

# day32-综合案例

## 案例一:添加用户

### 一,案例需求

1. 点击添加用户跳转添加用户页面

显示所有用户

编号	姓名	性别	年龄	籍贯	QQ	邮箱	操作
1	张三	男	11	广东	766335435	766335435@qq.com	<div>修改删除</div>
2	李四	男	12	广东	243424242	243424242@qq.com	<div>修改删除</div>
3	王五	女	13	广东	474574574	474574574@qq.com	<div>修改删除</div>
4	赵六	女	18	广东	77777777	77777777@qq.com	<div>修改删除</div>
5	钱七	女	15	湖南	412132145	412132145@qq.com	<div>修改删除</div>
6	王八	男	25	广西	412132775	412132995@qq.com	<div>修改删除</div>
<div>添加用户</div>							

2. 在添加用户页面，点击提交按钮,把数据提交到服务器,保存到数据库

添加用户页面

姓名：

请输入姓名

性别：

男

女

年龄：

请输入年龄

籍贯：

广东

QQ：

请输入QQ号码

Email：

请输入邮箱地址

提交

重置

返回

3. 在添加完成，可以查看到新建的用户信息

## 显示所有用户

编号	姓名	性别	年龄	籍贯	QQ	邮箱	操作
1	张三	男	11	广东	766335435	766335435@qq.com	<button>修改</button> <button>删除</button>
2	李四	男	12	广东	243424242	243424242@qq.com	<button>修改</button> <button>删除</button>
3	王五	女	13	广东	474574574	474574574@qq.com	<button>修改</button> <button>删除</button>
4	赵六	女	18	广东	77777777	77777777@qq.com	<button>修改</button> <button>删除</button>
5	钱七	女	15	湖南	412132145	412132145@qq.com	<button>修改</button> <button>删除</button>
6	王八	男	25	广西	412132775	412132995@qq.com	<button>修改</button> <button>删除</button>
<button>添加用户</button>							

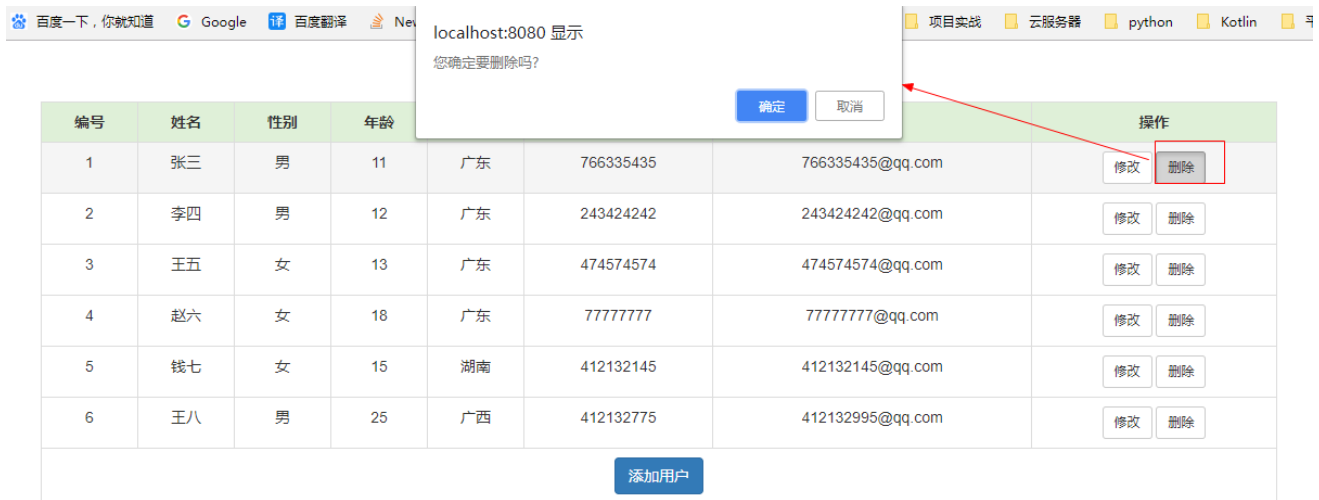
## 二,技术分析

传统方式的开发一个请求对应一个Servlet:这样的话会导致一个模块的Servlet过多,导致整个项目的Servlet都会很多.能不能做一个处理?让一个**模块**用一个Servlet处理请求.

