcity'];
31     $spinode=$_POST['shippingpincode'];
32     $query=mysqli_query($con,"update users set shippingAddress='$saddress',shippingState='$sstate',shippingCity='$scity',shippingPincode='$spinode'");
33     if($query)
34     {
35         echo "<script>alert('Shipping Address has been updated');</script>";
36     }
37 }
```

4.2.13 About-us.php

```
about-us.php
1 <?php
2 session_start();
3 error_reporting(0);
4 include 'includes/config.php';
5 ?>
6 <!DOCTYPE html>
7 <html lang="en">
8
9 <head>
10     <!-- Meta -->
11     <meta charset="utf-8">
12     <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
13     <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
14     <title>About Us</title>
15     <?php include('includes/header-files-css.php');?>
16
17 </head>
18
19 <body class="cnt-home">
20     <div class="container py-5">
21     </div>
22 </div>
23
24 <div class="bg-white py-5">
25 </div>
26
27 <div class="bg-light py-5">
28 </div>
29
30 </div>
31
32 </div><!-- /.row -->
33 </div><!-- /.checkout-box -->
34 <?php include 'includes/brands-slider.php';?>
35
36 </div>
37 </div>
```

4.2.14 My-account.php

```
my-account.php
1 <?php
2 session_start();
3 error_reporting(0);
4 include 'includes/config.php';
5 if (strlen($_SESSION['login']) == 0) {
6     header('location:login.php');
7 } else {
8     if (isset($_POST['update'])) {
9         $name = $_POST['name'];
10        $contactno = $_POST['contactno'];
11        $query = mysqli_query($con, "update users set user_name='$name',user_phone='$contactno' where Id='" . $_SESSION['id'] . "'");
12        if ($query) {
13            echo "<script>alert('Your info has been updated');</script>";
14        }
15    }
16
17    date_default_timezone_set('Europe/London'); // change according to timezone
18    $currentTime = date('d-m-Y h:i:s A', time());
19
20    if (isset($_POST['submit'])) {
21        $sql = mysqli_query($con, "SELECT user_password FROM users where user_password='" . md5($_POST['cpass']) . "' && id='" . $_SESSION['id'] . "'");
22        $num = mysqli_fetch_array($sql);
23        if ($num > 0) {
24            // $con=mysqli_query($con,"update students set password='".md5($_POST['newpass'])."', updationDate='$currentTime' where id='".$_SESSION['id']."'");
25            echo "<script>alert('Password Changed Successfully !!');</script>";
26        } else {
27            echo "<script>alert('Current Password not match !!');</script>";
28        }
29    }
30
31    ?>
32 <!DOCTYPE html>
33 <html lang="en">
34
35 <head>
36 <!-- Meta -->
37 <meta charset="utf-8">
38 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
39 <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no">
40 <title>My Account</title>
41 <?php include('includes/header-files-css.php');?>
42 <script type="text/javascript">
43 function valid() {
44     if (document.chngpwd.cpass.value == "") {
45         alert("Current Password Filed is Empty !!");
46         document.chngpwd.cpass.focus();
47         return false;
48     } else if (document.chngpwd.newpass.value == "") {
49         alert("New Password Filed is Empty !!");
50         document.chngpwd.newpass.focus();
51         return false;
52     } else if (document.chngpwd.cnfpass.value == "") {
53         alert("Confirm Password Filed is Empty !!");
54         document.chngpwd.cnfpass.focus();
55         return false;
56     } else if (document.chngpwd.newpass.value != document.chngpwd.cnfpass.value) {
57         alert("Password and Confirm Password Field do not match !!");
58         document.chngpwd.cnfpass.focus();
59         return false;
60     }
61     return true;
62 }
63 </script>
64
65 </head>
66
67 <body class="cnt-home">[...]
```


5. Results and Discussion

To ensure that the system operates correctly, it is crucial to verify and validate the entire system after it has been completed. As a result, framework testing must include both functional and non-functional specifications.

Various testing methods were used to assess each feature of the website. Initially, there were numerous errors that had to be corrected out at each stage. The system is being maintained as part of the testing process.

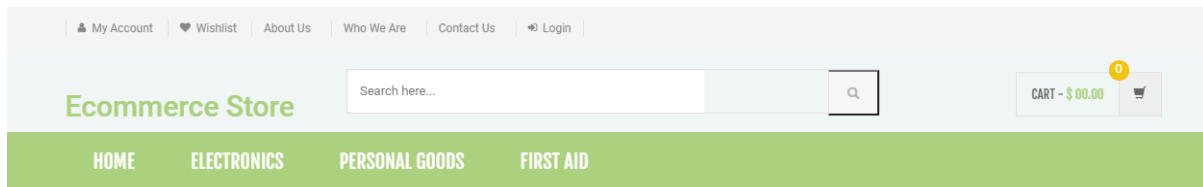
5.1 Testing of the Features

5.1.1 User Interface and Screenshots of running website

Website is designed in appealing way to make user's mood pleasant. All the features of the website have been checked and positive results have been come forward. All the texts and images are displaying on the website which shows the system is working properly. Some main features of the website have described below.

