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Project title	E-commerce Application

E-commerce Application on IBM Cloud Foundry

Project Title: E-commerce App

Phase 3: Development part-1

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.



- Start by designing and developing the E-Commerce Application.
 - Design the website layout HTML and CSS.
- Create engaging content with captivating photos and design's.

E-Commerece:

E-commerce, short for electronic commerce, refers to the buying and selling of goods and services over the internet. It involves a wide range of online business activities, including online retail, digital payments, electronic auctions, and more. Ecommerce has transformed the way people conduct business and shop, offering several advantages, such as convenience, accessibility, a broader market reach, and cost savings. It encompasses various types of transactions, from business-toconsumer (B2C), where businesses sell products or services directly to individual consumers, to business-to-business (B2B), where companies trade goods and

services with other businesses. E-commerce has become a fundamental part of the global economy and has continuously evolved with advancements in technology and changing consumer behavior.

Uses of E-Commerce:

E-commerce, or electronic commerce, has a wide range of uses and applications across various industries and for different purposes. Here are some of the key uses of e-commerce:

- 1. Online Retail:** E-commerce enables businesses to sell products and services to customers over the internet. This includes a wide range of products, from clothing and electronics to books and groceries. Major online retailers like Amazon, eBay, and Alibaba operate on this model.
- 2. Digital Products and Services:** E-commerce facilitates the sale of digital goods and services, such as e-books, software, online courses, streaming services (Netflix, Spotify), and downloadable music.
- 3. B2B E-commerce:** Businesses use e-commerce to purchase goods and services from other businesses. This is common in industries like manufacturing and wholesale.
- 4. Online Marketplaces:** E-commerce marketplaces like Etsy, eBay, and Airbnb provide a platform for individuals and businesses to buy and sell products and services.
- 5. Auctions:** Online auction platforms like eBay enable users to bid on and purchase items in real-time auctions.
- 6. Subscription Services:** E-commerce is used for subscription-based services such as streaming (Netflix, Hulu), meal kit delivery (Blue Apron), and subscription boxes (Birchbox, Loot Crate).
- 7. Dropshipping:** Some e-commerce businesses operate on a dropshipping model, where they sell products without holding inventory. When a product is sold, the order is sent to a third-party supplier who ships the product directly to the customer.

8. Digital Advertising: E-commerce platforms often utilize digital advertising to promote products and services, including pay-per-click advertising, social media advertising, and search engine marketing.

9. E-tickets and Reservations: The travel and entertainment industry uses e-commerce to sell tickets for flights, concerts, movies, and events. Restaurants and hotels also use e-commerce for online reservations.

10. Crowdfunding: Crowdfunding platforms like Kickstarter and Indiegogo use e-commerce to facilitate fundraising for creative projects and innovative products.

11. Banking and Financial Services: E-commerce is used for online banking, investment services, insurance, and financial transactions, allowing customers to manage their finances online.

12. Government Services: E-commerce platforms enable citizens to pay taxes, obtain official documents, and access government services online.

13. Healthcare and Telemedicine: E-commerce is increasingly used for booking medical appointments, ordering prescription medications, and accessing telemedicine services.

14. Education and E-Learning: E-commerce is essential for online learning platforms and institutions that offer courses, certifications, and educational materials.

15. Food Delivery: E-commerce apps and websites like Uber Eats and DoorDash enable customers to order food for delivery from local restaurants.

16. **Charity and Fundraising: Nonprofits and charitable organizations use e-commerce to accept donations and raise funds for various causes.

17. Real Estate: Online real estate platforms allow users to search for and purchase properties or rent apartments.

18. Art and Collectibles: E-commerce has made it easier to buy and sell art, collectibles, and rare items through online auctions and marketplaces.

19. Event Ticketing: Ticketing services like Eventbrite and Ticketmaster use e-commerce for event ticket sales and management.

20. Global Trade: International trade relies on e-commerce platforms to facilitate the buying and selling of goods and services across borders.

These are just a few examples of the many uses of e-commerce. The digital economy continues to evolve, with new e-commerce applications and models emerging regularly.

HEADER:

Creating an effective header for an e-commerce website is crucial because it's one of the first things visitors see, and it helps them navigate your site. Here's a sample header for an e-commerce website.

1. Logo: Your logo, which links to the homepage. Make sure the logo is easily recognizable.

2. Search Bar: A search bar that allows users to search for products. This is a crucial feature for an e-commerce site.

3. Navigation Menu: A navigation menu with links to important sections of your website, such as products, categories, brands, the shopping cart, and the user's account.