- 传统方式  
查询所有的用户 :<http://localhost:8080/day32/findAll>  
添加用户: :<http://localhost:8080/day32/add>  
删除用户 :<http://localhost:8080/day32/delete>
- 以模块为单位创建, 创建一个UserServlet  
查询所有的用户 :<http://localhost:8080/day32/userServlet?method=findAll>  
添加用户: :<http://localhost:8080/day32/userServlet?method=add>  
删除用户 :<http://localhost:8080/day32/userServlet?method=delete>

## 案例二:删除用户

### 一,案例需求



点击确定删除之后, 再重新查询所有全部展示,

## 案例三:分页展示用户

### 一,案例需求

显示所有联系人

编号	姓名	性别	年龄	籍贯	QQ	邮箱	操作
1	张三	男	20	广东	44444222	zs@qq.com	<button>修改</button> <button>删除</button>
2	张三	男	20	广东	44444222	zs@qq.com	<button>修改</button> <button>删除</button>
3	张三	男	20	广东	44444222	zs@qq.com	<button>修改</button> <button>删除</button>
4	张三	男	20	广东	44444222	zs@qq.com	<button>修改</button> <button>删除</button>
5	张三	男	20	广东	44444222	zs@qq.com	<button>修改</button> <button>删除</button>

« 1 2 3 4 5 6 7 8 9 »

- 分页查询出用户信息

### 二,技术分析

#### 1,数据库操作 limit

```
select * from product limit a,b;
```

a(从哪里开始查询) :  $a = (\text{当前页码} - 1) * b$ ;

b(一页显示的数量): 是由开发者自定义(需求)的;  $b = 2$

-----  
-- 分页查询用户; 一页显示5条  $b=5$ ;

-- limit a ,b;  $a = (\text{当前页码} - 1) * b$ ;

-- 第一页  $a = 0, b = 5$

```

SELECT * FROM `user` LIMIT 0,5
-- 第二页 a =5, b = 5
SELECT * FROM `user` LIMIT 5,5
-- 第三页 a =10, b = 5
SELECT * FROM `user` LIMIT 10,5

```

## 2. 分页需要的数据的封装

```

//封装分页的数据的
public class PageBean{
    //一页显示的用户的集合 List<User> list
    //当前页码          int curPage;
    //总页数            int sumPage;
    //用户的总数        int count;
    //一页显示的数量    int curSize;
}

//-----计算sumPage-----//

一页显示2条数据， 总数量 8，总页数4
一页显示3条数据， 总数量 8，总页数3
一页显示4条数据， 总数量 8，总页数2
一页显示4条数据， 总数量 9，总页数3

if(count % curSize ==0){
    sumPage = count/curSize;
}else{
    sumPage = count/curSize+1;
}

```

## 三,思路分析

## 四,代码实现

### 环境准备

- 数据库创建

```

CREATE TABLE user (
    id int primary key auto_increment,
    name varchar(50),
    sex varchar(50),
    age int,
    address varchar(50),
    qq varchar(50),
    email varchar(50)
);

