Java (Spring Boot and Angular Project) Enterprise Ecommerce Application BRD



▶ The Online Shopping is the process whereby consumers directly buy goods and services without any intermediary service over the internet. The goal of this website is to develop a web-based interface for eCommerce website, the website would be easy to use and hence the shopping experience pleasant for the users.

The main goal of this website is:

- ▶ To develop an easy to use web-based interface where customers can search for products, view a complete description of the product and order the product.
- ▶ Reach out to a larger audience internet access is becoming so mainstream now that your product/service can reach almost everyone on the planet with an internet-enabled device.
- ▶ Your virtual shop remains open and operational 24x7 even if you/your employee are not working- this might not be wholly true if your product is a service-which requires immediate human-intervention.



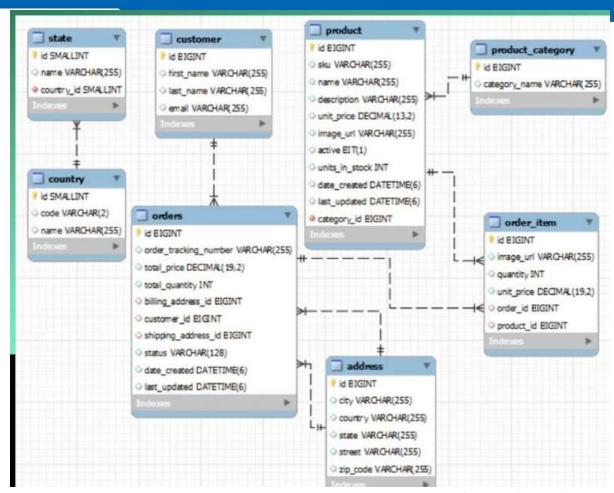
Functional Requirement



- ▶ Registration: A new user will have to register in the system by providing essential details in order to view the products in the system. The admin must accept a new user by unblocking him.
- ▶ Login: A user must login with his user name and password to the system after registration.
- Add Products: The shopping cart project contains different kind of products. The products can be classified into different categories by name. Admin can add new products into the existing system with all its details including an image.
- View Products: User can view the list of products based on their names after successful login. A detailed description of a particular product with product name, products details, product image, price can be viewed by users.
- ▶ Delete Products: Administrator can delete the products based on the stock of that particular product.
- ▶ Search products: Admin will have a list view of all the existing products. He can also search for a particular product by name.
- View Order: Administrator can view the Orders which is generated by the users. He can verify the details of the purchase.
- Delete Order: Admin can delete order from the orders list when the product is taken for delivery. Add to cart: The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed.

Sample ERD







- ▶ Show a list of products
- ▶ Add products to a shopping cart (CRUD)
- ▶ Shopping cart checkout
- User login/logout security, Okta
- ▶ Track user orders for logged in users
- ▶ Admin dashboard/ product creation
- ▶ Inventory Management
- ▶ Email Functionality to be used for customer registration and payment

Tasks for Final Demo



- ▶ GitHub Actions- CI CD
- ▶ SonarClould for Static Code Analyzer
- ▶ Jacoco for code coverage
- Microservices
- Docker/ Kubernetes
- ▶ Azure Kubernetes Services or App Services + Insight for Logging
- ▶ Stripe integration
- ▶ Jira/ Github integration

List of Technologies to be used



- SpringBoot as a Back End
- ▶ Angular as Front End
- Maven
- ▶ MySQL DB
- ▶ Deployment to Azure
- ▶ Stripe Payment Gateway
- ▶ OAuth2.0 Okta Authentication and Authorization.



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