4. Styling: Ensure that your header is visually appealing and consistent with your overall website design.

Remember to adapt the code and styling to match your specific e-commerce website's branding and design. Additionally, you may want to include additional

elements, such as a user login option, a wishlist link, or promotional banners, depending on your site's requirements and goals.

SEARCH ENGINE:

If you're looking for a search engine specifically designed for ecommerce websites, there are a few popular options to consider. These search engines are tailored to the needs of online retailers and can help improve the search experience for your customers. Here are some notable e-commerce search engines:

1. **Algolia:** Algolia is a powerful search and discovery API for e-commerce sites. It provides fast and relevant search results, real-time indexing, and customizable search features.
2. **Elasticsearch:** Elasticsearch is an open-source search and analytics engine that can be used to create a highly customizable search experience for e-commerce websites. Many e-commerce platforms integrate Elasticsearch to power their search capabilities.
3. **Solr:** Apache Solr is another open-source search platform that is commonly used in e-commerce. It offers features like faceted search, filtering, and scalability.
4. **Swifttype:** Now part of Elastic, Swifttype offers a user-friendly search and discovery solution for e-commerce sites with features like autocomplete, faceted search, and analytics.
5. **SearchSpring:** SearchSpring is a search and merchandising platform designed for e-commerce. It provides features like intelligent autocomplete, faceted search, and personalization.
6. **Klevu:** Klevu is a popular search solution for e-commerce platforms. It offers AI-powered search, merchandising, and analytics to improve the shopping experience.

7. **Sajari:** Sajari is an AI-powered search and discovery platform designed for ecommerce, helping businesses improve search relevance and user experience.

When choosing a search engine for your e-commerce site, consider factors such as your specific requirements, budget, scalability, integration capabilities with your existing e-commerce platform. Additionally, many e-commerce platforms have their built-in search functionality, so you may want to explore those options as well.

PRODUCTS:

Creating an e-commerce app involves offering a wide range of products and providing detailed information about them to help customers make informed purchasing decisions. The specific products and details will depend on the type of ecommerce app and your target market, but here is a general list of product categories and details to consider:

Product Categories:

1. **Electronics:** Smartphones, laptops, tablets, cameras, accessories, and more.
2. **Clothing and Fashion:** Men's, women's, and children's clothing, footwear, accessories, and jewelry.
3. **Home and Furniture:** Furniture, home decor, kitchen appliances, and bedding.
4. **Beauty and Personal Care:** Skincare, makeup, haircare, grooming products, and fragrances.
5. **Health and Wellness:** Vitamins, supplements, fitness equipment, and wellness products.
6. **Books and Media:** Books, e-books, movies, music, and video games.
7. **Toys and Games:** Toys, board games, video games, and hobby items.
8. **Sports and Outdoors:** Sports equipment, outdoor gear, and activewear.

9. Automotive: Car accessories, maintenance products, and parts.

10. Food and Groceries: Fresh produce, packaged food, and beverages.

Product Details:

1. Product Name: Clearly state the product's name.

2. Price: Display the price, including any discounts or special offers.

3. Product Description: Provide a detailed description of the product, including features, benefits, and specifications.

4. Images: High-quality images from different angles and close-ups.

5. Reviews and Ratings: Allow customers to leave reviews and rate products.

6. Product Availability: Indicate whether the product is in stock or out of stock.

7. Size and Color Options: If applicable, allow customers to choose different sizes and colors.

8. Shipping Information: Include estimated delivery times and shipping costs.

9. Returns and Refund Policy: Explain the return and refund process.

10. Related Products: Suggest related or complementary products.

11. Customer Q&A: Enable customers to ask questions about the product.

12. Product Variants: If you sell variations of a product, such as different models or configurations, display these options.

13. Sizing Charts: For clothing and footwear, provide sizing charts.

14. Warranty Information: If applicable, include information about product warranties.

15. Product Videos: Include videos that demonstrate the product in use.

16. Product Compare: Allow customers to compare multiple products.

17. Inventory Tracking: Keep track of product availability in real-time.

18. Social Sharing: Enable customers to share products on social media.

19. Product Recommendations: Use algorithms to suggest relevant products to customers.

20. Filters and Sorting Options: Allow users to filter and sort products by criteria like price, popularity, and rating.

21. Add to Cart and Checkout: Implement a seamless shopping cart and checkout process.

22. Payment Options: Provide various payment methods, including credit cards, digital wallets, and more.

23. Security: Ensure the security of customer data and payment information.

24. Customer Support: Offer customer support options like live chat, email, or a helpline.

Remember that a well-organized and informative product page is essential for a successful e-commerce app. Make the shopping experience as smooth and convenient as possible for your customers to encourage sales and repeat business.