```

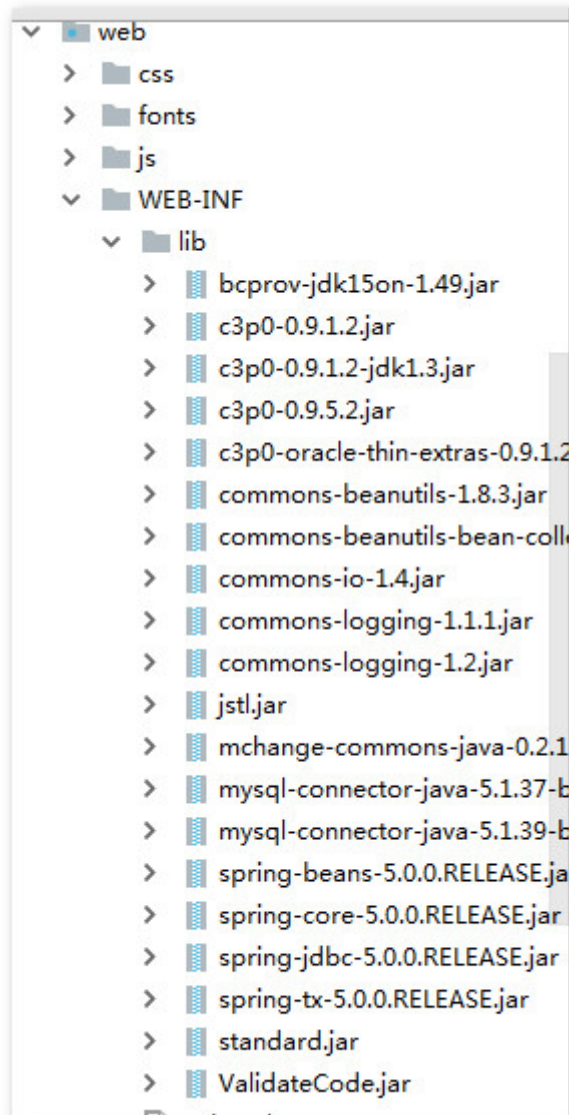
```
INSERT INTO `user` (`id`,`name`,`sex`,`age`,`address`,`qq`,`email`) VALUES
(null, '张三', '男', 11, '广东', '766335435', '766335435@qq.com'),
(null, '李四', '男', 12, '广东', '243424242', '243424242@qq.com'),
(null, '王五', '女', 13, '广东', '474574574', '474574574@qq.com'),
(null, '赵六', '女', 18, '广东', '777777777', '777777777@qq.com'),
(null, '钱七', '女', 15, '湖南', '412132145', '412132145@qq.com'),
(null, '王八', '男', 25, '广西', '412132775', '412132995@qq.com');
.....
```

- C3P0Utils

```
public class C3p0Utils {
    private static DataSource ds=new ComboPooledDataSource();
    public static DataSource getDs(){
        return ds;
    }
}
```

```
<!--C3P0Utils-->
<c3p0-config>
    <default-config>
        <property name="driverClass">com.mysql.jdbc.Driver</property>
        <property name="jdbcUrl">jdbc:mysql://localhost:3306/fuxi</property>
        <property name="user">root</property>
        <property name="password">123</property>
        <property name="initialPoolSize">5</property>
    </default-config>
</c3p0-config>
```

- 需要导入C3P0,JDBC,BootStrap,jstl包



## Web前端页面

- 首页index

```
<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
  <head>
    <title>${Title}</title>
  </head>
  <body>
    <a href="http://localhost/userServlet?method=findAll">查询所有的用户</a><br/>
    <a href="http://localhost/userServlet?method=findByPage&curPage=1">分页查询用户</a><br/>
  </body>
</html>
```

- 单页查询list

```
<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
```

```

<!DOCTYPE html>
<!-- 网页使用的语言 -->
<html lang="zh-CN">
<head>
    <!-- 指定字符集 -->
    <meta charset="utf-8">
    <!-- 使用Edge最新的浏览器的渲染方式 -->
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <!-- viewport视口：网页可以根据设置的宽度自动进行适配，在浏览器的内部虚拟一个容器，容器的宽度与设备的宽度相同。
    width：默认宽度与设备的宽度相同
    initial-scale：初始的缩放比，为1:1 -->
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <!-- 上述3个meta标签*必须*放在最前面，任何其他内容都*必须*跟随其后！ -->
    <title>显示所有用户</title>

    <!-- 1. 导入CSS的全局样式 -->
    <link href="css/bootstrap.min.css" rel="stylesheet">
    <!-- 2. jQuery导入，建议使用1.9以上的版本 -->
    <script src="js/jquery-2.1.0.min.js"></script>
    <!-- 3. 导入bootstrap的js文件 -->
    <script src="js/bootstrap.min.js"></script>
    <style type="text/css">
        td, th {
            text-align: center;
        }
    </style>
</head>
<body>
<div class="container">
    <h3 style="text-align: center;">显示所有用户</h3>
    <table border="1" class="table table-bordered table-hover">
        <tr class="success">
            <th>编号</th>
            <th>姓名</th>
            <th>性别</th>
            <th>年龄</th>
            <th>籍贯</th>
            <th>QQ</th>
            <th>邮箱</th>
            <th>操作</th>
        </tr>
        <c:forEach items="${list}" var="u">
            <tr>
                <td>${u.id}</td>
                <td>${u.name}</td>
                <td>${u.sex}</td>
                <td>${u.age}</td>
                <td>${u.address}</td>
                <td>${u.qq}</td>
                <td>${u.email}</td>

                <td><a class="btn btn-default btn-sm"