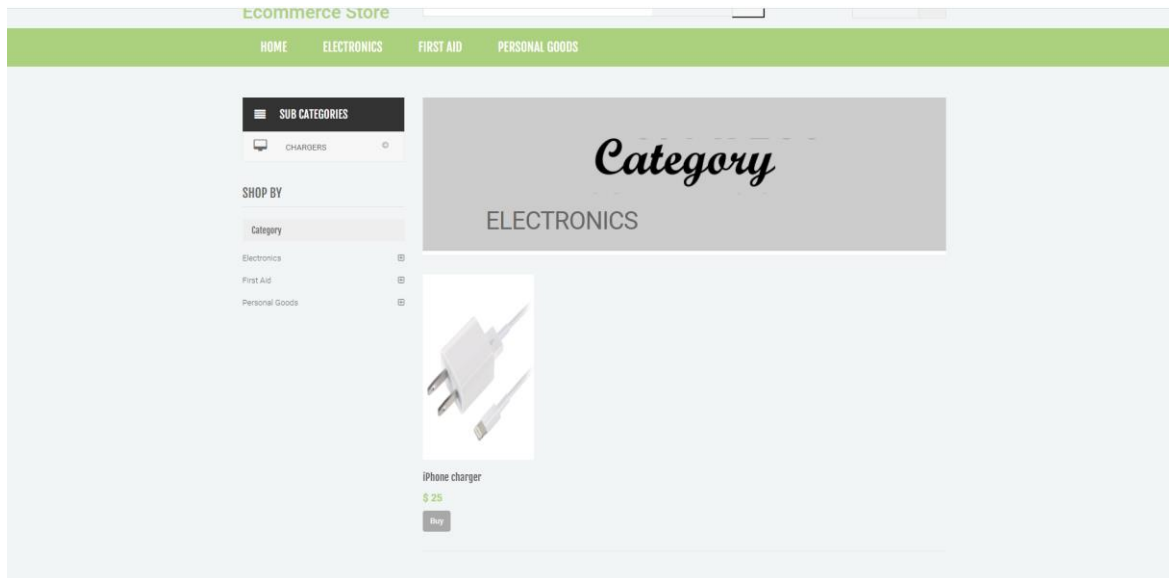
5.1.2 Menu Bar

Top menu bar of the website comprises of six options to further move towards different webpages of the website. There is also a search bar through which user can search for the desired available product. Another horizontal menu bar takes user to home page and different product categories.



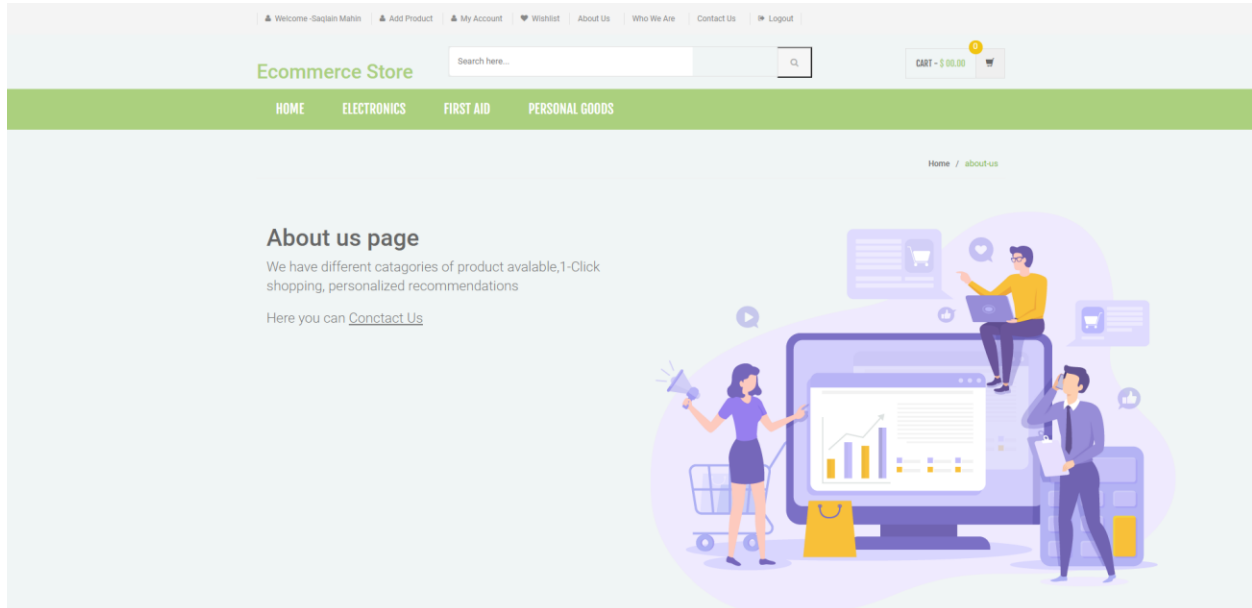
5.1.3 Home Page

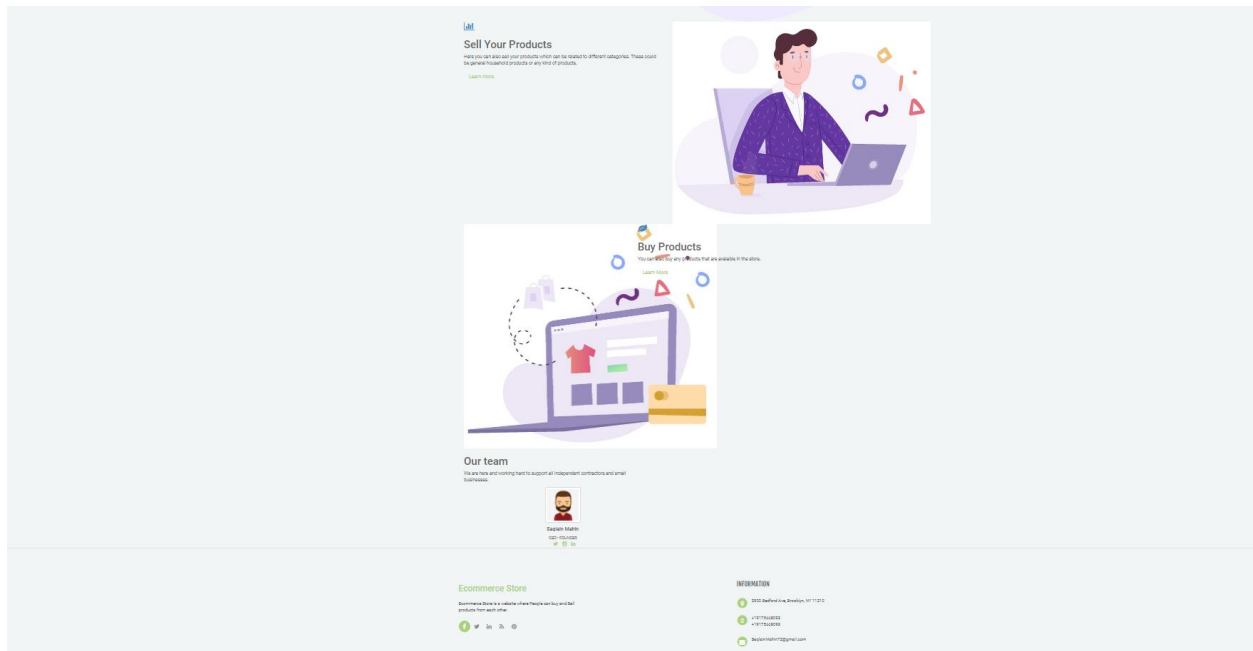
Home page of the website includes horizontal and vertical menu bar, both functions equally by taking user to different product categories.



