

This documentation is for reference purpose only and is for those who have attended the classroom sessions at Thinking Machines.

- During your classroom session appropriate theory needs to be written against each example.
- You are required to bring this book daily for your classroom sessions.
- If you try to understand the examples without attending theory sessions then may god help you.

[illegible]

### Configuring Tomcat 4

Download tomcats.zip, unzip it, then unzip tomcat4, copy the tomcat4 folder (the one which contains the bin folder) to c:\

Now I am assuming that the following path exists

c:\tomcat4\bin

Move to c:\tomcat4\bin folder. Edit startup.bat and see to it that the first two lines are as follows.

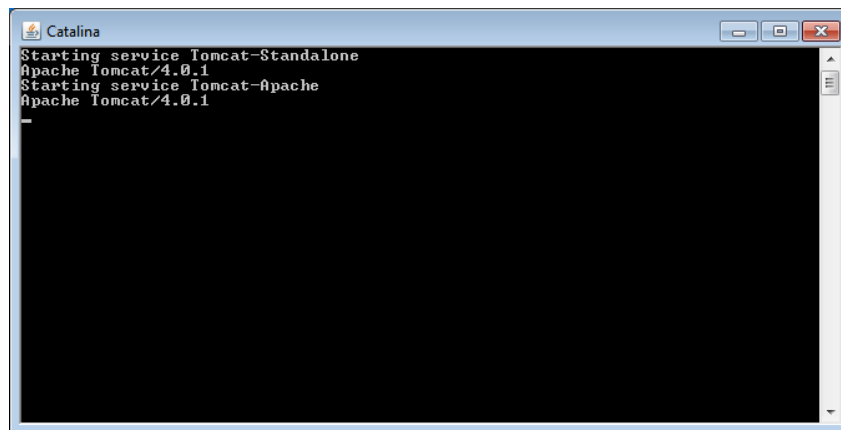
```
set CATALINA_HOME=c:\tomcat4
set JAVA_HOME=c:\jdk1.8
```

Note : I am assuming that you have jdk 1.8 installed and the c:\jdk1.8\bin path exists.

---

Now create a shortcut to c:\tomcat4\bin\startup.bat named as Tomcat4.

Double click the shortcut to start the server, you should see the following



Note : If firewall prompts something, select (allow) option.

Now start browser and in the address bar type

<http://localhost:8080> and you should see the following.



**one.com**

Now close the server window and the browser window.

Now let us create our first website one.com

move to c:\tomcat4\webapps and create the following structure

one.com\WEB-INF\classes

Note : WEB-INF is upper case

Now in c:\tomcat4\webapps\one.com folder create the following files.

**index.html (location c:\tomcat4\webapps\one.com)**

```
<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>one.com</title>
</head>
<body>
<center>
<h1><i>Welcome to a cool site</i></h1>
<h3>Ujjain</h3>
<h6><u>Madhya Pradesh</u></h6>
<b>India</b>
<br>
<br/>
<a href='/one.com/abcd.html'>Begin</a>
</center>
</body>
</html>
```

---

**abcd.html (location c:\tomcat4\webapps\one.com)**

```
<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>one.com</title>
<script>
function ramu(f)
{
var nn=f.nm.value;
if(nn.length==0)
{
alert('Name required'); f.nm.focus();
return false;
}
}
```

[illegible]

```

<option value='102'>Ujjain</option>
<option value='103'>Indore</option>
</select></td></tr></tr></tr>
<td colspan='2' align='center'>
<input type='submit' value='Save'></td></tr></table>
</form>
</center>
</body>
</html>

