This section will guide you to:

* Create an HTML page to send different requests via hyperlinks
* Create servlets to handle each request
* Show the output of the servlet showing whether the request came through a filter or not

Program:

<html>

<head>

<meta charset="UTF-8">

<title>Filter Demo</title>

</head>

<body>

<a href="dashboard?userid=johndoe">Account Dashboard (allow filter)</a><br>

<a href="profile?userid=johndoe">Account Profile (allow filter)</a><br>

<a href="dashboard">Account Dashboard (block filter)</a><br>

<a href="info">Info Page </a><br>

</body>

</html>

//Account profile Servlet

**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);

}

}

//Account dashboard servlet

**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);

}

}

//create info page servlet

**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);

}

}

//create loginFilter servlet

**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

}

}

//configuration 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>