# A PROJECT REPORT ON

# E-Commerce Website A Report Submitted to Blackbuck Engineers Pvt. Ltd

# **Submitted by**

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We are also deeply thankful to Ranjith Reddy Sir, our placement officers, for providing us with the opportunity to undertake this training Your support, dedication to our career growth, and belief in our vision have been crucial in turning this endeavor into a reality.

This project would not have been possible without the knowledge and opportunities provided by Black Bucks Academy, the guidance of Ram Kumar Sir, and the trust and support of Placement Officer. We are sincerely grateful for their contributions to help us.

#### Abstract

This project aimed to design and develop a straightforward e-commerce website using modern web technologies, including HTML, HTML5, CSS, JavaScript, and Node.js. The website provides essential functionality for users, such as user registration, login, a homepage, a contact us page, and a shopping page with product images.

The website's primary focus was on creating a user-friendly interface and ensuring a seamless user experience. The HTML and HTML5 markup was employed to structure the website's content and provide a strong foundation for CSS styling. CSS was utilized for designing and making the website visually appealing, with an emphasis on responsive design to ensure compatibility across different devices and screen sizes.

The project also integrated basic Node.js and JavaScript functionalities for user registration and login, enhancing the website's interactivity. Users could register for an account, log in, and explore the shopping page to view product images. For user management, Node.js and JavaScript were integrated into the project. Users could register their accounts, log in securely, and explore the shopping page, which showcased product images. The registration and login functionalities were created with basic validation to enhance security and data integrity.

While this project represents a simple e-commerce website, it serves as a valuable stepping stone for individuals seeking to expand their web development expertise. Future iterations of the project could include an expanded feature set, such as product listings, shopping cart functionality, secure payment processing, and more, to transform it into a fully functionally e-commerce platform.

## Introduction

In today's fast-paced digital age, the way we shop has undergone a profound transformation. With the advent of e-commerce, consumers have come to expect convenience, choice, and accessibility in their online shopping experiences. "Blossom House" emerges as an innovative project designed to bring this transformation to the world of flower shopping.

Traditionally, purchasing flowers meant a trip to a physical flower shop, limited product options, and the constraints of geographic proximity. The existing system posed challenges such as manual inventory management, seasonal sales fluctuations, and a lack of online presence. "Blossom House" was conceived to overcome these limitations and usher in a new era of flower retail.

This project is a web-based e-commerce platform created with a fusion of modern technologies, including HTML, CSS, JavaScript, and Bootstrap. It leverages these tools to offer a seamless and user-friendly shopping experience for customers seeking an extensive selection of flowers, all from the comfort of their homes.

This project serves as a starting point for those looking to explore web development and e-commerce. While it represents a simplified version of an e-commerce website, it lays the foundation for understanding web development fundamentals and can be expanded upon to create more complex and feature-rich e-commerce platforms. In this report, we will delve into the methods and technologies used in the development of this simple e-commerce website, shedding light on the project's objectives,.

## **Advantages:**

- The project serves as an excellent learning opportunity for individuals new to web development. It allows them to gain hands-on experience with fundamental web technologies like HTML, HTML5, CSS, JavaScript, and Node.js.
- Creating a basic e-commerce website like this can be cost-effective, making it accessible for small businesses or individuals with limited budgets.
- Despite its simplicity, the website provides essential features such as user registration and login, which can be a starting point for developing more advanced features like shopping carts, product listings, and payment processing. Improved inventory management.

# **Disadvantages:**

- Basic user registration and login systems may lack robust security measures.
   Developing a secure e-commerce platform requires a deeper understanding of web security to protect user data and transactions.
- In a highly competitive e-commerce market, a simple website may struggle to compete with more feature-rich and visually appealing platforms. Customers may prefer sites with more advanced functionality.
- The project does not incorporate real-world payment processing or inventory management, limiting its practicality for actual e-commerce business operations, Seasonal sales variability.

