

Practical No. 6

Objective: Displaying the request headers on client side.

Theory:

Request header is used to pass additional information about the request or itself to the server. Request header can be used by client to pass useful information. `getHeaderNames()` and `getHeader()` methods of `javax.servlet.http.HttpServletRequestinterface` can be used to get the header information.

Source Code:

```
import java.io.IOException; import  
java.io.PrintWriter; import  
javax.servlet.ServletException; import  
javax.servlet.annotation.WebServlet; import  
javax.servlet.http.HttpServlet; import  
javax.servlet.http.HttpServletRequest; import  
javax.servlet.http.HttpServletResponse;  
import java.util.*;  
  
{@WebServlet(urlPatterns = {"/NewServlet"}) public class  
NewServlet extends HttpServlet {  
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)  
        throws ServletException, IOException  
    {response.setContentType("text/html;charset=UTF-8"); try  
    {PrintWriter out = response.getWriter() { out.println("<!DOCTYPE html>");  
    out.println("<html>");           out.println("<head>");  
    out.println("<title>Servlet NewServlet</title>");  
    out.println("</head>");  
    out.println("<body>");  
    out.println("<h1>Servlet NewServlet at " + request.getContextPath() +  
    "</h1>");           out.println("</body>");           out.println("</html>");  
    }  
    }  
    @Override  
    protected void doGet(HttpServletRequest request, HttpServletResponse response)  
throws ServletException, IOException { response.setContentType("text/html"); PrintWriter  
out=response.getWriter();  
  
String title="HTTP Header Request Example";  
String docType="<! doctype html public "-//w3c//dtd html 4.0"+ "transitional // en">\n";  
out.println(docType +"<html>\n"+ "<head><title>" + title + "</title></head >\n" + "<body  
bgcolor="#f0f0f0 ">\n"+ "<h1 align="center >" + title +  
" </h1> \n" + "<table width="100%" border="1" align="center">\n"  
+"<tr bgcolor ="#949494"> \n" + "<th>HeaderName</th><th>  
HeaderValues</th>\n" + "</tr>\n";  
Enumeration<String> headerNames=request.getHeaderNames();  
while(headerNames.hasMoreElements())  
{  
    String headerName = (String)headerNames.nextElement();  
    out.print("<tr><td>" + headerName + "</td>\n");           String  
    headValue = request.getHeader(headerName);  
}
```

```

        out.println("<td>" + headValue + "</td></tr>\n");
    }
    out.println("</table>\n</body></html>");
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{ doGet(request,response);
    //processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}

}

Web-app:
<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
           xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
           xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-
app_3_1.xsd"
           version="3.1">
    <display-name>Servlet-Form GET </display-name>
    <servlet>
        <servlet-name>readAllHeaders</servlet-name>
        <servlet-class>NewServlet</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>readAllHeaders</servlet-name>
        <url-pattern>/readAllHeaders</url-pattern>
    </servlet-mapping>
</web-app>
Index.html:
<html>
    <head>
        <title>TODO supply a title</title>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
    </head>
    <body>
        <form action="NewServlet">
            <input type="submit" value="OK" />
        </form>
    </body>
</html>

```

Output:



HTTP Header Request Example

HeaderName	HeaderValues
Accept	text/html,application/xhtml+xml;q=0.9
Content-Type	text/html; charset=UTF-8
Accept-Encoding	gzip, deflate
User-Agent	Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
Accept-Language	en-US,en;q=0.9
Connection	keep-alive

Servlet NewServlet at /reqheader

Result: The given program has been compiled and executed successfully.