5.1.4 About us

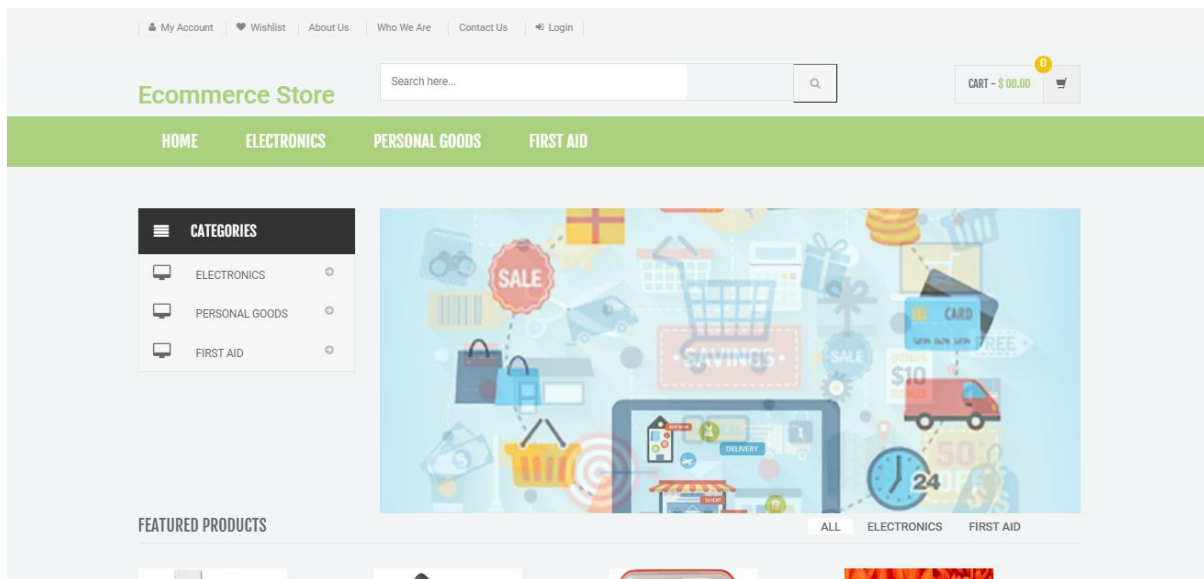
The next option right after 'Wishlist' option redirects user to 'About Us' web page where user or customer can view complete description about the website and its services. As you can see in three different screenshots of About Us page below.





5.1.5 Categories

The system has three main categories such as Electronics, Personal goods, and First Aid. User or customer can easily view product of his/her choice by clicking on these options. You can clearly see in the screenshot below that how product categories are arranged.

