Dt : 12/12/2023

faq:

wt is the diff b/w

* (i)getParameter()*

* (ii)getParameterValues()*

(i)getParameter():

*   =>getParameter() method is used to get single parameter-value from the request-object.*

syntax:

String var = req.getParameter("para_name");

(ii)getParameterValues():

* =>getParameterValues() method is used to get group parameter-values from the request*

*   object.*

syntax:

String arr_var[] = req.getParameterValues("para_name");

*==
=========*

*imp

2.HttpSession:

=>HttpSession is an interface from javax.servlet.http package and which is used in

Session tracking process.

=>The following are some important methods of HttpSession:

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

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

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

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

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

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

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

public abstract java.lang.String[] getValueNames();

public abstract void invalidate();

public abstract javax.servlet.ServletContext getServletContext();

public abstract javax.servlet.http.HttpSessionContext getSessionContext();

=>we use getSession() method from HttpServletRequest to create implementation object

for HttpSession-Interface.

Method Signature of getSession():

public abstract javax.servlet.http.HttpSession getSession();

public abstract javax.servlet.http.HttpSession getSession(boolean);

*==
===============*

3.URL re-write:

=>The process of adding parameter-values to servlet-url-pattern is known as

URL re-writing process.

syntax:

servlet-url-pattern?para=value&para=value&...

"?" - symbol is separator b/w url-pattern and parameters.

"&" - symbol is separator b/w parameters

Ex:

https://www.google.com/search?q=gmail&...

*==
===============*

4.Hidden form fields:

=>The process of declaring <input type="hidden"...> in <form> tag of HTML is known as

Hidden form fields.

=>The values in Hidden form fields are not displayed to the end-user,which means not

  shown to the end-user.

 syntax:

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

   <input type="hidden" name="name" value="value">

    ....

  </form>

===

Note:

 =>'URL re-write' and 'Hidden form fields' are Sub-techniques in Session Tracking

   process and which are also used to send data from one Servlet-program to another

   Servlet-program

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ProjectName : OnlineBookStore

Users :

  Admin

  Customer

DB tables:

  Admin57(uname,pword,fname,lname,addr,mid,phno)

  Customer57(uname,pword,fname,lname,addr,mid,phno)

create table Admin57(uname varchar2(15),pword varchar2(15),fname varchar2(15),

lname varchar2(15),addr varchar2(15),mid varchar2(25),phno number(15),primary key(uname));

create table Customer57(uname varchar2(15),pword varchar2(15),fname varchar2(15),

lname varchar2(15),addr varchar2(15),mid varchar2(25),phno number(15),primary key(uname));

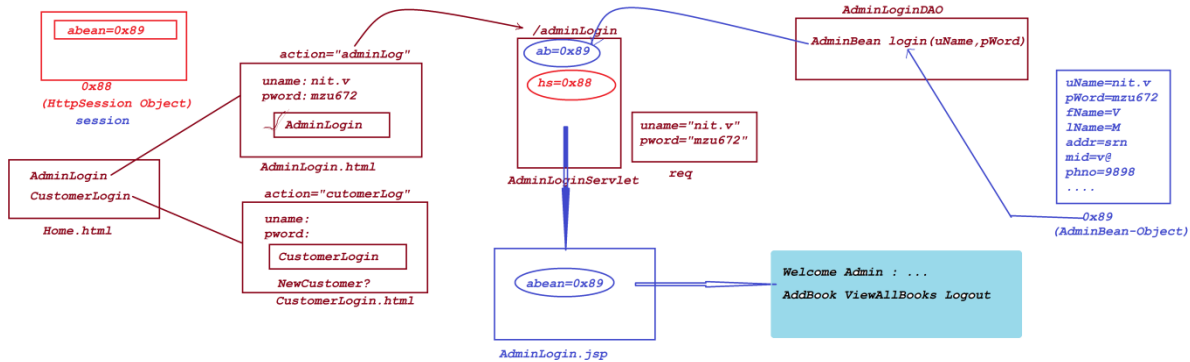*BookDetails57(code,name,author,price,qty)*

create table BookDetails57(code varchar2(10),name varchar2(15),author varchar2(15),

price number(10,2),qty number(10),primary key(code));

Layout:

The diagram labels (as shown in the figure):

- `abean=0x89`
- `0x88` (HttpSession Object) session
- `AdminLogin CustomerLogin` — Home.html
- `action="adminLog"` — `uname: nit.v` `pword: mzu672` — `AdminLogin` — AdminLogin.html
- `action="cutomerLog"` — `uname:` `pword:` — `CustomerLogin` — NewCustomer? — CustomerLogin.html
- `/adminLogin` — `ab=0x89` — `hs=0x88` — AdminLoginServlet
- `uname="nit.v"` `pword="mzu672"` — req
- `AdminLoginDAO` — `AdminBean login(uName,pWord)`
- `uName=nit.v pWord=mzu672 fName=V lName=M addr=srn mid=v@ phno=9898 ....` — `0x89` (AdminBean-Object)
- `abean=0x89` — AdminLogin.jsp
- `Welcome Admin : ...` `AddBook ViewAllBooks Logout`