```

---

**aaa.java (location c:\tomcat4\webapps\one.com\WEB-INF\classes)**

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class aaa extends HttpServlet
{
public void doGet(HttpServletRequest request, HttpServletResponse response)
{
try
{
String nn=request.getParameter("nm");
String ss=request.getParameter("sex");
String cc=request.getParameter("ct");
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
// some code to save data
response.setContentType("text/html");
PrintWriter pw;
pw=response.getWriter();
pw.println("<!DOCTYPE html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>one.com</title>");
pw.println("</head>");
pw.println("<body>");
pw.println("<h1>Data Saved</h1></body></html>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
}

```

---

The above code won't get compiled using

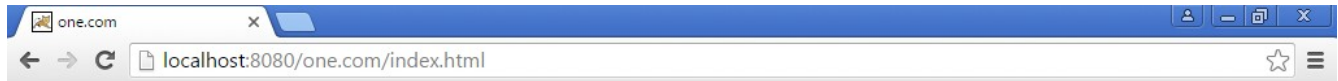
```
javac aaa.java  
use  
javac -classpath c:\tomcat4\common\lib\servlet.jar;. aaa.java
```

---

Now start server, then browser as done earlier and type the following in the address bar

<http://localhost:8080/one.com>

you should see the following.



*Welcome to a cool site*

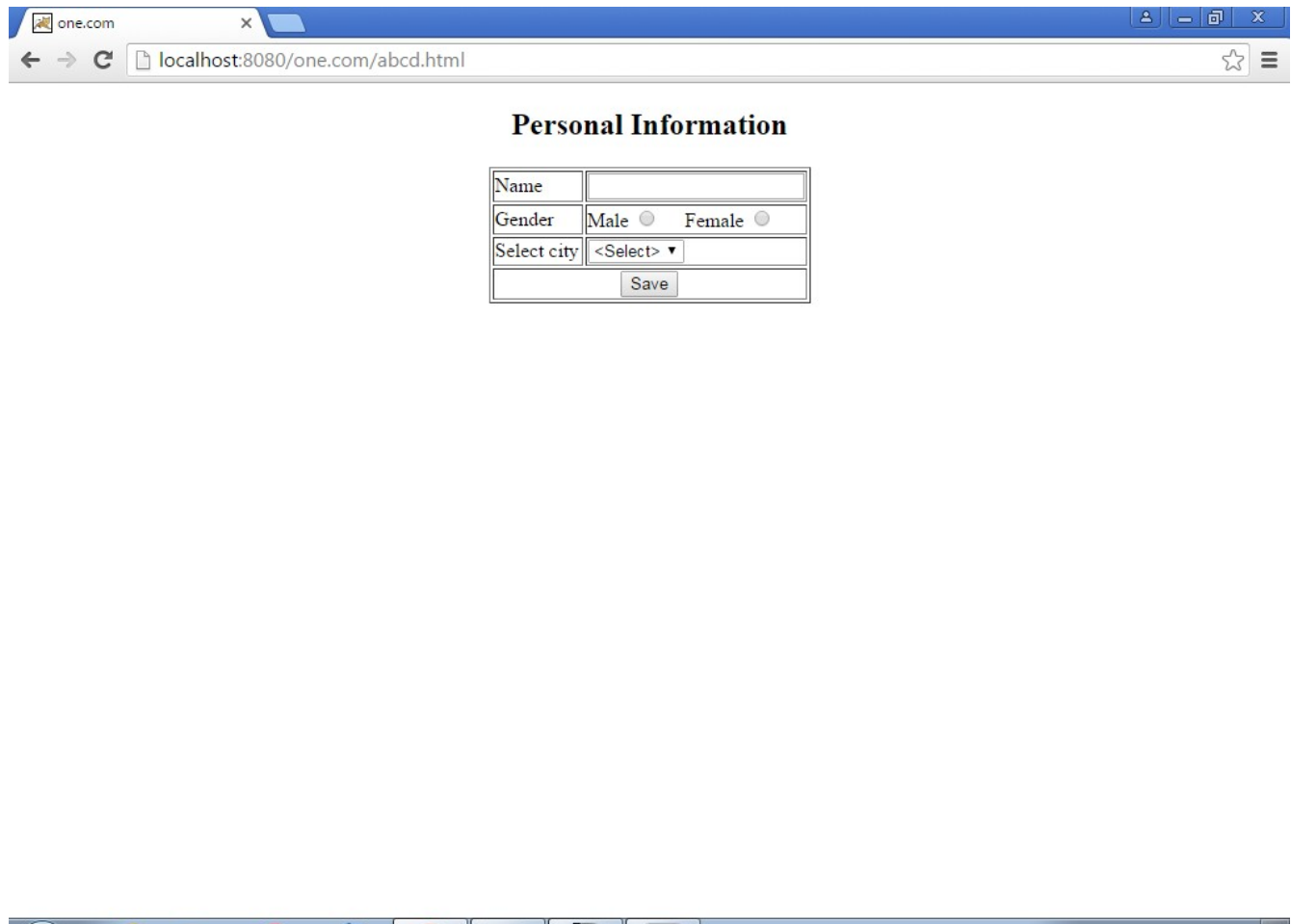
**Ujjain**

Madhya Pradesh

**India**

Begin

Now click the hyperlink with text Begin and you should see the following



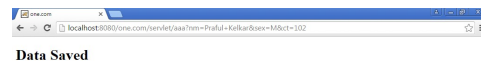