# **Software and Hardware Requirements**

# **Software Requirements:**

- 1. Programming Languages:
  - Ensure that the following programming languages are installed:
    - HTML

- -Java Script
- -Bootsrap

#### 2. Web Browser:

- A modern web browser for testing and development purposes. Common choices include:
  - Google Chrome
  - Mozilla Firefox
  - Microsoft Edge
- 2. Text Editor or Integrated Development Environment (IDE):
  - A text editor or IDE for coding and development. Option include:
    - Visual Studio Code

# **Hardware Requirements:**

- 1. Minimum Server Requirements:
- The server's hardware specifications will depend on the expected traffic and complexity of your website. As a general guideline, consider at least:
  - 1 GB RAM
  - 1 CPU Core
  - Sufficient storage space for your database and website files.
- 2. Client Devices:
- Ensure that your website is designed to be accessible on various client devices, including desktops, laptops, tablets, and smartphones.
- 3. Internet Connection:
  - A stable internet connection is necessary for development, deployment, and testing.

#### **Motivation:**

The motivation behind undertaking the development of a simple e-commerce website lies in its potential to serve as a practical learning experience and skill-building exercise. This project offers an opportunity to gain proficiency in essential web technologies, including HTML, CSS, JavaScript, and Node.js, while allowing for the practical application of these skills. Furthermore, the completion of such a project can significantly enrich one's portfolio, demonstrating a commitment to web development and showcasing practical abilities. For those pursuing a career in web development or looking to explore entrepreneurial opportunities, the development of an e-commerce website, even in its simplest form, represents a valuable stepping stone towards achieving these goals.

#### **Literature Review:**

A literature review for an e-commerce website project like "Blossom House," which focuses on selling flowers of different varieties, can provide valuable insights into the e-commerce industry, user experience, and best practices for online retail. Below is a literature review highlighting key areas of relevance for our project:

#### 1. E-commerce Trends and Growth:

E-commerce has witnessed substantial growth in recent years, driven by factors such as convenience, changing consumer behavior, and the COVID-19 pandemic (Statista). Understanding this growth is crucial for setting realistic business expectations.

#### 2. E-commerce Website Design and Development:

Studies on e-commerce website design stress the significance of responsive and mobile- first design, which ensures that the website functions well on various devices (Smashing Magazine).

## 3. Product Presentation and Imagery:

High-quality product images and detailed descriptions are critical for showcasing products effectively and encouraging conversions (Baymard Institute).

#### 4. Customer Reviews:

The inclusion of customer reviews and ratings can significantly impact purchasing decisions. Leveraging user-generated content can enhance trust and credibility (Spiegel Research Center).

## 5. Inventory Management and Order Processing:

Efficient inventory management and order processing systems are essential for preventing stockouts, ensuring timely deliveries, and maintaining customer satisfaction (International Journal of Management, IT and Engineering).

#### 6. Ethical and Environmental Considerations:

Ethical sourcing of products and environmentally sustainable practices in e-commerce are becoming increasingly important to socially conscious consumers (Consumer Reports).

## **Existing System:**

#### 1. Physical Flower Shops:

Before the introduction of "Blossom House," customers typically purchased flowers by visiting physical brick-and-mortar flower shops, garden centers, or florists.

## 2. Limited Geographic Reach:

These physical flower shops had a limited geographic reach, serving only customers who could visit the shop in person or those located within a specific delivery radius.

#### 3. Limited Product Selection:

The product selection was limited to the flowers and arrangements available at the physical store. Customers had no easy way to browse a wide variety of flowers and choose from a vast inventory.

## 4. Inconvenience and Time-Consuming:

Shopping for flowers at physical stores could be inconvenient, requiring customers to travel to the shop during business hours. It was time-consuming and may not have been suitable for customers with busy schedules.

#### 5. Lack of Online Presence:

Many traditional flower shops had limited or no online presence, which means they missed out on a significant portion of potential customers who prefer to shop online.

