

SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY

COLLEGE CODE : 7327

DOMAIN:CLOUD COMPUTING

TEAM MEMBERS

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Introduction

Creating an e-commerce application on the cloud is a transformative journey that leverages the power of cloud computing to build, host, and manage an online platform for buying and selling goods and services. In this digital age, e-commerce has become an essential channel for businesses to reach a global customer base, and the cloud offers a flexible and scalable environment to make this a reality.

Creating a E-commerce applications on cloud foundry

- SET UP CLOUD FOUNDRY:**

Ensure you have access to a Cloud Foundry environment. You can use a platform like IBM Cloud, Pivotal Web Services, or SAP Cloud Platform, all of which support Cloud Foundry.

- SELECT A PROGRAMMING LANGUAGE:**

Choose a programming language and framework for your e-commerce application. Popular choices include Java (using Spring Boot), Node.js, or Ruby on Rails.

- DATABASE:**

Decide on a database for your application. Cloud Foundry supports various databases like PostgreSQL, MySQL, and MongoDB. You can choose the one that best fits your needs.

- **APPLICATION DEVELOPMENT:**

Develop your e-commerce application using the selected language and framework. Ensure that it includes features like product listings, shopping cart, user authentication, and payment processing.

- **CONTAINERIZATION :**

Containerize your application using Docker. This allows you to package your application and its dependencies into a container image.

- **CLOUD FOUNDRY MANIFEST:**

Create a Cloud Foundry manifest file that specifies details about your application, including the runtime, memory, and services it requires.

- **PUSH TO CLOUD FOUNDRY:**

Use the Cloud Foundry command-line interface (cf CLI) to push your application to the Cloud Foundry platform. This will make your application accessible on the cloud.

- **SERVICE INTEGRATION:**

Integrate any necessary services like payment gateways, caching, or CDN services. You can use Cloud Foundry's marketplace to add and bind these services to your app.

- **SCALING:**

Configure auto-scaling and load balancing to ensure your e-commerce application can handle varying levels of traffic.

- **MONITORING AND LOGGING :**

Set up monitoring and logging to keep an eye on the health and performance of your application. Cloud Foundry often provides tools and integrations for this purpose.

- **SECURITY:**

Implement security best practices, including data encryption, secure authentication, and protection against common web application vulnerabilities like cross-site scripting (XSS) and SQL injection.

- **CONTINUOUS INTEGRATION AND DEPLOYMENT(CI/CD):**

Implement CI/CD pipelines to automate the deployment process and ensure that updates are rolled out seamlessly.

- **TESTING:**

Thoroughly test your e-commerce application to ensure it functions correctly and securely.

- **BACKUP AND DISASTER RECOVERY:**

Implement backup and disaster recovery solutions to protect your data and ensure business continuity.

TECHNOLOGY STACK:

Choose a technology stack that supports real-time features. This might include a combination of the following:

BACKEND FRAMEWORK:

Node.js with frameworks like Express.js or Nest.js, or other real-time capable languages and frameworks. Frontend Framework: A modern JavaScript framework like React, Angular, or Vue.js.

• DOMAIN SETUP:

Configure your domain and DNS settings to point to your e-commerce application on Cloud Foundry

• LAUNCH AND MONITOR:

Finally, launch your e-commerce application and continuously monitor its performance, making necessary optimizations as needed.

SOURCE CODE

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

<head>
  <meta charset="UTF-8">
  <meta name="description" content="Male_Fashion Template">
  <meta name="keywords" content="Male_Fashion, unica, creative, html">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Men's Fashion </title>

  <!-- Google Font -->
  <link href="https://fonts.googleapis.com/css2?family=Nunito+Sans:wght@300;400;600;700;800;900&display=swap" rel="stylesheet">
```

```
<!-- Css Styles -->
<link rel="stylesheet" href="css/bootstrap.min.css" type="text/css">
<link rel="stylesheet" href="css/font-awesome.min.css" type="text/css">
<link rel="stylesheet" href="css/elegant-icons.css" type="text/css">
<link rel="stylesheet" href="css/magnific-popup.css" type="text/css">
<link rel="stylesheet" href="css/nice-select.css" type="text/css">
<link rel="stylesheet" href="css/owl.carousel.min.css" type="text/css">
<link rel="stylesheet" href="css/slicknav.min.css" type="text/css">

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

<body>
<!-- Page Preloader -->
<div id="preloader">
<div class="loader"></div>
</div>
```

```
<!-- Offcanvas Menu Begin -->
<div class="offcanvas-menu-overlay"></div>
<div class="offcanvas-menu-wrapper">

</div>
<!-- Offcanvas Menu End -->

<!-- Header Section Begin -->
<header class="header">

<div class="container">
<div class="row">
<div class="col-lg-3 col-md-3">
<div class="header__logo">
<a href=".index.html"></a>
</div>
</div>
```

