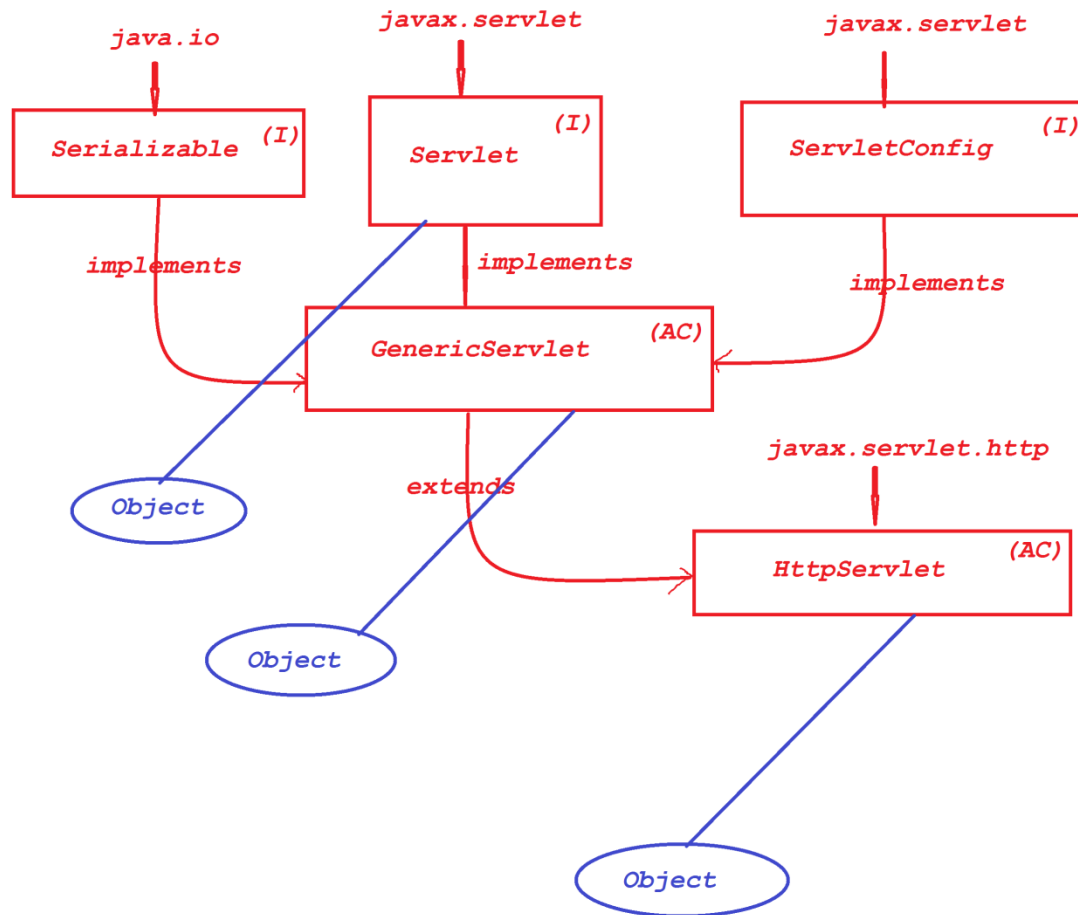


**Dt : 28/11/2023**

**Hierarchy of 'Servlet' interface:**



=====  
=>In the process of constructing Servlet programs,we use any one of the following model:

**(a)Servlet-program implementing from 'Servlet' interface**

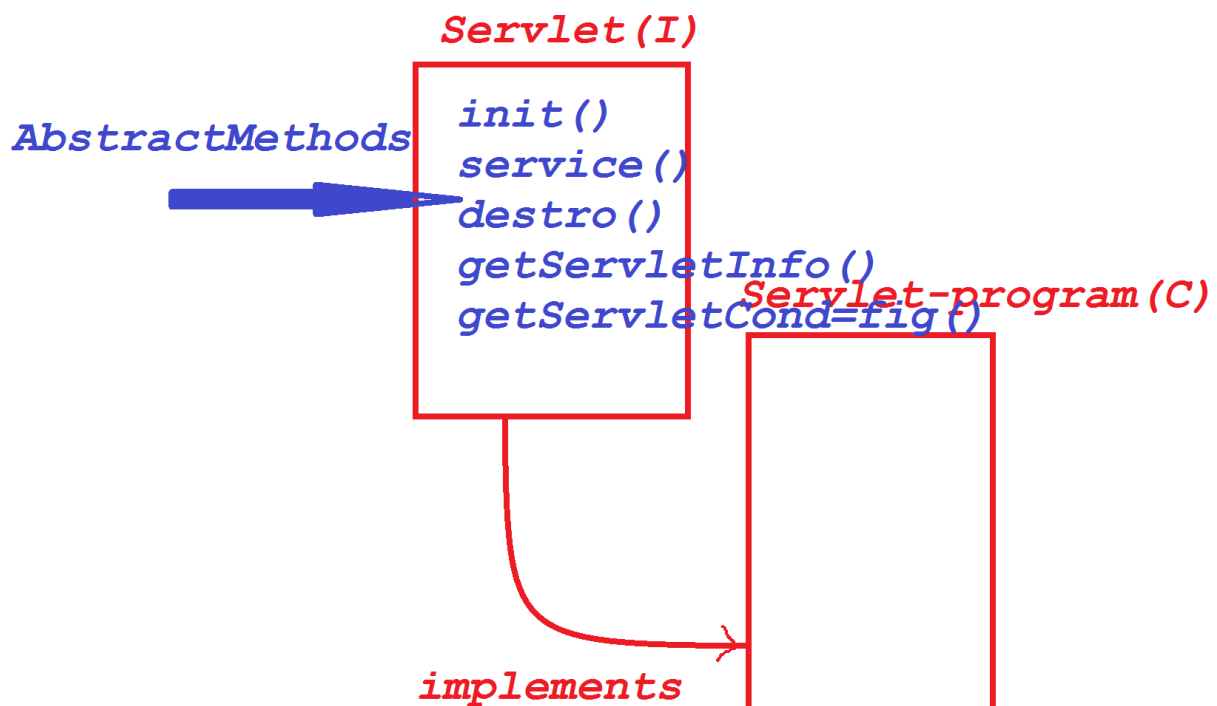
**(b)Servlet-program extending from 'GenericServlet' AbstractClass**

