THỰC HÀNH CHUYÊN ĐỀ CƠ SỞ 2 (JAVA NÂNG CAO)

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Lab 1: Servlet Programming

Program Code	**Chuyên đề cơ sở 2 (Java nâng cao)**
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Đà Lạt, 8/2018

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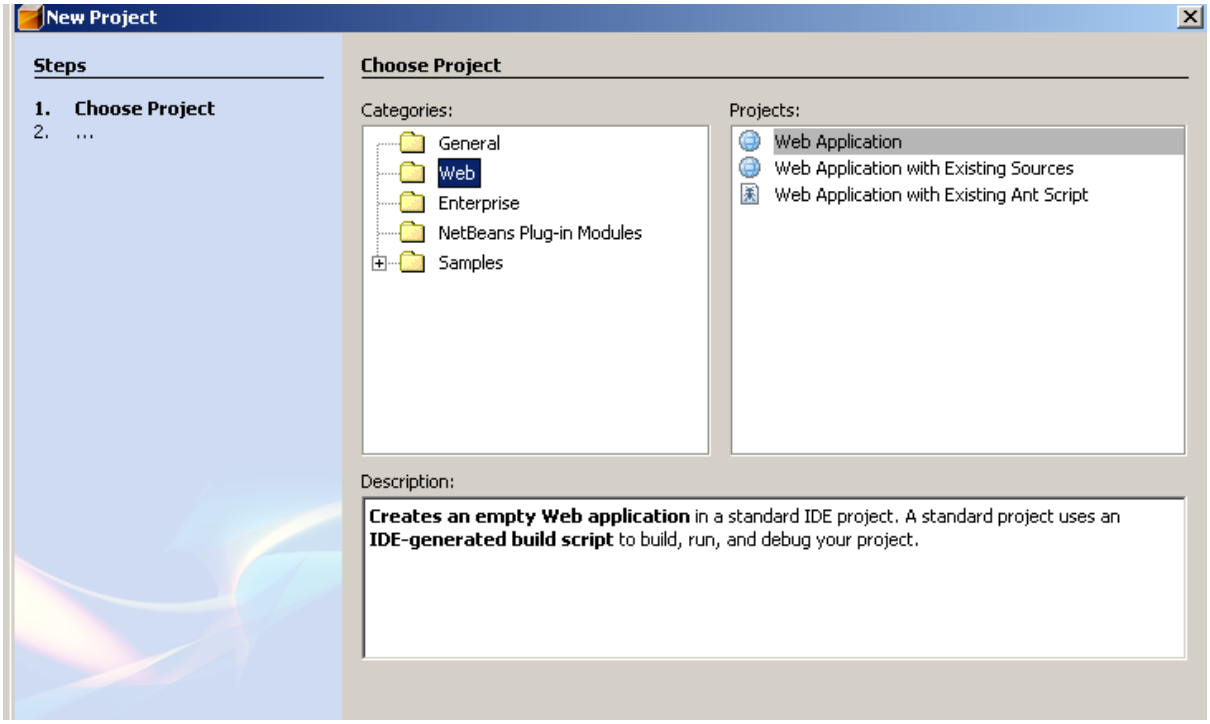
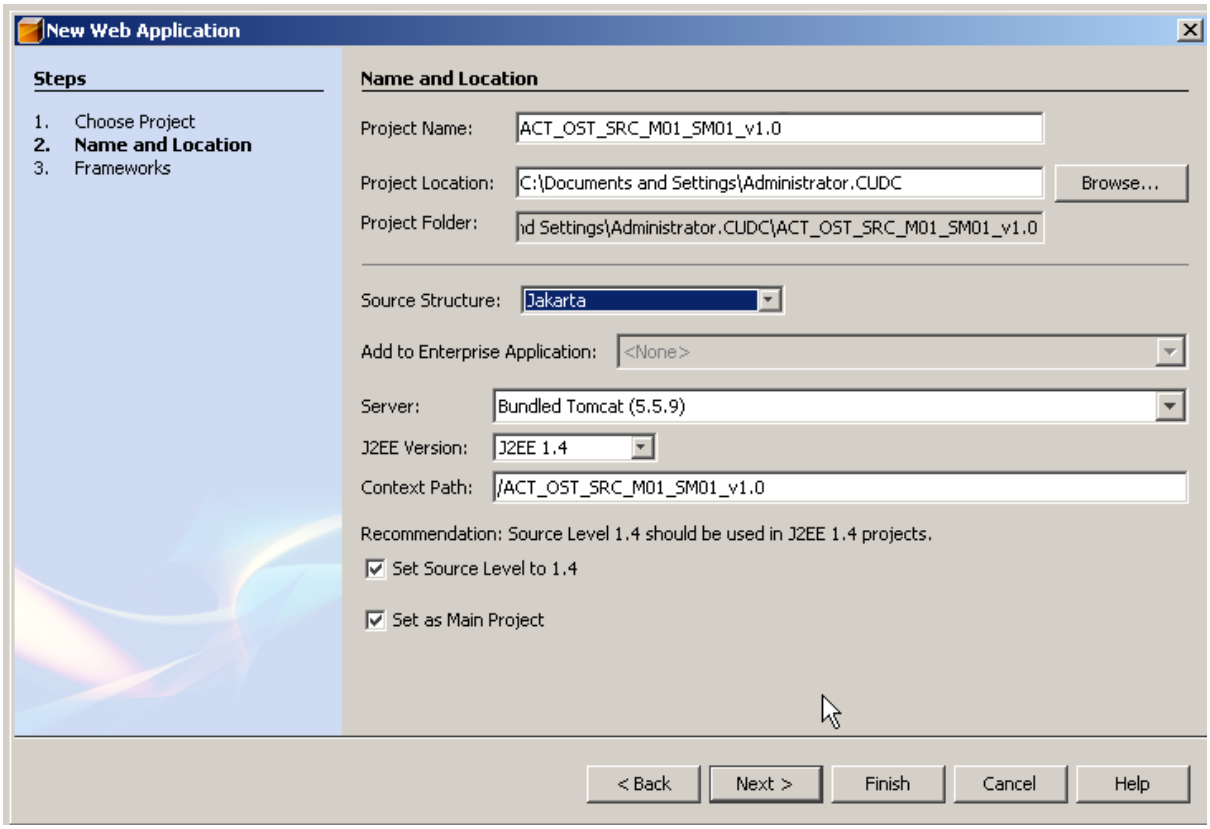
Lab Guide 1: Create Hello Servlet project