PROGRAM:

HTML:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width,
initial-scale=1.0">

  <title>my project1</title>

</head>

<link rel="stylesheet" href="css/style.css">

<body>

  <h1 class="sri">e-commerece</h1>

  <h1 class="he1">E-commerce Application</h1>

  <form action="search_results.php" method="GET">

<input type="text" class="form" placeholder="Search for
products">

    <input type="submit" class="btn" value="Search">

  </form>

  <div class="container">

    <div class="shop-content">
```

```
<div class="box">
  <div class="pic">
    
    <div class="name">laptop
      <div class="amount">RS.50000

  </div>
```

```
</div>
```

```
<div class="box">
  <div class="pic">
    
    <div class="name">watch
      <div class="amount">RS.500

  </div>
```

```
</div>
```

```
<div class="box">
  <div class="pic">
    
    <div class="name">mobile
      <div class="amount">RS.5000

  </div>
```

```
</div>
```

```
<div class="box">
```

```
  <div class="pic">
```

```
    
```

```
    <div class="name">SPEAKER</div>
```

```
      <div class="amount">RS.3000
```

```
    </div>
```

```
  </div>
```

```
<div class="box">
```

```
  <div class="pic">
```

```
    
```

```
    <div class="name">TELEVISION
```

```
      <div class="amount">RS.10000
```

```
    </div>
```

```
  </div>
```

```
<div class="box">
```

```
  <div class="pic">
```

```
    
```

```
    <div class="name"> CAMERA
```

```
      <div class="amount">RS.8000
```

```
    </div>
```

```
  </div>
```

```
</div>
```

```

</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</body>
</html>

```

CSS:

```
@import url('https://fonts.googleapis.com/css2?family=Poppins:ital,wght@1,100&display=swap');
```

```
*{  margin: 0;  padding: 0;  box-sizing: border-
box;  font-family: Verdana, Geneva, Tahoma, sans-
serif;  font-family: 'Poppins', sans-serif;
}
```

```
.sri {  font-size: 80px;
font-weight: 1000;  text-
align: center;  text-
transform: uppercase;
```

```
margin-top: 60px;  
transition: 0.2s;  
}
```

Body

```
{  width:  
100%;  min-  
height: 100vh;  
  
    background-image: linear-gradient(to right, #616161, #9bc5c3);  
}
```

img

```
{  width:  
100%;  
}
```

.shop-content

```
{    display: grid;    grid-template-columns:  
300px 300px 300px;    justify-content: center;  
align-items: center;    gap: 20px;  
}
```

```
.container {  max-  
width: 1200px;
```

```
padding: 4rem;
```

```
margin: auto;
```

```
}
```

```
.box
```

```
{
```

```
    padding: 4px;
```

```
border-radius: 6px;
```

```
gap: 30px;    width:
```

```
300px;
```

```
}
```

```
.name
```

```
{    font-size: 20px;    font-
```

```
weight: 800;    text-
```

```
transform: uppercase;
```

```
color: azure;
```

```
}
```

```
.pic
```

```
{
```

```
    overflow: hidden;
```

```
}
```

```
.pic:hover img {  
transform: scale(1.5);  
}
```

```
.img {  
transition: 0.2s;  
aspect-ratio: 1/1;  
object-fit: cover;  
}
```

```
.he1 {  font-size: 30px;  
font-weight: 600;  text-  
align: center;  text-  
transform: uppercase;  
}
```

```
.form {  width: 50%;  max-width:  
1000px;  margin-left: 300px;  
border-radius: 6px;  background-color:  
rgb(203, 214, 214);  border-color:  
rgb(210, 231, 190);  
}
```



```
.btn { background-color:
brown; border-radius:
6px; color: white;
}
```

```
.sri:hover
```

```
{ font-size:
120px;
}
```

OUTPUT:

E-COMMERCE

E-COMMERCE APPLICATION

Search



LAPTOP
RS.50000



WATCH
RS.500



MOBILE
RS.5000



SPEAKER
RS.3000



TELEVISION
RS.10000



CAMERA
RS.8000

CONCLUSION:

E-Commerce industry is that force which cannot be ignored by any element of the economy. Coronavirus pandemic proved that one of the major

tools that can help consumers during crisis is e-commerce. In order to maintain social distancing and self-quarantine, the consumers have become more reliable on the e-commerce industry. In the questionnaire, the respondents were asked to rate their experience of online shopping before COVID-19 and also during COVID-19. The graph 6 shows the ratings of consumers according to their experience before COVID-19. According to which 35.8% rated 4, whereas 3% rated 1 and 3.9% as 5.