```
package com.sportyshoe.controller;
import java.util.ArrayList;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RequestParam;
import com.sportyshoe.bean.CartItem;
import com.sportyshoe.bean.Product;
import com.sportyshoe.service.ProductService;
@Controller
public class CartController {
     @Autowired
     private ProductService productService;
//
     @Autowired
     private PurchaseService purchaseService;
//
//
//
     @Autowired
//
     private PurchaseItemService purchaseItemService;
     @SuppressWarnings("unchecked")
     @RequestMapping(value = "/showCart", method = RequestMethod.GET)
       public String showCart(ModelMap map, javax.servlet.http.HttpServletRequest request)
           // check if user is logged in
           HttpSession session = request.getSession();
           if (session.getAttribute("user_id") == null) {
               map.addAttribute("error", "Error, You need to login before adding items to cart");
           } else {
               // if cart is already in session then retrieve it else create a new cart list and
               // save it to session
                List<CartItem> cartItems = new ArrayList<CartItem>();
                if (session.getAttribute("cartItems") != null)
                     cartItems = (List<CartItem>) session.getAttribute("cartItems");
               // get total of all cart items
                double totalValue = getCartValue(cartItems);
                map.addAttribute("cartTotal", totalValue);
               map.addAttribute("cartItems", cartItems);
           }
           map.addAttribute("pageTitle", "SPORTY SHOES - YOUR CART");
```

```
return "cartDetails";
   @SuppressWarnings("unchecked")
   @RequestMapping(value = "/addToCart", method = RequestMethod.GET)
public String cartAddItem(@RequestParam String id, ModelMap map, HttpServletRequest request)
             HttpSession session = request.getSession();
             int idValue = Integer.parseInt(id);
             System.out.println("I am in addToCart");
         // if cart is already in session then retrieve it else create a new cart list and
         // save it to session
         List<CartItem> cartItems = new ArrayList<CartItem>();
         if (session.getAttribute("cartItems") != null)
              cartItems = (List<CartItem>) session.getAttribute("cartItems");
         if (isItemInCart(cartItems, idValue)) {
              map.addAttribute("error", "This item is already in your cart");
         } else {
              Product product = productService.findProduct(idValue);
              CartItem item = new CartItem();
              item.setProductId(idValue);
              item.setQty(1);
              item.setRate(product.getListPrice());
              double dprice = item.getRate() * item.getQty();
              item.setPrice(dprice);
              item.setProductName(product.getProductName());
              cartItems.add(item);
              session.setAttribute("cartItems", cartItems);
              session.setAttribute("cartTotal", getCartValue(cartItems));
   return "redirect:home";
 }
@SuppressWarnings("unchecked")
@RequestMapping(value = "/cartDeleteItem", method = RequestMethod.GET)
public String cartDeleteItem(ModelMap map, javax.servlet.http.HttpServletRequest request,
        @RequestParam(value="id", required=true) String id)
    // check if user is logged in
        HttpSession session = request.getSession();
        int idValue = Integer.parseInt(id);
        List<CartItem> cartItems = new ArrayList<CartItem>();
        if (session.getAttribute("cartItems") != null)
              cartItems = (List<CartItem>) session.getAttribute("cartItems");
         for(CartItem item: cartItems) {
              if (item.getProductId() == idValue) {
                   cartItems.remove(item);
                   session.setAttribute("cartItems", cartItems);
```

```
session.setAttribute("cartTotal", getCartValue(cartItems));
                    break:
               }
    return "redirect:showCart";
  ł
@SuppressWarnings("unchecked")
@RequestMapping(value = "/checkout", method = RequestMethod.GET)
