Dt : 15/12/2023

Assignment:(Construct Customer-Login for above appliaction using the following Layout)

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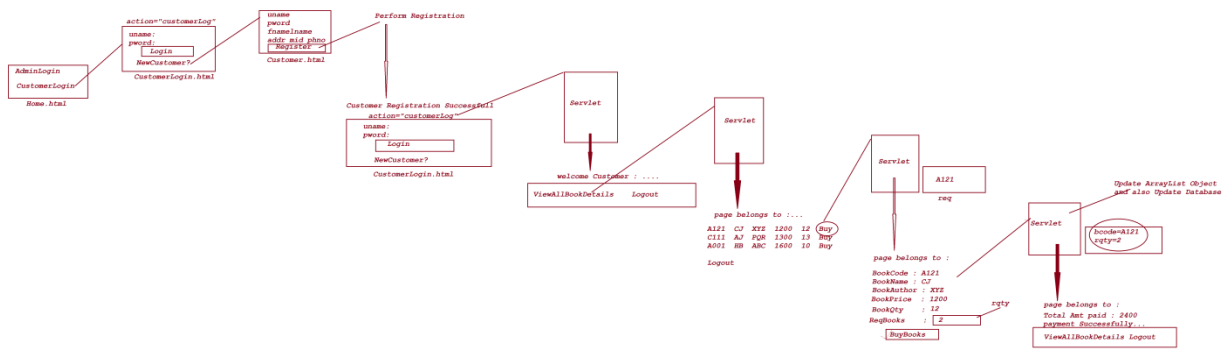
faq:

wt is the diff b/w

  (i)Cookie

  (ii)HttpSession

(i)Cookie:

  =>Cookie is a Class from javax.servlet.http and which is used session tracking

   process.

  =>Cookie is created by Server-Application,but stored in WebBrowser to track the

   user

  =>Cookie Applications are Client dependent Application.

(ii)HttpSession:

=>HttpSession is an interface from javax.servlet.http and which is also used in Session tracking process.

=>HttpSession object is created by Server-application and which is available in Server only.

=>HttpSession Applications are Sever dependent applications

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faq:

wt is the diff b/w

(i)getSession()

(ii)getSession(false)

(iii)getSession(true)

(i)getSession():

=>getSession() method will search for existing session,if not available creates new-session.

(ii)getSession(false):

=>getSession(false) method will also search for existing session,if available use the session and if not available new session is not created.

(iii)getSession(true)

=>getSession(true) method also search for existing session,if available use the

session and if not available create a new session.

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ServletContext:

=>ServletContext is an interface from javax.servlet package and which is instantiated

automatically when Web Application is deployed into Server.

=>This ServletContext object is loaded with Server information.

=>we use getServletContext() method from ServletRequest to access the reference of

ServletContext Object.

syntax:

ServletContext sct = req.getServletContext();

=>we use <context-param> tag part of web.xml to initialize parameter-values to

ServletContext object.

syntax:

```
<web-app>

  <context-param>

    <param-name> name </param-name>

    <param-value> value </param-value>

  </context-param>

   ...

</web-app>
```

  =>we use getInitParameter() method to access initialized parameter-value from the

   ServletContext Object.

Method signature of getInitParameter():

public abstract java.lang.String getInitParameter(java.lang.String);

syntax:

String var = sct.getInitParameter("para_name");

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ServletConfig:

  =>ServletConfig is an interface from javax.servlet package and which is instantiated

   automatically when the Servlet-program loaded for execution.

=>This ServletConfig Object is loaded with Servlet-name.

=>we use getServletConfig() method from 'GenericServlet' to access the reference of

ServletConfig Object

syntax:

ServletConfig scf = this.getServletConfig();

=>we use <init-param> subtag of <servlet> tag to initialize parameter-values in

ServletConfig object.