```

```

href="JavaScript:void(0)"onclick="updateuser(${u.id})">修改</a>&nbsp;
        <a class="btn btn-default btn-sm" href="JavaScript:void(0)"
onclick="deleteById(${u.id})">删除</a>
    </td>
</tr>
</c:forEach>
<tr>
    <td colspan="8" align="center"><a class="btn btn-primary"
href="${pageContext.request.contextPath }/add.jsp">添加用户</a></td>
</tr>
</table>
</div>
<script>
    //创建函数响应删除的点击事件
    function deleteById(id){
        //弹出确定框
        var flag = window.confirm("您确定要删除吗?");
        //console.log("flag="+flag);
        //点击了确定
        if(flag){
            //请求服务器,需要根据id删除
            location.href="http://localhost/userServlet?method=deleteById&id="+id;
        }
    }
    function updateuser(id){
        location.href="http://localhost/userServlet?method=updateuser&id="+id;
    }
</script>
</body>
</html>

```

## • 分页查询list\_page

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<!DOCTYPE html>
<html lang="zh-CN">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Bootstrap模板</title>
    <link href="css/bootstrap.min.css" rel="stylesheet">
    <script src="js/jquery-2.1.0.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <style type="text/css">
        td, th {
            text-align: center;
        }
    </style>
</head>
<body>

```



```

<div class="container">
  <h3 style="text-align: center">显示所有用户</h3>
  <table border="1" class="table table-bordered table-hover">
    <tr class="success">
      <th>编号</th>
      <th>姓名</th>
      <th>性别</th>
      <th>年龄</th>
      <th>籍贯</th>
      <th>QQ</th>
      <th>邮箱</th>
      <th>操作</th>
    </tr>

    <c:forEach items="${pageBean.list}" var="u">
      <tr>
        <td>${u.id}</td>
        <td>${u.name}</td>
        <td>${u.sex}</td>
        <td>${u.age}</td>
        <td>${u.address}</td>
        <td>${u.qq}</td>
        <td>${u.email}</td>
        <td><a class="btn btn-default btn-sm"
href="JavaScript:void(0)" onclick="changeGai(${u.id})">修改</a>&nbsp;<a class="btn btn-default
btn-sm" href="JavaScript:void(0)" onclick="deleteid(${u.id})">删除</a></td>
      </tr>
    </c:forEach>
  <tr>
    <td colspan="8" align="center">
      <ul class="pagination success">
        <c:if test="${pageBean.curPage == 1}">
          <li class="disabled"><a href="JavaScript:void(0)" aria-label="Previous">
<span aria-hidden="true">&laquo;</span></a></li>
        </c:if>
        <c:if test="${pageBean.curPage > 1}">
          <li><a href="http://localhost/userServlet?
method=findByPage&curPage=${pageBean.curPage - 1}" aria-label="Previous"><span aria-
hidden="true">&laquo;</span></a></li>
        </c:if>
        <c:forEach begin="1" end="${pageBean.sumPage}" var="n">
          <c:if test="${n == pageBean.curPage}">
            <li class="active"><a href="JavaScript:void(0)">${n}</a></li>
          </c:if>
          <c:if test="${n != pageBean.curPage}">
            <li><a href="http://localhost/userServlet?
method=findByPage&curPage=${n}">${n}</a></li>
          </c:if>
        </c:forEach>
        <c:if test="${pageBean.curPage == pageBean.sumPage}">
          <li class="disabled"><a href="JavaScript:void(0)" aria-label="Next">
<span aria-hidden="true">&raquo;</span></a></li>
        </c:if>
      </ul>
    </td>
  </tr>

```