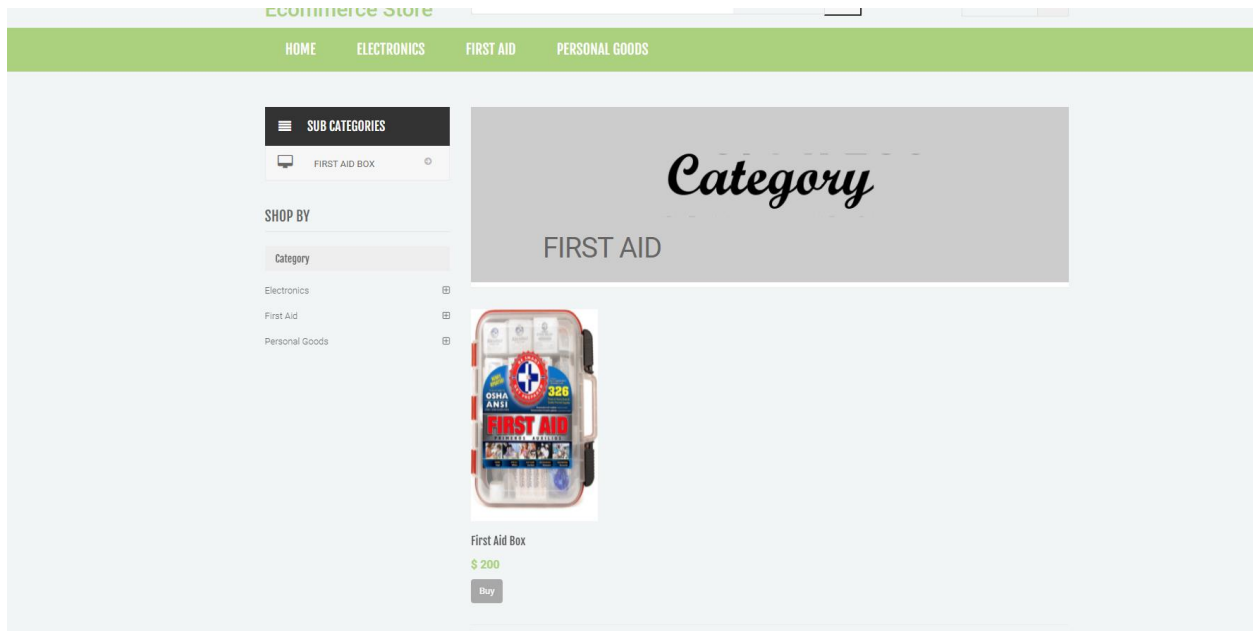


5.1.6 Subcategories

Three main categories are further divided into subcategories which have multiple products.

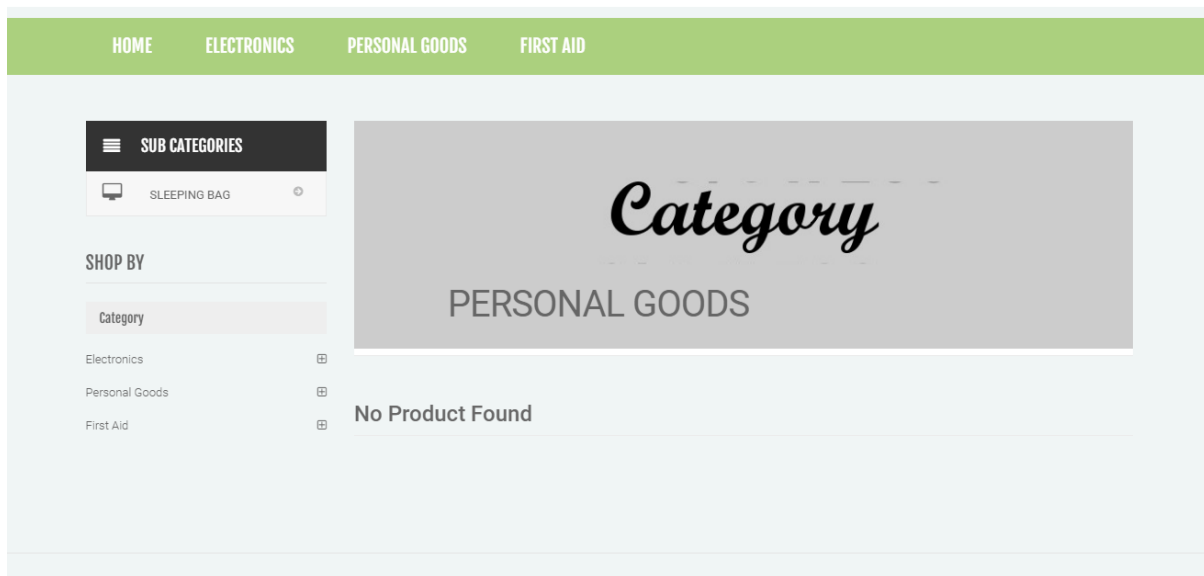
5.1.7 First Aid

First Aid subcategory places different types of first aid medical equipment at best quality.



5.1.8 Personal Goods

User or customer can buy good quality household or personal goods of his/her own choice at this website.



5.1.9 Contact Us

Contact Us option gives user or customer the communication interface where he/she can chat with admin of the system. User can simply enter his/her name and send the message to the admin at given email Id. Here he/she can file a complaint relevant to any issue and can ask any question related to the product. Website's admin is always ready to respond the customer at every time. So, results were positive while testing this webpage. Below is the screenshot of this webpage:

CONTACT US

If you've any query or suggestions contact us.

Home / Contact

Contact us.

Name

Enter name

Email address

Enter email

We'll never share your email with anyone else.

Message

Submit

ADDRESS

+1 New York City

United States

Email : email@example.com

Phone: +15555555555

5.1.10 Store Information

Ecommerce Store

Ecommerce Store is a website where People can buy and Sell products from each other.

