Dt : 25/10/2024(Day-26)

ProjectName : App_Servlet_3_JSP_Response(Modified Code)

product.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<style>
table, th, td {
  border: 1px solid black;
}
</style>
</head>
<body>
<form action="dis" method="post" >
      <table>
      <tr>
            <td>ProductCode</td>
            <td><input type="text" name="code"><br></td>
      </tr>
      <tr>
            <td>ProductName</td>
            <td><input type="text" name="name"><br></td>
      </tr>
      <tr>
            <td>ProductPrice</td>
            <td><input type="text" name="price"><br></td>
      </tr>
      <tr>
            <td>ProductQty</td>
            <td><input type="text" name="qty"><br></td>
      </tr>
      <tr>
            <td><input type="submit" value="Display"></td>
            <td></td>
      </tr>
      </table>
  </form>
</body>
</html>
```

web.xml

```
<?xml version="1.0" encoding="UTF-8"?>

<web-app>
   <welcome-file-list>
```

```
        <welcome-file>product.html</welcome-file>
    </welcome-file-list>
</web-app>
```

DisplayServlet.java

```
package test;

import java.io.*;

import jakarta.servlet.*;

import jakarta.servlet.annotation.*;

@SuppressWarnings("serial")

@WebServlet("/dis")

public class DisplayServlet extends GenericServlet

{

        @Override

  public void service(ServletRequest req,ServletResponse res)throws ServletException,

  IOException

  {

                RequestDispatcher rd = req.getRequestDispatcher("Display.jsp");

     rd.forward(req, res);

  }

}
```

Display.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>
<style>
table, th, td {
```

```
  border: 1px solid black;
}
</style>
</head>
<body>
<%
String pCode = request.getParameter("code");
String pName = request.getParameter("name");
float pPrice = Float.parseFloat(request.getParameter("price"));
int pQty = Integer.parseInt(request.getParameter("qty"));
out.println("=====ProductDetails=====<br>");
%>
<table>
      <tr>
            <td>ProductCode:</td>
            <td><%=pCode %></td>
      </tr>
      <tr>
            <td>ProductName:</td>
            <td><%=pName %></td>
      </tr>
      <tr>
            <td>ProductPrice:</td>
            <td><%=pPrice %></td>
      </tr>
      <tr>
            <td>ProductQty:</td>
            <td><%=pQty %></td>
      </tr>
      </table>
</body>
</html>
```

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Assignment:

Construct Application to read and display UserRegistrationDetails.

UserName

PassWord

FirstName

LastName

City

MailId

PhoneNo

Note::

=>Use JSP response

=>Use HTML/CSS/JS

(Perform Form Validations)

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**imp*

DAO Layer:

=>DAO stands for 'Data Access Object' and which is separate layer in MVC holding database related codes or holding persistent logics.

(MVC - Model View Controller)

=>Database related codes means the logics related to create,Insert,Retrieve,update and delete operations on database.

Note::

=>In the process of establishing communication b/w Servlet-Application and Database product,the DB-Jar file must be copied into "lib" folder of "WEB-INF".

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**imp*

Bean classes:

=>The classes which are constructed with the following rules are known as Bean Classes:

Rule-1 : The class must be implemented from 'java.io.Serializable' interface

Rule-2 : The variables declared in the class must be 'private' variables.

Rule-3 : The class must be declated with 0-argument Constructor

(0-parameter Constructor)

Rule-4 : The class must be declared with 'Setter' and 'Getter' methods.

=>These Bean-Classes will generate bean-objects.