```

                <c:if test="${pageBean.curPage < pageBean.sumPage}">
                    <li><a href="http://localhost/userServlet?
method=findByPage&curPage=${pageBean.curPage+1}" aria-label="Next"><span aria-
hidden="true">&raquo;</span></a></li>
                </c:if>
            </ul>
        </td>
    </tr>
</table>
</div>
</body>
<script>
    function deleteid(id){
        var flag = window.confirm("您确定要删除吗?");
        if(flag){
            location.href="http://localhost/userServlet?
method=deletebyid&id="+id+"&curPage=${pageBean.curPage}";
        }
    }
    function changegai(id){
        location.href="http://localhost/userServlet?
method=upuser&id="+id+"&curPage=${pageBean.curPage}";
    }
</script>
</html>

```

- msg

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
<head>
    <title>Title</title>
</head>
<body>
    <h1>${msg}</h1>
</body>
</html>

```

- 增加用户页面add

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<!DOCTYPE html>
<html lang="zh-CN">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>添加用户</title>
    <link href="css/bootstrap.min.css" rel="stylesheet">
    <script src="js/jquery-2.1.0.min.js"></script>

    <script src="js/bootstrap.min.js"></script>

```

```

</head>
<body>
<div class="container">
  <center><h3>添加用户页面</h3></center>
  <form action="http://localhost/userServlet" method="post">
    <input type="hidden" name="method" value="add"/>
    <div class="form-group">
      <label for="name">姓名 : </label>
      <input type="text" class="form-control" id="name" name="name" placeholder="请输入姓名">
    </div>
    <div class="form-group">
      <label>性别 : </label>
      <input type="radio" name="sex" value="男" checked="checked"/>男
      <input type="radio" name="sex" value="女"/>女
    </div>
    <div class="form-group">
      <label for="age">年龄 : </label>
      <input type="text" class="form-control" id="age" name="age" placeholder="请输入年龄">
    </div>
    <div class="form-group">
      <label for="address">籍贯 : </label>
      <select name="address" class="form-control" id="jiguan">
        <option value="广东">广东</option>
        <option value="广西">广西</option>
        <option value="湖南">湖南</option>
      </select>
    </div>
    <div class="form-group">
      <label for="qq">QQ : </label>
      <input type="text" class="form-control" name="qq" placeholder="请输入QQ号码"/>
    </div>
    <div class="form-group">
      <label for="email">Email : </label>
      <input type="text" class="form-control" name="email" placeholder="请输入邮箱地址"/>
    </div>
    <div class="form-group" style="text-align: center">
      <input class="btn btn-primary" type="submit" value="提交" />
      <input class="btn btn-default" type="reset" value="重置" />
      <input class="btn btn-default" type="button" value="返回" />
    </div>
  </form>
</div>
</body>
</html>

```

## • 更新单页update

```

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

<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

```

```

<%
String path = request.getContextPath();
String basePath =
request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";
%>
<!DOCTYPE html>
<!-- 网页使用的语言 -->
<html lang="zh-CN">
    <head>
        <base href="<%=basePath%>" />
        <!-- 指定字符集 -->
        <meta charset="utf-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <title>修改用户</title>

        <link href="css/bootstrap.min.css" rel="stylesheet">
        <script src="js/jquery-2.1.0.min.js"></script>
        <script src="js/bootstrap.min.js"></script>

    </head>
    <body>
        <div class="container" style="width: 400px;">
            <h3 style="text-align: center;">修改用户</h3>
            <form action="/userServlet" method="post">
                <input type="hidden" name="method" value="updatesrc" />
            <div class="form-group">
                <label for="name">姓名 : </label>
                <input type="text" class="form-control" id="name" name="name" placeholder="请输入姓名" />
            </div>

            <div class="form-group">
                <label>性别 : </label>
                <input type="radio" name="sex" value="男" />男
                <input type="radio" name="sex" value="女" />女
            </div>

            <div class="form-group">
                <label for="age">年龄 : </label>
                <input type="text" class="form-control" id="age" name="age" placeholder="请输入年龄" />
            </div>