  public String checkout(ModelMap map, javax.servlet.http.HttpServletRequest request)
     // check if user is logged in
     HttpSession session = request.getSession();
     if (session.getAttribute("user id") == null) {
          request.setAttribute("message", "You must login to check out");
          return "login";
     } else {
          List<CartItem> cartItems = new ArrayList<CartItem>();
          if (session.getAttribute("cart items") != null)
               cartItems = (List<CartItem>) session.getAttribute("cart items");
          double totalValue = getCartValue(cartItems);
          map.addAttribute("cartValue", totalValue);
          map.addAttribute("cartItems", cartItems);
     map.addAttribute("pageTitle", "SPORTY SHOES - CHECKOUT");
    return "checkOutDetails";
  }
 @RequestMapping(value = "/completepurchase", method = RequestMethod.GET)
  public String completePurchase(ModelMap map, javax.servlet.http.HttpServletRequest request)
     // check if user is logged in
     HttpSession session = request.getSession();
     if (session.getAttribute("user id") == null) {
          map.addAttribute("error", "Error, You need to login before completing purchase");
      } else {
          // take items from cart and update the databae
          List<CartItem> cartItems = new ArrayList<CartItem>();
          if (session.getAttribute("cart items") != null)
               cartItems = (List<CartItem>) session.getAttribute("cart items");
          BigDecimal totalValue = getCartValue(cartItems);
          long userId = (Long) session.getAttribute("user id");
          Purchase purchase = new Purchase();
          purchase.setUserId(userId);
          purchase.setDate(Calendar.getInstance().getTime());
          purchase.setTotal(totalValue);
          long purchaseId = purchaseService.updatePurchase(purchase);
          for(CartItem item: cartItems) {
               PurchaseItem pItem = new PurchaseItem();
               pItem.setPurchaseId(purchaseId);
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```
pItem.setProductId(item.getProductId());
               pItem.setUserId(userId);
               pItem.setRate(item.getRate());
               pItem.setQty(item.getQty());
               pItem.setPrice(item.getPrice());
               purchaseItemService.updateItem(pItem);
          map.addAttribute("cartValue", totalValue);
          map.addAttribute("cartItems", cartItems);
     }
    return "redirect:confirm";
 @SuppressWarnings("unchecked")
@RequestMapping(value = "/gateway", method = RequestMethod.GET)
  public String gateway(ModelMap map, javax.servlet.http.HttpServletRequest request)
     // check if user is logged in
     HttpSession session = request.getSession();
     if (session.getAttribute("user id") == null) {
          map.addAttribute("error", "Error, You need to login before making payment");
     } else {
          List<CartItem> cartItems = new ArrayList<CartItem>();
          if (session.getAttribute("cartItems") != null)
               cartItems = (List<CartItem>) session.getAttribute("cartItems");
          double totalValue = getCartValue(cartItems);
          map.addAttribute("cartValue", totalValue);
          map.addAttribute("cartItems", cartItems);
     }
     map.addAttribute("pageTitle", "SPORTY SHOES - PAYMENT GATEWAY");
    return "gateway";
 @SuppressWarnings("unchecked")
@RequestMapping(value = "/confirm", method = RequestMethod.GET)
  public String confirm(ModelMap map, javax.servlet.http.HttpServletRequest request)
     // check if user is logged in
     HttpSession session = request.getSession();
     if (session.getAttribute("user id") == null) {
          map.addAttribute("error", "Error, You need to login before completing the purchase");
     } else {
          // clear items from cart as order has completed
          List<CartItem> cartItems = new ArrayList<CartItem>();
          if (session.getAttribute("cart items") != null)
               cartItems = (List<CartItem>) session.getAttribute("cartItems");
          double totalValue = getCartValue(cartItems);
          map.addAttribute("cartValue", totalValue);
```

