**Java Web开发**

**实验五**

**作业报告**

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| --- | --- |
| 学 院 | 计算机 |
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# 实验题目

1、 练习老师在理论课上演示的购物车实例，理解购物功能如何实现，理解如何利用session对象保存购物信息，如何设计封装数据类。（请参考“第四章会话管理课上的购物车实例代码.docx”文档）；

如果上课听懂了购物车的原理或者部分理解，可以参考我的实例完成第2题，此题可忽略不写。

2、 第四章课后练习3购物车，实现一个购物车应用程序，可以购物，显示购物数量并查看购物车内容。（此题模版test4E，提供给大家参考。）

提示：采购此书做成超链接，并用URL重写带关键信息

a) Shopping.view?bookID=‘0001’，其中0001是你选中图书对应的ID号，每点击一次就在相应的购书数量上加一，并返回当前的选购页面。

b) 除了要保存图书的ID号、书名，还要保存购书数量，所以session对象保存的信息需要考虑清楚，最好是一个对象

数组或列表。

购物车的效果图

3、 对第三章动态验证码程序实现动态验证。（选做）

提示：在生成动态验证码的同时将其放入HttpSession对象中，在网页上提取出来进行比对

# 分析与设计

购物车由Shopping.jsp,Book.java,CarServlet.java,ShoppingServlet.java文件组成

# 关键源码（部分）

Shopping.jsp

<html>

<%

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

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

BookList[0] = **new** Book("1001","书a","img/b.png",0);

BookList[1] = **new** Book("1002","书b","img/b.png",0);

BookList[2] = **new** Book("1003","书c","img/b.png",0);

session.setAttribute("bookList",BookList);

session.setAttribute("sum",0);

}

%>

<body>

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

<% out.print("<td> <a href='cart.view'>"+"已采购"+session.getAttribute("sum")+"本书籍</a></td>"); %>

<br>

<tale border =*1*>

<%

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

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

out.print("<tr>");

out.print("<td> <img src ='"+book.getBookImg()+"'height='200px'"+"width='200px'"+"></td>");

out.print(book.getBookName());

out.print("<td> <a href='shopping.view?id="+book.getBookId()+"'>采购此书</a></td><br>");

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

} %>

</body>

</html>

Book.java

**public** **class** Book **extends** HttpServlet {

String BookId;

String BookName;

String BookImg;

**int** BookNumber;

**public** Book(String id,String name,String img,**int** num) {

**this**.BookId = id;

**this**.BookName = name;

**this**.BookImg = img;

**this**.BookNumber = num;

}

**public** Book(){

**super**();

}

**public** String getBookId() {

**return** BookId;

}

**public** **void** setBookId(String bookId) {

BookId = bookId;

}

**public** String getBookName() {

**return** BookName;

}

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

BookName = bookName;

}

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

BookImg = bookImg;

}

**public** String getBookImg(){

**return** BookImg;

}

**public** **int** getBookNumber() {

**return** BookNumber;

}

**public** **void** setBookNumber(**int** bookNumber) {

BookNumber = bookNumber;

}

}

CarServlet.java

@WebServlet("/cart.view")

**public** **class** CarServlet **extends** HttpServlet {

**public** CarServlet() {

**super**();

}

**public** **void** destroy() {

**super**.destroy(); // Just puts "destroy" string in log

// Put your code here

}

**public** **void** doGet(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

doPost(request, response);

}

**public** **void** doPost(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

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

response.setCharacterEncoding("UTF-8");

HttpSession session = request.getSession();

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

PrintWriter out = response.getWriter();

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

out.print("<tr>");

out.print("<td> <img src ='" + book.getBookImg() + "'height='200px'" + "width='200px'" + "></td>");

out.print("<td> 共" + book.getBookNumber() + "本</td>");

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

}

}

**public** **void** init() **throws** ServletException {

// Put your code here

}

}

ShoppingServlet.java

@WebServlet("/shopping.view")

**public** **class** ShoppingServlet **extends** HttpServlet {

**public** ShoppingServlet() {

**super**();

}

**public** **void** destroy() {

**super**.destroy(); // Just puts "destroy" string in log

// Put your code here

}

**public** **void** doGet(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

doPost(request,response);

}

**public** **void** doPost(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

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

response.setCharacterEncoding("UTF-8");

HttpSession session = request.getSession();

PrintWriter out = response.getWriter();

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

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

**int**[] num = **new** **int**[4];

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

num[i] = bookList[i].getBookNumber();

**if** (id.equals(bookList[i].getBookId())) {

num[i]++;

}

bookList[i].setBookNumber(num[i]);

}

**int** sum = 0;

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

num[i] = bookList[i].getBookNumber();

sum = num[i] + sum;

session.setAttribute("sum", sum);

}

response.sendRedirect("Shopping.jsp");

}

**public** **void** init() **throws** ServletException {

// Put your code here

}

}

运行图：



