DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SUBJECT CODE: 19CS2107
ENTERPRISE PROGRAMMING WORKBOOK

Servlets #5

Date of the Session: ___/___/___ **Time of the Session:** _____to______

Prerequisite:

- □ Servlets and their applications.
- □ 'CRUD' operations in SQL.

Pre-Lab Task:

1. Write a note on servlet and its life cycle.

The web Containes maintains the life cycle of Servlet instance

Servlet class is loaded

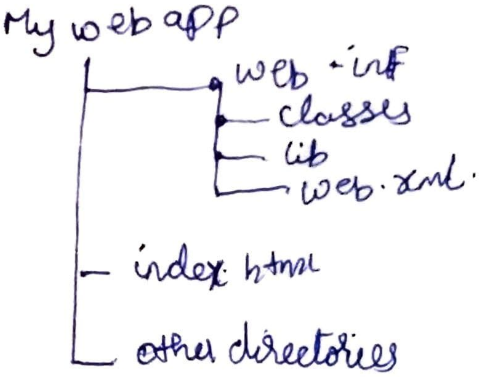
Servlet instance is Created

init Method is invoked

Serive Method is invoked

Detroy Method is invoked

2. Draw the Structure of directories that are to be created under Tomcat's 'webapps' folder.



1. Create a project named 'myservice' and using servlets make a service which prints "Welcome to Servlets!!" on to the server console. The class must be named 'FirstServlet' and the URL pattern must be '/your_name'.

   Add another service into the same 'myservice' project which prints "Bye to Servlets!!" on to the server console. Name the class 'SecondServlet' and set URL pattern to '/your_name143'. (Hint: Modify the 'web.xml' file by adding another servlet name and URL pattern.)

   Check the working condition of both the services.

Writing space for the Problem:(For Student's use only)

Filesevlet . Java :

```
impole java . io . Exeption ;
impolt java x . Servlet Exeption ;
impolt java x . Servlet http HttP Servlet ;
impole java x . Servlet HttP servlet Request ;
 Public class first Servlet extends HttP Serolet {
  Private Static final long Serial version UID = 1C ;
  Protected void doGet ( HttP Servlet Request request , HttP
   Servlet Responses response ) throws Servlet Exeption
  Io Exeption {
     System . out . Print ln ( " welcome to Servlet " ) ;
  }
 Protected void doPost ( H ttP Servlet Request request , HttP Servlet
          Response response ) throws Servlet .

 Exception , IO Exception
   }
 }
}
```

Second servlet . Java

```
second servlet extends H ttP Servlet {
Public Class Second servlet
Public Static Final long Serial Version UID = 1L ;
Protected void doget ( HttPServlet Request , request , HttPServlet Response
        throws Servlet exception , Io exception
```

In Lab Task:

1. A professor from K L University after 21 years of Work he decided to retire from his job and before he leaves, he wants to get feedback about him from all his students. As you are his favorite student, he asked you for help, so, you decided to make a Web app using servlets in which the students must first register and then login into it with the registered credentials, which in turn gives a page and Asks for remarks , the students can type and submit their views in it and this login credentials and remarks must be stored into 'farewell' table in database. He wants everyone to register and login because he wants to know how every particular student think about him.

Writing space for the Problem:(For Student's use only)

Index.html :

```
<! DocTYPE html>
<html>
<head>
<meta charset ="ISO-8859-1">
<title>Insert title here</title>

</head>
<lbody>
<form action ="Registration".Method ="Post">

 id<input > type ="text" name ="id"/>
name <input type ="text' name ="email"/>
Email <input type ="text" name = "email"/>
username <input type ="text' name ="uname"/>
Password <input type ="text" name ="Pwd"/>
 <input type ="Submit" name = "Submit"/>
 </form>.

 </body>
 </html>
```

Registration . Java

```
Public class Registration extends HttPS Servlet{.
    Private Static final long Serial version UID=12;
    Public Registration (){.
      Super ();
  }.

Protected void doget (HttP Servlet Request, HttP Servlet Response)throws
Servlet Exception, Io Exception {.
response. get writer (). append ("served at:") append (request get Context
                                                      Path());

}.

Protected void GoPost (HttP Servlet Request, HttP servlet Response)
  throws Servlet Exception, Io Exception
 {
    Print Writer out = response. get writer ();
  response. Set Content type. ("text/html");
   String name = request. get Parameter ("name");
   String id = request. get Parameter ("id");
   String email = request. get Parameter ("email");
   String uname = request. get Parameter ("uname")
  String Pwd = request get Parameter ("Pwd");
 Connection Con:
 try {
     Class. for Name ("oracle jdbc. driver. oracle Driver");
 Con = Driver Management. Get Connection ("jdbc: oracle: thin:@ localhost1521;XE",
  "System", "root");
```