## **Proposed System:**

The proposed system for the Blossom House e-commerce project encompasses the following key elements:

- 1. **User-Friendly Website:** The central component is a user-friendly e-commerce website designed to provide customers with an intuitive and enjoyable shopping experience. It should feature an attractive and responsive design, making it accessible from various devices and browsers.
- 2. **Product Catalog:** The website will have a comprehensive catalog of various flower varieties, arrangements, and related products. Each product listing should include high-quality images, detailed descriptions, and pricing information.
- 3. **Search and Filter Functionality:** To facilitate easy product discovery, the system should incorporate robust search and filter features, allowing customers to find specific flowers, occasions, or price ranges quickly.
- 4. **Secure Checkout Process:** The checkout process should be secure, simple, and efficient. It should include options for payment methods, delivery addresses, and delivery date selection. Integration with secure payment gateways is essential for handling transactions.
- 5. **User Accounts:** Users can create accounts to streamline future purchases, track order history, and receive updates on promotions or new arrivals. Account creation should be easy, requiring minimal information.
- 6. **Order Management:** An admin panel is necessary for order management. It should enable order tracking, order processing, and status updates. Admins should also be able to manage inventory and product listings.
- 7. **Delivery and Shipping:** Implement a system for setting delivery zones, calculating shipping costs, and providing estimated delivery times. Customers should receive order tracking information.
- 8. **Customer Support:** Offer multiple channels for customer support, including live chat, email, or a dedicated support page. Promptly address customer inquiries and issues.

## **Keywords and Definitions:**

## 1. E-commerce (Electronic Commerce):

E-commerce refers to the buying and selling of goods or services over the internet. It encompasses various online activities, including online shopping, electronic payments, and online marketplaces.

#### 2. Website:

A website is a collection of web pages accessible through the internet. It serves as the online storefront for e-commerce businesses, providing information about products or services and facilitating transactions.

## 3. Online Shopping:

Online shopping is the process of purchasing products or services through a website or app. It allows customers to browse, select, and buy items without visiting a physical store.

## 7. Product Catalog:

A product catalog is an organized listing of the products or services offered by an ecommerce business. It includes product descriptions, prices, and images.

#### 8. User Account:

A user account is a personal and secure online account that customers create on an e-commerce website. It allows them to store personal information, track orders, and receive updates.

## 9. Inventory Management:

Inventory management involves tracking and controlling the quantity and availability of products in stock. E-commerce businesses use software to manage their inventory efficiently.

## **Implementation:**

- HTML, CSS, JavaScript: Build the user interface using these fundamental web technologies for layout, styling, and interactivity.
- **Responsive Design:** Ensure the website is responsive to different screen sizes and devices.
- **Bootstrap:** Utilize Bootstrap or similar frameworks for a responsive and consistent design.
- Client-Side Frameworks: Consider using JavaScript frameworks like React or Vue.js for dynamic user interfaces.

## **Challenges Faced:**

- Limited market reach and customer base due to physical store limitations.
- Inability to provide a wide variety of flowers and convenience to customers.
- Manual processes for inventory management and order processing.
- Limited marketing and online presence, missing out on the growing e-commerce market.

# **System Testing:**

Software testing is an important element of software quality assurance and represents the ultimate review of specification, design and coding. It increasing visibility of software as a system element and the costs associates with a software failure are motivating forces for all well planned through testing. The system is tested with giving wrong information. Cascade deletion and, the software developer checks updating. Testing and debugging are different activities, but debugging must be accommodated in any testing strategy.

#### **UNIT TESTING:**

Unit testing is the important and major part of the project. So errors can be rectified easily in each module and program clarity can be increased. In this project, the entire system is divided into several modules and is developed individually. Hence, unit testing is conducted to individual modules.

#### **INTEGRATION TESTING:**

Integration testing is the systematic technique for constructing the program structure while conducting tests to uncover errors associated with integrating. After the unit test, each module is gradually integrated to form one final system. All the modules when unit tested will work properly but after integrating the data can cause error one module can have an inadvertent, adverse effect on another; sub functions when combined may not produce the desired major function; global data structures can cause problems, etc. In this project the integration testing is performed by combing login, civil registration and status modules are generated the report.

## PERFORMANCE TESTING:

A type of Physical test covering a wide range of engineering or functional evaluations where a material, product, or system is not specified by detailed material or component specifications: rather, emphasis is on the final measurable performance characteristics. Testing can be a qualitative or quantitative procedure.

#### **ACCEPTANCE TESTING:**

The User Acceptance testing focuses mainly on the functionality thereby validating the fitness-for-use of the system by the business user. The user acceptance test is performed by the users and application managers.