The screenshot shows a web browser window with the address bar displaying 'localhost:8080/one.com/abcd.html'. The page title is 'one.com'. The main content area displays a form titled 'Personal Information'. The form consists of a table with three rows: 'Name' with a text input field, 'Gender' with radio buttons for 'Male' and 'Female', and 'Select city' with a dropdown menu showing '<Select>'. Below the table is a 'Save' button.

Personal Information	
Name	<input type="text"/>
Gender	Male <input type="radio"/> Female <input type="radio"/>
Select city	<Select> ▼
<input type="button" value="Save"/>	

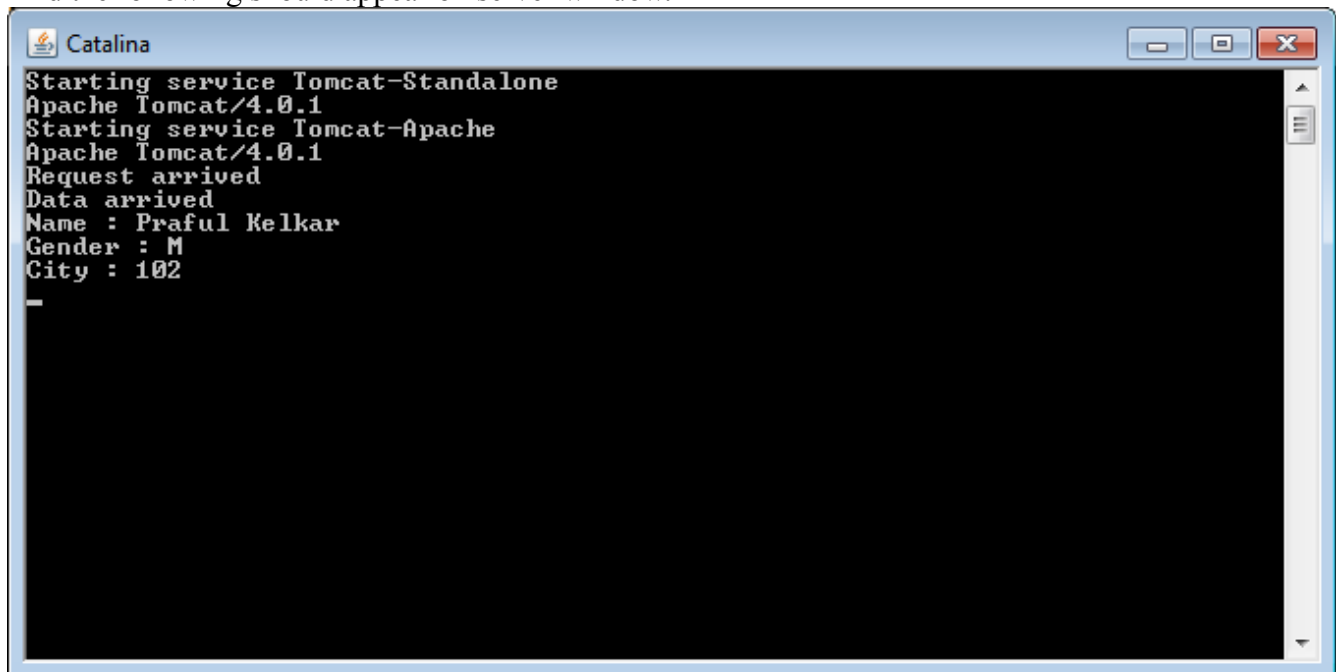
Test the following scenarios

Click the save button without feeding anything, you should see the message box that says Name required. Then Feed name, but type digits and click the save button and see what happens, you should see a message appear that says invalid data, then correct it but don't select gender or city and click the save button, now you should see a message that says, select gender, now select gender but don't select city and click the save button, now you should see the message, select city. Now select city and click the Save button, now the following should appear





And the following should appear on server window.



---

**two.com**  
**index.html**