```
<div class="col-lg-6 col-md-6">
<nav class="header__menu mobile-menu">
<ul>
<li><a href=".//index.html">Home</a></li>
<li class="active"><a href="#">Login</a></li>
<li class="active"><a href=".//shop.html">Shop</a></li>

</li>
</ul>
</nav>
</div>

<div class="col-lg-3 col-md-3">
<div class="header_nav_option">
<a href="#" class="search-switch"></a>
<a href="#"></a>
<a href="#"> <span>0</span></a>
<div class="price">$0.00</div>
</div>
```

```
</div>
</div>
<div class="canvas__open"><i class="fa fa-bars"></i></div>
</div>
</header>
<!-- Header Section End -->
```

```
<!-- Breadcrumb Section Begin -->
```

```
<!-- Breadcrumb Section End -->
```

```
<!-- Shop Section Begin -->
<section class="shop spad">
<div class="container">
<div class="row">
<div class="col-lg-3">
</div>
```

```
<div class="col-lg-9">
<div class="shop_product_option">
<div class="row">
<div class="col-lg-6 col-md-6 col-sm-6">
<div class="shop_productoption_left">
<p>Showing 1–12 of 126 results</p>
</div>
</div>
<div class="col-lg-6 col-md-6 col-sm-6">
<div class="shop_productoption_right">
<p>Sort by Price:</p>
<select>
<option value="">Low To High</option>
<option value="">$0 - $55</option>
<option value="">$55 - $100</option>
</select>
</div>
</div>
```

```
</div>
</div>
<div class="row">
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-2.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#"> <span>Compare</span>
</a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Piqué Biker Jacket</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
```

```
<i class="fa fa-star-o"></i>
</div>
<h5>$67.24</h5>
<div class="product_color_select">
<label for="pc-4">
<input type="radio" id="pc-4">
</label>
<label class="active black" for="pc-5">
<input type="radio" id="pc-5">
</label>
<label class="grey" for="pc-6">
<input type="radio" id="pc-6">
</label>
</div>
```

```
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item sale">
<div class="product_item_pic set-bg" data-setbg="img/product/product-3.jpg">
<span class="label">Sale</span>
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#"> <span>Compare</span>
</a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Multi-pocket Chest Bag</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
```

```
<div class="rating">
  <i class="fa fa-star"></i>
  <i class="fa fa-star"></i>
  <i class="fa fa-star"></i>
  <i class="fa fa-star"></i>
  <i class="fa fa-star-o"></i>
</div>
<h5>$43.48</h5>
<div class="product_color_select">
  <label for="pc-7">
    <input type="radio" id="pc-7">
  </label>
  <label class="active black" for="pc-8">
    <input type="radio" id="pc-8">
  </label>
  <label class="grey" for="pc-9">
    <input type="radio" id="pc-9">
  </label>
```

```
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-4.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#"> <span>Compare</span>
</a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Diagonal Textured Cap</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
```

```
<div class="rating">
<i class="fa fa-star-o"></i>
</div>
<h5>$60.9</h5>
<div class="product_color_select">
<label for="pc-10">
<input type="radio" id="pc-10">
</label>
<label class="active black" for="pc-11">
<input type="radio" id="pc-11">
</label>
<label class="grey" for="pc-12">
<input type="radio" id="pc-12">
</label>
```

```
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item sale">
<div class="product_item_pic set-bg" data-setbg="img/product/product-6.jpg">
<span class="label">Sale</span>
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#"> <span>Compare</span>
</a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Ankle Boots</h6>
```

+ Add To Cart

<div class="rating">

<i class="fa fa-star"></i>

<i class="fa fa-star"></i>

<i class="fa fa-star"></i>

<i class="fa fa-star"></i>

<i class="fa fa-star-o"></i>

</div>

<h5>\$98.49</h5>

<div class="product_color_select">

<label for="pc-16">

<input type="radio" id="pc-16">

</label>

<label class="active black" for="pc-17">

<input type="radio" id="pc-17">

</label>

```
<label class="grey" for="pc-18">
<input type="radio" id="pc-18">
</label>
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-
7.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
```

```
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>T-shirt Contrast Pocket</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
<i class="fa fa-star-o"></i>
</div>
<h5>$49.66</h5>
<div class="product_color_select">
<label for="pc-19">
```

```
<input type="radio" id="pc-19">
</label>
<label class="active black" for="pc-20">
<input type="radio" id="pc-20">
</label>
<label class="grey" for="pc-21">
<input type="radio" id="pc-21">
</label>
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-
8.jpg">
```

```
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Basic Flowing Scarf</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
<i class="fa fa-star-o"></i>
```