            <div class="form-group">
                <label for="address">籍贯 : </label>
                <select name="address" class="form-control" >
                    <option value="广东">广东</option>
                    <option value="广西">广西</option>
                    <option value="湖南">湖南</option>
                </select>
            </div>

            <div class="form-group">

                <label for="qq">QQ : </label>

```

```

        <input type="text" class="form-control" name="qq" placeholder="请输入QQ号码"/>
    </div>

    <div class="form-group">
        <label for="email">Email : </label>
        <input type="text" class="form-control" name="email" placeholder="请输入邮箱地址"/>
    </div>

    <div class="form-group" style="text-align: center">
        <input class="btn btn-primary" type="submit" value="提交" />
        <input class="btn btn-default" type="reset" value="重置" />
        <input class="btn btn-default" type="button" value="返回"/>
    </div>
</form>
</div>
</body>
</html>

```

- 更新多页uppage date

```

<%
String path = request.getContextPath();
String basePath =
request.getScheme()+ "://" + request.getServerName() + ":" + request.getServerPort() + path + "/";
%>
<!DOCTYPE html>
<!-- 网页使用的语言 -->
<html lang="zh-CN">
    <head>
        <base href="<%=basePath%>" />
        <!-- 指定字符集 -->
        <meta charset="utf-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <title>修改用户</title>

        <link href="css/bootstrap.min.css" rel="stylesheet">
        <script src="js/jquery-2.1.0.min.js"></script>
        <script src="js/bootstrap.min.js"></script>

    </head>
    <body>
        <div class="container" style="width: 400px;">
            <h3 style="text-align: center;">修改用户</h3>
            <form action="/userServlet" method="post">
                <input type="hidden" name="method" value="srcupdate"/>
            <div class="form-group">
                <label for="name">姓名 : </label>
                <input type="text" class="form-control" id="name" name="name" placeholder="请输入姓名" />
            </div>

            <div class="form-group">

```

```

        <label>性别 : </label>
        <input type="radio" name="sex" value="男" />男
        <input type="radio" name="sex" value="女" />女
    </div>

    <div class="form-group">
        <label for="age">年龄 : </label>
        <input type="text" class="form-control" id="age" name="age" placeholder="请输入年龄" />
    </div>

    <div class="form-group">
        <label for="address">籍贯 : </label>
        <select name="address" class="form-control" >
            <option value="广东">广东</option>
            <option value="广西">广西</option>
            <option value="湖南">湖南</option>
        </select>
    </div>

    <div class="form-group">
        <label for="qq">QQ : </label>
        <input type="text" class="form-control" name="qq" placeholder="请输入QQ号码"/>
    </div>

    <div class="form-group">
        <label for="email">Email : </label>
        <input type="text" class="form-control" name="email" placeholder="请输入邮箱地址"/>
    </div>

    <div class="form-group" style="text-align: center">
        <input class="btn btn-primary" type="submit" value="提交" />
        <input class="btn btn-default" type="reset" value="重置" />
        <input class="btn btn-default" type="button" value="返回"/>
    </div>
</form>
</div>
</body>
</html>

```

## Servlet

- **UserServlet主类**

```

@WebServlet("/userServlet")
public class UserServlet 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");
    }
}

```

```

request.setCharacterEncoding("utf-8");
String method = request.getParameter("method");
if("findAll".equals(method)) {
    findALLQ(request,response);
}else if("add".equals(method)){
    addU(request,response);
}else if("findByPage".equals(method)){
    try {
        int curPage =Integer.parseInt(request.getParameter("curPage"));
        Service ss=new Service();
        pageBean pb=ss.getpage(curPage);
        request.setAttribute("pageBean",pb);
        request.getRequestDispatcher("/list_page.jsp").forward(request,response);
    } catch (Exception e) {
        e.printStackTrace();
    }
}else if("deleteById".equals(method)){
    deleteit(request,response);
}else if("updateuser".equals(method)){
    int id = Integer.parseInt(request.getParameter("id"));
    request.getSession().setAttribute("id",id);
    request.getRequestDispatcher("/update.jsp").forward(request,response);
}else if("updatesrc".equals(method)){
    updateshu(request,response);
}else if("deletebyid".equals(method)){
    dele(request,response);
}else if("upuser".equals(method)){
    int id = Integer.parseInt(request.getParameter("id"));
    int curPage=Integer.parseInt(request.getParameter("curPage"));
    request.getSession().setAttribute("curPage",curPage);
    request.getSession().setAttribute("id",id);
    request.getRequestDispatcher("/upupdate.jsp").forward(request,response);
}else if("srcupdate".equals(method)){
    shuupdate(request,response);
}

