

```
package Servlets;

/*****
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Dentist Project
CIST2373
*****/

import Business.Dentist;
import Business.Patient;
import Business.Procedures;
import Business.Appointments;
import Business.AppointmentList;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.RequestDispatcher;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

@WebServlet(urlPatterns =
{
    "/loginServlet"
})

/*****
 * Main login servlet. Directs from index.jsp. Index stores id and password, gets retrieved in loginServlet.
 * Servlet will check if first character identifies a patient or dentists. It will verify the password from the
 * correct table and direct to displayDentist or displayPatient. Data from selected db will be stored in session.
 *****/
public class loginServlet extends HttpServlet
{
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        /*****
         * DRIVER STEPS
         *****/

        //Load Driver - Step #1
        try {
            Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        } //Get Connection from the Driver - Step #2
        catch (Exception con) {
            con=DriverManager.getConnection("jdbc:ucanaccess://C:/Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB.mdb");
        } //Create a Statement - Step #3
        Statement stmt = con.createStatement();
        //Execute Statement - Step #4
        String dentSQL = ("select * from Dentists");
        String patSQL = ("select * from Patients");
        String procSQL = ("select * from Procedures");

        ResultSet drs = stmt.executeQuery(dentSQL);
        ResultSet prs = stmt.executeQuery(patSQL);

        //Process through the Data - Step #5
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();

        //END DRIVER STATEMENTS

        /****RECEIVE AND PROCESS ID and PASSWORD INPUT****/
        String id = (request.getParameter("userID")); //Stores input from index:userID field
        String pw = request.getParameter("passWord"); //Stores input from index:passWord field
        char patientOrDentist = id.charAt(0); //stores first character to later check if patient or dentist
        String pod=Character.toString(patientOrDentist);

        //Put Object in session
        HttpSession session;
        session = request.getSession();
    }
}
```

```

Appointments a1; //Create new appointment for Patient. Dentist will use a different method for appointments.
a1 = new Appointments();
AppointmentList aList = new AppointmentList();

System.out.println("UserID: " + id + ", User Password: " + pw);

if (pod.equals("d") || (pod.equals("D"))){
    Dentist dl;
    dl = new Dentist();
    dl.selectDB(id);
    //System.out.println(dl.bList.count);
    //dl.getAppointments(id);

    session.setAttribute("dl", dl);
    session.setAttribute("dList", dl.bList);
    session.setAttribute("id", dl.getDentistID());
    System.out.println("Dentist " + dl + " added to session");
    if (pw.equals(dl.getDentistPassword()))
    {
        RequestDispatcher rd = request.getRequestDispatcher("/displayDentist.jsp"); //If password is correct, go to displayDentist.jsp page
        rd.forward(request, response);
    }
    else
    {
        RequestDispatcher rd = request.getRequestDispatcher("/error.jsp"); //If password is wrong, display error.jsp page
        rd.forward(request, response);
    }
}
else if (pod.equals("a") || (pod.equals("A"))){
    Patient pl;
    pl = new Patient();
    pl.selectDB(id);
    pl.display();
    a1.selectDB(id);
    session.setAttribute("a1", a1);
    session.setAttribute("procl", pl);
    session.setAttribute("pl", pl);
    session.setAttribute("id", pl.getPatientID());
    System.out.println("Patient " + pl + " added to session");
    if (pw.equals(pl.getPatientPassword()))
    {
        RequestDispatcher rd = request.getRequestDispatcher("/displayPatient.jsp"); //If password is correct, go to displayPatient.jsp page
        rd.forward(request, response);
    }
    else
    {
        RequestDispatcher rd = request.getRequestDispatcher("/error.jsp"); //If password is wrong, display error.jsp page
        rd.forward(request, response);
    }
}

}

catch(Exception se) // Ends from Driver steps
{
    System.out.println(se);
}

}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">
/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException
{
    processRequest(request, response);
}

/**
 * Handles the HTTP <code>POST</code> method.

```

```
*
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException
{
    processRequest(request, response);
}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */
@Override
public String getServletInfo()
{
    return "Short description";
} // </editor-fold>
} // Ends loginServlet
```