**Principal usage for getting user**

1. Open User model class and annotate class with @Component
2. Open IUserDAO class and add a new method

public User getUserByUserName(String userName);

1. Open UserDAOImpl andd define the abode declared method

public User getUserByUserName(String userName){

String selectUser="freom User where userName=:userName";

return sessionFactory

.getCurrentSession()

.createQuery(selectUser, User.class)

.setParameter("userName",userName)

.getSingleResult();

}

1. Open FrontEndPageController and replace the existing index method with the following method:

@Autowired

private IUserDAO userDAO;

@RequestMapping("/")

public String index(Principal principal, Model model){

String status="null";

if(principal!=null){

User user=userDAO.getUserByUserName(principal.getName());

if(user.getRole().equals("ADMIN")){

status= "redirect:/admin/page";

}

else{

status= "page";

}

}

return status;

}

**Adding product to CartItem**

1. Open ICartItemDAO and add following methods for cart:

**public** **boolean** deleteAllCartItem(Cart c);

//Cart CRUD

**public** **boolean** updateCart(Cart c);

**public** **boolean** deleteCart(**int** cartId);

1. Open CartItemDAOImpl and add the definition of above methods:

**public** **boolean** deleteAllCartItem(Cart c){

**try** {

sessionFactory.getCurrentSession().delete(c.getCartId());

**return** **true**;

} **catch** (Exception e) {

e.printStackTrace();

**return** **false**;

}

}

//Cart CRUD

**public** **boolean** updateCart(Cart c){

**try** {

sessionFactory.getCurrentSession().update(c);

**return** **true**;

} **catch** (Exception e) {

e.printStackTrace();

**return** **false**;

}

}

**public** **boolean** deleteCart(**int** cartId){

**try** {

sessionFactory.getCurrentSession().delete(cartId);

**return** **true**;

} **catch** (Exception e) {

e.printStackTrace();

**return** **false**;

}

}

1. Create a class named FrontEndcartItemController inside the controller package of frontend project. Add following method.

**package** com.health.HealthMedicineQuestFrontEnd.controller;

**import** java.security.Principal;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Controller;

**import** org.springframework.web.bind.annotation.PathVariable;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.servlet.ModelAndView;

**import** com.health.HealthMedicineQuestBackEnd.dao.ICartItemDAO;

**import** com.health.HealthMedicineQuestBackEnd.dao.IProductDAO;

**import** com.health.HealthMedicineQuestBackEnd.dao.IUserDAO;

**import** com.health.HealthMedicineQuestBackEnd.model.Cart;

**import** com.health.HealthMedicineQuestBackEnd.model.CartItem;

**import** com.health.HealthMedicineQuestBackEnd.model.Product;

**import** com.health.HealthMedicineQuestBackEnd.model.User;

@Controller

**public** **class** FrontEndCartController {

@Autowired

IProductDAO productDAO;

@Autowired

ICartItemDAO cartItemDAO;

@Autowired

IUserDAO userDAO;

@RequestMapping(value={"/user/{productId}/{quantity}/cart"})

**public** ModelAndView addToCart(@PathVariable("productId")**int** id,@PathVariable("quantity")**int** quantity, Principal principal){

ModelAndView model;

**if**(principal!=**null**){

User user=userDAO.getUserByUserName(principal.getName());

Product p=productDAO.getProduct(id);

//User u=userDAO.getUser(userId);

CartItem ci=**new** CartItem();

Cart c=user.getCart();

//calculating subTotal for cartItems

**int** unitPrice=p.getProductPrice();

**double** subTotal=unitPrice\*quantity;

//updating cart instance

**int** totalPrice=c.getGrandTotal();

totalPrice+=subTotal;

c.setGrandTotal(totalPrice);

**int** items=c.getItemCounts();

**items+=quantity;**

c.setItemCounts(items);

//update cartitem instance

ci.setCart(c);

ci.setQuantity(quantity);

ci.setTotalPrice(subTotal);

ci.setProduct(productDAO.getProduct(id));

//updating product instance

**int** i\_q=p.getProductQuantity();

**int** f\_q=i\_q-quantity;

p.setProductQuantity(f\_q);

