### **Lab 11**

## **Introduction to JSP Implicit Objects**

#### Mục tiêu

- Sử dụng JSP Implicit Objects: request, response, session.

### Phần I Bài tập step by step

#### Bài 1.1

Tạo module view product trong eMarket project.

```
Step 1: Tạo trang product.jsp
```

```
</div>
   </div>
   <div class="one-half">
      <div id="amazingslider-wrapper-1"</pre>
style="display:block;position:relative;max-width:450px;margin:0px auto
98px;">
         <div id="amazingslider-1"</pre>
style="display:block;position:relative;margin:0 auto;">
             <%
                   for (String img:
selectedProductDetail.getAllImages()) {
                %>
                <img src="images/<%=img%>" alt="" title="" />
                   <%
                      }
                   %>
             <%
                   for (String img:
selectedProductDetail.getAllImages()) {
                %>
                <img src="images/tn-<%=img%>" alt="" title=""
/>
                   <%
                      }
                   %>
```

```
</div>
   </div>
</div>
<div class="one-half last">
   <a href="#fane1">Product Details</a>
   <div id="fane1" class="tab_content">
     <h3>Technical Details</h3>
     >
        <%=selectedProductDetail.getInformation()%>
     <h3>Accessories</h3>
     <%=selectedProductDetail.getAccessories()%>
     <h3>Warranty Strategy</h3>
     <%=selectedProductDetail.getGuaranty()%>
     <h3>Price</h3>
     <%=selectedProduct.getPrice()%> $
     <a href="#" class="button">Add to cart</a>
     </div>
</div>
```

```
<div style="clear:both; height: 40px"></div>
```

#### </div>

Step 2: Trong entity class ProductDetail tạo function getAllImages() để view slider.

Class ProductDetail.java

```
package entity;
import java.io.Serializable;
import java.util.ArrayList;
import java.util.List;
import javax.persistence.Basic;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Lob;
import javax.persistence.NamedQueries;
import javax.persistence.NamedQuery;
import javax.persistence.Table;
import javax.validation.constraints.Size;
import javax.xml.bind.annotation.XmlRootElement;
/**
 * @author ThanDieu
 */
@Entity
@Table(name = "product_detail", catalog = "eMarket", schema = "")
@XmlRootElement
@NamedQueries({
    @NamedQuery(name = "ProductDetail.findAll", query = "SELECT p FROM")
ProductDetail p"),
    @NamedQuery(name = "ProductDetail.findByProductId", query = "SELECT p
FROM ProductDetail p WHERE p.productId = :productId"),
    @NamedQuery(name = "ProductDetail.findByImage1", query = "SELECT p FROM
ProductDetail p WHERE p.image1 = :image1"),
    @NamedQuery(name = "ProductDetail.findByImage2", query = "SELECT p FROM")
ProductDetail p WHERE p.image2 = :image2"),
    @NamedQuery(name = "ProductDetail.findByImage3", query = "SELECT p FROM
ProductDetail p WHERE p.image3 = :image3"),
    @NamedQuery(name = "ProductDetail.findByImage4", query = "SELECT p FROM
ProductDetail p WHERE p.image4 = :image4"),
    @NamedQuery(name = "ProductDetail.findByImage5", query = "SELECT p FROM
ProductDetail p WHERE p.image5 = :image5")})
public class ProductDetail implements Serializable {
    private static final long serialVersionUID = 1L;
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Basic(optional = false)
    @Column(name = "product id")
```

```
private Integer productId;
@Lob
@Size(max = 2147483647)
@Column(name = "information")
private String information;
@Size(max = 45)
@Column(name = "image1")
private String image1;
@Size(max = 45)
@Column(name = "image2")
private String image2;
@Size(max = 45)
@Column(name = "image3")
private String image3;
@Size(max = 45)
@Column(name = "image4")
private String image4;
@Size(max = 45)
@Column(name = "image5")
private String image5;
@Lob
@Size(max = 2147483647)
@Column(name = "accessories")
private String accessories;
@Lob
@Size(max = 2147483647)
@Column(name = "guaranty")
private String guaranty;
public ProductDetail() {
public ProductDetail(Integer productId) {
    this.productId = productId;
}
public Integer getProductId() {
    return productId;
}
public void setProductId(Integer productId) {
    this.productId = productId;
}
public String getInformation() {
    return information;
}
public void setInformation(String information) {
    this.information = information;
}
public String getImage1() {
    return image1;
```

```
}
public void setImage1(String image1) {
    this.image1 = image1;
}
public String getImage2() {
    return image2;
public void setImage2(String image2) {
    this.image2 = image2;
}
public String getImage3() {
    return image3;
}
public void setImage3(String image3) {
    this.image3 = image3;
}
public String getImage4() {
    return image4;
}
public void setImage4(String image4) {
    this.image4 = image4;
}
public String getImage5() {
    return image5;
}
public void setImage5(String image5) {
    this.image5 = image5;
}
public String getAccessories() {
    return accessories;
}
public void setAccessories(String accessories) {
    this.accessories = accessories;
public String getGuaranty() {
    return guaranty;
public void setGuaranty(String guaranty) {
    this.guaranty = guaranty;
}
public List<String> getAllImages(){
```

```
List<String> images = new ArrayList<String>();
        if (image1 != null) images.add(image1);
        if (image2 != null) images.add(image2);
        if (image3 != null) images.add(image3);
        if (image4 != null) images.add(image4);
        if (image5 != null) images.add(image5);
        return images;
    }
    @Override
    public int hashCode() {
        int hash = 0;
        hash += (productId != null ? productId.hashCode() : 0);
        return hash;
    }
    @Override
    public boolean equals(Object object) {
        // TODO: Warning - this method won't work in the case the id fields
are not set
        if (!(object instanceof ProductDetail)) {
            return false;
        ProductDetail other = (ProductDetail) object;
        if ((this.productId == null && other.productId != null) ||
(this.productId != null && !this.productId.equals(other.productId))) {
            return false;
        return true;
    }
    @Override
    public String toString() {
        return "entity.ProductDetail[ productId=" + productId + " ]";
}
Step 3: Thêm xử lý cho product view trong ControllerServlet
Thêm đoạn code sau vào sau lệnh if xử lý user path:
else if (userPath.equals("/product")){
            Product selectedProduct;
            ProductDetail selectedProductDetail;
            String productId = request.getQueryString();
            if (productId != null){
                selectedProduct =
productSB.find(Integer.parseInt(productId));
                selectedProductDetail =
productDetailSB.find(Integer.parseInt(productId));
                session.setAttribute("selectedProduct", selectedProduct);
```

```
session.setAttribute("selectedProductDetail",
selectedProductDetail);
            }
 }
Thêm urlPattern cho Servlet:
WebServlet(name = "ControllerServlet",
            urlPatterns = {"/ControllerServlet",
                             "/category",
                             "/product"})
Inject code cho ProductSessionBean và ProductDetailSessionBean để xử lý các thao tác
với CSDL liên quan đến product.
    private ProductSessionBean productSB;
    @ E.JB
    private ProductDetailSessionBean productDetailSB;
Step 4: Tạo các navigation đến /product
Mở trang index.jsp. Sửa lại như sau:
<script src="js/jquery.tools.min.js"></script>
<script>
    $(function () {
        $("#prod_nav ul").tabs("#panes > div", {
            effect: 'fade',
            fadeOutSpeed: 400
        });
    });
</script>
<script>
    $(document).ready(function () {
        $(".pane-list li").click(function () {
            window.location = $(this).find("a").attr("href");
```

```
return false;
       });
   });
</script>
<c:set var='view' value='/index' scope='session' />
<div id="container">
   <h2>Best Seller</h2>
   <div id="prod_wrapper">
       <div id="panes">
           <c:forEach var="product" items="${newProducts}">
              <div>
                  <img
src="${initParam.imgProductPath}${product.getImage()}" width="379"
height="225" alt="">
                  <h5>${product.getName()}</h5>
                  ${product.getDescriptionDetail()}
                  <a href="<c:url</pre>
value='product?${productId}'/>" class="button">More Info</a>
                      <a href="#" class="button">Buy Now</a>
                  </div>
           </c:forEach>
       </div>
       <!-- END tab panes -->
```