syntax:

```
<web-app>
 ...
 <servlet>
    <servlet-name> name </servlet-name>
    <servlet-class> class </servlet-class>
      <init-param>
        <param-name> name </param-name>
        <param-value> value </param-value>
      </init-param>
 </servlet>
 <servlet-mapping>
  <servlet-name> name </servlet-name>
  <url-pattern> /url </url-pattern>
```
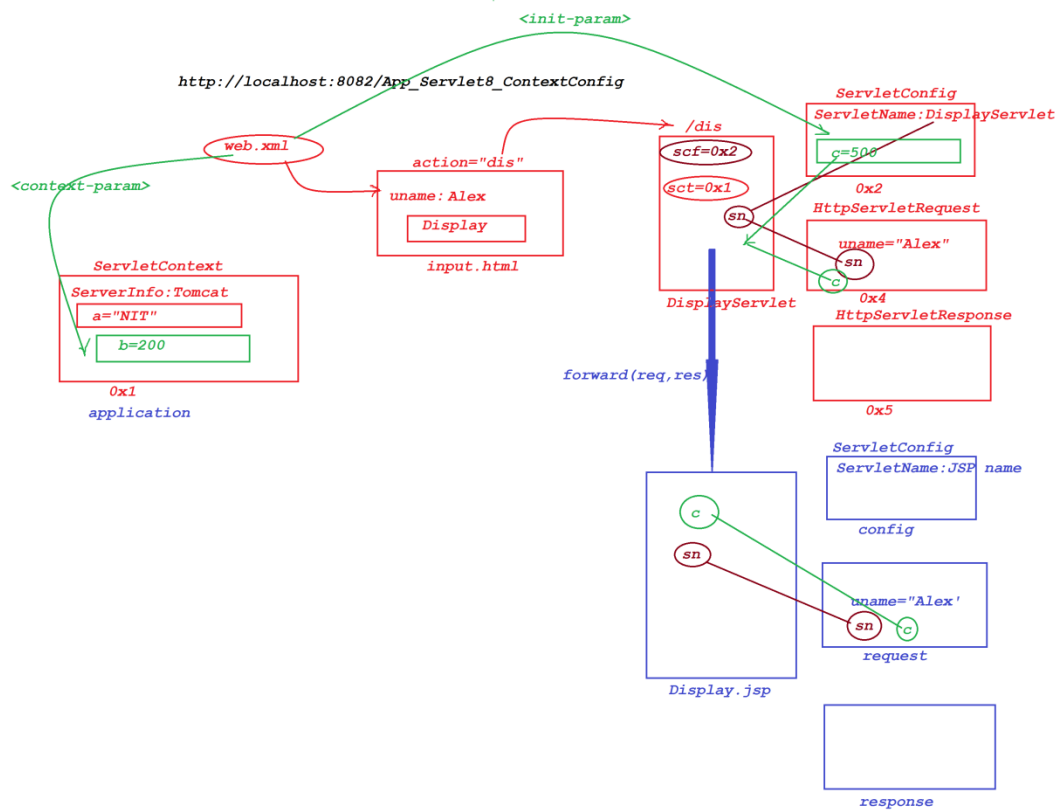
</servlet-mapping>

...

</web-app>

=>we use getInitParameter() method to get the initialized parameter from ServletConfig

   Object

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Ex-Application:

Layout:

input.html

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="dis" method="post">
UserName:<input type="text" name="uname"><br>
<input type="submit" value="Display">
</form>
</body>
</html>
```

DisplayServlet.java

```java
package test;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

@SuppressWarnings("serial")

public class DisplayServlet extends HttpServlet{

    @Override

 protected void doPost(HttpServletRequest req,HttpServletResponse res)throws

 ServletException,IOException{

    ServletContext sct = req.getServletContext();

    ServletConfig scf = this.getServletConfig();

    req.setAttribute("sn", scf.getServletName());

    req.setAttribute("c", scf.getInitParameter("c"));
```

```java
        sct.setAttribute("a","NIT");


        req.getRequestDispatcher("Display.jsp").forward(req, res);

    }

}
```

Display.jsp

```jsp
<%@ page language="java"
        contentType="text/html; charset=ISO-8859-1"
        pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String uName = request.getParameter("uname");
out.println("Welcome User : "+uName+"<br>");
out.println("====ServletContext====");
out.println("<br>ServerInfo:"+application.getServerInfo
());
String a = (String)application.getAttribute("a");
out.println("<br>Attribute in Context:"+a);
int b =
Integer.parseInt(application.getInitParameter("b"));
out.println("<br>Context-InitParameter:"+b);
out.println("<br>====ServletConfig====");
out.println("<br>ServletName
:"+request.getAttribute("sn"));
out.println("<br>Config-
InitParameter:"+request.getAttribute("c"));
out.println("<br>JSP Config:"+config.getServletName());
%>
</body>
```

```
</html>
```

web.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app>
  <context-param>
      <param-name>b</param-name>
      <param-value>200</param-value>
  </context-param>
  <servlet>
    <servlet-name>DisplayServlet</servlet-name>
    <servlet-class>test.DisplayServlet</servlet-class>
      <init-param>
          <param-name>c</param-name>
          <param-value>500</param-value>
      </init-param>
  </servlet>
  <servlet-mapping>
      <servlet-name>DisplayServlet</servlet-name>
      <url-pattern>/dis</url-pattern>
  </servlet-mapping>
  <welcome-file-list>
    <welcome-file>input.html</welcome-file>
  </welcome-file-list>
</web-app>
```

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Note:

(i)Only one ServletContext object is created for WebApplication and the information

   in ServletContext object can be used by all the Servlet-programs and JSP-Programs

   of Web Application.

(ii)Every Servlet-program and JSP-program in applications will have its own

ServletConfig objects.

(iii)when we want to send data to WebApplication then we send data to ServletContext

object.

(iv)when we want to send data to individual Servlet-program then we send data to

ServletConfig object

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Note:

=>To execute Servlet-program we need servlet-url-pattern and this Servlet-url-pattern

is holded by any one of the following:

1.Annotation

@WebServlet("/url")

2.web.xml

<servlet></servlet>

<servlet-mapping></servlet-mapping)

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