#### **Test Results:**

All the test cases mentioned above passed successfully. No defects encountered.

# **Coding:**

## home.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<style>
.header-2{
background-color: lightskyblue;
height: 75px;
}
.s{
display: flex;
align-items: center;
justify-content: center;
flex-wrap: wrap;
.s .image{
flex:1 1 40rem;
padding-top: 5rem;
.s .image img{
width: 40%;
height: 20%;
.s.image.content{
flex:1 1 40rem;
.s .content span{
font-size: 3rem;
color:#666;
}
.content h3{
font-size: 5rem;
color:var(--black);
}
</style>
<title>Bootstrap Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
<link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
<body style="background: url(istockphoto-1560142923-2048x2048.jpg); background-size:
cover;">
<div class="header-1">
<h1 align="center" style="color: rgb(114, 95, 160)"><strong>E-Commernce
website</strong></h1>
<form align="right" action="" class="search-box-container">
<input type="search" id="search-box" placeholder="Search Here...">
 <label for="search-box" class="fas fa-bars"></label>
 </form>
 </div><br>
 <div class="header-2" style="color: black;">
 <div id="menu" class="fas fa-bars" style="color: blanchedalmond;">
 <center><nav class="navbar">
 <a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
 215);">HOME</a>
 <a href="registration2.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
 215);">CREATE ACCOUNT</a>
 <a href="login1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
 215);">LOGIN</a>
 <a href="index.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">PRODUCTS</a>
<!--- <a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">OFFERS</a>-->
<a href="contact1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215)">CONTACT US</a>
</nav></center></div>
 </div>
Index.html
 <!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<link rel="stylesheet" href="style1.css">
```

```
</head>
 <body class="">
 <div class="container">
 <header>
 <h1>Your Shopping Cart</h1>
 <div class="shopping">
 <img src="c.png">
 <span class="quantity">0</span>
 </div>
 </header>
 <div class="list">
 </div>
 </div>
 <div class="card">
 <h1>Card</h1>
 <div class="checkOut">
 <div class="total">0</div>
 <div class="closeShopping">Close</div>
 </div>
 </div>
 <script src="app.js"></script>
 </body>
 </html>
Login.html
 <html>
 <head>
 <title>
 Login page
 </title>
 <link rel="stylesheet" href="style.css">
 <script>
 function validate(form)
 var username=form.user.value;
 var password=form.pass.value;
 if(username.length===0)
 alert("You must have enter a valid Username");
```

```
return false;
}
if(password.length===0)
alert("You must have enter a valid password");
return false;
}
}
</script>
</head>
<body style="background: url(online-fashion-shopping-with-computer.jpg); background-size:</p>
cover;">
<form align="center" action="sucess.html" onsubmit="return validate(this);">
<h1 style="color: purple;">Login Page</h1>
<input type="submit">
</form>
<h3 align="center">Don't have account</h3>
<a href="registration2.html">Sign up</a>
</body>
</html>
Registration.html
<html>
<head>
<title>
Registration
</title>
<style>
.header-2{
background-color: lightskyblue;
height: 75px;
}
</style>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
<script>
function validate(form)
var username=form.username.value;
var password=form.password.value;
var mail=form.mail.value;
var age=form.age.value;
var mobile=form.mymobile.value;
var address=form.add.value;
if(username.length===0)
alert("You must have enter a valid Username");
return false;
if(password.length===0)
alert("You must have enter a valid password");
return false;
if(mail.length===0)
alert("You must enter a valid email");
return false;
}
if(age.length===0)
alert("You must enter age");
return false;
if(mobile.length===0)
alert("You must enter mobile number");
return false;
if(address.length===0)
alert("You must enter address");
return false;
```