Facebook Twitter LinkedIn YouTube

INFORMATION

2900 Bedford Ave, Brooklyn, NY 11210

+19175448093

+19175448093

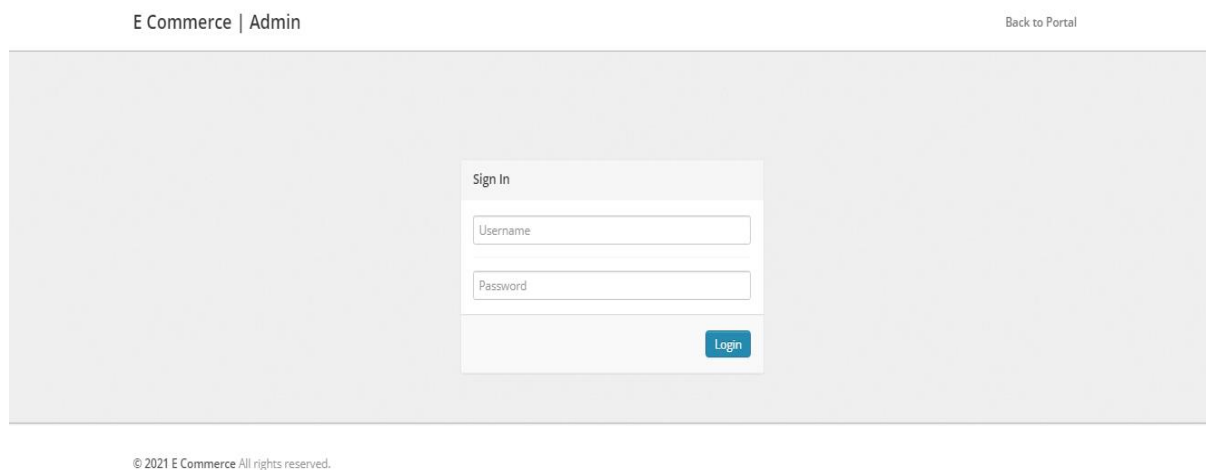
SaqianMahin72@gmail.com

5.2 Database Testing

Database testing has been done successfully as the website is properly connected with designed database. All the insertions, deletions, updates, and every feature that is linked with database are working well. Some errors have been shown at start but resolved at time.

5.2.1 Admin Interface

Admin can access the system after getting registered, he/she can manage the whole website after completing his/her login process.



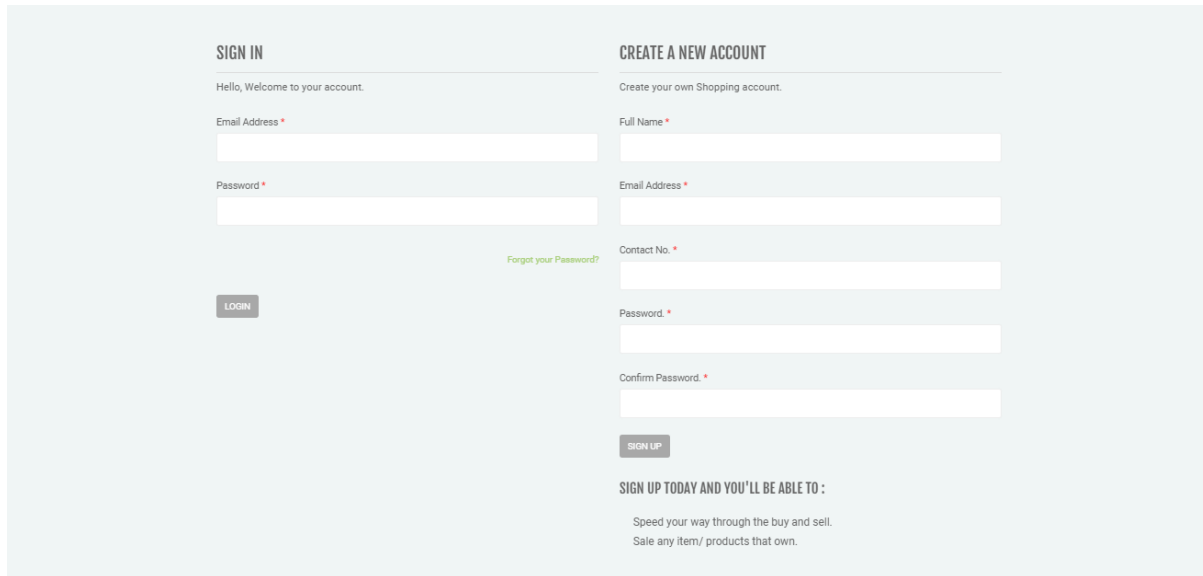
The screenshot displays the admin login page for an e-commerce system. At the top left, the text "E Commerce | Admin" is visible, and at the top right, there is a link "Back to Portal". The main content area is a light gray rectangle containing a white "Sign In" form. The form has two input fields: "Username" and "Password", each with a small eye icon for toggling visibility. Below these fields is a blue "Login" button. At the bottom of the page, a copyright notice reads "© 2021 E Commerce All rights reserved."

5.2.2 Signup for Account

Whenever a user accesses the site for the first time and wishes to make an order, he or she must first register as a customer by filling out the sign-up form. After completing the registration process, he or she will proceed to the login form to purchase the required products. The database correctly records all the data provided by the user or client.