Writing space for the Problem:(For Student's use only)

```
Prepared statement PS = Con.Prepare Statement ("insert into Farewel Value
 (?,?,?,?,?)");
 PS.Set String (1, id);
 PS.Set String (2, name);
 PS.Set String (3, email);
 PS.Set String (4, uname );
 PS.Set String (5, Pwd ):
 int rs = PS. execute update ();
  Con.commit ();
 }
 Catch (Exception e )
 {
   out.Println (e);
   }
 }.
```

Post Lab Task

1. Create a login Servlet which on login retrieves and Displays the Previous Remark Given by you. You must also provide an Update Remark Text Field in which the student can type a new remark and replace the previous remark with it. For login, use the credentials that are in the 'farewell' table. **Use Eclipse IDE for ease of the task.**

Writing space for the Problem:(For Student's use only)

index.html

```
<!DOCTYPE html>
<html>
<head>
 <meta charset ="ISO-8859-1">
 <title> Insert title here</title>.
<lhead>.
<body>
<form Method="Post' action ="login Check">
 username <input type=" text' name="uname"/>.
 Password <input type="Password" name="Pwd"/>
  <input type="submit name ="login"/>.
  </form>
  </body>
   </html>.
```

loginCheck.java ÷

```
 Public class login check extends HttPServlet {.
 Private static final long Serial VersionUID =1L ;
      Public login Check (){.
      Super();
   }.
Protected void doget(HttP Servlet Request request; HttP Servlet
  Response') throws Servlet Exception, Io Exception{.
```

Writing space for the Problem:(For Student's use only)

```
response. get writer () append ("Server at: ") .append (request .get
ContextPath () );

}
Protected void doPost (HTTP Servlet Request, HTTP Servlet Response)
throws Servlet Exception, Io exception {.

  Print writer out = response. get writer () ;
  response. Content type ("text /html");
  String uname = request. get Parameter ("uname");
  String Pwd = request . get Paramter ("Pwd");

try {.
  // Connection Statements
  Prepared Statement Ps = Con. Prepare statements ("Select uname,
   Pwd, remarks from farewell, where uname = ? and Pwd = ?");
     Ps. Set String (1, uname);.
  ~~Protected void Go doGet (H~~
    Ps. Set String (2, Pwd);
  Result set rs = Ps. execute Query();
   if (rs.next()) {.
       out .println ("your remarks are:");
       out. Print ln ("rs. get String(3)]);
       out. Print ln ("<br/> <a. href = "index 1. html"> click here.
       to change your remarks </a >");
      }
     Catch (exception e)
   }
  }
}
```

Writing space for the Problem:(For Student's use only)

```
}
}
Index1.html:
<!DOCTYPE html>
<html>
<head>.
<meta charset ="ISO-8859-1">
<title>insert title here</title>
</head>
<$body>
  <form Method="Post" action ="change Remark">
  <input type ="text" name="remark"/>
  <input type ="Submit" name="Submit"/>
  </form>
  </body>
  </html>
Change Remark.java:
  Public class change Remark extends HttpServlet {.
   Private static final long serial Version UID =1L;
      Public Change Remark() {.
        Super();
      }
   Protected void doget (HttpServlet Request, HttP Servlet Response)
   throws Servlet Exception, IO Exception{.
    response. get writer (). append ("Served at :"), append(request get ).
     Context Path());
    }.
```

Writing space for the Problem:(For Student's use only)

```
Protected void doPost () throws Servlet exception, IOException {
String remark = request · get Parameter ("remark").
Print writer out = response - get writer ()
HTTP Session Session = request · get HttSession ();
String uname = (String) Session· get Attribute (~~+pd~~("uname")
String Pwd = (String) session · get Attribute ("Pwd");
response · Set Content type ("Text/html");
try{;
/Connection Statement
Statement x = "update Farewell , Set ~~mod~~ remarks = 'remark'
where · uname = uname and Pwd = "Pwd";
        int P1 = PS1 ·execute update (x);
   Con. Commit ();
  if (P1 ! = 0){.
      out · Println ("Remark Changed");
   }
   else { out · Println ("try again"); }}.
      Catch ( Exception t){
       }
 } }
```

(For Evaluator's use only)

Comment of the Evaluator (if Any)	Evaluator's Observation Marks Secured: 46 out of 50 Full Name of the Evaluator: Signature of the Evaluator Date of Evaluation: