**Java Web开发**

**实验六**

**作业报告**

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| --- | --- |
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| 完 成 时 间 | 2019年4月- |

# 实验题目

1、上周没有完成作业的同学请继续完成，完成了作业的同学请为购物车增加功能：

2、参考成熟的购物系统，为购物车增加功能，完善购物车：删除商品，查看商品具体信息，计算商品总价，修改商品购买件数等等。界面尽量美观。

提示：Java文件即Book.java的设计需要重构，需要分离商品基本信息和购买信息，需要有类分别来保存单件商品的购买信息和所有商品的购买信息。所以至少要三个Java类才能完成购物的基本功能。

Servlet也需要响应更多的操作，可以在一个Servlet中也可以分多个文件响应。并在适当的地方调用Java方法。

# 关键源码（部分）

Shopping.jsp

<%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"UTF-8"*%>

<%@ page import=*"shop.\*"* %>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<%

**if**(session.getAttribute("bookList")==**null**){

Book[] BookList=**new** Book[3];

ShoppingCart[] Cart=**new** ShoppingCart[3];

BookList[0]=**new** Book("001","JSP程序设计实训与案例教程","img\\001.jpg",47.20);

BookList[1]=**new** Book("002","JSP大学实用教材","img\\002.jpg",29.98);

BookList[2]=**new** Book("003","JSP网站设计","img\\003.jpg",34.10);

Cart[0]=**new** ShoppingCart("",0,0);

Cart[1]=**new** ShoppingCart("",0,0);

Cart[2]=**new** ShoppingCart("",0,0);

session.setAttribute("bookList",BookList);

session.setAttribute("cart",Cart);

session.setAttribute("sum",0);

}

%>

<body>

<img src=*"img/000.jpg"* height=*"60px"* width=*"60px"*>

<a href=*"cart.view"*>已采购<%=session.getAttribute("sum") %>本书籍</a><br>

<table border=*"3"*>

<%

Book[] bookList=(Book[])session.getAttribute("bookList");

out.println("<tr>");

**for**(Book book:bookList){

out.println("<td> <img src='"+book.getBookImg()+"'height='300px' width='260px'> </td>");

}

out.println("</tr>");

out.println("<tr>");

**for**(Book book:bookList){

out.println("<td align=center><a href='shopping.view?id="+book.getBookID()+"'>采购次数</a></td>");

}

out.println("</tr>");

%>

</table>

</body>

</html>

add.java

package shop;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/add.view")

public class add extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGet(request, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

String getID=request.getParameter("id");

if(getID!=null){

for(int i=0;i<shoppingCart.length;i++){

if(shoppingCart[i].getBookID().equals(getID)){

int a=shoppingCart[i].getShopNum();

a++;

shoppingCart[i].setShopNum(a);

break;

}

}

}

request.getRequestDispatcher("cart.view").forward(request, response);

}

}

Book.java

**package** shop;

**public** **class** Book {

String bookID;

String bookName;

String bookImg;

**double** price;

**public** Book(String id,String name,String img,**double** price){

**this**.bookID=id;

**this**.bookName=name;

**this**.bookImg=img;

**this**.price=price;

}

**public** String getBookID(){

**return** bookID;

}

**public** **void** setBookID(String bookID){

**this**.bookID=bookID;

}

**public** String getBookName(){

**return** bookName;

}

**public** **void** setBookName(String bookName){

**this**.bookName=bookName;

}

**public** **double** getPrice(){

**return** price;

}

**public** **void** setPrice(**double** price){

**this**.price=price;

}

**public** String getBookImg(){

**return** bookImg;

}

**public** **void** setBookImg(String bookImg){

**this**.bookImg=bookImg;

}

}

chartServlet.java

package shop;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/cart.view")

public class chartServlet extends HttpServlet {

protected void doPost (HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGet(request, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html;charset=utf-8");

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

Book[]book=(Book[])session.getAttribute("bookList");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

int sum=shoppingCart[0].getShopNum()+shoppingCart[1].getShopNum()+shoppingCart[2].getShopNum();

PrintWriter out = response.getWriter();

out.println("<html><body><font size=8>");

out.println("已采购"+sum+"本书籍<br>");

out.println("<table border=1>");

for(int i=0;i<shoppingCart.length;i++){

if(shoppingCart[i].getBookID().equals("")){

break;

}else{

int j;

for(j=0;j<book.length;j++){

if(book[j].getBookID().equals(shoppingCart[i].getBookID()))

break;

}

out.println("<tr>");

out.println("<td> <img src='"+book[j].getBookImg()+"'height='120px' width='80px'> </td>");

out.println("<td><a>共"+shoppingCart[i].getShopNum()+"本</a></td>");

out.println("<td><a>共"+(shoppingCart[i].getShopNum()\*shoppingCart[i].getPrice())+"元</a></td>");

out.println("<td align=center><a href='add.view?id="+shoppingCart[i].getBookID()+"'>添加一本</a></td>");

out.println("<td align=center><a href='reduce.view?id="+shoppingCart[i].getBookID()+"'>减少一本</a></td>");

out.println("<td align=center><a href='check.view?id="+shoppingCart[i].getBookID()+"'>查看信息</a></td>");

out.println("<td align=center><a href='del.view?id="+shoppingCart[i].getBookID()+"'>删除</a></td>");

out.println("</tr>");

}

}

session.setAttribute("sum", sum);

out.println("<a href='shopping.jsp'>返回购物</a>");

out.println("</table>");

out.println("</body>");

out.println("</html>");

}

}

Check.java

package shop;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/check.view")

public class check extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGet(request, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html;charset=utf-8");

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

Book[]book=(Book[])session.getAttribute("bookList");

String getID=request.getParameter("id");

PrintWriter out = response.getWriter();

out.println("<html><body><font size=8>");

out.println("<table border=1>");

for(int i=0;i<shoppingCart.length;i++){

if(shoppingCart[i].getBookID().equals(getID)){

int j;

for(j=0;j<book.length;j++){

if(shoppingCart[i].getBookID().equals(book[j].getBookID())){

out.println("<tr>");

out.println("<td><a>ID:"+book[j].getBookID()+"</a></td>");

out.println("<td> <img src='"+book[j].getBookImg()+"'height='120px' width='80px'> </td>");

out.println("<td><a>名字:"+book[j].getBookName()+"</a></td>");

out.println("<td><a>单价:"+shoppingCart[i].getPrice()+"元</a></td>");

out.println("<td><a>共"+shoppingCart[i].getShopNum()+"本</a></td>");

out.println("<td><a>总价:"+(shoppingCart[i].getShopNum()\*shoppingCart[i].getPrice())+"元</a></td>");

out.println("</tr>");

break;

}

}

}

}

out.println("</table>");

out.println("<a href='cart.view'>返回购物车</a>");

out.println("</body>");

out.println("</html>");

}

}

del.java

package shop;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/del.view")

public class del extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGet(request, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

String getID=request.getParameter("id");

if(getID!=null){

for(int i=0;i<shoppingCart.length;i++){

if(shoppingCart[i].getBookID().equals(getID)){

shoppingCart[i].setBookID(shoppingCart[2].getBookID());

shoppingCart[i].setPrice(shoppingCart[2].getPrice());

shoppingCart[i].setShopNum(shoppingCart[2].getShopNum());

shoppingCart[2].setBookID("");

shoppingCart[2].setPrice(0);

shoppingCart[2].setShopNum(0);

}

}

}

request.getRequestDispatcher("cart.view").forward(request, response);

}

}

reduce.java

package shop;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/reduce.view")

public class reduce extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGet(request, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

String getID=request.getParameter("id");

if(getID!=null){

for(int i=0;i<shoppingCart.length;i++){

if(shoppingCart[i].getBookID().equals(getID)){

int a=shoppingCart[i].getShopNum();

if(a==1){

shoppingCart[i].setBookID(shoppingCart[2].getBookID());

shoppingCart[i].setPrice(shoppingCart[2].getPrice());

shoppingCart[i].setShopNum(shoppingCart[2].getShopNum());

shoppingCart[2].setBookID("");

shoppingCart[2].setPrice(0);

shoppingCart[2].setShopNum(0);

break;

}else{

a--;

shoppingCart[i].setShopNum(a);

break;

}

}

}

}

request.getRequestDispatcher("cart.view").forward(request, response);

}

}

ShoppingCart.java

**package** shop;

**public** **class** ShoppingCart {

String bookID;

**int** shopNum=0;

**double** price;

**public** ShoppingCart(String id,**int** shopNum,**double** price){

**this**.bookID=id;

**this**.shopNum=shopNum;

**this**.price=price;

}

**public** String getBookID(){

**return** bookID;

}

**public** **void** setBookID(String bookID){

**this**.bookID=bookID;

}

**public** **int** getShopNum(){

**return** shopNum;

}

**public** **void** setShopNum(**int** shopNum){

**this**.shopNum=shopNum;

}

**public** **double** getPrice(){

**return** price;

}

**public** **void** setPrice(**double** price){

**this**.price=price;

}

}

ShoppingServlet.java

package shop;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/shopping.view")

public class ShoppingServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

doGetrequest, response);

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html;charset=utf-8");

HttpSession session=request.getSession();

request.setCharacterEncoding("utf-8");

Book[]book=(Book[])session.getAttribute("bookList");

ShoppingCart[]shoppingCart=(ShoppingCart[])session.getAttribute("cart");

String getID=request.getParameter("id");

if(getID!=null){

int i;

for(i=0;i<book.length;i++){

if(getID.equals(book[i].getBookID())){

break;

}

}

for(int j=0;j<shoppingCart.length;j++){

if(shoppingCart[j].getBookID().equals("")){

shoppingCart[j].setBookID(getID);

shoppingCart[j].setPrice(book[i].getPrice());

shoppingCart[j].setShopNum(1);

break;

}else if(shoppingCart[j].getBookID().equals(getID)){

int a=shoppingCart[j].getShopNum();

a++;

shoppingCart[j].setShopNum(a);

break;

}

}

}

int sum;

sum=shoppingCart[0].getShopNum()+shoppingCart[1].getShopNum()+shoppingCart[2].getShopNum();

session.setAttribute("sum", sum);

request.getRequestDispatcher("shopping.jsp").forward(request, response);

}

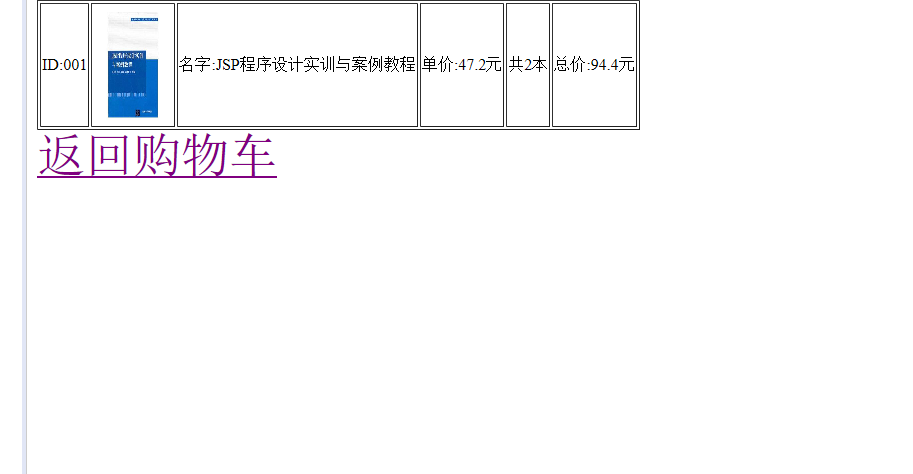
}

# 运行效果图



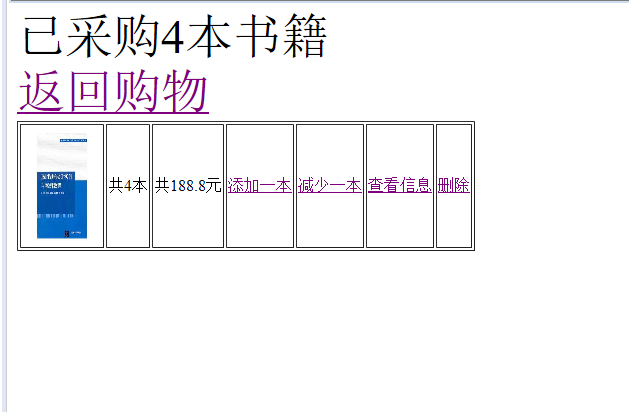


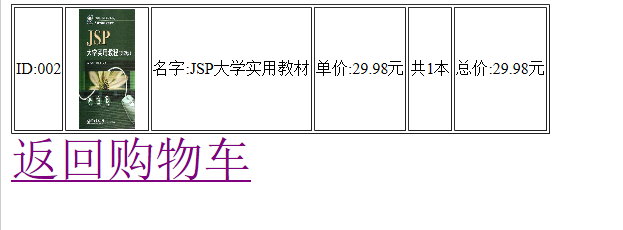


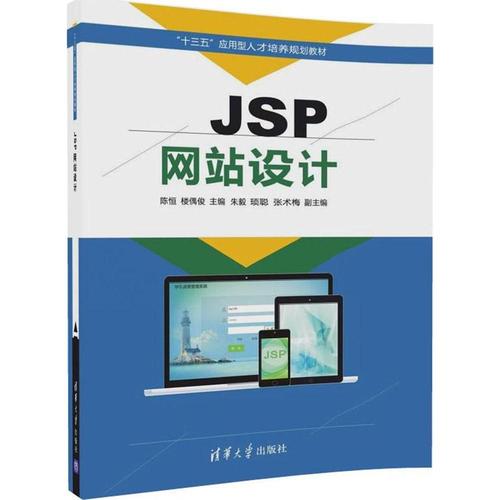












# 收获与问题

1、 学习更好的设计Java类。从而灵活使用session对象；

2、 完善购物车的功能；

3、 优化购物车的结构。