5.2.3 Login user account

This feature allows users and staff members to login to their accounts as database properly stores all their records. Login to specific account is essential for the customer to buy his/her desired product.



The image shows a user interface for account management, divided into two main sections: 'SIGN IN' and 'CREATE A NEW ACCOUNT'.

SIGN IN

- Header: 'Hello, Welcome to your account.'
- Fields: 'Email Address *' and 'Password *'.
- Link: 'Forgot your Password?' (in green text).
- Button: 'LOGIN'.

CREATE A NEW ACCOUNT

- Header: 'Create your own Shopping account.'
- Fields: 'Full Name *', 'Email Address *', 'Contact No. *', 'Password *', and 'Confirm Password *'.
- Button: 'SIGN UP'.
- Section: 'SIGN UP TODAY AND YOU'LL BE ABLE TO :'
 - Speed your way through the buy and sell.
 - Sale any item/ products that own.

5.3 Structure of Database

Here you can see complete structure of the database that how database is interacting with the website. The system's database is organizing different data in multiple tables and these tables are communicating with each other to share desired information.

5.3.1 List of All the Tables on phpMyAdmin

phpMyAdmin

Server: 127.0.0.1 » Database: saqecommerce

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Recent Favorites

New

- information_schema
- mysql
- origin-gym
- performance_schema
- phpmyadmin
- saqecommerce
 - New
 - admin
 - category
 - orders
 - ordertrackhistory
 - products
 - subcategory
 - users
 - wishlist
- test

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> admin		1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> category		3	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> orders		3	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> ordertrackhistory		2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> products		4	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> subcategory		6	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> users		1	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> wishlist		0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
8 tables	Sum	20	InnoDB	utf8mb4_general_ci	128.0 KiB	0 B

☐ Check all With selected:

Print Data dictionary

Create table

Console Number of columns: 4

5.3.2 Admin Table

performance_schema phpmyadmin saqecommerce

New

- admin
- category
- orders
- ordertrackhistory
- products
- subcategory
- users
- wishlist

test

Show all Number of rows: 25 Filter rows: Search this table

Options

	ID	username	password	creation_date	updateDate
<input type="checkbox"/>	1	admin	21232097a57a5a743894a0e4a8016c3	2021-04-11 23:21:41	0000-00-00 00:00:00

☐ Check all With selected:

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

5.3.3 Category Table

The screenshot shows the phpMyAdmin interface for the 'category' table in the 'sagecommerce' database. The table has 3 rows and 5 columns: id, categoryName, categoryDescription, creationDate, and updationDate. The data is as follows:

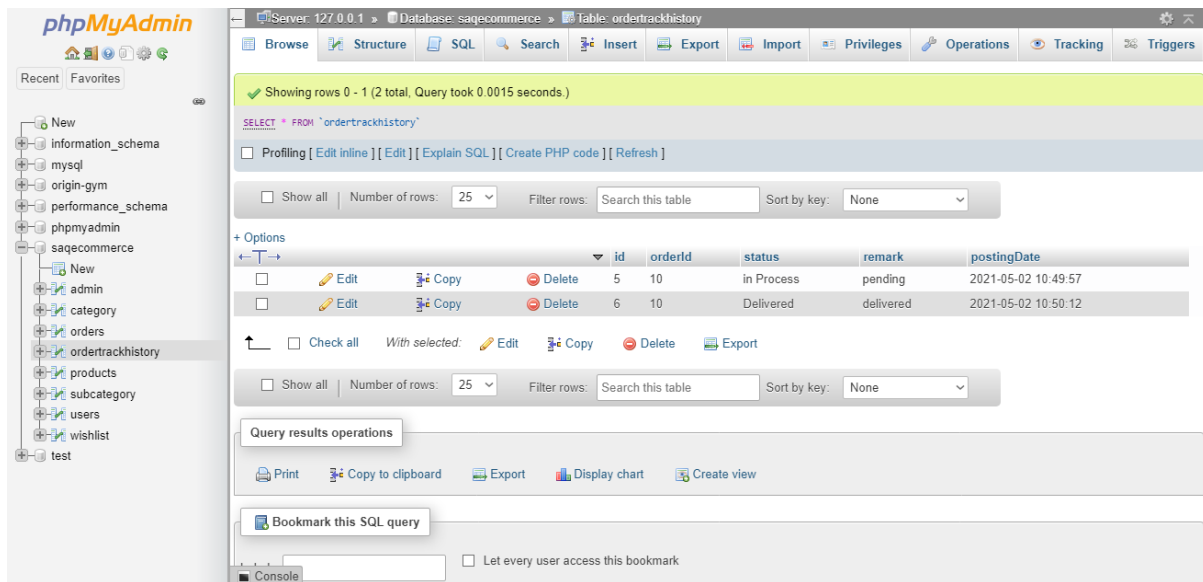
id	categoryName	categoryDescription	creationDate	updationDate
4	Electronics	Electronic Products are related to the electronics...	2021-03-18 19:19:32	31-01-2021 01:37:35 PM
5	Personal Goods	Personal Goods are related to the person like mirr...	2021-02-24 19:19:54	31-01-2021 01:36:26 PM
7	First Aid	First Aid box is also necessary in your any hostel...	2021-02-28 17:08:37	31-01-2021 01:38:52 PM

5.3.4 Orders Table

The screenshot shows the phpMyAdmin interface for the 'orders' table in the 'sagecommerce' database. The table has 3 rows and 8 columns: id, userid, productId, quantity, orderDate, paymentMethod, and orderStatus. The data is as follows:

id	userid	productId	quantity	orderDate	paymentMethod	orderStatus
9	1	28	1	2021-05-01 18:43:29	Debit / Credit card	NULL
10	1	27	3	2021-05-01 18:47:21	Internet Banking	Delivered
11	1	27	1	2021-05-01 18:48:01	COD	NULL

5.3.5 Order Track History Table



Server: 127.0.0.1 » Database: saqecommerce » Table: ordertrackhistory

Showing rows 0 - 1 (2 total, Query took 0.0015 seconds.)