```
}
}
</script>
<link rel="stylesheet" href="style.css">
</head>
<body style="background: url(sho.jpg); background-size: cover;">
<header>
<div class="header-2">
<div id="menu" class="fas fa-bars" style="color: blanchedalmond;">
<center><nav class="navbar">
<a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">HOME</a>
<a href="registration2.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">CREATE ACCOUNT</a>
<a href="login1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">LOGIN</a>
<a href="index.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">PRODUCTS</a>
<!--- <a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">OFFERS</a>-->
<a href="contact1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215)">CONTACT US</a>
</nav></center></div>
</div>
</header>
<form action="login1.html" align="center" onsubmit="return validate(this);">
<h1 style="color: black;">Registration Form</h1>
<hr>
Username : 
<input type="text" name="username" placeholder="Enter name">
Password : 
<input type="password" name="password" placeholder="Enter password">
Email: 
<input type="email" placeholder="Enter your mail" name="mail" id="myself"
list="mymail">
```

```
<datalist id="mymail">
<option value="pushpa@gmai.com"></option>
<option value="kakarlapushpa@gmail.com"></option>
<option value="pushpakakarla4@gmail.com"></option>
</datalist>
Age : 
<input type="number" placeholder="Enter Age" min="10" max="50" name="age" >
Gender : 
<input type="radio" name="gender">Male
<input type="radio" name="gender">Female
MobileNumber : 
<input type="tel" name="mymobile" pattern="[0-9]{10}" title="10 digit mobile number"
placeholder="Enter MobileNumber" >
Address : 
<input style="color: black;" type="submit">
<input style="color: black;" type="reset">
</form>
</body>
</html>
Cart.html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<link rel="stylesheet" href="style1.css">
</head>
<body class="">
<div class="container">
<header>
<h1>Your Shopping Cart</h1>
<div class="shopping">
 <img src="c.png">
 <span class="quantity">0</span>
 </div>
 </header>
 <div class="list">
 </div>
 </div>
 <div class="card">
 <h1>Card</h1>
 <div class="checkOut">
 <div class="total">0</div>
<div class="closeShopping">Close</div>
</div>
</div>
<script src="app.js"></script>
</body>
</html>
Contact.html
<html>
<head>
<title>Contact</title>
<style>
.header-2{
background-color: lightskyblue;
height: 75px;
 }
</style>
<link rel="stylesheet" href="style.css">
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
```

<title>Document</title>

```
k rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
<style>
body{
background-image: url("c:\Users\HP\Documents\do.jpg");
</style>
</head>
<br/>
<br/>
d-illustration-smartphone-with-products-coming-out-screen-
online-shopping-e-commerce-concept.jpg); background-size: cover;">
<header>
<div class="header-2">
<div id="menu" class="fas fa-bars" style="color: blanchedalmond;">
<center><nav class="navbar">
<a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">HOME</a>
<a href="registration2.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">CREATE ACCOUNT</a>
<a href="login1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">LOGIN</a>
<a href="index.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215);">PRODUCTS</a>
<!--- <a href="home.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215):">OFFERS</a>-->
<a href="contact1.html" class="btn btn-info" role="button" style="border:rgb(72, 191,
215)">CONTACT US</a>
</nav></center></div>
</div>
</header>
<h1 align="center" style="color: purple;">Contact Us</h1>
<form action="#" align="center" >
<div class="container">
FullName : 
<input type="text" placeholder="Enter Your name">
PhoneNumber : 
="tel" pattern="[0-9]{10}" placeholder="Enter number" title="10 digit mobile
```

