STAR LION COLLEGE OF ENGINEERING AND TECHNOLOGY

Name	V.Sriharan
Department	Computer Science And Engineering
Project Title	E-Commerece Application

E-commerce Application on IBM Cloud Foundry

Phase-2 Submission Document

Project Title: E-commerce App

Introduction:

E-commerce, short for electronic commerce, has revolutionized the way businesses operate and consumers shop. In a fast-paced digital world, E-commerce applications have emerged as a pivotal tool for businesses to reach a broader audience and facilitate seamless transactions over the internet. These applications encompass online platforms where buyers and sellers engage in buying and selling products or services, making transactions efficient, convenient, and accessible 24/7.

An E-commerce application serves as a virtual marketplace where customers can browse through a wide array of products or services, compare prices, read reviews, and make secure purchases without the need to visit physical stores. For businesses, these applications provide an avenue to showcase their offerings, manage inventory, process payments, and build lasting customer relationships.

In this rapidly evolving landscape, the success of an E-commerce application hinges on user experience, security, reliability, and adaptability to changing market trends. Providing a seamless, intuitive interface, secure payment gateways, personalized recommendations, and efficient logistics are paramount to ensuring customer satisfaction and retention.

What is E-Commerece?

E-commerce, short for electronic commerce, refers to the buying and selling of goods and services over the internet or other electronic channels. It involves a wide range of online transactions, including online retail stores, digital marketplaces, online auctions, and various business-to-business (B2B) and business-to-consumer (B2C) transactions.

In essence, e-commerce eliminates the need for physical interaction between buyers and sellers. Instead, individuals and businesses can conduct transactions, exchange information, and engage in commerce electronically through websites, mobile apps, emails, or other online platforms.

Key Components of E-commerce:

1.   **Online Presence:** E-commerce begins with establishing a digital platform where products or services can be showcased and transactions can take place. This can be a website, a mobile app, or even a presence on a third-party marketplace.

2.   **Products/Services** Listings: Sellers list their products or services on the ecommerce platform, providing detailed descriptions, images, prices, and other relevant information to attract potential buyers.

3.   **Online Transactions:** E-commerce enables secure online transactions, usually facilitated through various payment gateways, credit cards, digital wallets, or other electronic payment methods.

4. **Order Processing and Fulfillment:** Once an order is placed, the ecommerce platform processes the order, manages inventory, and arranges for shipping and delivery to the customer.

5. **Customer Service and Support:** E-commerce platforms typically offer customer support to address inquiries, handle returns, resolve disputes, and ensure a positive customer experience.

CODING:

INDEX:

```html
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initialscale=1.0">
  <title>E-commerce Website</title>
  <link rel="stylesheet" href="styles.css"> <!-- Link to your CSS
file for styling -->
</head>

<body>
  <header>
    <h1>Welcome to Our E-commerce Store</h1>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Products</a></li>
        <li><a href="#">Contact Us</a></li>
      </ul>
    </nav>
  </header>
```

```html
  <section class="featured-products">
   <h2>Featured Products</h2>
   <!-- Display featured products with images, titles, and
descriptions -->    <div class="product">
    <img src="product1.jpg" alt="Product 1">
    <h3>Product 1</h3>
    <p>Description of Product 1.</p>
    <button>Add to Cart</button>
   </div>

   <div class="product">
    <img src="product2.jpg" alt="Product 2">
    <h3>Product 2</h3>
    <p>Description of Product 2.</p>
    <button>Add to Cart</button>
   </div>

   <!-- Add more products as needed -->
  </section>

  <section class="about-us">
   <h2>About Us</h2>
   <p>We are a leading e-commerce platform providing a wide
range of products to our customers.</p>
  </section>

  <section class="contact">
   <h2>Contact Us</h2>
   <!-- Add a contact form or contact information here -->
  </section>

  <footer>
   <p>&copy; 2023 E-commerce Website</p>
  </footer>

  <script src="script.js"></script> <!-- Link to your JavaScript file
for interactive elements -->
</body>
```

```
</html>
```

SEARCH:

```html
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initialscale=1.0">
  <title>E-commerce Website with Search</title>
  <style>
    /* CSS for styling the search bar */
    #search-container {      text-
align:        center;      margin:
20px 0;
    }

    #search-bar {      padding:
10px;
      width: 300px;
    }
  </style>
</head>

<body>
  <header>
    <h1>Welcome to Our E-commerce Store</h1>
    <nav>
     <ul>
       <li><a href="#">Home</a></li>
       <li><a href="#">Products</a></li>
       <li><a href="#">Contact Us</a></li>
     </ul>
    </nav>
  </header>

  <!-- Search bar section -->
```

```html
  <section id="search-container">
    <input type="text" id="search-bar" placeholder="Search products...">
    <button onclick="searchProducts()">Search</button>
  </section>

  <section class="featured-products">
    <h2>Featured Products</h2>
    <!-- Display featured products with images, titles, and descriptions -->    <div class="product">
      <!-- Product 1 details -->
    </div>

    <div class="product">
      <!-- Product 2 details -->
    </div>

    <!-- Add more products as needed -->
  </section>

  <!-- Other sections (About Us, Contact Us, etc.) -->

  <footer>
    <p>&copy; 2023 E-commerce Website</p>
  </footer>

  <script>
    // JavaScript function to handle the search functionality    function searchProducts() {
// Retrieve the search query      const searchQuery = document.getElementById('searchbar').value;
    // Perform search based on the query (e.g., redirect to a search results page)
    // Replace this with your actual search implementation window.location.href = `search-results.html?q=${encodeURIComponent(searchQuery)}`;
    }
  </script>
</body>
```

```
                    </html>
```