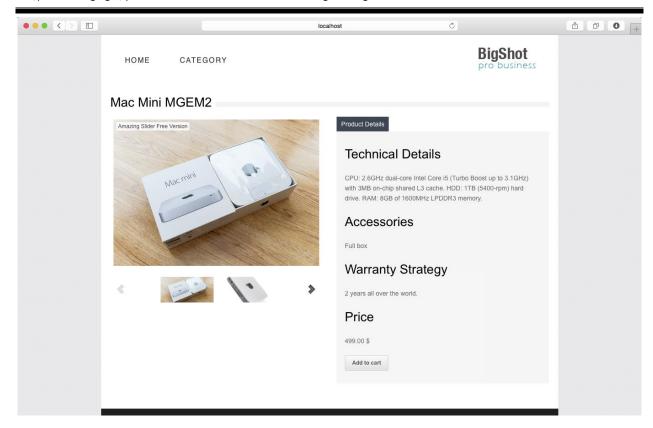
```
<br clear="all">
        <!-- navigator -->
        <div id="prod_nav">
            <l
                <c:set var="countProduct" scope="request" value="${1}" />
                <c:forEach var="product" items="${newProducts}">
                    <1i>>
                        <a href="#${countProduct}">
                            <img
src="${initParam.imgProductPath}${product.getImage()}" width="75" height="75"
alt="">
                            <strong>${product.getName()}</strong> $
${product.getPrice()}
                        </a>
                    <c:set var="countProduct" scope="request"</pre>
value="${countProduct+1}" />
                </c:forEach>
            </div>
        <!-- close navigator -->
    </div>
    <div style="clear:both"></div>
    <c:forEach var="category" items="${categories}">
        <c:if test="${category.categoryId == 4}" >
            <div class="one-fourth last">
```

```
<div class="heading_bg">
                    <h2>${category.name}</h2>
                </div>
                <a href="<c:url value='category?${category.categoryId}'/>">
                    <img
src="${initParam.imgProductPath}${category.getImage()}" width="217"
height="145" alt="">
                </a>
            </div>
        </c:if>
        <c:if test="${category.categoryId < 4}">
            <div class="one-fourth">
                <div class="heading_bg">
                    <h2>${category.name}</h2>
                </div>
                <a href="<c:url value='category?${category.categoryId}'/>">
                    <img
src="${initParam.imgProductPath}${category.getImage()}" width="217"
height="145" alt="">
                </a>
            </div>
        </c:if>
    </c:forEach>
    <div style="clear:both; height: 40px"></div>
</div>
```

Thêm config cho trang product.jsp trong file web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app 3 1.xsd">
    tener>
        <description>ServletContextListener</description>
        <listener-class>listener.ControllerServletListener</listener-class>
    </listener>
    <session-config>
        <session-timeout>
        </session-timeout>
    </session-config>
    <jsp-config>
        <jsp-property-group>
            <description>JSP configuration for the store front</description>
            <url-pattern>/index.jsp</url-pattern>
            <url-pattern>/contact.jsp</url-pattern>
            <url-pattern>/category.jsp</url-pattern>
            <url-pattern>/product.jsp</url-pattern>
            <include-prelude>/WEB-INF/jspf/header.jspf</include-prelude>
            <include-coda>/WEB-INF/jspf/footer.jspf</include-coda>
        </isp-property-group>
        <jsp-property-group>
            <description>JSP configuration for the admin
console</description>
            <url-pattern>/admin/*</url-pattern>
            <include-prelude>/WEB-INF/jspf/header.jspf</include-prelude>
            <include-coda>/WEB-INF/jspf/footer.jspf</include-coda>
        </jsp-property-group>
    </jsp-config>
    <context-param>
        <param-name>imgProductPath</param-name>
        <param-value>img/demo/</param-value>
    </context-param>
    <context-param>
        <param-name>imgProductDetailPath</param-name>
        <param-value>images/</param-value>
    </context-param>
</web-app>
```

Chạy chương trình review kết quả:



# PHẦN 2: BÀI TẬP LÀM THÊM

Tạo module addProduct và view lại product trước khi thực hiện add vào CSDL.

