Creating entities necessary to work with the Cart Module and writing test cases for the same

1. Create a class named “CartItem” inside the model package of backend project and add following code:

package com.health.HealthMedicineQuestBackEnd.model;

import java.io.Serializable;

import javax.persistence.CascadeType;

import javax.persistence.Entity;

import javax.persistence.FetchType;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.ManyToOne;

import javax.persistence.OneToOne;

@Entity

public class CartItem implements Serializable{

public static long getSerialversionuid() {

return serialVersionUID;

}

private static final long serialVersionUID = 8712338576769305042L;

@Id

@GeneratedValue(strategy=GenerationType.IDENTITY)

int cartItemId;

int quantity;

double totalPrice;

@ManyToOne(cascade = CascadeType.ALL,fetch = FetchType.EAGER)

Cart cart;

@OneToOne(fetch = FetchType.EAGER)

Product product;

public int getCartItemId() {

return cartItemId;

}

public void setCartItemId(int cartItemId) {

this.cartItemId = cartItemId;

}

public int getQuantity() {

return quantity;

}

public void setQuantity(int quantity) {

this.quantity = quantity;

}

public double getTotalPrice() {

return totalPrice;

}

public void setTotalPrice(double totalPrice) {

this.totalPrice = totalPrice;

}

public Cart getCart() {

return cart;

}

public void setCart(Cart cart) {

this.cart = cart;

}

public Product getProduct() {

return product;

}

public void setProduct(Product product) {

this.product = product;

}

}

1. Open Cart class inside the model package and replace with following code:

package com.health.HealthMedicineQuestBackEnd.model;

import java.io.Serializable;

import java.util.List;

import javax.persistence.CascadeType;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.OneToMany;

import javax.persistence.OneToOne;

@Entity

public class Cart implements Serializable{

private static final long serialVersionUID = 6711662177389182695L;

@Id

@GeneratedValue(strategy=GenerationType.IDENTITY)

int cartId;

int itemCounts;

int grandTotal;

@OneToOne(cascade=CascadeType.**PERSIST**)

User user;

public static long getSerialversionuid() {

return serialVersionUID;

}

**@OneToMany(cascade = CascadeType.ALL, mappedBy="cart")**

**private List<CartItem> cartItem;**

public Cart() {

super();

// TODO Auto-generated constructor stub

}

public Cart(int cartId, int itemCounts, int grandTotal) {

super();

this.cartId = cartId;

this.itemCounts = itemCounts;

this.grandTotal = grandTotal;

}

public int getCartId() {

return cartId;

}

public void setCartId(int cartId) {

this.cartId = cartId;

}

public int getItemCounts() {

return itemCounts;

}

public void setItemCounts(int itemCounts) {

this.itemCounts = itemCounts;

}

public int getGrandTotal() {

return grandTotal;

}

public void setGrandTotal(int grandTotal) {

this.grandTotal = grandTotal;

}

public User getUser() {

return user;

}

public void setUser(User user) {

this.user = user;

}

}

1. Open User class of model package modify as below:

package com.health.HealthMedicineQuestBackEnd.model;

import java.io.Serializable;

import java.util.ArrayList;

import java.util.List;

import javax.persistence.CascadeType;

import javax.persistence.Entity;

import javax.persistence.FetchType;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.OneToMany;

import javax.persistence.OneToOne;

import javax.persistence.Transient;

import javax.validation.constraints.Size;

@Entity

public class User implements Serializable{

public static long getSerialversionuid() {

return serialVersionUID;

}

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private static final long serialVersionUID = 1844930708071631748L;

@Id

@GeneratedValue(strategy=GenerationType.IDENTITY)

int userId;

@Size(min=1, max=30,message="Please enter first name")

String userName;

@Size(min=1, max=30,message="Please enter password")

String password;

@Size(min=1, max=30,message="Please enter full name")

String userFullName;

@Transient

@Size(min=1, max=30,message="Confirm password must be equal to the password")

String userConfirmPassword;

@Size(min=1, max=30,message="Please enter phone number")

String userPhoneNumber;

@Size(min=1, max=30,message="Please enter email id")

String userEmail;

@Size(min=1, max=30,message="Please enter security question")

String userQuestion;

@Size(min=1, max=30,message="Please enter security answer")

String userAnswer;

boolean enabled;

String role;

@OneToMany(cascade=CascadeType.ALL, **mappedBy="user"**)

List<Address> address=new ArrayList<>();