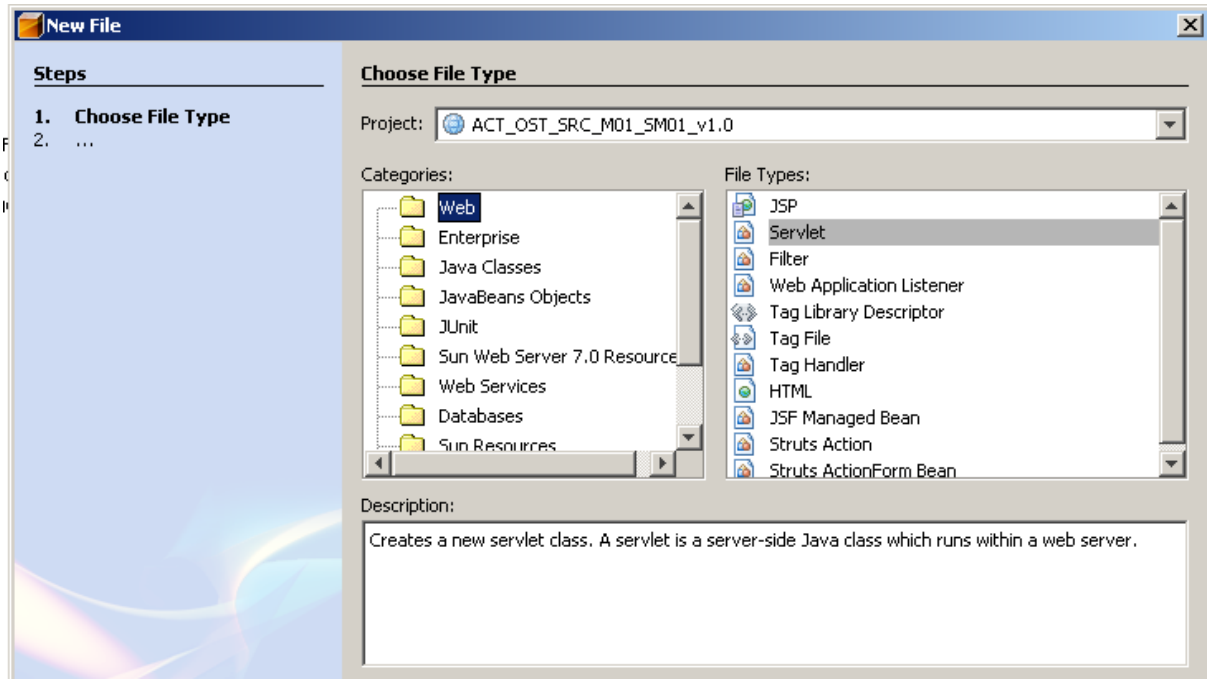
- Create new web project



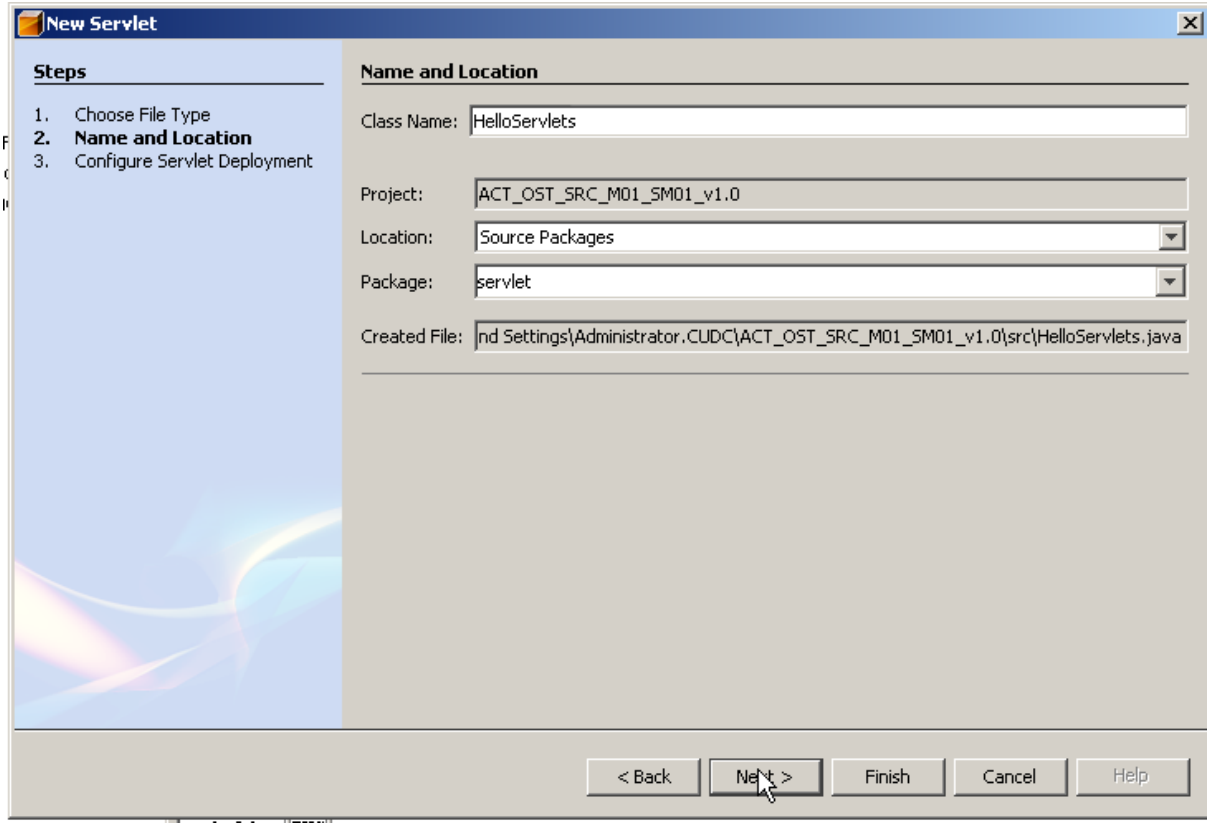
- Select Source Structure and Web container