```
SELECT * FROM `ordertrackhistory`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				id	orderId	status	remark	postingDate
<input type="checkbox"/>	Edit	Copy	Delete	5	10	in Process	pending	2021-05-02 10:49:57
<input type="checkbox"/>	Edit	Copy	Delete	6	10	Delivered	delivered	2021-05-02 10:50:12

Check all | With selected: Edit | Copy | Delete | Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

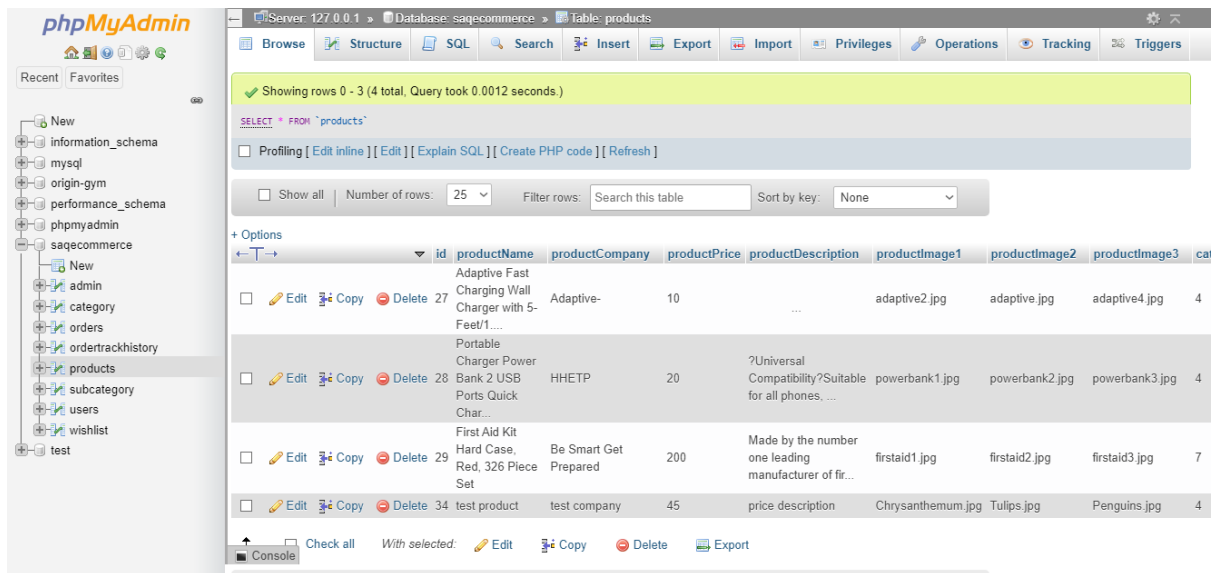
Query results operations

Print | Copy to clipboard | Export | Display chart | Create view

Bookmark this SQL query

Let every user access this bookmark

5.3.6 Products Table



Server: 127.0.0.1 » Database: saqecommerce » Table: products

Showing rows 0 - 3 (4 total, Query took 0.0012 seconds.)

```
SELECT * FROM `products`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				id	productName	productCompany	productPrice	productDescription	productImage1	productImage2	productImage3	category
<input type="checkbox"/>	Edit	Copy	Delete	27	Adaptive Fast Charging Wall Charger with 5-Feet/1.5m Cable	Adaptive-	10	...	adaptive2.jpg	adaptive.jpg	adaptive4.jpg	4
<input type="checkbox"/>	Edit	Copy	Delete	28	Portable Charger Power Bank 2 USB Ports Quick Charge	HHETP	20	?Universal Compatibility?Suitable for all phones. ...	powerbank1.jpg	powerbank2.jpg	powerbank3.jpg	4
<input type="checkbox"/>	Edit	Copy	Delete	29	First Aid Kit Hard Case, Red, 326 Piece Set	Be Smart Get Prepared	200	Made by the number one leading manufacturer of fir...	firstaid1.jpg	firstaid2.jpg	firstaid3.jpg	7
<input type="checkbox"/>	Edit	Copy	Delete	34	test product	test company	45	price description	Chrysanthemum.jpg	Tulips.jpg	Penguins.jpg	4

Check all | With selected: Edit | Copy | Delete | Export

5.3.7 Subcategory Table

ordertrackhistory	<input type="checkbox"/>				6	4	Laptops	2017-02-03 18:13:00	31-01-2021 01:50:09 PM
products	<input type="checkbox"/>				7	4	Computers	2017-02-03 18:13:27	31-01-2021 01:50:17 PM
subcategory	<input type="checkbox"/>				15	7	First Aid Box	2021-04-11 13:39:16	31-01-2021 01:46:48 PM
users	<input type="checkbox"/>				20	5	Sleeping Bag	2021-01-31 00:49:57	NULL
wishlist	<input type="checkbox"/>				21	9	Chargers	2021-05-02 03:27:36	NULL
test	<input type="checkbox"/>				22	10	First Aid Box	2021-05-02 05:17:26	NULL

5.3.8 Users Table

phpMyAdmin

Recent Favorites

- New
- information_schema
- mysql
- origin-gym
- performance_schema
- phpmyadmin
- saqecommerce
 - New
 - admin
 - category
 - orders
 - ordertrackhistory
 - products
 - subcategory
 - users
 - wishlist
- test

Server: 127.0.0.1 » Database: saqecommerce » Table: users

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 0 (1 total, Query took 0.0011 seconds.)

