Writing Enterprise Applications with Java 2 Platform, Enterprise Edition - part4

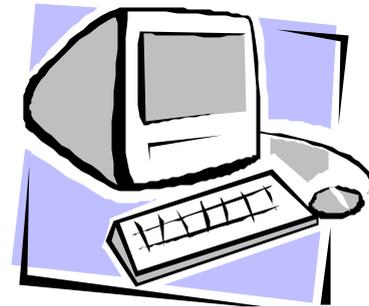## Document Information

Document title:	Writing Enterprise Applications with Java 2 Plat form, Enterprise Edition - part4
Document file name:	Writing_Enterprise_Applications_4_JunoYoon
Revision number:	<1.0>
Issued by:	< > junoyoon@orgio.net
Issue Date:	<2001/04/19>
Status:	final

Content Information

Audience	
Abstract	Lesson WAR BonusServlet JSP .
Reference	Writing Enterprise Applications with JavaTM Platform, Enterprise Edition By Monica Pawlan (http://developer.java.sun.com/developer/online Training/J2EE/Intro/)
Benchmark information	

Table of Contents

Lesson 4 – JavaServer Pages

JSP (JavaServer Pages ™)   HTML   XML

,   . JSP

                JSP   .

                        Lesson   WAR   BonusServlet   JSP

                                        .

JSP

JSP   <%   %>   JSP

                HTML   . init , doGet , doPost   HttpServlet

                                        ,   JSP

                JSP   .

        JSP   (Bonus.jsp)   Lesson   BonusServlet

                .   JSP

    . JSP   JSP   .   JS

P   JSP   .

```
<HTML>
<HEAD>
<TITLE>Bonus Calculation</TITLE>
</HEAD>
  <%-- Comment
     Scriptlet for import statements
      <%@ indicates a jsp directive --%>
      <%@ page import="javax.naming. *" %>
      <%@ page import="javax.rmi.PortableRemoteObject" %>
      <%@ page import="Beans. *" %>
      <%-- Comment
           Scriptlet to get the parameters,
```

```
                    convert string to Integer to int for bonus
                    calculation, and declare/initialize bonus
                    variable.  <% indicates a jsp scriptlet --%>
          <%! String strMult, socsec; %>
          <%! Integer integerMult; %>
          <%! int multiplier; %>
          <%! double bonus; %>
          <%! double calc; %>
   <%
          strMult = request.getParameter("MULTIPLIER");
          socsec = request.getParameter("SOCSEC");
          integerMult = new Integer(strMult);
          multiplier = integerMult.intValue();
          bonus = 100.00;
   %>
          <%-- Comment
                    Scriptlet to look up session Bean --%>
          <%
                    InitialContext ctx = new InitialContext();
                    Object objref = ctx.lookup("calcs");
                    Object objref2 = ctx.lookup("bonus");
                    CalcHome homecalc = (CalcHome)
                              PortableRemoteObject.narrow(
                              objref, CalcHome.class);
                    BonusHome homebonus = (BonusHome)
                              PortableRemoteObject.narrow(
                              objref2, BonusHome.class);
   %>
          <%-- Comment
                    Scriptlet to create session Bean,
                    call calcBonus method, and retrieve a database
                    record by the social security number
                    (primary key) --%>
   <%
          try {
                    Calc theCalculation = homecalc.create();
                    calc = theCalculation.calcBonus(multiplier, bonus);
                    Bonus theBonus = homebonus.create(calc, socsec);
                    Bonus record = homebonus.findByPrimaryKey(socsec);
   %>
          <%-- Comment
                    HTML code to display retrieved data
                    on returned HTML page. --%>
                    <H1>Bonus Calculation</H1>
                    Social security number retrieved:
```

```
                    <%= record.getSocSec() %>
                <P>
                Bonus Amount retrieved: <%= record.getBonus() %>
                <P>
        <%-- Comment
                Scriptlet to catch DuplicateKeyException --%>
    <%
        } catch (javax.ejb.DuplicateKeyException e) {
                String message = e.getMessage();
    %>
        <%-- Comment
                HTML code to display original data passed to JSP
                on returned HTML page --%>
                Social security number passed in: <%= socsec %>
                <P>
                Multiplier passed in: <%= strMult %>
                <P>
                Error: <%= message %>
        <%-- Comment
                Scriptlet to close try and catch block --%>
    <%
        }
    %>
        <%-- Comment
                HTML code to close HTML body and page --%>
    </BODY>
    </HTML>
```

Bonus.jsp   HTML   JSP
            . JSP   HTML   <!--   <%--
                      HTML   . JSP
        , JSP   , HTML   . HTML   H
TML   Web   . JSP
        HTML   .

        : <%-- Comment : Scriptlet for import statements ...   JSP
    (:)   , Runtime Error   .

        <HTML>
        <HEAD>

```
                    <TITLE>Bonus Calculation</TITLE>
                    </HEAD>
                        <%-- Comment
                                Scriptlet for import statements
                                <%@ indicates a jsp directive --%
```

(Directives)

JSP   , JSP   JSP   .

                                                                                                  .

<%@   %>   .

```
            <%@ page import="javax.naming. *" %>
            <%@ page import="javax.rmi.PortableRemoteObject" %>
            <%@ page import="Beans. *" %>
```

JSP   (expession)

                                .   (expession)   ,

                                .   JSP   ,   .

                                                                                      ,

                                .   ( )   <%! ( ) %>   **<%! double bonus;**

String text; %>   ,   .

```
            <%! String strMult, socsec; %>
            <%! Integer integerMult; %>
            <%! int multiplier; %>
            <%! double bonus; %>
```

JSP   JSP   Java   (nest)   .