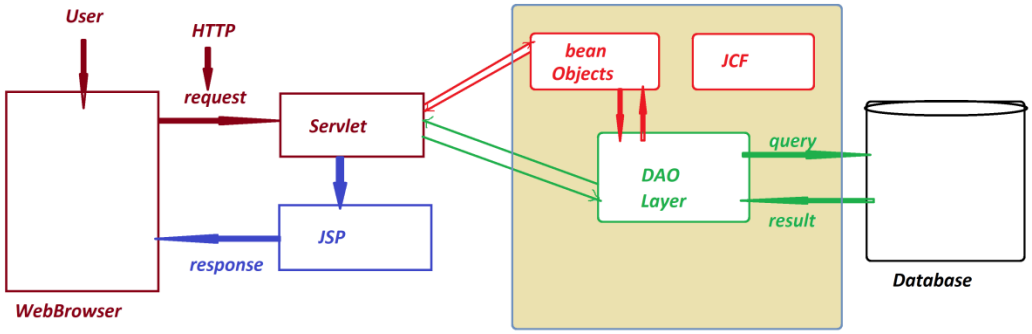
=>These bean-objects are intermediate storages b/w Servlet-program and Database product

Note::

=>we use JCF-Objects to organize multiple bean-objects.

(JCF - Java Collection<E> Framework)

Diagram:



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**imp*

"attribute" in Servlet Programming:

=>'attribute' is a variable in Servlet Programming,which can be added to ServletContext-object,ServletRequest-Object and HttpSession-Object.

=>The following are the methods related to 'attribute':

(a)setAttribute()

(b)getAttribute()

(c)removeAttribute()

(d)getAttributeNames()

(a)setAttribute():

=>setAttribute()-method is used to set attribute to objects.

Method Signature:

public abstract void setAttribute(java.lang.String, java.lang.Object);

(b)getAttribute():

=>getAttribute()-method is used to get the attribute from the Objects.

Method Signature:

public abstract java.lang.Object getAttribute(java.lang.String);

(c)removeAttribute():

=>removeAttribute()-method is used to delete attribute from the Objects.

Method Signature:

public abstract void removeAttribute(java.lang.String);

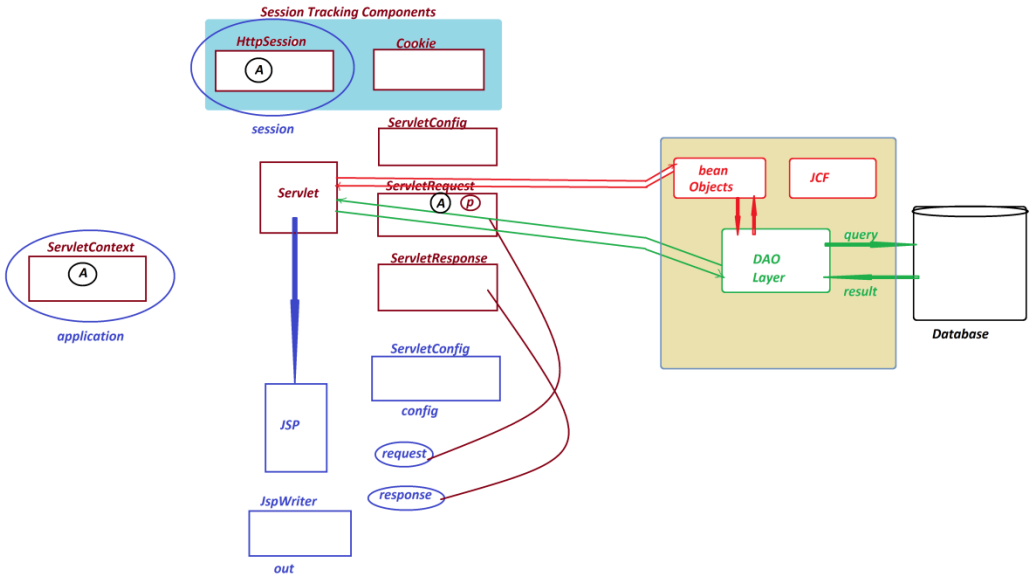
(d)getAttributeNames():

=>getAttributeNames()-method is used to get multiple attribute names from the Objects.

Method Signature:

public abstract java.util.Enumeration<java.lang.String> getAttributeNames();

Diagram:



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