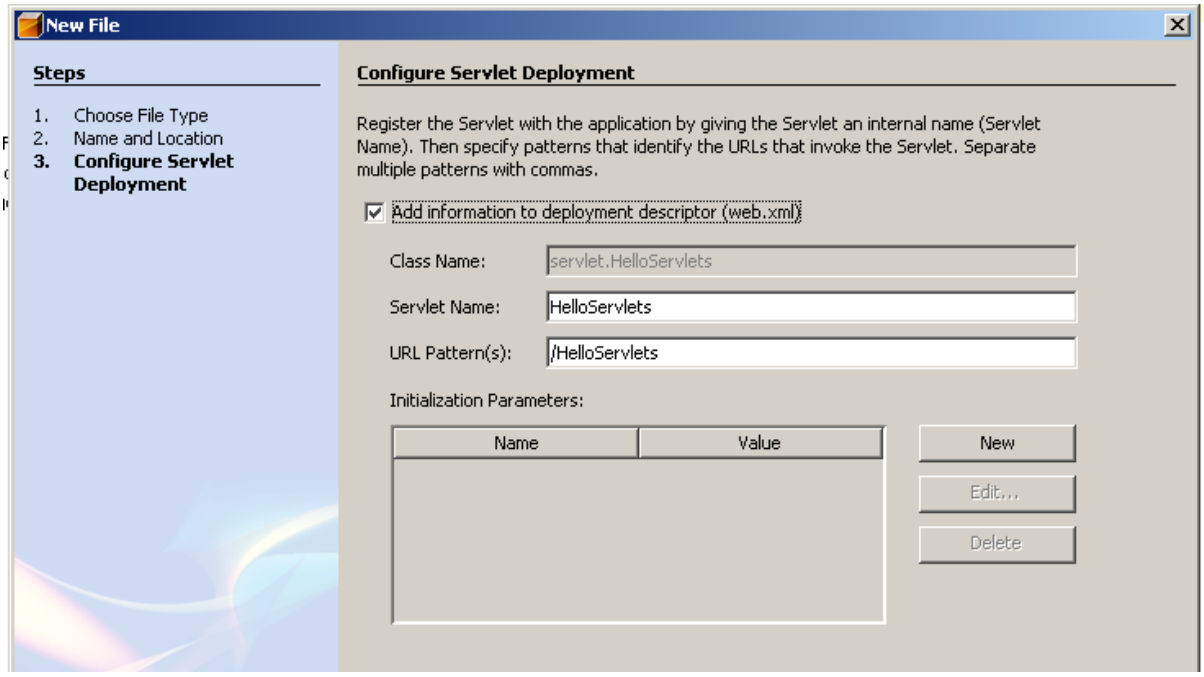
- Create a servlet



- Name the servlet



- Add servlet info to the web.xml



- Create HelloServlets source code

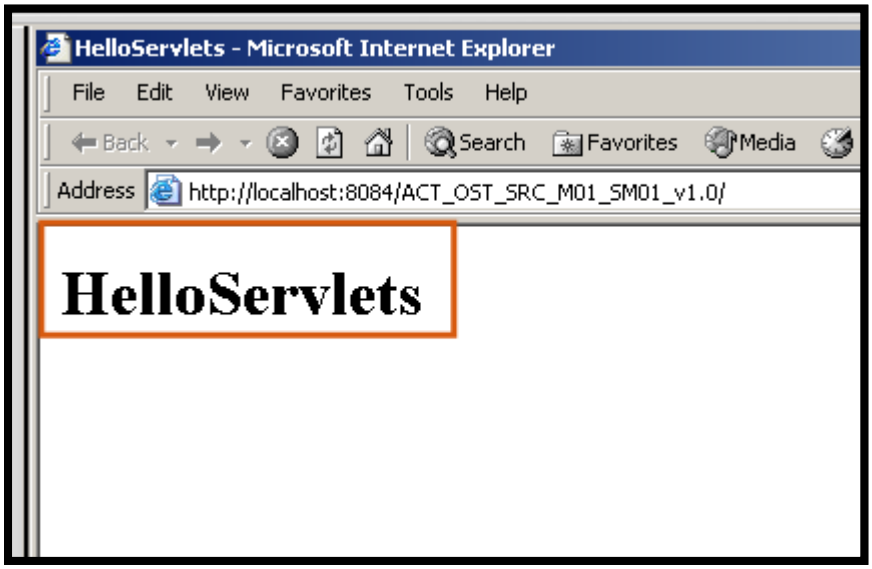
```
public class HelloServlets extends HttpServlet {

    /** Processes requests for both HTTP <code>GET</code> and <code>POST</code> methods.
     * @param request servlet request
     * @param response servlet response
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        /* TODO output your page here
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet HelloServlets</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Servlet NewServlet1 at " + request.getContextPath () + "</h1>");
        out.println("</body>");
        out.println("</html>");
        */
        out.close();
    }

    HttpServlet methods. Click on the + sign on the left to edit the code.
}
```

HelloServlets.java *

```
16  * HelloServlets class displays HelloServlets on the screen
17  *
18  * @author vincent
19  */
20 public class HelloServlets extends HttpServlet {
21
22     /** Processes requests for both HTTP <code>GET</code> and <code>POST</code> methods.
23      * @param request servlet request
24      * @param response servlet response
25      */
26     protected void processRequest(HttpServletRequest request, HttpServletResponse response)
27     throws ServletException, IOException {
28         response.setContentType("text/html;charset=UTF-8");
29         PrintWriter out = response.getWriter();
30         /* TODO output your page here*/
31         out.println("<html>");
32         out.println("<head>");
33         out.println("<title>Servlet HelloServlets</title>");
34         out.println("</head>");
35         out.println("<body>");
36         // Display Hello Servlets
37         out.print("Hello Servlets");
38         out.println("</body>");
39         out.println("</html>");
40         out.close();
41     }
42
43     HttpServlet methods. Click on the + sign on the left to edit the code.
68 }
```