```
<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>two.com</title>
</head>
<body>
<center>
<h1><i>Welcome to a cool site</i></h1>
<h3>Ujjain</h3>
<h6><u>Madhya Pradesh</u></h6>
<b>India</b>
```

```

<br>
<br/>
<a href='/two.com/abcd.html'>Begin</a>
</center>
</body>
</html>

```

---

**abcd.html**

```

<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>one.com</title>
<script>
function ramu(f)
{
var nn=f.nm.value;
if(nn.length==0)
{
alert('Name required'); f.nm.focus();
return false;
}
var v='ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz.';
document.getElementById("nameErrorSection").innerHTML="";
var e=0;
while(e<nn.length)
{
if(v.indexOf(nn.charAt(e))==-1)
{
document.getElementById("nameErrorSection").innerHTML="Invalid data in name";
f.nm.focus();
return false;
}
e++;
}
if(f.sex[0].checked==false && f.sex[1].checked==false)
{
alert("Select gender");
return false;
}
if(f.ct.selectedIndex==0)
{
alert("Select a city");
f.ct.focus();
return false;
}
return true;

```

```

}
</script>
</head>
<body>
<center>
<h1>Session Tracking Example</h1>
<h4><u>Using Hidden Form Field</u></h4>
<h2>Personal Information - Page 1</h2>
<form action='/two.com/servlet/aaa' onsubmit='return ramu(this)'>
<table border='0'>
<tr><td>
Name</td><td>
<input type='text' name='nm' id='nm' >
<span id='nameErrorSection'></span>
</td></tr><tr>
<td colspan='2' align='center'>
<input type='submit' value='Next'></td></tr></table>
</form>
</center>
</body>
</html>

```

---

**aaa.java**

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class aaa extends HttpServlet
{
public void doGet(HttpServletRequest rq, HttpServletResponse rs)
{
try
{
String nn=rq.getParameter("nm");
PrintWriter pw=rs.getWriter();
rs.setContentType("text/html");
pw.println("<!DOCTYPE html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>two.com</title>");
pw.println("<script>");
pw.println("function ramu(f);
pw.println("{");
pw.println("if(f.sex[0].checked==false && f.sex[1].checked==false)");
pw.println("{");
pw.println("alert(\"Select gender\");");
pw.println("return false;");