}

//多页用户修改
private void shuupdate(HttpServletRequest request, HttpServletResponse response) {
    try {
        String name = request.getParameter("name");
        String sex = request.getParameter("sex");
        int age = Integer.parseInt(request.getParameter("age"));
        String address = request.getParameter("address");
        String qq = request.getParameter("qq");
        String email = request.getParameter("email");
        int id = (int) request.getSession().getAttribute("id");
        int curPage = (int) request.getSession().getAttribute("curPage");
        Service ss=new Service();
        int changeupdate = ss.changeupdate(id, name, sex, age, address, qq, email);
        System.out.println("更改成功数为:"+changeupdate);
        response.sendRedirect("/userServlet?method=findByPage&curPage="+curPage);
    } catch (Exception e) {

```

```

        e.printStackTrace();
    }

}

//多页删除用户
private void dele(HttpServletRequest request, HttpServletResponse response) {
    try {
        int id = Integer.parseInt(request.getParameter("id"));
        int curPage = Integer.parseInt(request.getParameter("curPage"));
        Service ss = new Service();
        ss.deletesrc(id);
        response.sendRedirect("/userServlet?method=findByPage&curPage="+curPage);
    } catch (Exception e) {
        e.printStackTrace();
    }
}

//单页修改用户
private void updateshu(HttpServletRequest request, HttpServletResponse response) {
    try {
        String name = request.getParameter("name");
        String sex = request.getParameter("sex");
        int age = Integer.parseInt(request.getParameter("age"));
        String address = request.getParameter("address");
        String qq = request.getParameter("qq");
        String email = request.getParameter("email");
        int id = (int) request.getSession().getAttribute("id");
        Service ss = new Service();
        int changeupdate = ss.changeupdate(id, name, sex, age, address, qq, email);
        System.out.println("更改成功数为:" + changeupdate);
        response.sendRedirect("/userServlet?method=findAll");
    } catch (Exception e) {
        e.printStackTrace();
    }
}

//单页删除用户
public void deleteit(HttpServletRequest request, HttpServletResponse response) {
    try {
        int id = Integer.parseInt(request.getParameter("id"));
        Service ss = new Service();
        ss.deletesrc(id);
        response.sendRedirect("/userServlet?method=findAll");
    } catch (Exception e) {
        e.printStackTrace();
    }
}

//单页查询所有记录
public void findALLQ(HttpServletRequest request, HttpServletResponse response) {
    try {
        Service sc = new Service();
        List list = sc.getList();
        request.setAttribute("list", list);
        request.getRequestDispatcher("/list.jsp").forward(request, response);
    } catch (Exception e) {

```



```

        e.printStackTrace();
    }
}
//单页增加用户，通过页面链接传来request
public void addU(HttpServletRequest request, HttpServletResponse response){
    try {
        Map<String, String[]> map = request.getParameterMap();
        User user=new User();
        BeanUtils.populate(user,map);
        Service ss=new Service();
        ss.addUser(user);
        response.sendRedirect("/userServlet?method=findAll");
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}
}

```

- **pageBean**

```

public class pageBean {
    List list;
    int curPage;//当前页
    int sumPage;
    int count;
    int curSize;
    构造get/set方法
}

```

- **规定每页显示几条数据PerCount**

```

public class PerCount {
    public static int percount=5;
}

```

- **User**

```

public class User {
    private int id;
    private String name;
    private String sex;
    private int age;
    private String address;
    private String qq;
    private String email;
    构造get/set方法
    构造函数空参满参
    toString()方法
}

```

- 业务层Service