37:37 INS

Out-put

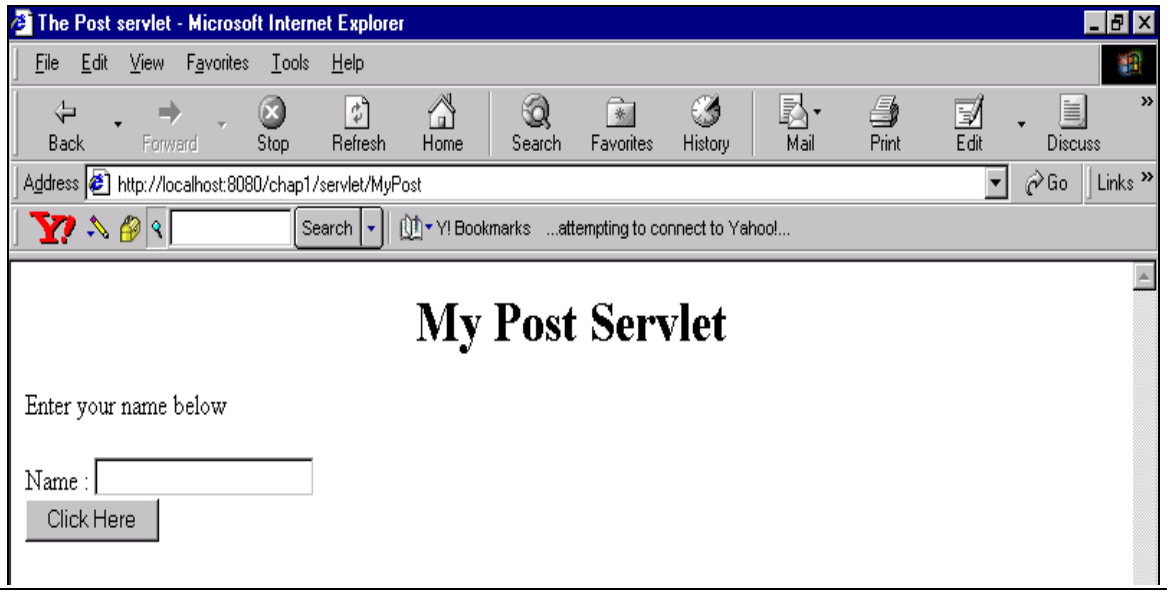


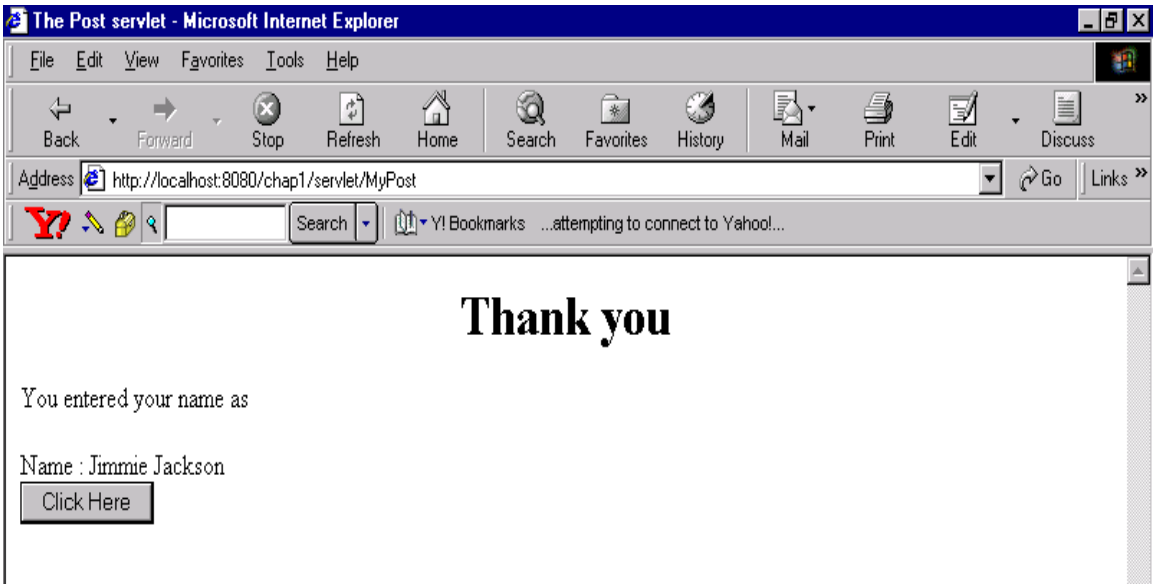
Lab Guide 2: Using doPost( ) methods

```
public class MyPost extends HttpServlet {
 public void doGet(HttpServletRequest req,HttpServletResponse res) throws ServletException,
 IOException  {
   PrintWriter out = res.getWriter(); // opening an output
   ……..    //Writing to an output stream
   out.println("<HTML>");
   ……..
   out.println("<P>Enter your name below</P>");
   out.println("<FORM METHOD = \"POST\" ACTION=" +
   "\"http://localhost:8080/servlet/MyPost\"> ");
   out.println("<P>Name : <INPUT TYPE=\"TEXT\" NAME=\"fname\" " +"size=\"20\"><br>");
   out.println("<INPUT TYPE=\"Submit\" NAME=\"btn_submit\"   VALUE=\"Click Here\">");
   out.println("</FORM></BODY></HTML>");
   out.close();  // Always close the output stream
 }
```

```
public void doPost(HttpServletRequest req,HttpServletResponse res) throws
ServletException, IOException  {
   PrintWriter out = res.getWriter(); // opening an output
   ……..    //get data (paramneter value ) from the request object
   String name=req.getParameter("fname");    //Writing to an output stream
   out.println("<HTML>");
   out.println("<HEAD>");
   out.println("<TITLE>The Post servlet </TITLE>");
  ……..
   out.println("<P>You entered your name as </P>");
   out.println("<P>Name : " + name + "<BR>");
   out.println("<INPUT TYPE=\"Submit\" NAME=\"btn_submit\"
   VALUE=\"Click Here\">");
   ……..
   out.close();         } }
```