*(c)Servlet-program extending from 'HttpServlet' AbstractClass*

*(a)Servlet-program implementing from 'Servlet' interface:*

*=>If the Servlet-program implemented from 'Servlet' interface,then we must Construct the body for all five abstract methods of 'Servlet' interface.*

*Diagram:*

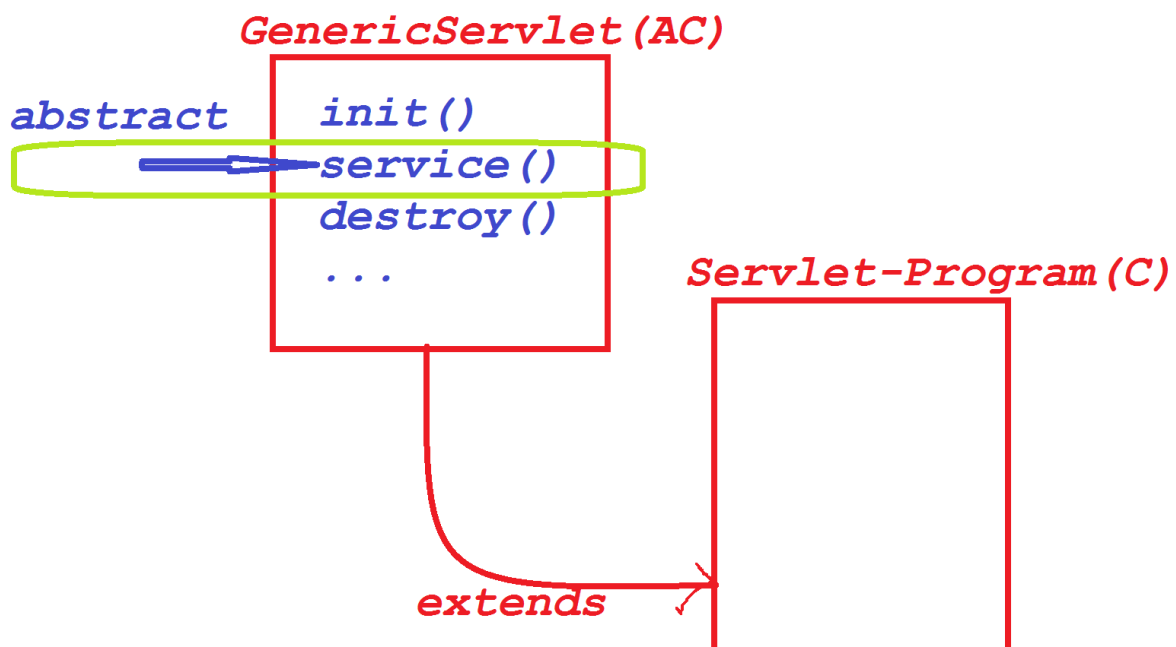


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*(b)Servlet-program extending from 'GenericServlet' AbstractClass:*

=>If the Servlet-program extends from 'GenericServlet' AbstractClass,  
then we must construct body for only service() method and remaining  
methods are optional methods.

Diagram:



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(c)Servlet-program extending from 'HttpServlet' AbstractClass:

=>If the Servlet-program extends from 'HttpServlet' AbstractClass,then  
all the methods are optional methods.

