

Phase 3 :

Development part

Step 1: Set up an IBM Cloud Account If you don't already have one, sign up for an IBM Cloud account and log in.

Step 2: Define Your Project Requirements Clearly define the requirements for your artisanal e-commerce platform. Consider aspects like user registration, product listings, shopping cart, payment processing, and order management.

Step 3: Design Your Database Choose a suitable database service on IBM Cloud, such as IBM Db2 or IBM Cloudant, to store product information, customer data, and orders.

Step 4: Create Your E-commerce Application You can use a web application framework like Node.js, Ruby on Rails, or Java Spring Boot, depending on your expertise and preference. Write code to create the core functionality of your e-commerce platform, such as user registration, product management, and shopping cart.

Step 5: Develop the User Interface Design and build the user interface (UI) of your e-commerce platform. You can use web technologies like HTML, CSS, and JavaScript. Consider using a front-end framework like React or Angular for a more dynamic and responsive UI.

Step 6: Integrate Payment Gateway Choose a payment gateway service, like Stripe or PayPal, to handle payment processing. Integrate this service with your application to securely handle payments.

Step 7: Implement User Authentication Implement user authentication to secure user data and allow customers to log in, manage their profiles, and track their orders.

Step 8: Set Up Product Management Develop features for adding, updating, and displaying product listings. Include images, descriptions, prices, and stock information.

Step 9: Implement Shopping Cart Create a shopping cart functionality that allows customers to add and remove items, view the cart, and proceed to checkout.

Step 10: Order Management Develop features for order processing, including order confirmation emails, tracking, and history.

Step 11: Deploy on IBM Cloud Foundry To deploy your application, follow these general steps:

- Install the IBM Cloud CLI tool.
- Use the CLI to log in to your IBM Cloud account.
- Create an instance of Cloud Foundry.
- Push your application to Cloud Foundry using the CLI.

Step 12: Monitor and Scale Set up monitoring and logging to keep track of your application's performance and errors. Configure auto-scaling to handle increased traffic during peak times.

Step 13: Secure Your Platform Implement security measures to protect your application from common web threats, like SQL injection and cross-site scripting (XSS). Use SSL certificates for secure data transmission.

Step 14: Test Your Platform Thoroughly test your e-commerce platform to ensure it works as expected and is secure.

Step 15: Go Live Once you're satisfied with testing, make your e-commerce platform live and open it to the public.

Design the platform layout and create a database to store product information

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Artisanal E-Commerce</title>
  <link rel="stylesheet" href="styles.css">
</head>
```

HTML

```

<body>
  <header>
    <h1>Welcome to Artisanal Marketplace</h1>
    <nav>
      <ul>
        <li><a href="#home">Home</a></li>
        <li><a href="#products">Products</a></li>
        <li><a href="#cart">Cart</a></li>
      </ul>
    </nav>
  </header>

  <section id="home">
    <h2>Discover Unique Handcrafted Items</h2>
    <p>Explore our collection of artisan-made products.</p>
  </section>

  <section id="products">
    <h2>Featured Products</h2>
    <div class="product-gallery">
      <!-- Display product images, names, and prices -->
      <div class="product">
        
        <h3>Artistic Jewelry</h3>
        <p>$50.00</p>
        <button>Add to Cart</button>
      </div>
      <!-- Add more products -->
    </div>
  </section>

  <section id="cart">
    <h2>Your Shopping Cart</h2>
    <!-- Display cart items and total -->
    <div class="cart-items">
      <!-- Display cart items -->
    </div>
    <p>Total: $[Total Amount]</p>
    <button>Proceed to Checkout</button>
  </section>

  <footer>
    <p>&copy; 2023 Artisanal Marketplace. All rights reserved.</p>
  </footer>
</body>
</html>

```

Phase 4: Development Part 2