```
public class Service {
    public List getList()throws Exception{
        Dao dao=new Dao();
        return dao.getUser();
    }
    public void addUser(User user) throws Exception {
        Dao dao=new Dao();
        dao.addUser(user);
    }
    public void deletesrc(int id) throws Exception {
        Dao dao=new Dao();
        dao.deleteD(id);
    }

    public pageBean getpage(int curPage) throws Exception {
        pageBean pb=new pageBean();
        int per=PerCount.percount;
        pb.setCount(per);
        pb.setCurPage(curPage);
        Dao dao=new Dao();
        int count = dao.getCount();
        pb.setCurSize(count);
        if(count%per==0){
            pb.setSumPage(count/per);
        }else{
            pb.setSumPage(count/per+1);
        }
        List<User> list = dao.limitUser(curPage, per);
        pb.setList(list);
        return pb;
    }
    public int changeupdate(int id,String name,String sex,int age,String address,String qq,String email) throws Exception {
        Dao dao=new Dao();
        int changeup = dao.changeup(id, name, sex, age, address, qq, email);
        return changeup;
    }
}
```

- Dao层

```
public class Dao {
    public List getUser()throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
        List<User> list = jt.query("select * from user", new BeanPropertyRowMapper<>
(User.class));
        return list;
    }
    public void addUser(User user)throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
```

```

        Object[] message=
{null,user.getName(),user.getSex(),user.getAge(),user.getAddress(),user.getQq(),
user.getEmail()};
        jt.update("insert into user values (?,?,?,?,?,?,?)",message);
    }
    public void deleteD (int id)throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
        jt.update("delete from user where id=?",id);
    }
    public List<User> limitUser(int curPage,int percount)throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
        List<User> list = jt.query("select * from user limit ?,?", new BeanPropertyRowMapper<>
(User.class), (curPage - 1) * percount, percount);
        return list;
    }
    public int getCount()throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
        Long aLong = jt.queryForObject("select count(*) from user", Long.class);
        return (int) aLong.longValue();
    }
    public int changeup(int id,String name,String sex,int age,String address,String qq,String
email)throws Exception{
        JdbcTemplate jt=new JdbcTemplate(C3p0Utils.getDs());
        int update = jt.update("update user set name=?,sex=?,age=?,address=?,qq=?,email=? where
id=?", name, sex, age, address, qq, email, id);
        return update;
    }
}

```

## 扩展

### 一, PageBean优化

```

/**
 * 分页的数据的封装类
 */
public class PageBean<T> {

    //一页显示的用户的集合 List<User> list
    //当前页码          int curPage;
    //总页数            int sumPage;
    //用户的总数        int count;
    //一页显示的数量    int curSize;

    private List<T> list;
    private int curPage;
    private int sumPage;
    private int count;

    private int curSize;

```

```

public void setList(List<T> list) {
    this.list = list;
}

public List<T> getList() {
    return list;
}

public int getCurPage() {
    return curPage;
}

public void setCurPage(int curPage) {
    this.curPage = curPage;
}

public int getSumPage() {
    return sumPage;
}

public void setSumPage(int sumPage) {
    this.sumPage = sumPage;
}

public int getCount() {
    return count;
}

public void setCount(int count) {
    this.count = count;
}

public int getCurSize() {
    return curSize;
}

public void setCurSize(int curSize) {
    this.curSize = curSize;
}
}

```

## 二, doGet()方法里面的优化

```

@WebServlet("/userServlet")
public class UserServlet extends javax.servlet.http.HttpServlet {

    //1. 判断是哪一个方法  2.让这个方法执行

```

```
protected void doGet(javax.servlet.http.HttpServletRequest request,
javax.servlet.http.HttpServletResponse response) throws javax.servlet.ServletException,
IOException {
    try {
        //0.处理post请求的乱码
        request.setCharacterEncoding("utf-8");
        //1. 获得method请求参数(说白了就是方法名)
        String methodStr = request.getParameter("method");
        //2. 获得字节码对象
        Class clazz = this.getClass();
        //3. 反射获得methodStr(方法名)对应的Method对象
        Method method = clazz.getMethod(methodStr, HttpServletRequest.class,
        HttpServletResponse.class);
        //4. 让这个方法执行
        method.invoke(this,request,response);

    } catch (Exception e) {
        e.printStackTrace();
    }
}
}
```