

Lab: JavaServer Pages

Preamble

For this lab, you can create a new Web application project, or re-use the one you created for the servlet lab.

1 First Steps

Modify the `index.jsp` JSP to display the current date, using a JSP expression and the `java.util.Date` class.

Next, modify the JSP so that it displays the integers from 1 to 10 using JSP scriptlets. You need to use the *implicit object* named `out` to output the values.

Further modify your code so that it displays the name and value of the parameters of the HTTP request, using interleaved scriptlets and HTML tags. Again, you need to use the *implicit object* named `request` to access the request.

Check that the parameters you add after the “?” of the URL are correctly displayed.

2 Login – Process – Logout Workflow Using JSPs

Consider the exercise 2.1 of the previous lab. Implement the same functionality, this time using three JSPs: `Login.jsp`, `Process.jsp`, `Logout.jsp`.

Use two methods to transfer control from one JSP to another: (i) a scriptlet calling the dispatcher, as in exercise 2.1, (ii) the JSP forward tag.

3 JSP Model 2 Architecture

Consider the exercise 3.2 of the previous lab. Implement the same functionality, this time using the *JSP Model 2* design pattern: the application consists of a single servlet and several JSPs. The servlet is the *controller* of the application, while the JSPs make up the *view*.

Based on user inputs, the servlet calls the *model* to update it and then select the appropriate JSP. The selected JSP then queries the model to get the information to display. In our example, the model is the set of (key, value) pairs of the user (or client), which is stored in the corresponding session object.

4 JSP Standard Tag Libray – Expression Language

Modify the JSPs of the previous exercise to use JSTL tags and expression language constructs rather than mere scriptlets and expressions.