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```
cartItems.clear();
         session.setAttribute("cart items", null);
    }
    map.addAttribute("pageTitle", "SPORTY SHOES - PURCHASE CONFIRMATION");
   return "confirm";
/**
* Check if an item is already in the cart
* @param list
* @param item
* @return
private boolean isItemInCart(List<CartItem> list, long item) {
    boolean retVal = false;
    for(CartItem thisItem: list) {
         if (item == thisItem.getProductId()) {
              retVal = true;
              break;
    return retVal;
}
/**
* Get total value of items in cart
* @param list
* @return
private double getCartValue(List<CartItem> list) {
    double total = 0.0;
    for(CartItem item: list) {
         double dprice = item.getRate() * (item.getQty());
         total += dprice;
    return total;
```

```
package com.sportyshoe.bean;
public class CartItem {
     private int productId;
     private String productName;
     private double rate;
     private int qty;
     private double price;
     public int getProductId() {
          return productId;
     public void setProductId(int productId) {
          this.productId = productId;
     public String getProductName() {
          return productName;
     public void setProductName(String productName) {
          this.productName = productName;
     public double getRate() {
         return rate;
     public void setRate(double rate) {
          this.rate = rate;
     public int getQty() {
          return qty;
    public void setQty(int qty) {
          this.qty = qty;
    public double getPrice() {
          return price;
     public void setPrice(double price) {
          this.price = price;
     public CartItem(int productId, String productName, double rate, int qty, double price) {
          super();
          this.productId = productId;
          this.productName = productName;
          this.rate = rate;
          this.qty = qty;
          this.price = price;
     }
     public CartItem() {
          super();
          // TODO Auto-generated constructor stub
```

```
import java.util.Date;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.servlet.ModelAndView;
import com.sportyshoe.bean.User;
import com.sportyshoe.service.LoginService;
@Controller
public class LoginController {
    @Autowired
    LoginService loginService;
    @RequestMapping(value = "/loginForm")
    public ModelAndView loginForm(HttpServletRequest req) {
         ModelAndView may = new ModelAndView();
         mav.setViewName("login");
         return may;
    }
    @RequestMapping(value="/signIn", method=RequestMethod.POST)
    public ModelAndView signIn(HttpServletRequest req) {
         User ll = new User();
         11.setEmailId(req.getParameter("email"));
         ll.setPwd(req.getParameter("password"));
         String result = loginService.checkUser(ll, req);
         ModelAndView mav = new ModelAndView();
         System.out.println("Value Returned: " + result);
         if (result.matches("failure")) {
             mav.setViewName("login");
         }else if (result.matches("user")){
              mav.setViewName("cartDetails");
         }else if (result.matches("admin")) {
             mav.setViewName("/adminHome");
             mav.setViewName("index");
         return may;
    }
    @RequestMapping(value="signUp", method=RequestMethod.POST)
    public ModelAndView signUp(HttpServletRequest req) {
```

package com.sportyshoe.controller;

```
Date date = new Date();
    User ll = new User();
    11.setEmailId(req.getParameter("email"));
    11.setPwd(req.getParameter("password"));
    11.setName(req.getParameter("name"));
    11.setAddress(req.getParameter("address"));
    11.setUserRole("user");
    ll.setDateAdded(date);
    String result = loginService.signUp(ll);
    ModelAndView mav = new ModelAndView();
    System.out.println(result);
    mav.setViewName("login");
    mav.addObject("msg", result);
    return mav;
}
@RequestMapping(value = "/signupForm")
public ModelAndView signupForm(HttpServletRequest req) {
    ModelAndView mav = new ModelAndView();
    mav.setViewName("signupForm");
    return mav;
}
@RequestMapping(value = "/logout")
public ModelAndView logout(HttpServletRequest req) {
    HttpSession session = req.getSession();
    session.invalidate();
    ModelAndView mav = new ModelAndView();
    mav.setViewName("index");
    return mav;
}
```

```
package com.sportyshoe.service;
import java.util.Optional;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.sportyshoe.bean.User;
import com.sportyshoe.repository.UserRepository;
@Service
public class LoginService {
     @Autowired
    UserRepository ur;
    public String checkUser(User user, HttpServletRequest request) {
         HttpSession session = request.getSession();
         String email = user.getEmailId();
         String pwd = user.getPwd();
         Optional<User> dbUser = ur.findById(email);
         if (dbUser.isPresent()) {
               String dbEmail = dbUser.get().getEmailId();
               String dbPassword = dbUser.get().getPwd();
               String dbRole = dbUser.get().getUserRole();
               if (dbEmail.matches(email) && dbPassword.matches(pwd)) {
                    session.setAttribute("user id", dbEmail);
                    session.setAttribute("user role", dbRole);
                    return dbRole;}
               else {
                    return "failure";}
          } else {
              return "failure";
     }
    public String signUp(User II) {
         Optional < User > user = ur.findById(ll.getEmailId());
         if (user.isPresent()) {
              return "User already exits";
          }else {
              ur.save(11);
              return "User account created.";
          }
     }
```

}	