```

```
pw.println("}");
pw.println("return true;");
pw.println("");
pw.println("</script>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Hidden Form Field</u></h4>");
pw.println("<h2>Personal Information - Page 2</h2>");
pw.println("Name : <b>" + nn + "</b><br>");
pw.println("<form action='/two.com/servlet/bbb' onSubmit='return ramu(this)'>");
pw.println("<input type='hidden' name='nm' id='nm' value='" + nn + "'>");
pw.println("<table border='0">");
pw.println("<tr><td>");
pw.println("Gender</td><td>");
pw.println("Male <input type='radio' name='sex' id='ml' value='M'">);
pw.println("&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~");
pw.println("Female <input type='radio' name='sex' id='fe' value='F'">);
pw.println("</td></tr>");
pw.println("</tr><tr>");
pw.println("<td colspan='2' align='center'">);
pw.println("<input type='submit' value='Next'"></td></tr></table>");
pw.println("</form>");
pw.println("</center>");
pw.println("</body>");
pw.println("</html>");
```

```
} catch(Exception e)
{
    System.out.println(e);
}
}
}
```

**bbb.java**

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class bbb extends HttpServlet
{
public void doGet(HttpServletRequest rq,HttpServletResponse rs)
{
try
{
String nn=rq.getParameter("nm");
String ss=rq.getParameter("sex");
```

```
PrintWriter pw=rs.getWriter();
rs.setContentType("text/html");
pw.println("<!Doctype html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>two.com</title>");
pw.println("<script>");
pw.println("function ramu(f)");
pw.println("{");
pw.println("if(f.ct.selectedIndex==0)");
pw.println("{");
pw.println("alert('Select a city');");
pw.println("f.ct.focus();");
pw.println("return false;");
pw.println("}");
pw.println("return true;");
pw.println("}");
pw.println("</script>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Hidden Form Field</u></h4>");
pw.println("<h2>Personal Information - Page 3</h2>");
pw.println("Name : <b>"+nn+"</b></br>");
pw.println("Sex : <b>"+ss+"</b></br>");
pw.println("<form action='/two.com/servlet/ccc' onsubmit='return ramu(this)'>");
pw.println("<input type='hidden' name='nm' id='nm' value='"+nn+"'>");
pw.println("<input type='hidden' name='sex' id='sex' value='"+ss+"'>");
pw.println("<table>");
pw.println("<tr><td>");
pw.println("Select city</td><td>");
pw.println("<select name='ct' id='ct'>");
pw.println("<option value='-1'>&lt;Select&gt;</option>");
pw.println("<option value='101'>Pune</option>");
pw.println("<option value='102'>Ujjain</option>");
pw.println("<option value='103'>Indore</option>");
pw.println("</select></td></tr></tr><tr>");
pw.println("<td colspan='2' align='center'>");
pw.println("<input type='submit' value='Save'></td></tr></table>");
pw.println("</form>");
pw.println("</center>");
pw.println("</body>");
pw.println("</html>");
```

```
} catch(Exception e)
{
System.out.println(e);
}
}
}
```

---

**ccc.java**

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class ccc extends HttpServlet
{
public void doGet(HttpServletRequest request, HttpServletResponse response)
{
try
{
String nn=request.getParameter("nm");
String ss=request.getParameter("sex");
String cc=request.getParameter("ct");
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
response.setContentType("text/html");
PrintWriter pw;
pw=response.getWriter();
// some code to save data
pw.println("<!doctype html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>two.com</title>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Hidden Form Field</u></h4>");
pw.println("<h1>Data Saved</h1></body></html>");
pw.println("Name : "+nn+"</br>");
pw.println("Gender : "+ss+"</br>");
pw.println("City : "+cc+"</br>");
pw.println("</center>");
} catch(Exception exception)
{

```

```

System.out.println(exception);
}
}
}
}

```

---

Now configure tomcat7 as we configured tomcat4. Finally you should have a shortcut to c:\tomcat7\bin\startup.bat on your desktop.

Note : in case of tomcat4 the servlet.jar is located in c:\tomcat4\common\lib  
 In case of tomcat7, the name of the jar file is servlet-api.jar and is located in tomcat7\lib folder.

