

Dt : 4/12/2023

define Java Bean Class?

=>The class which is constructed with the following rules is known as Java Bean Class.

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 declared with 0-argument Constructor or 0-parameter Constructor.

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

Note:

=>These Bean-classes will generate bean-objects and the bean-objects will hold data going onto Database product and also will hold coming from Database product.

(bean-objecst are intermediate storages b/w Servlet-program and Database product)

faq:

define Getter methods?

=>The methods which are used to get the data from the objects are known as Getter methods.

faq:

define Setter methods?

=>The methods which are used to set the data for the objects are known as Setter methods.

Coding rule of Getter and Setter methods:

=>Every variable in the class must have its own 'Getter' method. and 'Setter' method.

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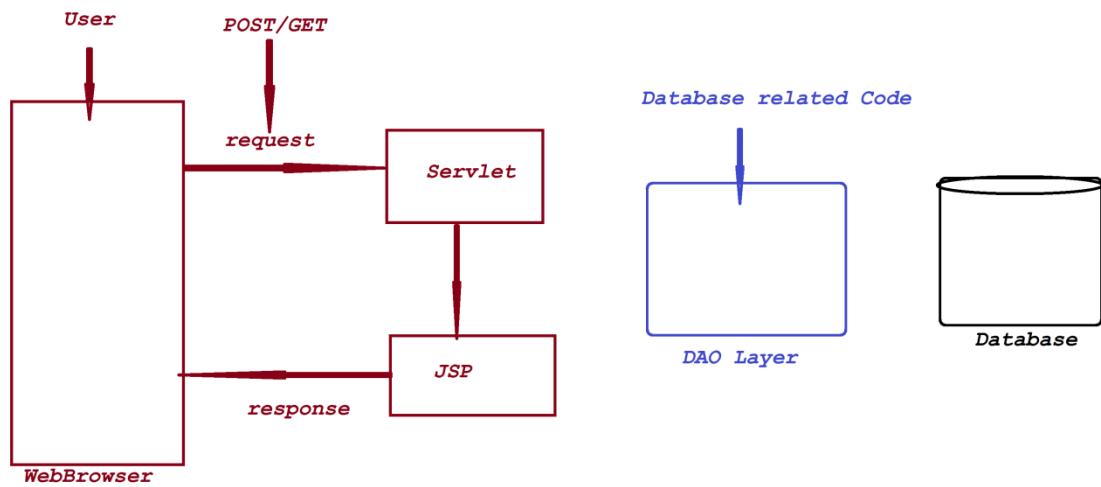
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faq:

define DAO?

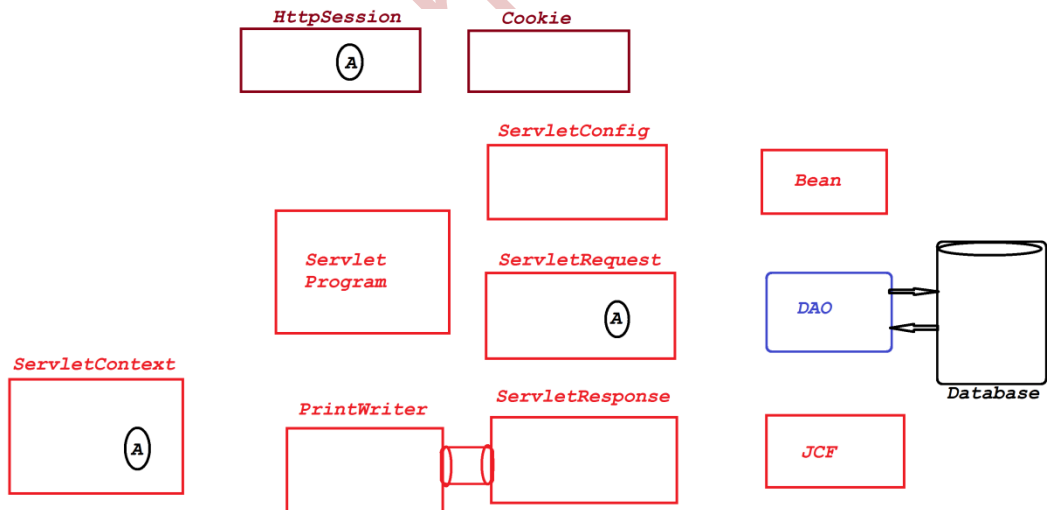
=>DAO stands for 'Data Access Object' and which is separate layer in MVC(Model View Controller) to hold database related code,which means holding persistent logics.

Diagram:



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Objects in Servlet Programming:



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"attribute" in ServletProgramming"

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

=>The following are some important methods related to 'attribute':

(i)setAttribute()

(ii)getAttribute()

(iii)removeAttribute()

(iv)getAttributeNames()

(i)setAttribute():

=>setAttribute() method is used to add variable to objects.

Method Signature:

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

(ii)getAttribute():

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

Method Signature:

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

(iii)removeAttribute():

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

Method Signatute:

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

(iv)getAttributeNames():

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

Method Signature:

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

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faq:

define request?

=>The query which is generated from the WebBrowser(Client) to Server program is known as request.

=>requests generated from the Client are categorized into two types:

1.POST request

2.GET request

1.POST request:

=>The request which is generated to send data to Server is known as

POST request.

=>Through POST request we can send all types of data,which means we can send Text,Audio,Video,Image and Animation data.

=>Through POST request we can send UnLimited data.

=>The POST request data is secure,because the data is encapsulated to the body-part of HTTP protocol.

=>We use the following syntax to raise POST request:

```
<form action="url" method="POST">
```

.....

```
</form>
```

=>we use doPost() method from 'HttpServlet' to accept POST request.

Method Signature of doPost():

```
protected void doPost(javax.servlet.http.HttpServletRequest,  
javax.servlet.http.HttpServletResponse)throws  
javax.servlet.ServletException,java.io.IOException;
```

2.GET request:

=>The request which is generated to get the data from the server is known as GET request.

=>Through GET request we can send only Text data.

=>Through GET request we can send only 4KB or 8KB data.

=>The GET request data is not secure,because the data is added to query

String and displayed in AddressBar.

=>We use the following four ways to raise GET request:

(i)declare method="GET" in <form> tag

syntax:

<form action="url" method="GET">

...

</form>

(ii)declare <form> tag without "method"

syntax:

<form action="url">

...

</form>

(iii)The request raised through hyperlinks is GET request

(iv)Raising request by declared servlet-url-pattern in AddressBar is

GET request

=>we use doGet() method from javax.servlet.http.HttpServlet to accept

GET request.

Method Signature of doGet():

protected void doGet(javax.servlet.http.HttpServletRequest,

javax.servlet.http.HttpServletResponse)throws

javax.servlet.ServletException,java.io.IOException;

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