Output:




The Post servlet - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss
Address http://localhost:8080/chap1/servlet/MyPost
Go Links
Search Y! Bookmarks ...attempting to connect to Yahoo!...
Thank you
You entered your name as
Name : Jimmie Jackson
Click Here

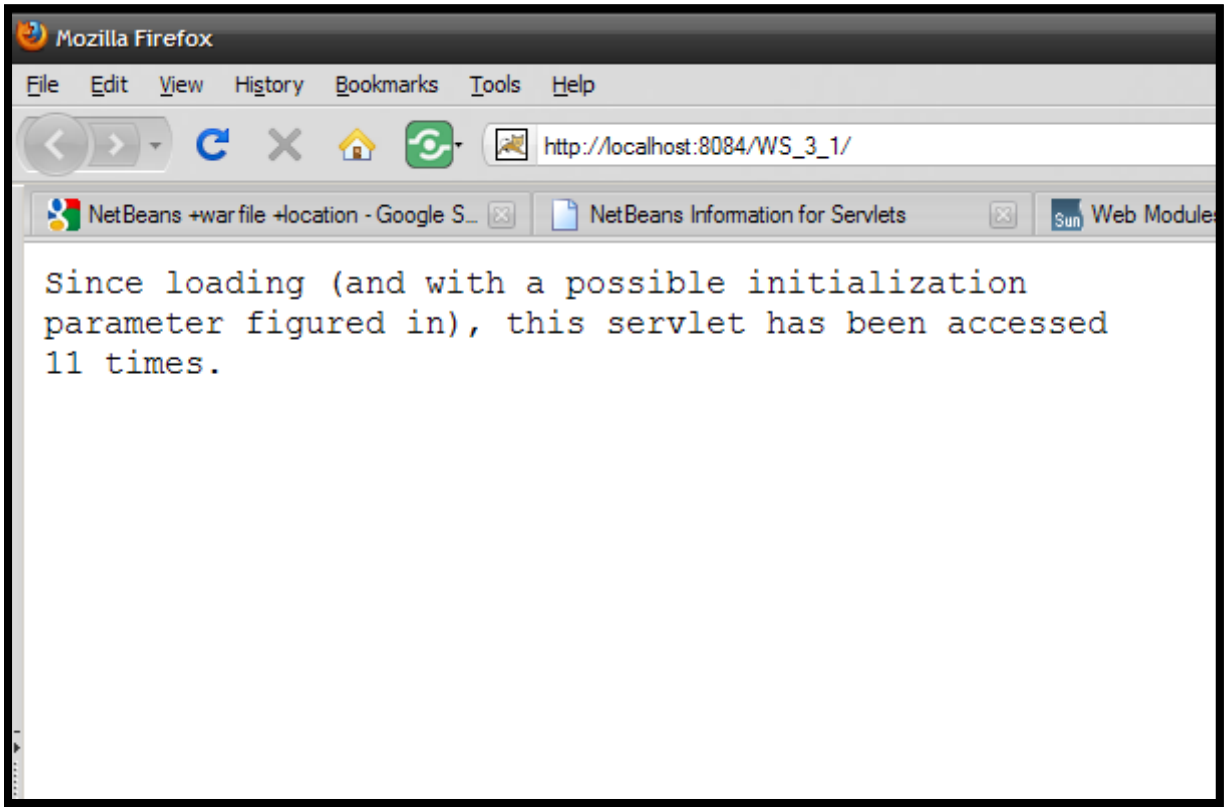
Lab Guide 3: Dummy Counter

Code

```
int count;
public void init(ServletConfig config) throws ServletException {

  String initial = config.getInitParameter("initial");

    count = Integer.parseInt(initial);
```

```
public void doGet(HttpServletRequest req, HttpServletResponse res)  throws
ServletException, IOException {
   res.setContentType("text/plain");
   PrintWriter out = res.getWriter();
   count++;
   out.println("Since loading (and with a possible initialization");
   out.println("parameter figured in), this servlet has been accessed");
   out.println(count + " times.");
  }
}
```

Output



Lab Guide 4: Servlet Context

Code

```
public void init(ServletConfig config) throws ServletException {
    super.init(config); //To change body of generated methods, choose Tools

    ServletContext context = config.getServletContext();