Now move to c:\tomcat7\webapps\ and create the folder structure.

```

three.com
three.com\WEB-INF
three.com\WEB-INF\classes\tm

```

#### index.html (Location – three.com)

```

<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>three.com</title>
</head>
<body>
<center>
<h1><i>Welcome to a cool site</i></h1>
<h3>Ujjain</h3>
<h6><u>Madhya Pradesh</u></h6>
<b>India</b>
<br>
<br>
<a href='/three.com/abcd.html'>Begin</a>
</center>
</body>
</html>

```

---

#### abcd.html

```

<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>three.com</title>
<script>
function ramu(f)
{
var nn=f.nm.value;
if(nn.length==0)

```

[illegible]



```

Select city</td><td>
<select name='ct' id='ct'>
<option value='-1'>&lt;Select&gt;</option>
<option value='101'>Pune</option>
<option value='102'>Ujjain</option>
<option value='103'>Indore</option>
</select></td></tr></tr><tr>
<td colspan='2' align='center'>
<input type='submit' value='Save'></td></tr></table>
</form>
</center>
</body>
</html>

```

---

**aaa.java (Location three.com\WEB-INF\classes\tm)**

To compile the following code, you will have to type

**javac -classpath c:\tomcat7\lib\servlet-api.jar; \*.java**

```

package tm;
import java.io.*;
import java.net.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class aaa extends HttpServlet
{
public void doGet(HttpServletRequest rq,HttpServletResponse rs)
{
try
{
String nn=rq.getParameter("nm");
String ss=rq.getParameter("sex");
String cc=rq.getParameter("ct");
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
rs.setContentType("text/html");
PrintWriter pw;
pw=rs.getWriter();
pw.println("<!doctype html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>three.com</title>");

```

```

pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using URL Rewriting</u></h4>");
pw.println("<a href='/three.com/SaveData?nm="+URLLEncoder.encode(nn)
+"&ct="+URLLEncoder.encode(cc)+"&sex="+URLLEncoder.encode(ss)+">Save</a>");
pw.println("</center>");
pw.println("</body>");
pw.println("</html>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
}

```

---

bbb.java (Location three.com\WEB-INF\classes\tm)

To compile the following code, you will have to type

**javac -classpath c:\tomcat7\lib\servlet-api.jar;. \*.java**

```

package tm;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class bbb extends HttpServlet
{
public void doGet(HttpServletRequest request, HttpServletResponse response)
{
try
{
String nn=request.getParameter("nm");
String ss=request.getParameter("sex");
String cc=request.getParameter("ct");
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
response.setContentType("text/html");
PrintWriter pw;
pw=response.getWriter();
// some code to save data
pw.println("<!DOCTYPE html>");
pw.println("<html lang='en'>");
pw.println("<head>");

```

```

pw.println("<meta charset='utf-8'>");
pw.println("<title>three.com</title>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using URL Rewriting</u></h4>");
pw.println("<h1>Data Saved</h1></body></html>");
pw.println("Name : "+nn+"</br>");
pw.println("Gender : "+ss+"</br>");
pw.println("City : "+cc+"</br>");
pw.println("</center>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
}

```

---

Note : copy paste the following in a file named as web.xml

**web.xml (Location : three.com\WEB-INF)**

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5" 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_2_5.xsd">
  <servlet>
    <servlet-name>FormProcessor</servlet-name>
    <servlet-class>tm.aaa</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>DataSaver</servlet-name>
    <servlet-class>tm.bbb</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>FormProcessor</servlet-name>
    <url-pattern>/ProcessForm</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>DataSaver</servlet-name>
    <url-pattern>/SaveData</url-pattern>
  </servlet-mapping>
</web-app>

```

---

**four.com (tomcat7\webapps)**

Comple everything as done in three.com

**index.html**