```
number">
Email : 
<input type="email" placeholder="Enter mail">
Message : 
<textarea placeholder="Message"></textarea>
</div>
<input type="submit">
</form>
</body>
</html>
RESULTS:
    ○ File | C:/SRIT-UI-Documentation/html5/home.html
                                                   A A B G G B B B B B
                              E-Commern@website
                                              Stock
Credit: da-kuk
      1560142923
```

Fig 1.1 Home page

■ P Type here to search

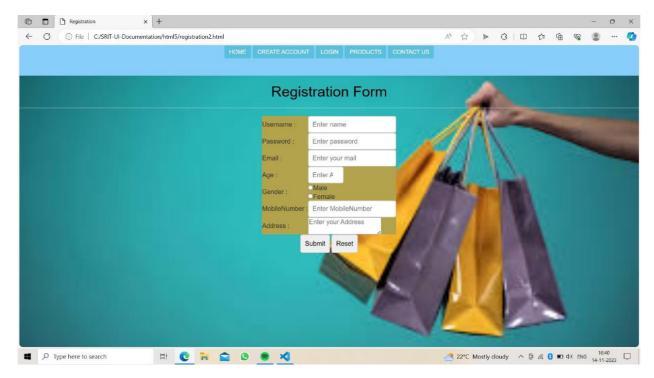


Fig 1.2 Registration page

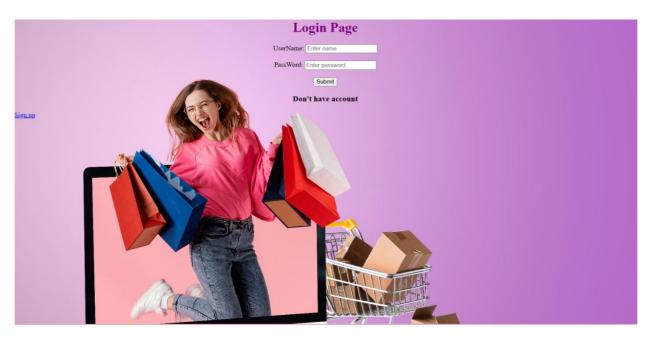


Fig 1.3 Login Page

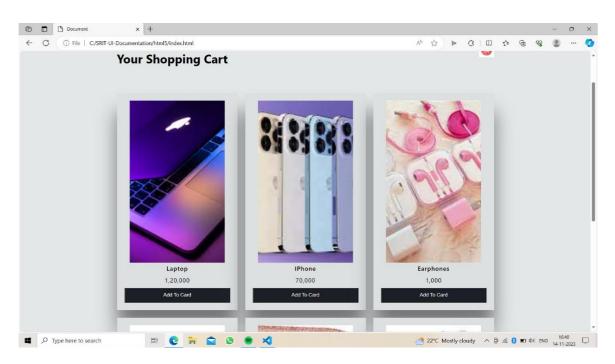


Fig 1.4 Index Page

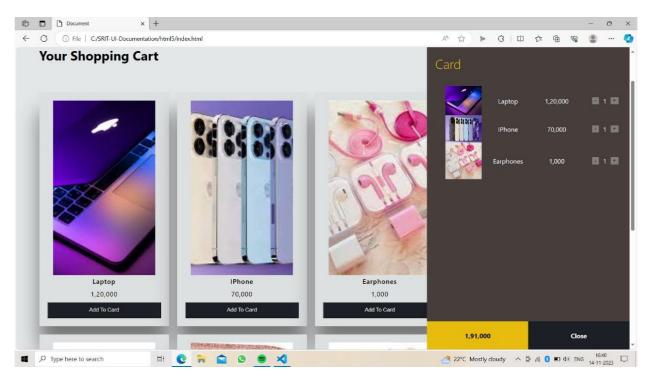


Fig 1.5 Index Page

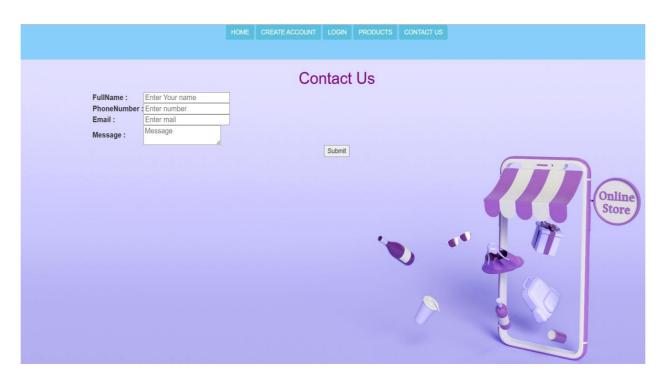


Fig 1.6 Contact us

## **Conclusion**

This Web application "E-COMMERCE" avoids the manual work and the problems concern with it. It is an easy way to obtain the information regarding the various products information that is present in the markets. This system is an improved application better than the existing one's regarding the information about the various activities. Still, we found out that the project can be done in a better way. Primarily, when we request information about particular details it shows all the relevant information. This project is a computerized solution for storing the details of all related information in an organization and also task assigned to an employee by an organization. Here, we can conclude that the application been developed is to reduce manpower and various complexities.

