

## **E- Commerce Project Algorithm**

1.Create a Home Controller setting cart with 0 products as it won't have objects when it is first login with homepage.jsp view.

2.Create a user entity with some attributes and build constructors ,getters and setters for it.

3.Create a User repository interface which extends JpaRepository which supports CRUD operations.

4.Create a UserService interface with method names you want to perform in service layer and implement them in UserServiceImpl class.

5.Create a login Controller that validates userid and password with the help of Email Validator. According to the role it redirects the page to either admin page or login page or error page.

6.Login Page contains options to change password and also to sign for free and we can do according to our choice and pages will appear according to our choice.

7.Admin page contains productcategories , products to manage, List of Users and also purchaseReport to view along with logout option on the top.

8.Create a Product entity with some attributes and build constructors ,getters and setters for it.

9.Create a Product repository interface which extends JpaRepository which supports CRUD operations.

10.Create a ProductService interface with method names you want to perform in service layer and implement them in ProductServiceImpl class.

11. Create a ProductCategory entity with some attributes and build constructors, getters and setters for it.

12. Create a ProductCategory repository interface which extends JpaRepository which supports CRUD operations.

13. Create a ProductCategoryService interface with method names you want to perform in service layer and implement them in ProductServiceCategoryImpl class.

14. Create a PurchaseItem entity with some attributes and build constructors, getters and setters for it.

15. Create a PurchaseItem repository interface which extends JpaRepository which supports CRUD operations.

16. Create a PurchaseItemService interface with method names you want to perform in service layer and implement them in PurchaseItemServiceImpl class.

17. Create a PurchaseOrder entity with some attributes and build constructors, getters and setters for it.

18. Create a PurchaseOrder repository interface which extends JpaRepository which supports CRUD operations.

19. Create a PurchaseOrderService interface with method names you want to perform in service layer and implement them in PurchaseOrderServiceImpl class.

20. Create a shop Controller and inject productCategoryService, ProductService, ProductRepository, productCategoryRepository.

21. Do the mapping and implement methods when to appear on show page like allProducts, brands, ProductCategories etc.

22. Jsp pages will have options according when you add a product and proceed to buy etc.

23. In shop page, you can shop, and order products, and order confirmation page and continue shopping option will appear when payment was successful.

25. We can logout at anytime when we were done shopping.

26. In application.properties file mention the database connection, hibernate properties, spring mvc properties and also serverport for tomcat.

27. In static folder create image folder for background images and all product images under product image folder. (images can be downloaded from internet)

28. Create all the jsp pages under src/main/webapp/WEB-INF/jsp.