                    ,   .

                    .   ,<%   %>   .

```
            <%
            strMult = request.getParameter("MULTIPLIER");
            socsec = request.getParameter("SOCSEC");
            integerMult = new Integer(strMult);
            multiplier = integerMult.intValue();
            bonus = 100.00;
            %>
```

(session, request, response, out, in)

.   HttpServletRequest   request

.   response   HttpServletResponse   , out   PrintWriter

, in   BufferedReader   .

```
<%
  strMult = request.getParameter("MULTIPLIER");
  socsec = request.getParameter("SOCSEC");
  integerMult = new Integer(strMult);
  multiplier = integerMult.intValue();
  bonus = 100.00;
%>
```

JSP   JSP   .

,   Entity Bean   Bonus (   )   ID   ,   JSP

.

```
<H1>Bonus Calculation</H1>
  Social security number retrieved: <%= record.getSocSec() %>


  <P>
  Bonus Amount retrieved: <%= record.getBonus() %>
  <P>
```

JSP

JavaServer Pages 1.1   JSP

JSP   JSP

.   JSP

. 1.1   JSP   .

o   **jsp:forward   jsp:include**   , JSP

.

o   **jsp:useBean   jsp:setProperty ,jsp:getProperty**   JSP   JavaBeans

.

o   **jsp:plugin**   Java   Applet   Java
     Plug-In   .

bonus.html

bonus.html   BonusServlet   Bonus.jsp   HTML   ACTION
.

```
<HTML>
<BODY BGCOLOR = "WHITE">
<BLOCKQUOTE>
<H3>Bonus Calculation</H3>
<FORM METHOD="GET" ACTION="Bonus.jsp">
<P>
Enter social security Number:
<P>
<INPUT TYPE="TEXT" NAME="SOCSEC"></INPUT>
<P>
Enter Multiplier:
<P>
<INPUT TYPE="TEXT" NAME="MULTIPLIER"></INPUT>
<P>
<INPUT TYPE="SUBMIT" VALUE="Submit">
<INPUT TYPE="RESET">
</FORM>
</BLOCKQUOTE>
</BODY>
</HTML>
```

, J2EE   ,   , Cloudscape
.   .

```
j2ee -verbose
deploytool
cloudscape -start
```

, J2EE   .

UNIX

```
j2sdkee1. 2.1/bin/j2ee -verbose
j2sdkee1. 2.1/bin/deploytool
j2sdkee1. 2.1/bin/cloudscape -start
```

Windows

```
j2sdkee1. 2.1\bin\j2ee -verbose
```

j2sdkee1. 2.1\bin\deploytool
j2sdkee1. 2.1\bin\cloudscape -start

WAR

JSP   Web   ,   Lesson   WAR
  , JSP   WAR   .

Local Applications:

o   BonusApp   ,
                                     .

o   BonusWar   BonusWar   .
o   [Edit]   [Delete]   .

WAR

[File]   :

o   [Web   ]   .

[Introduction]   :

o   [Next >]

[War File General Properties]   :

          :   .   Bonus.jsp (   )   ,
        bonus.html   .   bonus.html   (   ),
            Bonus.jsp (   )   , bonus.html   .
                          ,
                      .   ,   .

o   [display name] BonusWar   .
o   [Add]   .
o   ClientCode   Bonus.jsp   .
o   [Next >]   .
o   ClientCode   bonus.html   .
o   [Finish]   .

[War File General Properties]   **:**

o   [Next >]   .

[Choose Component Type]   **:**

o   [JSP]   . [Next >]   .

[Component General Properties]   **:**

o   **[JSP   ]   Bonus.jsp**   .
o   BonusJSP   .
o   [Finish]   .

[Inspecting window]

o   [Web Content]   .
o   JSPRoot   .

J2EE

                                    Verifier   . Verifier
         Enterprise Bean   compiler
             .

o   BonusApp   [Tool]   [Verifier]   .
o   [OK]   .
                                                .
o   , Verifer
             .

o   [Tool]   [Deploy Application]   .
             .
o   J2EE
                                    .
o   [Next >]   . CalcBean   JNDI   calcs , BonusBean   JND
         I   bonus   .

.

o   [Next >]   .
o   Context Root   JSPRoot   .
                    , JSPRoot   .
o   [Next >]   .
o   [Finish]   ,   .
                                                              .   3
                      ,   1   .
o   [OK]

1.

J2EE

        Web   8000   . bonus.html
        http://localhost:8000/JSPRoot/bonus.html   .

               :   , Bonus.jsp   public_ht
        ml/JSPRoot   , bonus.html   public_html/JSPRoot/WEB-INF/classes
                         .   ,
                         .

        public_html/JSPRoot/bonus.html
        public_html/JSPRoot/WEB-INF/classes/Bonus.jsp

o   social security number   multiplier   .
o   Submit   . Bonus.jsp
                      HTML   .

Bonus Calculation
Social Security number retrieved: 777777777
Bonus Amount Retrieved: 200.0

    social security number   ,   .

Bonus Calculation
Soc Sec passed in: 777777777
Multiplier passed in: 2
Error: Duplicate primary key

Java Server Pages technology   JavaBeans
                            .   JSP
                                                    JavaBeans   .
        ,   URL   .

http://japan.hanmir.com/jtk.cgi?url=http://java.sun.com/j2ee/j2sdkee/techdocs/guides/ejb/html/Client.fm.html#10649
http://japan.hanmir.com/jtk.cgi?url=http://developer.iplanet.com/viewsource/fields_jspcomp/fields_jspcomp.html