//adding cart item

cartItemDAO.addCartItem(ci);

//updating cart

cartItemDAO.updateCart(c);

//updating product

productDAO.updateProducts(p);

model =**new** ModelAndView("page");

model.addObject("title","View All Products");

model.addObject("userClickProducts","true");

model.addObject("product",**new** Product());

model.addObject("list",productDAO.getAllProducts());

}

**else**

{

model=**new** ModelAndView("login");

}

**return** model;

}

}

1. Open singleProduct.jsp page and add the following code to trigger the add items to CartItem and Cart table.

<form:form modelAttribute="prod" action="${contextRoot}/user/${prod.productId}">

<div class=*"row"*>

<p>

<select name=*"quantity"*>

<c:forEach var=*"i"* begin=*"1"* end=*"*${prod.productQuantity}*"*>

<option value=*"*${i}*"*>${i}</option>

</c:forEach>

</select>

</p>

</div>

1. Add addToCartTest method and add following method:

@Test

**public** **void** testAddToCart(){

Product p=*productDAO*.getProduct(1);

User user=*userDAO*.getUser(1);

CartItem ci=**new** CartItem();

Cart c=user.getCart();

//calculating subTotal for cartItems

**int** unitPrice=p.getProductPrice();

**double** subTotal=unitPrice\*1;

//updating cart instance

**int** totalPrice=c.getGrandTotal();

totalPrice+=subTotal;

c.setGrandTotal(totalPrice);

**int** items=c.getItemCounts();

items+=1;

c.setItemCounts(items);

//update cartitem instance

ci.setCart(c);

ci.setQuantity(1);

ci.setTotalPrice(subTotal);

ci.setProduct(*productDAO*.getProduct(1));

//updating product instance

//int i\_q=p.getProductQuantity();

//int f\_q=i\_q-1;

//p.setProductQuantity(f\_q);

//adding cart item

*cartItemDAO*.addCartItem(ci);

//updating cart

//cartItemDAO.updateCart(c);

*assertEquals*("List CartItem fetched Successfully!",**true**,*cartItemDAO*.updateCart(c));

}

1. Open cartview.jsp and the add the following code:

<div class=*"container content"*>

<form:form modelAttribute=*"prod"*>

<div class=*"row"*>

<div class=*"col-md-12"* style="height:*5%*: *border-bottom*:*1px solid black*">

<h2>Shopping Cart <span>(<!-- ${cart.itemCount} --> Item(s))</span></h2>

</div>

</div>

<div class=*"row"*>

<div class=*"col-md-12"*>

<table class=*"table table-responsive table-sripped"*>

<tr>

<th colspan=*"2"* style="color:*darkgrey*">Item</th>

<th style="color:*darkgrey*">Quantity</th>

<th style="color:*darkgrey*">Price</th>

<th style="color:*darkgrey*">Sub Total</th>

<th></th>

</tr>

<c:set var=*"price"* value=*"*${0}*"*/>

<c:forEach items=*"*${prod}*"* var=*"p"*>

<tr>

<td><img src=*"*${images}*/*${p.product.imageUrl}*"* width=*"70px"* height=*"70px"*/></td>

<td>${p.product.productName}</td>

<td>${p.quantity} </td>

<td>&#8377; ${p.totalPrice} </td>

<c:set var=*"price"* value=*"*${price+p.totalPrice}*"*/>

<td></td>

<td><span class=*"glyphicon glyphicon-remove-sign"* style="text-size:*30px*; color:*crimson*"></span></div></td>

</tr>

</c:forEach>

</table>

</div>

</div>

<div class=*"row"*>

<div class=*"col-md-12"*>

<table class=*"table table-responsive"*>

<tr>

<td></td>

<td></td>

<td>Grand Total</td>

<td>${price}</td>

</tr>

<tr>

<td></td>

<td></td>

<td><a href=*"*${contextRoot}*/user/products"* class=*"btn btn-danger btn-lg"*>Continue Shopping</a> </td>

<td><a href=*"billing"* class=*"btn btn-danger btn-lg"*>Place Order</button></td>

</tr>

</table>

</div>

</div>

</form:form>

</div>

</div>