**Course 2 - Backend and Database Development**

**Session tracking :** session is a collection of request and response within a particular period of a time. by default http protocol is state less protocol. By default session time is 3 minute.

Generally we use few technique to handle the session.

1st -------------------------🡪request

2nd + session id ----🡪

Client Server

Response 🡨-----------1st + cookies file

1. Cookies : cookies is small text file created by server when client send first request to server. This file contains lot of information like session id, cookies path, expiry etc. this file send with 1st response to client. This file store in client machine.

Client can disable cookies option in browser.

Cookies is not secure.

1. URL rewriting technique : server side technology they append session id through url in encryption format. This technique is good when cookies option disable in client machine. But this technique support only get method.

URL?sessionId=$$$$$@@@@@&&&&&&&

1. HttpSession : HttpSession is an interface which provided set of method which help to keep the track about the session.

**In Servlet**

HttpSession hs = request.getSession();

**In JSP**

**out** :

**request**

**response**

JSP provided implicit object **session**.

Object scope

Object scope divided into 3 types.

1. Page scope or servlet/jsp scope : instance variable generally known as page or servlet/jsp scope.
2. Request scope
3. Session scope

If we declare any instance variable of type int, float, char, string, object or collection object in servlet outside a doGet/doPost or in jsp inside declarative tag. The scope of that variable or object present within that page.

Servlet page --🡪 Demo

int id =100;

String name = “Steven”; instance variable.

/Demo /welcome.jsp

doGet() / doPost()

PrintWriter pw = response.getWriter();

HttpSession hs = request.getSession();

Pw.println(“id is ”+id);

Pw.println(“name is ”+name);

//RequestDispatch rd = request.getReqeustDispacher(“welcome.jsp”)

//request.setAttribute(“a”,id);

//request.setAttribute(“b”,name);

hs.setAttribute(“a”,id);

hs.setAttribute(“b”,name);

//rd.include(request,response);

//rd.forward(request,response);

response.sendRedirect(“welcome.jsp”)

**welome.jsp** page 🡪

<%

//Object id = request.getAttribute(“a”);

//String name = (String)request.getAttribute(“b”);

Object id = session.getAttribute(“a”);

String name = (String)session.getAttribute(“b”);

out.println(“id is ”+id);

out.println(“name is ”+name);

%>

response.sendRedirect(“welcome.jsp”);

or

RequestDispatch rd = request.getReqeustDispacher(“welcome.jsp”)

rd.forward(request,response);

in both we will get the output of target page.

forward method is part of request object. in forward request doesn’t destroy you are in still same request but you can see the output of target page. Request dispatcher forward method we can move from one page to another page within a application.

sendRedirect method is part of response. It destroy request means it generate new request ie new url display on browser. sendRedirect we can move within a same application as well as other application(you need to provide complete URL).