

Phase-2 Practice Project: Assisted Practice

5. Write a program to demonstrate a Servlet Filter.

Web.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd" id="WebApp_ID" version="4.0">
  <display-name>FilterDemo</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.htm</welcome-file>
    <welcome-file>default.jsp</welcome-file>
  </welcome-file-list>

  <filter>
    <filter-name>loginFilter</filter-name>
    <filter-class>LoginFilter</filter-class>
  </filter>
  <filter-mapping>
    <filter-name>loginFilter</filter-name>
    <url-pattern>/dashboard</url-pattern>
    <url-pattern>/profile</url-pattern>
  </filter-mapping>

  <servlet>
    <servlet-name>AccountDashboard</servlet-name>
    <servlet-class>AccountDashboard</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>AccountProfile</servlet-name>
    <servlet-class>AccountProfile</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>InfoPage</servlet-name>
    <servlet-class>InfoPage</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>AccountDashboard</servlet-name>
    <url-pattern>/dashboard</url-pattern>
```

```

</servlet-mapping>
<servlet-mapping>
  <servlet-name>AccountProfile</servlet-name>
  <url-pattern>/profile</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>InfoPage</servlet-name>
  <url-pattern>/info</url-pattern>
</servlet-mapping>
</web-app>

```

Login:

```

import java.io.IOException;
import javax.servlet.Filter;
import javax.servlet.FilterChain;
import javax.servlet.FilterConfig;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
import javax.servlet.annotation.WebFilter;

/**
 * Servlet Filter implementation class LoginFilter
 */
@WebFilter("/LoginFilter")
public class LoginFilter implements Filter {

    /**
     * Default constructor.
     */
    public LoginFilter() {
        // TODO Auto-generated constructor stub
    }

    /**
     * @see Filter#destroy()
     */
    public void destroy() {
        // TODO Auto-generated method stub
    }

    /**
     * @see Filter#doFilter(ServletRequest, ServletResponse, FilterChain)
     */

```

```

    public void doFilter(ServletRequest request, ServletResponse response, FilterChain
chain) throws IOException, ServletException {
        // TODO Auto-generated method stub
        // place your code here

        String userId = request.getParameter("userid");

        if( userId != null){
            chain.doFilter(request, response);
        }

    }

    /**
     * @see Filter#init(FilterConfig)
     */
    public void init(FilterConfig fConfig) throws ServletException {
        // TODO Auto-generated method stub
    }
}

```

Info:

```

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class InfoPage
 */
@WebServlet("/InfoPage")
public class InfoPage extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public InfoPage() {
        super();
        // TODO Auto-generated constructor stub
    }
}

```

```

/**
 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
 */
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    // TODO Auto-generated method stub
    response.getWriter().write("I am in InfoPage");
}

/**
 * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
 */
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    // TODO Auto-generated method stub
    doGet(request, response);
}
}

```

Account:

```

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class AccountProfile
 */
@WebServlet("/AccountProfile")
public class AccountProfile extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public AccountProfile() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**

```

```

        * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
        */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            response.getWriter().write("I am in Account Profile
after passing through LoginFilter");
        }

        /**
        * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
        */
        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            doGet(request, response);
        }
    }
}

```

Dashboard:

```

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class AccountDashboard
 */
@WebServlet("/AccountDashboard")
public class AccountDashboard extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
    * @see HttpServlet#HttpServlet()
    */
    public AccountDashboard() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**
    * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
    */

```

```

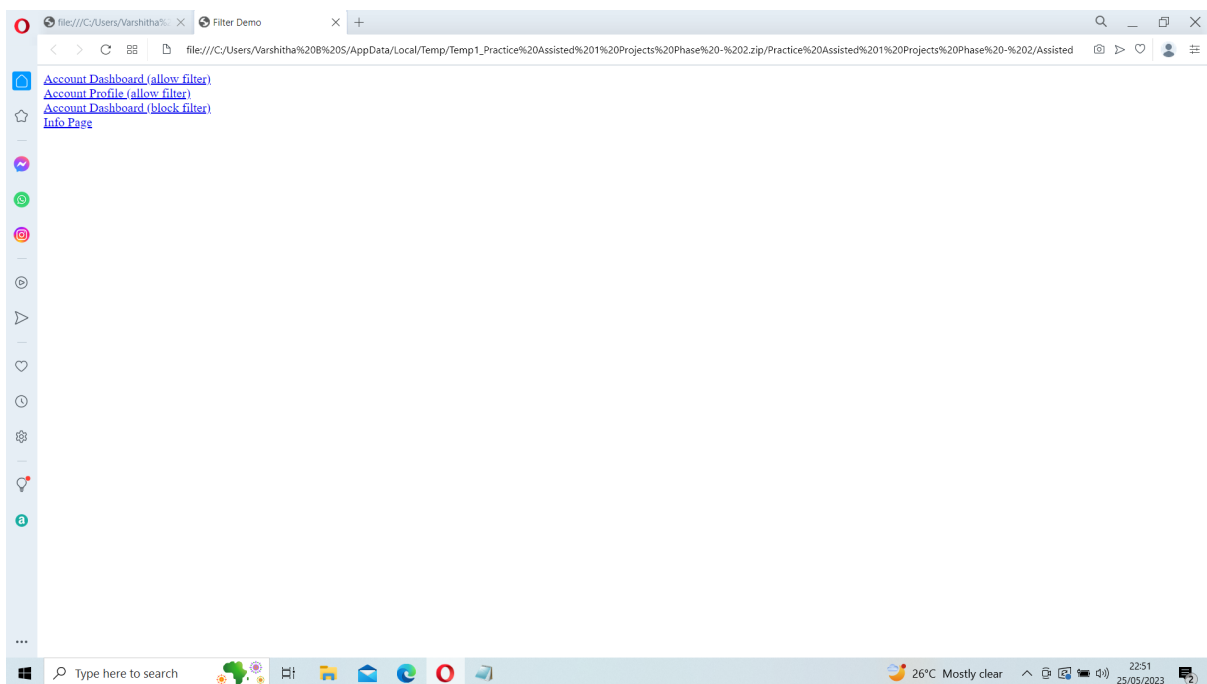
        protected void doGet(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub

            response.getWriter().write("I am in Account Dashboard
after passing through LoginFilter");
        }

        /**
         * @see HttpServlet#doPost(HttpServletRequest request,
        HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            doGet(request, response);
        }
    }
}

```

Output:



[Account Dashboard \(allow filter\)](#)
[Account Profile \(allow filter\)](#)
[Account Dashboard \(block filter\)](#)
[Info Page](#)

I am in Account Dashboard after passing through LoginFilter

I am in Account Profile after passing through LoginFilter

I am in InfoPage