    dbDriver = context.getInitParameter("DB_Driver");
    dbURL = context.getInitParameter("DB_URL");
    dbUser = context.getInitParameter("DB_User");
    dbPass = context.getInitParameter("DB_Pass");
}
```

```
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    PrintWriter out = response.getWriter();
    try {
        /* TODO output your page here. You may use following sample code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet JDBCServlet</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Servlet JDBCServlet at " + request.getContextPath() + "</h1>");
        out.println("</body>");
        out.println("</html>");

        try {
        Class.forName(dbDriver);
        connection = DriverManager.getConnection(dbURL,dbUser,dbPass);
        out.println("Connected!");
        }
        catch(Exception ex){
          out.println(ex.getMessage());
          out.println("Not connected!");
        }
    } finally {
        out.close();
    }
```

Web.xml

<?xml version="1.0" encoding="UTF-8"?>

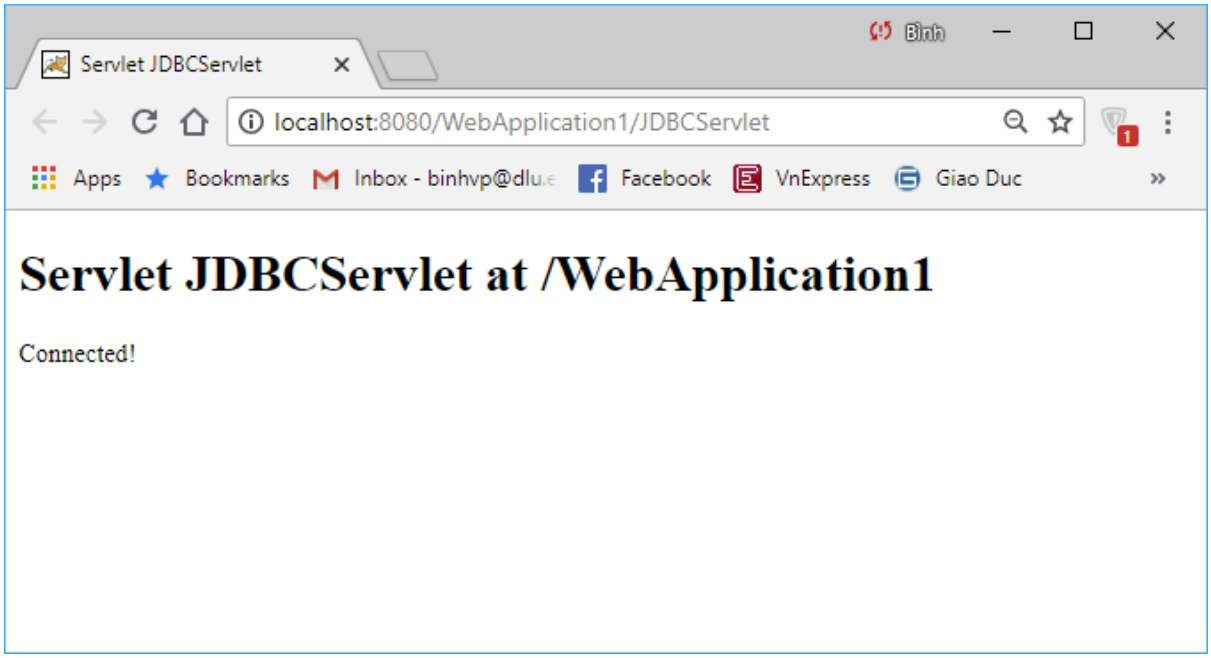
<web-app version="3.0" xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd">