**@OneToOne(cascade=CascadeType.ALL,mappedBy = "user", fetch = FetchType.EAGER)**

**Cart cart;**

public String getUserFullName() {

return userFullName;

}

public void setUserFullName(String userFullName) {

this.userFullName = userFullName;

}

public boolean isEnabled() {

return enabled;

}

public void setEnabled(boolean enabled) {

this.enabled = enabled;

}

public User() {

super();

// TODO Auto-generated constructor stub

}

public User(int userId, String userName, String password, String userFullName,String role, String userConfirmPassword,

String userPhoneNumber, String userEmail, String userQuestion, String userAnswer) {

super();

this.userId = userId;

this.userName = userName;

this.password = password;

this.userFullName=userFullName;

this.role = role;

this.userConfirmPassword = userConfirmPassword;

this.userPhoneNumber = userPhoneNumber;

this.userEmail = userEmail;

this.userQuestion = userQuestion;

this.userAnswer = userAnswer;

this.enabled=true;

}

public int getUserId() {

return userId;

}

public void setUserId(int userId) {

this.userId = userId;

}

public String getUserName() {

return userName;

}

public void setUserName(String userName) {

this.userName = userName;

}

public String getPassword() {

return password;

}

public void setPassword(String password) {

this.password = password;

}

public String getRole() {

return role;

}

public void setRole(String role) {

this.role = role;

}

public String getUserConfirmPassword() {

return userConfirmPassword;

}

public void setUserConfirmPassword(String userConfirmPassword) {

this.userConfirmPassword = userConfirmPassword;

}

public String getUserPhoneNumber() {

return userPhoneNumber;

}

public void setUserPhoneNumber(String userPhoneNumber) {

this.userPhoneNumber = userPhoneNumber;

}

public String getUserEmail() {

return userEmail;

}

public void setUserEmail(String userEmail) {

this.userEmail = userEmail;

}

public String getUserQuestion() {

return userQuestion;

}

public void setUserQuestion(String userQuestion) {

this.userQuestion = userQuestion;

}

public String getUserAnswer() {

return userAnswer;

}

public List<Address> getAddress() {

return address;

}

public void setAddress(List<Address> address) {

this.address = address;

}

public void setUserAnswer(String userAnswer) {

this.userAnswer = userAnswer;

}

public Cart getCart() {

return cart;

}

public void setCart(Cart cart) {

this.cart = cart;

}

}

1. Create an interface inside the dao package named ”ICartItemDAO” and add the following code:

package com.health.HealthMedicineQuestBackEnd.dao;

import java.util.List;

import com.health.HealthMedicineQuestBackEnd.model.CartItem;

public interface ICartItemDAO {

public List<CartItem> getAllCartItem();

public CartItem getCartItem(int id);

public boolean addCartItem(CartItem ci);

public boolean updateCartItem(CartItem ci);

public boolean deleteCartItem(int cartItemId);

}

1. Create a class inside the daoimpl package named “CartItemDAO” and add the following code:

package com.health.HealthMedicineQuestBackEnd.daoimpl;

import java.util.List;

import org.hibernate.SessionFactory;

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

import org.springframework.stereotype.Repository;

import org.springframework.transaction.annotation.Transactional;

import com.health.HealthMedicineQuestBackEnd.dao.ICartItemDAO;

import com.health.HealthMedicineQuestBackEnd.model.CartItem;

@Repository("cartItemDAO")

@Transactional

public class CartItemDAO implements ICartItemDAO{

@Autowired

SessionFactory sessionFactory;

public List<CartItem> getAllCartItem(){

return sessionFactory.getCurrentSession().createQuery("from CartItem", CartItem.class).getResultList();

}

public CartItem getCartItem(int id){

return sessionFactory.getCurrentSession().get(CartItem.class,Integer.valueOf(id));

}

public boolean addCartItem(CartItem ci){

try {

sessionFactory.getCurrentSession().persist(ci);

return true;

} catch (Exception e) {

e.printStackTrace();

return false;

}

}

public boolean updateCartItem(CartItem ci){

try {

sessionFactory.getCurrentSession().update(ci);

return true;

} catch (Exception e) {

e.printStackTrace();

return false;

}

}

public boolean deleteCartItem(int cartItemId){

try {

sessionFactory.getCurrentSession().delete(getCartItem(cartItemId));

return true;

} catch (Exception e) {

e.printStackTrace();

return false;

}

}

}

1. Create test case class inside the test package named “CartItemTestCase”