```
package com.sportyshoe.bean;
import javax.persistence.Entity;
import javax.persistence.Id;
@Entity
public class Product {
    @Id
    private int id;
    private String productName;
    private String productBrand;
    private String productCategory;
    private double productSize;
    private boolean productGender;
    private String productDescription;
    private double listPrice;
    public Product() {
         super();
         // TODO Auto-generated constructor stub
     }
    public String getProductManufacturer() {
         return productBrand;
     }
    public void setProductManufacturer(String productManufacturer) {
         this.productBrand = productManufacturer;
     }
    public String getProductCategory() {
         return productCategory;
     }
    public void setProductCategory(String productCategory) {
         this.productCategory = productCategory;
     }
    public double getProductSize() {
         return productSize;
     }
    public void setProductSize(double productSize) {
         this.productSize = productSize;
     }
    public boolean isProductGender() {
         return productGender;
     }
    public void setProductGender(boolean productGender) {
         this.productGender = productGender;
     }
```

```
public int getId() {
     return id;
}
public void setId(int id) {
     this.id = id;
}
public String getProductName() {
     return productName;
}
public void setProductName(String productName) {
     this.productName = productName;
}
public String getProductDescription() {
     return productDescription;
}
public void setProductDescription(String productDescription) {
     this.productDescription = productDescription;
}
public double getListPrice() {
     return listPrice;
}
public void setListPrice(double listPrice) {
     this.listPrice = listPrice;
}
@Override
public String toString() {
     return "Product [id=" + id + ", productName=" + productName + ", productManufacturer=" + productBrand
              + ", productDescription=" + productDescription + ", productCategory=" + productCategory
              + ", productSize=" + productSize + ", productGender=" + productGender + ", listPrice=" + listPrice
              +"]";
}
```

```
package com.sportyshoe.controller;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RequestParam;
import com.sportyshoe.bean.Product;
import com.sportyshoe.service.ProductService;
@Controller
public class ProductController {
     @Autowired
     ProductService ps;
     @RequestMapping(value = {"/", "/home"}, method = RequestMethod.GET)
    public String homePage(HttpServletRequest request) {
         HttpSession session = request.getSession();
         List<Product> pList = ps.findAllProducts();
         System.out.println(pList);
         request.setAttribute("pList", pList);
         if (session.getAttribute("cartItems") == null) {
              session.setAttribute("cartTotal", 0);
          }
         return "index";
     }
     @RequestMapping(value = "/addProduct", method = RequestMethod.GET)
    public String addProduct(HttpServletRequest request) {
         HttpSession session = request.getSession();
         String user role = "";
         if (session.getAttribute("user role") != null) {
              user role = (String)session.getAttribute("user role");
          } else {
              return "login";
         if (user role.matches("admin")) {
              return "addProduct";
          } else {
              return "login";
          }
     }
```

```
@RequestMapping(value = "/adminHome", method = RequestMethod.GET)
public String adminHome(HttpServletRequest request) {
     HttpSession session = request.getSession();
    String user role = "";
    if (session.getAttribute("user role") != null) {
          user role = (String)session.getAttribute("user role");
     } else {
         return "login";
    if (user role.matches("admin")) {
          List<Product> pList = ps.findAllProducts();
         request.setAttribute("pList", pList);
         return "adminHome";
     } else {
         return "login";
     }
}
@RequestMapping(value = "/getProductDetails", method = RequestMethod.GET)
public String getProductDetails(@RequestParam String id, HttpServletRequest request) {
    int pid = Integer.parseInt(id);
     Product item = ps.findProduct(pid);
    request.setAttribute("item", item);
    System.out.println(item);
    return "productDetails";
}
@RequestMapping(value = "/deleteProduct", method = RequestMethod.GET)
public String deleteProduct(@RequestParam String id, HttpServletRequest request) {
    HttpSession session = request.getSession();
    String user role = "";
    if (session.getAttribute("user role") != null) {
          user role = (String)session.getAttribute("user role");
     } else {
         return "login";
    if (user role.matches("admin")) {
          int pid = Integer.parseInt(id);
          String result = ps.deleteProduct(pid);
          request.setAttribute("message", result);
          return "adminHome";
         return "login";
}
```

