Advanced Java Lab

Week-5

Roll Number: 248W5A1213

1. **Use RequestDispatcher and sendRedirect() to forward/redirect requests.**

Code:

First Servlet.java:

```
package com.mycompany.servlets;

import java.io.IOException;
import javax.servlet.*;
import javax.servlet.http.*;

public class FirstServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        req.setAttribute("message", "Forwarded using RequestDispatcher!");
        RequestDispatcher rd = req.getRequestDispatcher("forward");
        rd.forward(req, res);
    }
}
```

ForwardServlet.java:

```
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class ForwardServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();
```

```
        String msg = (String) req.getAttribute("message");

        out.println("<h2>Forward Servlet</h2>");
        out.println("<p>Message: " + msg + "</p>");
    }
}
```

Redirectservlet.java:

```
package com.mycompany.servlets;

import java.io.IOException;
import javax.servlet.*;
import javax.servlet.http.*;

public class RedirectServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {

        response.sendRedirect("https://www.google.com");
    }
}
```
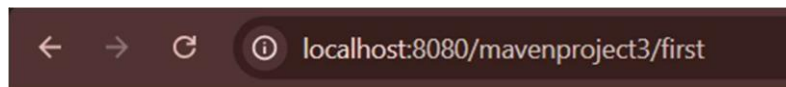
Output:

Forward Servlet

Message: Forwarded using RequestDispatcher!

2. Pass and display attributes between servlets using setAttribute().

Code:

AttributeSender.java:

```
package com.mycompany.servlets;

import java.io.IOException;
import javax.servlet.*;
import javax.servlet.http.*;

public class AttributeSender extends HttpServlet {
```

```java
    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        req.setAttribute("studentName", "Bharath");
        req.setAttribute("course", "Advanced Java");

        RequestDispatcher rd = req.getRequestDispatcher("showAttributes");
        rd.forward(req, res);
    }
}
```

ShowAttributes.java:

```java
package com.mycompany.servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class ShowAttributes extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {

        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        String name = (String) req.getAttribute("studentName");
        String course = (String) req.getAttribute("course");

        out.println("<h2>Received Attributes</h2>");
        out.println("<p>Name: " + name + "</p>");
        out.println("<p>Course: " + course + "</p>");
    }
}
```
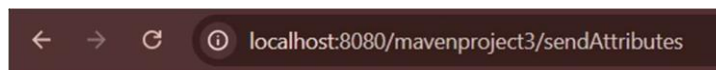
Output:

localhost:8080/mavenproject3/sendAttributes

Received Attributes

Name: Bharath

Course: Advanced Java