```
<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>four.com</title>
</head>
<body>
<center>
<h1><i>Welcome to a cool site</i></h1>
<h3>Ujjain</h3>
<h6><u>Madhya Pradesh</u></h6>
<b>India</b>
<br>
<br>
<a href='/four.com/abcd.html'>Begin</a>
</center>
</body>
</html>
```

---

**abcd.html**

```
<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>four.com</title>
<script>
function ramu(f)
{
var nn=f.nm.value;
if(nn.length==0)
{
alert('Name required'); f.nm.focus();
return false;
}
var v='ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz.';
document.getElementById("nameErrorSection").innerHTML="";
var e=0;
while(e<nn.length)
{
if(v.indexOf(nn.charAt(e))==-1)
{
document.getElementById("nameErrorSection").innerHTML="Invalid data in name";
f.nm.focus();
return false;
}
}
```

[illegible]

**aaa.java**

```
package tm;
import java.io.*;
import java.net.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class aaa extends HttpServlet
{
    public void doGet(HttpServletRequest rq, HttpServletResponse rs)
    {
        try
        {
            String nn=rq.getParameter("nm");
            String ss=rq.getParameter("sex");
            String cc=rq.getParameter("ct");
            Cookie c1=new Cookie("nm",nn);
            Cookie c2=new Cookie("ct",cc);
            Cookie c3=new Cookie("sex",ss);
            rs.addCookie(c1);
            rs.addCookie(c2);
            rs.addCookie(c3);
            System.out.println("Request arrived");
            System.out.println("Data arrived");
            System.out.println("Name : "+nn);
            System.out.println("Gender : "+ss);
            System.out.println("City : "+cc);
            rs.setContentType("text/html");
            PrintWriter pw;
            pw=rs.getWriter();
            pw.println("<!doctype html>");
            pw.println("<html lang='en'>");
            pw.println("<head>");
            pw.println("<meta charset='utf-8'>");
            pw.println("<title>four.com</title>");
            pw.println("</head>");
            pw.println("<body>");
            pw.println("<center>");
            pw.println("<h1>Session Tracking Example</h1>");
            pw.println("<h4><u>Using Cookies</u></h4>");
            pw.println("<a href='/four.com/SaveData'>Save</a>");
            pw.println("</center>");
            pw.println("</body>");
            pw.println("</html>");
        } catch (Exception exception)
        {
            System.out.println(exception);
        }
    }
}
```

```
}  
}  
}
```

---

**bbb.java**

```
package tm;  
import java.io.*;  
import javax.servlet.*;  
import javax.servlet.http.*;  
public class bbb extends HttpServlet  
{  
    public void doGet(HttpServletRequest request, HttpServletResponse response)  
    {  
        try  
        {  
            Cookie c[]=request.getCookies();  
            String nn="";  
            String ss="";  
            String cc="";  
            if(c!=null)  
            {  
                for(Cookie r:c)  
                {  
                    if(r.getName().equals("nm"))  
                    {  
                        nn=r.getValue();  
                    } else if(r.getName().equals("ct"))  
                    {  
                        cc=r.getValue();  
                    } else if(r.getName().equals("sex"))  
                    {  
                        ss=r.getValue();  
                    }  
                }  
            }  
            System.out.println("Request arrived");  
            System.out.println("Data arrived");  
            System.out.println("Name : "+nn);  
            System.out.println("Gender : "+ss);  
            System.out.println("City : "+cc);  
            response.setContentType("text/html");  
            PrintWriter pw;  
            pw=response.getWriter();  
            pw.println("<!DOCTYPE html>");  
            pw.println("<html lang='en'>");  
            pw.println("<head>");  
            pw.println("<meta charset='utf-8'>");  
            pw.println("<title>four.com</title>");  
        }  
        catch (Exception e)  
        {  
            e.printStackTrace();  
        }  
    }  
}
```