Home.html

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<a href="AdminLogin.html">AdminLogin</a>
<a href="CutomerLogin.html">CutomerLogin</a>
</body>
</html>
```

AdminLogin.html

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

CutomerLogin.html

```html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="customerLog" method="post">
UserName:<input type="text" name="uname"><br>
Password:<input type="password" name="pword"><br>
<input type="submit" value="CutomerLogin">
<a href="Register.html">NewCutomer?</a>
</form>
</body>
</html>
```

DBInfo.java

```java
package test;
public interface DBInfo
{
    public static final String
dbUrl="jdbc:oracle:thin:@localhost:1521:xe";
    public static final String uName="system";
    public static final String pWord="manager";

}
```

DBConnection.java

```java
package test;

import java.sql.*;

import static test.DBInfo.*;

public class DBConnection

{
```

```java
    private static Connection con=null;

    private DBConnection() {}

    static

    {

        try {

            Class.forName("oracle.jdbc.driver.OracleDriver");

            con = DriverManager.getConnection(dbUrl,uName,pWord);

        }catch(Exception e) {e.printStackTrace();}

    }

    public static Connection getCon()

    {

        return con;

    }

}
```

AdminBean.java

```java
package test;
import java.io.*;
@SuppressWarnings("serial")
public class AdminBean implements Serializable{
    private String uName,pWord,fName,lName,addr,mId;
    private long phNo;
    public AdminBean() {}
public String getuName() {
    return uName;
}
public void setuName(String uName) {
    this.uName = uName;
```

```java
    }
    public String getpWord() {
        return pWord;
    }
    public void setpWord(String pWord) {
        this.pWord = pWord;
    }
    public String getfName() {
        return fName;
    }
    public void setfName(String fName) {
        this.fName = fName;
    }
    public String getlName() {
        return lName;
    }
    public void setlName(String lName) {
        this.lName = lName;
    }
    public String getAddr() {
        return addr;
    }
    public void setAddr(String addr) {
        this.addr = addr;
    }
    public String getmId() {
        return mId;
    }
    public void setmId(String mId) {
        this.mId = mId;
    }
    public long getPhNo() {
        return phNo;
    }
    public void setPhNo(long phNo) {
        this.phNo = phNo;
    }

}
```

AdminLoginDAO.java

```java
package test;
import java.sql.*;
public class AdminLoginDAO {
   public AdminBean ab=null;
   public AdminBean login(String uName,String pWord) {
       try {
           Connection con = DBConnection.getCon();
           PreparedStatement ps = con.prepareStatement
         ("select * from Admin57 where uname=? and
pword=?");
           ps.setString(1, uName);
           ps.setString(2, pWord);
           ResultSet rs = ps.executeQuery();
           if(rs.next()) {
               ab = new AdminBean();
               ab.setuName(rs.getString(1));
               ab.setpWord(rs.getString(2));
               ab.setfName(rs.getString(3));
               ab.setlName(rs.getString(4));
               ab.setAddr(rs.getString(5));
               ab.setmId(rs.getString(6));
               ab.setPhNo(rs.getLong(7));
           }
       }catch(Exception e) {e.printStackTrace();}
       return ab;
   }
}
```

AdminLoginServlet.java

package test;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

```java
import javax.servlet.annotation.*;

@SuppressWarnings("serial")

@WebServlet("/adminLog")

public class AdminLoginServlet extends HttpServlet{

    @Override

    protected void doPost(HttpServletRequest req,HttpServletResponse res)throws

    ServletException,IOException{

        AdminBean ab = new
AdminLoginDAO().login(req.getParameter("uname"),
                req.getParameter("pword"));

        if(ab==null) {

            req.setAttribute("msg","Invalid Login process...<br>");

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

        }else {

            HttpSession hs = req.getSession();//Creating new Session

            hs.setAttribute("abean", ab);

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

        }

    }

}
```

AdminLogin.jsp

```jsp
<%@ page language="java"
        contentType="text/html; charset=ISO-8859-1"
```

```jsp
        pageEncoding="ISO-8859-1"
        import="test.AdminBean"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
AdminBean ab =
(AdminBean)session.getAttribute("abean");
out.println("Welcome Admin : "+ab.getfName()+"<br>");
%>
<a href="Book.html">AddBookDetails</a>
<a href="view1">ViewAllBookDetails</a>
<a href="logout">Logout</a>
</body>
</html>
```

Home.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 msg = (String)request.getAttribute("msg");
out.println(msg);
%>
<jsp:include page="Home.html"/>
</body>
</html>
```

web.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app>
  <welcome-file-list>
      <welcome-file>Home.html</welcome-file>
  </welcome-file-list>
</web-app>
```

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