BOOKMARK:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initialscale=1.0">
  <title>E-commerce Website with Bookmarking</title>
  <style>
    /* CSS for styling the bookmark button and list */
    .bookmark-button {      backgroundcolor:
#4CAF50;
      color: white;
padding: 10px;      border:
none;      cursor: pointer;
    }
    .bookmark-button:hover {      backgroundcolor:
#45a049;
    }

    #bookmark-list {      list-styletype:
none;
      padding: 0;
    }

    #bookmark-list li {
      margin-bottom: 5px;
    }
  </style>
</head>

<body>
  <header>
    <h1>Welcome to Our E-commerce Store</h1>
```

```html
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Products</a></li>
        <li><a href="#">Contact Us</a></li>
      </ul>
    </nav>
  </header>

  <section class="featured-products">
    <h2>Featured Products</h2>
    <!-- Product 1 details -->
    <div class="product">
      <h3>Product 1</h3>
      <button class="bookmark-button"
onclick="bookmarkProduct('Product 1')">Bookmark</button>
    </div>

    <!-- Product 2 details -->
    <div class="product">
      <h3>Product 2</h3>
      <button class="bookmark-button"
onclick="bookmarkProduct('Product 2')">Bookmark</button>
    </div>

    <!-- Add more products as needed -->
  </section>

  <section class="bookmarks">
<h2>Your Bookmarks</h2>
    <ul id="bookmark-list">
      <!-- Bookmarked items will appear here -->
    </ul>
  </section>

  <footer>
    <p>&copy; 2023 E-commerce Website</p>
  </footer>
```

```
  <script>
    // JavaScript function to handle bookmarking a product    function
bookmarkProduct(productName) {
      const bookmarkList = document.getElementById('bookmark-list');
      const listItem = document.createElement('li');
listItem.textContent = productName;
      bookmarkList.appendChild(listItem);
    }
  </script>
</body>

</html>
```

LOG IN:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initialscale=1.0">
  <title>E-commerce Website - Login</title>
  <style>
    /* CSS for basic styling of the login form */    body
{
      font-family: Arial, sans-serif;
    }

    .login-container {      width:
300px;      margin:
0 auto;      margin-top:
100px;
    }

    .login-container h2 {      textalign:
center;
      margin-bottom: 20px;
```

```
        }
.logi
n-
form
inpu
t {
widt
h:
100
%;
padd
ing:
10px;        margin-
bottom: 10px;
    }


    .login-form button {
width: 100%;     padding: 10px;
background-color: #4CAF50;
color:        white;     border:
      none;
cursor: pointer;
    }


    .login-form button:hover {
     background-color: #45a049;
    }
  </style>
</head>

<body>
  <div class="login-container">
    <h2>Login to Your Account</h2>
    <form class="login-form" onsubmit="return loginUser(event)">
<input type="text" id="username" placeholder="Username"
required><br>
     <input type="password" id="password" placeholder="Password"
required><br>
     <button type="submit">Login</button>
    </form>
```

</div>

        <script>   function loginUser(event) {   event.preventDefault();
const username = document.getElementById('username').value;   const
password = document.getElementById('password').value;   //
Implement authentication logic here (e.g., send data to the server)
console.log('Username:', username);   console.log('Password:',
password);
        // Replace this with your actual authentication logic
    }
    </script>
</body>

</html>

OUTPUT:

• In the middle part of the home page showing the current promotion or offer running.

• Bottom of the page showing Account, Help and Popular menu. Popular menu will show the latest product, Help for contact and Account for register or existing user login.

Home Page view is shown in figure below:

Figure: 3. 1 Home page

3.1.2 CUSTOMER LOGIN AND REGISTRATION PAGE

Customer have to login before adding product in cart. In this page existing customer can login to buy product and new user can create an account for buying the product.

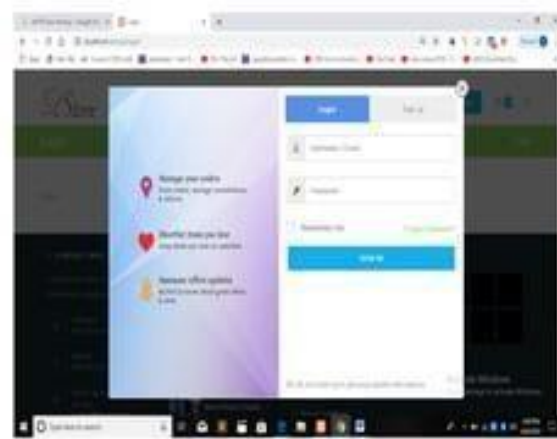Figure of user login and registration page given below:

Figure: 3.2 user login and registration

40

CONCLUSION:

E-Commerce industry is that force which cannot be ignored by any element of theeconomy. Coronavirus pandemic proved that one of the major tools that can helpconsumers during crisis is e-commerce. In order to maintain social distancing and selfquarantinethe consumers have become more reliable on the e-commerce industry.In the questionnaire the respondents were asked to rate their experience of onlineshopping before covid19 and also during covid19. The graph 6 shows the ratings ofconsumers according to their experience before covid19. According to which 35.8% rated 4 whereas 3% rated 1 and 3.9% as 5.