```

pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Cookies</u></h4>");
pw.println("<h1>Data Saved</h1></body></html>");
pw.println("Name : "+nn+"<br>");
pw.println("Gender : "+ss+"<br>");
pw.println("City : "+cc+"<br>");
pw.println("</center>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
}

```

---

#### web.xml (Location four.com\WEB-INF)

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.5" 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_2_5.xsd">
  <servlet>
    <servlet-name>FormProcessor</servlet-name>
    <servlet-class>tm.aaa</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>DataSaver</servlet-name>
    <servlet-class>tm.bbb</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>FormProcessor</servlet-name>
    <url-pattern>/ProcessForm</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>DataSaver</servlet-name>
    <url-pattern>/SaveData</url-pattern>
  </servlet-mapping>
</web-app>

```

---

#### five.com

#### Compile everything as done in four.com index.html

```

<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>

```



```

<title>five.com</title>
</head>
<body>
<center>
<h1><i>Welcome to a cool site</i></h1>
<h3>Ujjain</h3>
<h6><u>Madhya Pradesh</u></h6>
<b>India</b>
<br>
<br/>
<a href='/five.com/abcd.html'>Begin</a>
</center>
</body>
</html>

```

---

**abcd.html**

```

<!Doctype html>
<html lang='en'>
<head>
<meta charset='utf-8'>
<title>five.com</title>
<script>
function ramu(f)
{
var nn=f.nm.value;
if(nn.length==0)
{
alert('Name required'); f.nm.focus();
return false;
}
var v='ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz .';
document.getElementById("nameErrorSection").innerHTML="";
var e=0;
while(e<nn.length)
{
if(v.indexOf(nn.charAt(e))==-1)
{
document.getElementById("nameErrorSection").innerHTML="Invalid data in name";
f.nm.focus();
return false;
}
e++;
}
if(f.sex[0].checked==false && f.sex[1].checked==false)
{
alert("Select gender");
return false;
}
}

```



```

{
public void doGet(HttpServletRequest rq, HttpServletResponse rs)
{
try
{
String nn=rq.getParameter("nm");
String ss=rq.getParameter("sex");
String cc=rq.getParameter("ct");
HttpSession sess=rq.getSession(true);
sess.setAttribute("nm",nn);
sess.setAttribute("ct",cc);
sess.setAttribute("sex",ss);
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
rs.setContentType("text/html");
PrintWriter pw;
pw=rs.getWriter();
pw.println("<!doctype html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>five.com</title>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Session Object</u></h4>");
pw.println("<a href='/five.com/SaveData'>Save</a>");
pw.println("</center>");
pw.println("</body>");
pw.println("</html>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
}

```

---

**bbb.java**

```

package tm;
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class bbb extends HttpServlet

```

```
{
public void doGet(HttpServletRequest request, HttpServletResponse response)
{
try
{
String nn="";
String ss="";
String cc="";
HttpSession sess;
sess=request.getSession(false);
if(sess!=null)
{
nn=(String)sess.getAttribute("nm");
cc=(String)sess.getAttribute("ct");
ss=(String)sess.getAttribute("sex");
}
System.out.println("Request arrived");
System.out.println("Data arrived");
System.out.println("Name : "+nn);
System.out.println("Gender : "+ss);
System.out.println("City : "+cc);
response.setContentType("text/html");
PrintWriter pw;
pw=response.getWriter();
pw.println("<!DOCTYPE html>");
pw.println("<html lang='en'>");
pw.println("<head>");
pw.println("<meta charset='utf-8'>");
pw.println("<title>five.com</title>");
pw.println("</head>");
pw.println("<body>");
pw.println("<center>");
pw.println("<h1>Session Tracking Example</h1>");
pw.println("<h4><u>Using Session Object</u></h4>");
pw.println("<h1>Data Saved</h1></body></html>");
pw.println("Name : "+nn+"</br>");
pw.println("Gender : "+ss+"</br>");
pw.println("City : "+cc+"</br>");
pw.println("</center>");
} catch (Exception exception)
{
System.out.println(exception);
}
}
}
```

---