```
@RequestMapping(value = "/storeProduct", method = RequestMethod.POST)
public String storeProduct(HttpServletRequest request) {
    HttpSession session = request.getSession();
     String user role = "";
    if (session.getAttribute("user role") != null) {
         user role = (String)session.getAttribute("user role");
     } else {
         return "login";
    if (user role.matches("admin")) {
         Product item = new Product();
         item.setId(Integer.parseInt(request.getParameter("id")));
         item.setProductName(request.getParameter("productName"));
         item.setProductManufacturer(request.getParameter("productBrand"));
         item.setProductCategory(request.getParameter("productCategory"));
         item.setProductDescription(request.getParameter("productDescription"));
         boolean isFemale = request.getParameter("gender").matches("female");
         System.out.println(request.getParameter("gender") +" : " + isFemale);
         item.setProductGender(isFemale);
         item.setProductSize(Double.parseDouble(request.getParameter("productSize")));
         item.setListPrice(Double.parseDouble(request.getParameter("listPrice")));
         String result = ps.updateProduct(item);
         request.setAttribute("message", result);
         return "adminHome";
     } else {
         return "login";
     }
}
@RequestMapping(value = "/updateProduct", method = RequestMethod.POST)
public String updateProduct(HttpServletRequest request) {
    HttpSession session = request.getSession();
    String user role = "";
    if (session.getAttribute("user role") != null) {
         user role = (String)session.getAttribute("user role");
     } else {
         return "login";
     }
     if (user role.matches("admin")) {
         Product item = new Product();
         item.setId(Integer.parseInt(request.getParameter("id")));
```

```
item.setProductName(request.getParameter("productName"));
item.setProductManufacturer(request.getParameter("productBrand"));
item.setProductCategory(request.getParameter("productCategory"));
item.setProductDescription(request.getParameter("productDescription"));

boolean isFemale = request.getParameter("gender").matches("female");
item.setProductGender(isFemale);

item.setProductSize(Double.parseDouble(request.getParameter("productSize")));
item.setListPrice(Double.parseDouble(request.getParameter("listPrice")));

String result = ps.updateProduct(item);
request.setAttribute("message", result);

return "adminHome";
} else {
    return "login";
}
```

}

```
package com.sportyshoe.repository;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.sportyshoe.bean.Product;

@Repository
public interface ProductRepository extends JpaRepository<Product, Integer> {
}
```

```
package com.sportyshoe.service;
import java.util.List;
import java.util.Optional;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.sportyshoe.bean.Product;
import com.sportyshoe.repository.ProductRepository;
@Service
public class ProductService {
     @Autowired
     ProductRepository pr;
     public List<Product> findAllProducts(){
          return pr.findAll();
     }
     public Product findProduct(int id) {
          Optional < Product > product = pr.findById(id);
          if (product.isPresent() ) {
               return product.get();
          } else {
               return null;}
     }
     public String storeProduct(Product item) {
          boolean existing = (pr.findById(item.getId()) != null);
          if (existing) {
               return "Duplicate product id";
          } else if (pr.save(item) != null) {
               return "Record Stored";
          } else {
               return "Record could not be save";
     }
     public String updateProduct(Product item) {
          boolean existing = (pr.findById(item.getId()) != null);
          if (existing) {
               if (pr.saveAndFlush(item) != null) {return "Record Updated";}
               else {return "Record could not be updateds";}
          }else {return "Item does not exist";}
     }
     public String deleteProduct(int id) {
          Optional < Product > product = pr.findById(id);
          if (product.isEmpty()) {
               return "No product was found";
```