SELECT * FROM 'users'

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

+ Options

	Id	user_name	user_password	user_email	user_phone	user_type	reg_date	shippingAddress
<input type="checkbox"/>	1	Test	098f6bcd4621d373cade4e832627b4f6	test@gmail.com	1235545544	user	2021-04-27 01:38:07	Test

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Console

5.3.9 Wishlist Table

phpMyAdmin

Recent

Favorites

New

information_schema

mysql

origin-gym

performance_schema

phpmyadmin

sagecommerce

- New
- admin
- category
- orders
- ordertrackhistory
- products
- subcategory
- users
- wishlist

test

Server: 127.0.0.1 » Database: sagecommerce » Table: wishlist

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0011 seconds.)

SELECT * FROM `wishlist`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

id	userId	productId	postingDate
----	--------	-----------	-------------

Query results operations

Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

6. Conclusion

E-Commerce website provides a platform where you can purchase different types of products from household or personal items to electronics of your interest. User can see various product categories and check for the desired product, and the website's administrator is responsible for managing the whole website like he/she can add, delete, update the products on the system and can also generate relevant reports in front of user. Admin can customise the overall website as well as the website's contents. Users must sign up for the system and buy any things they want.

This framework performs a variety of functions that allow users to sell what they have by uploading the product to websites where users can see the items that other users have submitted and those who wish to purchase the product can pick it up and add it to their cart. Furthermore, it allows users to save a product to their wish list to buy later.

Web design is an important factor when it comes to websites, and even more so for ecommerce websites. A successful e-commerce web design can help give customers a better experience and potentially lead to more sales. So, the website is designed in user friendly and appealing way that allows user to operate the website easily.

In this era of pandemic, this online system provides you to purchase products of your own choice by simply sitting at home. You can just buy a product from this website and get it at your doorstep.

Reflection:

To reflect upon this project which was to me one of my most challenging task/project yet in my whole college experience, beginning with, working with out any team members really kept me more accountable, however as mentioned by instructors before being able to learn new technologies/ developing all within the same time did not allow me to have a complete sane schedule. Having said that it pushed me to develop more project management and time management skills both which are very crucial to my future career. Having prior experience in BMCC where I took web development class really inspired me to continue on a part of a project i was working on, although I did not use every tool that I used for this project such as a database system, the implementations and the idea was always a static variable here since in the prior college

which we mainly started with HTML and CSS then PHP for the server side , having learned these basic concepts early helped me get to the research portion of the project faster, but with any new system new learning materials had to be learned via (ie YouTube, coursera, Udemy, online articles) to complete the new learning outcomes of the Ecommerce project, with technical supervisor encouraging/ motivating every discussion we had has had an impact on this project from suggestion improvements in technical writing to project management to developing, One thing I loved about this course was the project management aspect/ reporting to supervisor , mostly because it gave me great chance to exercise my project management skills as I'm mostly looking to apply for PM roles this opportunity was a great experience for me which I'm really looking forward add in resume/portfolio.

In terms of project outcomes Additional time would have had an huge impact in the quality and functionalities of the system, as I would have more time to add more features , in hindsight I would definitely add more team members to improve the system, I would have also wished that I planned out the project scope a degree earlier, which would have allowed me to design the system interface and customize a little better to my own liking, which goes back to the thought that having team members wouldn't have been a bad idea, since I saw many people working with team members who had individual tasks to complete, but having said that this was a great learning experience for me as I look to graduate and continue my career possibly in the web development world.

References

- [1] Maddy Osman (January 28, 2021) *Ecommerce Statistics for 2021* , Available at: <https://kinsta.com/blog/ecommerce-statistics/> (Accessed: 5th May 2021).
- [2] The Nielsen Company (US), LLC (2018) *Nielsen Connected Commerce Global Survey 2018*, United States: Nielsen .
- [3] Dinh, L., Sohl-Dickstein, J., Larochelle, H. and Pascanu, R., 2019. A RAD approach to deep mixture models. *arXiv preprint arXiv:1903.07714*.
- [4] Plake, C., Schiemann, T., Pankalla, M., Hakenberg, J. and Leser, U., 2006. AliBaba: PubMed as a graph. *Bioinformatics*, 22(19), pp.2444-2445.
- [5] DONICI, A.N., MAHA, A., IGNAT, I. and MAHA, L.G., 2012. E-Commerce across United States of America: Amazon. com. *Economy Transdisciplinarity Cognition*, 15(1).