```
</div>
<h5>$26.28</h5>
<div class="product_color_select">
<label for="pc-22">
<input type="radio" id="pc-22">
</label>
<label class="active black" for="pc-23">
<input type="radio" id="pc-23">
</label>
<label class="grey" for="pc-24">
<input type="radio" id="pc-24">
</label>
</div>
</div>
</div>
</div>
```

```
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-9.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Piqué Biker Jacket</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
```

```
<i class="fa fa-star-o"></i>
</div>
<h5>$67.24</h5>
<div class="product_color_select">
<label for="pc-25">
<input type="radio" id="pc-25">
</label>
<label class="active black" for="pc-26">
<input type="radio" id="pc-26">
</label>
<label class="grey" for="pc-27">
<input type="radio" id="pc-27">
</label>
```

```
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item sale">
<div class="product_item_pic set-bg" data-setbg="img/product/product-10.jpg">
<span class="label">Sale</span>
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
```

```
<div class="product_item_text">
<h6>Multi-pocket Chest Bag</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
<i class="fa fa-star"></i>
<i class="fa fa-star"></i>
<i class="fa fa-star"></i>
<i class="fa fa-star"></i>
<i class="fa fa-star-o"></i>
</div>
<h5>$43.48</h5>
<div class="product_color_select">
<label for="pc-28">
<input type="radio" id="pc-28">
</label>
<label class="active black" for="pc-29">
```

```
<input type="radio" id="pc-29">
</label>
<label class="grey" for="pc-30">
<input type="radio" id="pc-30">
</label>
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-11.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">

```



```
<div class="product_color_select">
<label for="pc-31">
<input type="radio" id="pc-31">
</label>
<label class="active black" for="pc-32">
<input type="radio" id="pc-32">
</label>
<label class="grey" for="pc-33">
<input type="radio" id="pc-33">
</label>
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item sale">
```

```
<div class="product_item_pic set-bg" data-setbg="img/product/product-12.jpg">
<span class="label">Sale</span>
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
<div class="product_item_text">
<h6>Ankle Boots</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
<i class="fa fa-star"></i>
```

```
<i class="fa fa-star"></i>
<i class="fa fa-star"></i>
<i class="fa fa-star"></i>
<i class="fa fa-star-o"></i>
</div>
<h5>$98.49</h5>
<div class="product_color_select">
<label for="pc-34">
<input type="radio" id="pc-34">
</label>
<label class="active black" for="pc-35">
<input type="radio" id="pc-35">
</label>
<label class="grey" for="pc-36">
<input type="radio" id="pc-36">
</label>
```

```
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-13.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">
<span>Compare</span></a>
</li>
<li><a href="#"></a></li>
</ul>
</div>
```

```
<div class="product_item_text">
<h6>T-shirt Contrast Pocket</h6>
<a href="#" class="add-cart">+ Add To Cart</a>
<div class="rating">
<i class="fa fa-star-o"></i>
</div>
<h5>$49.66</h5>
<div class="product_color_select">
<label for="pc-37">
<input type="radio" id="pc-37">
</label>
<label class="active black" for="pc-38">
```

```
<input type="radio" id="pc-38">
</label>
<label class="grey" for="pc-39">
<input type="radio" id="pc-39">
</label>
</div>
</div>
</div>
</div>
<div class="col-lg-4 col-md-6 col-sm-6">
<div class="product__item">
<div class="product_item_pic set-bg" data-setbg="img/product/product-14.jpg">
<ul class="product__hover">
<li><a href="#"></a></li>
<li><a href="#">

```



```
<div class="product_color_select">
<label for="pc-40">
<input type="radio" id="pc-40">
</label>
<label class="active black" for="pc-41">
<input type="radio" id="pc-41">
</label>
<label class="grey" for="pc-42">
<input type="radio" id="pc-42">
</label>
</div>
</div>
</div>
</div>
</div>
<div class="row">
```

```
</div>
</div>
</div>
</div>
</div>
</section>
<!-- Shop Section End -->
<!-- Footer Section Begin -->
<!-- Footer Section End -->
<!-- Js Plugins -->
<script src="js/jquery-3.3.1.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.nice-select.min.js"></script>
<script src="js/jquery.nicescroll.min.js"></script>
<script src="js/jquery.magnific-popup.min.js"></script>
```

```
<script src="js/jquery.countdown.min.js"></script>
<script src="js/jquery.slicknav.js"></script>
<script src="js/mixitup.min.js"></script>
<script src="js/owl.carousel.min.js"></script>
<script src="js/main.js"></script>
</body>

</html>
```

The code is a static front-end representation of a basic E-Commerce Store.

To make it functional for actual e-commerce purposes, we would need to implement server-side logic for managing the shopping cart, handling payments, and interacting with a backend system or database to keep track of products and user orders.

CONCLUSION

In conclusion, creating an e-commerce application on the cloud is a strategic and efficient way to establish and operate an online store. It offers several advantages, including scalability, cost-efficiency, and flexibility