```
} else {
          pr.deleteById(id);
          return "Product was deleted";
}
```

```
package com.sportyshoe.bean;
import java.util.Date;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Table;
@Entity
@Table(name= "purchases")
public class Purchase {
     @Id
     @GeneratedValue(strategy = GenerationType.IDENTITY)
     private int id;
     private String emailId;
     private Date date;
    private double total;
     public Purchase() {
          super();
         // TODO Auto-generated constructor stub
     }
    public int getId() {
         return id;
     }
     public void setId(int id) {
          this.id = id;
     }
     public String getEmailId() {
         return emailId;
     }
     public void setEmailId(String emailId) {
          this.emailId = emailId;
     }
     public Date getDate() {
         return date;
     }
     public void setDate(Date date) {
          this.date = date;
     }
     public double getTotal() {
         return total;
```

```
public void setTotal(double total) {
    this.total = total;
}
```

```
import java.util.ArrayList;
import java.util.Date;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import com.sportyshoe.bean.Purchase;
import com.sportyshoe.service.PurchaseService;
@Controller
public class PurchaseController {
    @Autowired
    private PurchaseService purchaseService;
    @RequestMapping(value = "/completePurchase", method = RequestMethod.GET)
       public String memberpurchases(ModelMap map, HttpServletRequest request)
          HttpSession session = request.getSession();
          if (session.getAttribute("user id") == null) {
               return "login";
          String userId = (String) session.getAttribute("user id");
          String result = purchaseService.completePurchase(userId, request);
          request.setAttribute("message", result);
        return "receipt";
       }
    @RequestMapping(value = "/purchaseToday")
         public String purchaseToday(HttpServletRequest request) {
              Date date = new Date();
              System.out.println("Inside purchase ");
              List<Purchase> purchaseList = new ArrayList<Purchase>();
              purchaseList = purchaseService.findPurchaseByDate(date, request);
              request.setAttribute("purchaseList", purchaseList);
              return "displayPurchase";
         }
```

package com.sportyshoe.controller;

```
package com.sportyshoe.bean;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Table;
@Entity
@Table(name= "purchase_items")
public class PurchaseItem {
     @Id
     @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private int purchaseId;
    private String userEmail;
    private int productId;
    private String productName;
    private double rate;
    private int qty;
    private double price;
    public PurchaseItem() {
         super();
         // TODO Auto-generated constructor stub
    public int getId() {
         return id;
    public void setId(int id) {
         this.id = id;
    public int getPurchaseId() {
         return purchaseId;
    public void setPurchaseId(int purchaseId) {
         this.purchaseId = purchaseId;
    public int getProductId() {
         return productId;
    public void setProductId(int productId) {
         this.productId = productId;
    public double getRate() {
         return rate;
    public void setRate(double rate) {
         this.rate = rate;
    public int getQty() {
```

```
return qty;
public void setQty(int qty) {
     this.qty = qty;
public double getPrice() {
     return price;
public void setPrice(double price) {
     this.price = price;
public String getProductName() {
     return productName;
public void setProductName(String productName) {
     this.productName = productName;
public String getUserEmail() {
     return userEmail;
public void setUserEmail(String userEmail) {
     this.userEmail = userEmail;
}
```

```
package com.sportyshoe.repository;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.sportyshoe.bean.PurchaseItem;
@Repository
public interface PurchaseItemRepository extends JpaRepository<PurchaseItem, Integer>{
}
```

```
package com.sportyshoe.service;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.sportyshoe.repository.ProductRepository;

@Service
public class PurchaseItemService {
     @Autowired
     ProductRepository pr;
}
```

```
package com.sportyshoe.repository;
import java.util.Date;
import java.util.List;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.sportyshoe.bean.Purchase;

@Repository
public interface PurchaseRepository extends JpaRepository<Purchase, Integer>{
    public List<Purchase> findByDate(Date date);
    public List<Purchase> findByEmailId(String emailId);
}
```

