Dt : 8/6/2022

Summary of Objects from Servlet Programming:

1.ServletContext

2.ServletConfig

3.ServletRequest/HttpServletRequest

4.ServletResponse/HttpServletResponse

5.PrintWriter

6.HttpSession

7.Cookie

8.Java Beans

9.DAO(Data Access Object)

10.JCF(Java Collection Framework) objects

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faq:

wt is the diff b/w

(i)ServletContext

(ii)ServletConfig

(i)ServletContext:

=>ServletContext is instantiated automatically when WebApp is deployed into Server and which will hold Server information.

=>Only one ServletContext object is created for WebApp.

(ii)ServletConfig:

=>ServletConfig is instantiated automatically when Servlet program is loaded for execution and which will hold Servlet name.

=>Every Servlet program will have its own ServletConfig object.

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faq:

wt is the diff b/w

(i)<contex-param>

(ii)<init-param>

(i)<contex-param>:

<context-param> tag is used to initialize parameters to ServletContext object.

(ii)<init-param>:

<init-param> tag is the Sub-tag of <servlet> tag and which is used to initialize parameters to ServletConfig object.

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faq:

wt is the diff b/w

(i)getParameter()

(ii)getInitParameter()

(i)getParameter():

=>getParameter() method is used to read parameters from the request object.

(ii)getInitParameter():

=>getInitParameter() method is used to read initialized parameters from the ServletContext and ServletConfig objects.

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**imp*

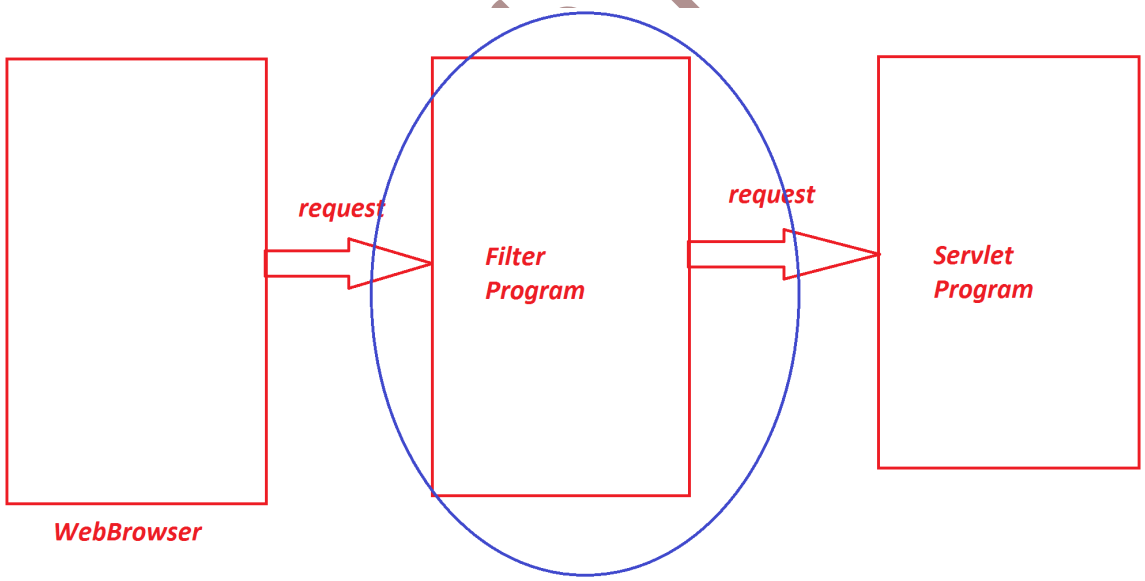
Filters in Servlet Programming:

=>Filter is a Pre-Processing component before Servlet program.

=>Filter and Servlet programs are executed with same url-pattern.

=>In the process of execution Filter programs will have highest priority in execution than Servlet programs

Diagram:



Advantage of Filters:

1.Using Filter we can perform Authentication process

2.Using Filter we can perform Authorization process

3.Using Filter we can perform data conversion

4.Using Filter we can perform data compression

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Note:

=>The following programming components are used in Constructing Filter programs:

1.Filter

2.FilterChain

3.FilterConfig

1.Filter:

=>Filter is an interface from javax.servlet package and which is implemented to filter program.

=>The following are the Life-Cycle methods from 'Filter':

```
public void init(javax.servlet.FilterConfig)
                throws javax.servlet.ServletException;
public abstract void doFilter(javax.servlet.ServletRequest,
    javax.servlet.ServletResponse, javax.servlet.FilterChain)
            throws java.io.IOException, javax.servlet.ServletException;
public void destroy();
```

2.FilterChain:

=>FilterChain is an interface from javax.servlet package and which is instantiated automatically while doFilter() method execution.

=>This FilterChain will have the following doFilter() method to link the Servlet program in execution process.

```
public abstract void doFilter(javax.servlet.ServletRequest,
    javax.servlet.ServletResponse) throws java.io.IOException,
                        javax.servlet.ServletException;
```

3.FilterConfig:

=>FilterConfig is an interface from javax.servlet package and which is instantiated automatically when filter program loaded for execution and FilterConfig will hold the filter name.

=>The following are the methods from FilterConfig:

```
public abstract java.lang.String getFilterName();
public abstract javax.servlet.ServletContext getServletContext();
public abstract java.lang.String getInitParameter(java.lang.String);
public abstract java.util.Enumeration<java.lang.String>
                        getInitParameterNames();
```