*init()* - Initialization

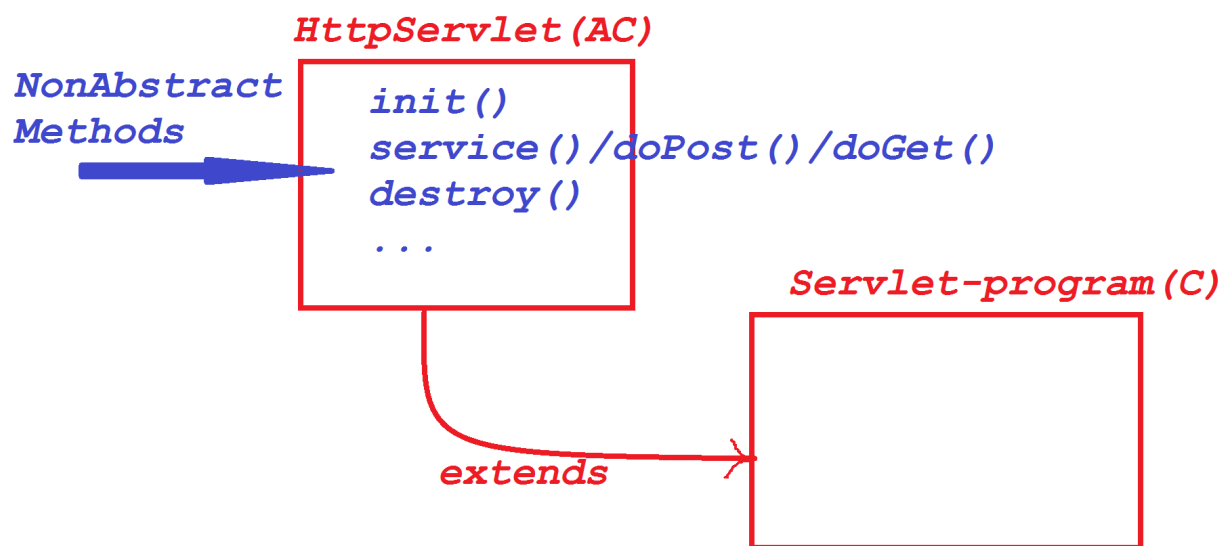
*service()* - any type of request(POST/GET)

*doPost()* - for POST request

*doGet()* - for GET request

*destroy()* - for destroying process

**Diagram:**



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**Conclusion:**

=>The Servlet-Objects generated from 'Servlet' interface are

**NonSerializable Objects**

=>The Servlet-Objects generated from 'GenericServlet' and 'HttpServlet' are Serializable Objects.

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***\*imp***

***Construct Servlet Application(Web Application) using IDE Eclipse:***

***step-1 : Open IDE Eclipse,while opening name the WorkSpace and click  
'Launch'***

***step-2 : Create 'Dynamic Web Project'***

***Click on File->New->Project->Web->select 'Dynamic Web Project' and click  
on 'Next'->name the project and click 'Finish'***

***step-3 : Add 'servlet-api.jar' file to Project***

***RightClick on Project->Build Path->Configure Build Path->Libraries->  
select 'Classpath' and click 'Add Exteranal Jars'->Browse and Select  
'servlet-api.jar' file from 'lib' folder of Tomcat->Open->Apply->  
Apply nad Close***

***step-4 : Add Web Server(Tomcat) to IDE Eclipse(One time process)***

***Click on 'Servers'->click on 'click this link to create a new Server'->  
select the required Server and click 'Next'->Browse 'Tomcat Installation***

**Directory->select the Folder and click 'Finish'**

**step-5 : Construct HTML file**

**RightClick on webapp->new->HTML file->name the file and click 'Finish'**

**input.html**

```
<form action="dis" method="post">
```

```
UserName:<input type="text" name="uname"><br>
```

```
MailId:<input type="text" name="mid"><br>
```

```
<input type="submit" value="Display">
```

```
</form>
```

**step-6 : Construct web.xml file(to start the execution process)**

**RightClick on WEB-INF->new->Other->XML->XML file->name the file as  
"web.xml" and click 'Finish'**

**web.xml**

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

**<web-app>**

**<welcome-file-list>**

**<welcome-file>input.html</welcome-file>**

**</welcome-file-list>**

**</web-app>**

**step-7 : Create package in 'src/main/java' of Java Resources**

**step-8 : Construct Servlet-programm in package**

**DisplayServlet.java**

**package test;**

**import java.io.\*;**

**import javax.servlet.\*;**

**import javax.servlet.annotation.\*;**

**@SuppressWarnings("serial")**

**@WebServlet("/dis")**

**public class DisplayServlet extends GenericServlet**

**{**

**@Override**

**public void init()throws ServletException**

**{**

```

        //NoCode
    }

    @Override
    public void service(ServletRequest req,ServletResponse res)throws
    ServletException,IOException
    {
        PrintWriter pw = res.getWriter();
        res.setContentType("text/html");
        String uName = req.getParameter("uname");
        String mId = req.getParameter("mid");
        pw.println("*****DisplayServlet*****");
        pw.println("<br>UserName:"+uName);
        pw.println("<br>MailId:"+mId);
    }

    @Override
    public void destroy()
    {
        //NoCode
    }
}

```

**step-9 : Deploy Web Application into Server for execution**



***RightClick on Project->Run AS->Run on Server->select the server and click  
'Finish'***

***http://localhost:8082/App\_Servlet1/***

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Venkatesh Maipathii