```
package com.sportyshoe.service;
import java.util.ArrayList;
import java.util.Date;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpSession;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import com.sportyshoe.bean.CartItem;
import com.sportyshoe.bean.Purchase;
import com.sportyshoe.bean.PurchaseItem;
import com.sportyshoe.repository.PurchaseItemRepository;
import com.sportyshoe.repository.PurchaseRepository;
@Service
public class PurchaseService {
     @Autowired
    PurchaseRepository pr;
     @Autowired
     PurchaseItemRepository ps;
     @SuppressWarnings("unchecked")
    public String completePurchase(String userId, HttpServletRequest request) {
         HttpSession session = request.getSession();
         Date date = new Date();
         List<CartItem> cartItems = new ArrayList<CartItem>();
          if (session.getAttribute("cartItems") != null)
               cartItems = (List<CartItem>) session.getAttribute("cartItems");
          double total = (Double) session.getAttribute("cartTotal");
          Purchase purchase = new Purchase();
          purchase.setDate(date);
          purchase.setEmailId(userId);
          purchase.setTotal(total);
          Purchase completedPurchase = pr.save(purchase);
          int purchaseId = completedPurchase.getId();
          session.setAttribute("email", userId);
          session.setAttribute("purchaseId", purchaseId);
          session.setAttribute("date", date.toString());
          List<PurchaseItem> purchaseDetails = new ArrayList<PurchaseItem>();
          for (CartItem item: cartItems) {
```

```
PurchaseItem pi = new PurchaseItem();
           pi.setPurchaseId(purchaseId);
           pi.setUserEmail(userId);
           pi.setProductId(item.getProductId());
           pi.setProductName(item.getProductName());
           pi.setRate(item.getRate());
           pi.setQty(item.getQty());
           pi.setPrice(item.getPrice());
           purchaseDetails.add(ps.save(pi));
      }
      session.setAttribute("purchaseDetails", purchaseDetails);
      session.setAttribute("cartItems", null);
      session.setAttribute("cartTotal", 0);
      session.setAttribute("purchaseTotal", total);
    return "Purchase Confirmed";
}
public List<Purchase> findPurchaseByDate(Date date, HttpServletRequest request){
    List<Purchase> purchaseList = new ArrayList<Purchase>();
    purchaseList = pr.findAll();
    return purchaseList;
}
```

```
package com.sportyshoe.bean;
import java.util.Date;
import javax.persistence.Entity;
import javax.persistence.Id;
import javax.persistence.Table;
@Entity
@Table(name= "users")
public class User {
    @Id
    private String emailId;
    private String pwd;
    private String name;
    private String address;
    private Date dateAdded;
    private String userRole;
    public String getUserRole() {
         return userRole;
    public void setUserRole(String userRole) {
         this.userRole = userRole;
    public User() {
         super();
         // TODO Auto-generated constructor stub
    public String getEmailId() {
         return emailId;
    public void setEmailId(String emailId) {
         this.emailId = emailId;
    public String getPwd() {
         return pwd;
    public void setPwd(String pwd) {
         this.pwd = pwd;
    public String getName() {
         return name;
    public void setName(String name) {
         this.name = name;
    public String getAddress() {
         return address;
    public void setAddress(String address) {
         this.address = address;
     }
```

```
public Date getDateAdded() {
    return dateAdded;
}
public void setDateAdded(Date dateAdded) {
    this.dateAdded = dateAdded;
}
```

```
package com.sportyshoe.repository;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.sportyshoe.bean.User;
@Repository
public interface UserRepository extends JpaRepository<User, String> {
```

```
package com.sportyshoe;
import java.util.Date;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.boot.autoconfigure.domain.EntityScan;
//import org.springframework.boot.autoconfigure.jdbc.DataSourceAutoConfiguration;
@SpringBootApplication(scanBasePackages = "com.sportyshoe")
@EntityScan(basePackages = "com.sportyshoe.bean")
public class WebstoreApplication {
    public static void main(String[] args) {
        SpringApplication.run(WebstoreApplication.class, args);
        Date currentDate = new Date();
        System.out.println("Spring Server Running at : " + currentDate.toString());
    }
}
```