<servlet>

<servlet-name>JDBCServlet</servlet-name>

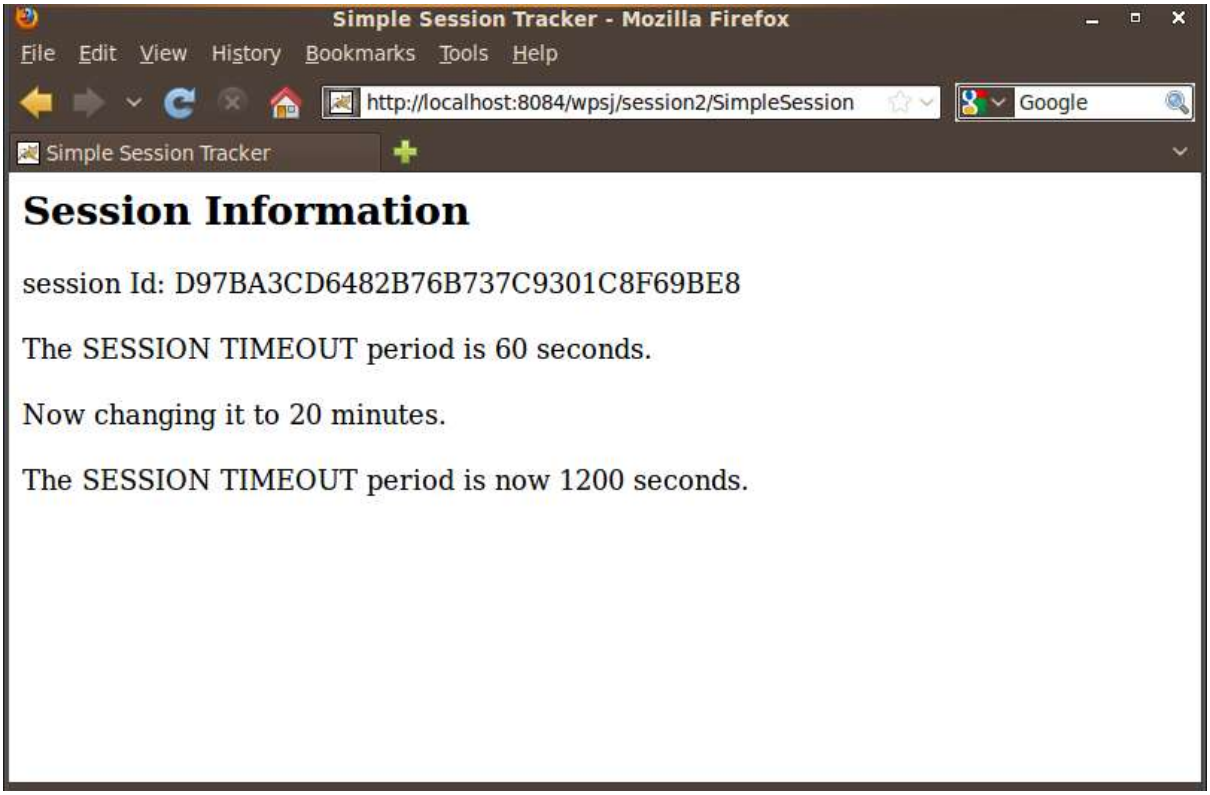
```
    <servlet-class>JDBCServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>JDBCServlet</servlet-name>
    <url-pattern>/JDBCServlet</url-pattern>
  </servlet-mapping>
  <context-param>
    <param-name>DB_Driver</param-name>
    <param-value>com.mysql.jdbc.Driver</param-value>
  </context-param>
  <context-param>
    <param-name>DB_URL</param-name>
    <param-value>jdbc:mysql://localhost:3306/mysql</param-value>
  </context-param>
  <context-param>
    <param-name>DB_User</param-name>
    <param-value>root</param-value>
  </context-param>
  <context-param>
    <param-name>DB_Pass</param-name>
    <param-value/>
  </context-param>
</web-app>
```

Output


Binh
Servlet JDBCServlet
localhost:8080/WebApplication1/JDBCServlet
Apps
Bookmarks
Inbox - binhvp@dlu.e
Facebook
VnExpress
Giao Duc
Servlet JDBCServlet at /WebApplication1
Connected!

Lab Guide 5: session tracker

Code

```
HttpSession session = request.getSession();

session.getId()

session.getMaxInactiveInterval()

session.setMaxInactiveInterval(20 * 60);

session.getMaxInactiveInterval()
```

Output