# FILTERS

## Filters:

A filter is an object that can be declaratively inserted in a container process.

Filter provides the only mechanism by which we can plugin code between request & response process.

Servlet supports static dispatching whereas filter provides dynamic dispatching.

Filter same as servlets.

Filters do not have main method because filter runs in server.

Filter has a life cycle to run in server. There are three life cycle methods in filter.

1) init() 2) doFilter() 3) destroy

Life cycle methods are belongs to javax.servlet.Filter interface.

Every filter must implements javax.servlet.Filter interface to derive life cycle.

## login.html

<html>

<body bgcolor=yellow text=blue>

<center>

<h1><u>Login Form</u></h1>

<form method=POST action=welcome>

Username <input type=text name=uname><br>

Password <input type=password name=pword><br><br>

<input type=submit><input type=reset>

</form>

</center>

</body>

</html>

# LoginFilter.java

```
import java.io.*;

import java.sql.*;

import javax.servlet.*;

public class LoginFilter implements Filter

{

     Connection con;

     public void init(FilterConfig fc)

     {

          try{

          Class.forName("oracle.jdbc.driver.OracleDriver");

     con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1
521:xe","system","manager");

          }catch(Exception e)

          {
```

```java
                System.err.println(e);

            }

        }

    public void doFilter(ServletRequest req, ServletResponse res,
FilterChain fchain)

    {

            try{

            String s1=req.getParameter("uname");

            String s2=req.getParameter("pword");

            PreparedStatement pstmt=con.prepareStatement("select *
from uinfo where uname=? and pword=?");

            pstmt.setString(1, s1);

            pstmt.setString(2, s2);

            ResultSet rs=pstmt.executeQuery();

            if(rs.next())

            {

                    fchain.doFilter(req, res);

            }

            else

            {

                    PrintWriter pw=res.getWriter();

                    pw.println("<html><body bgcolor=yellow
text=red><h1>");
```

```
                pw.println("Invalid Username/Password");

                pw.println("</h1></body></html>");

        }

        }catch(Exception e)

        {

                System.err.println(e);

        }

    }

    public void destroy()

    {

        try{

        con.close();

        }catch(Exception e)

        {

                System.err.println(e);

        }

    }

}
```

# WelcomeServlet.java

```java
import java.io.*;

import javax.servlet.http.*;

public class WelcomeServlet extends HttpServlet
```

```
{

    public void doPost(HttpServletRequest hreq, HttpServletResponse
hres)

    {

        try{

        PrintWriter pw=hres.getWriter();

        pw.println("<html><body bgcolor=red text=yellow><h1>");

        pw.println("Welcome...................");

        pw.println("</h1></body></html>");

        }catch(Exception e)

        {

            System.err.println(e);

        }

    }

}
```

## web.xml

```
<web-app>

<servlet>

<servlet-name>welcome</servlet-name>

<servlet-class>WelcomeServlet</servlet-class>

</servlet>

<servlet-mapping>
```

```
<servlet-name>welcome</servlet-name>

<url-pattern>/welcome</url-pattern>

</servlet-mapping>

<filter>

<filter-name>login</filter-name>

<filter-class>LoginFilter</filter-class>

</filter>

<filter-mapping>

<filter-name>login</filter-name>

<url-pattern>/welcome</url-pattern>

</filter-mapping>

</web-app>
```

## By

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