MST-II Assignment (to Be completed in 1 Day) (Set-E)

In this Covid-19 pandemic, the medical staff is collecting the sample of probable patients of Covid-19. After collecting sample, medical staffs creates a record about it on a web application. This web application automatically generates a unique ID which is also written/pasted on the collected sample. The sample is now sent to the labs for testing. After performing testing, lab staff opens the same web-application and update the record with result. Suppose you need to develop this web application by using JSP/Servlet.

1) Provide the database schema (tables and relations) for this project.
2) Describe all the servlet classes and their functionalities that you need to build this project.
3) Describe all the non-servlet java classes and their functionalities that you will use in servlet classes.
4) Describe all the major challenges that you may face to build this project
5) Build this application and submit the java source file and database .sql file

---

Enrollment no: 1810DMBCSE03328.
Name: Yash Sharma.
Year: 2nd (IV Sem)
Java MST-II Assignment .

1. **The database schema (tables and relations) for this project.**

Used Apache Derby for Connectivity.

Column name	Datatype	Length	Default	Primary Key	Not Null (?)	Auto Increment (?)
UID	VARCHAR	50		Yes	Yes	
NAME	CHAR	30			Yes	
AADHAAR	BIGINT	19			Yes	
ADDRESS	VARCHAR	100			Yes	
MOBILE NO	BIGINT	19			Yes	
REPORT_RESULT	CHAR	30			Yes	

2. **Describing Servlet Classes & their functionalities.**

medicalLogin.java: A servlet named “medicalLogin.java” is used for user authentication of the Medical Staff.

medicalhome.java: A servlet named “medicalhome.java” is created to take the input from the medical staff about the patient.

showpatient.java: A servlet named “showpatient.java” is created to insert the data of patient into the database.

logoutMedical.java: A servlet named “logoutMedical.java” is created to log out the medical staff from the Web Application.

labLogin.java: A servlet named “labLogin.java” is used for user authentication of the Lab Staff.

labhome.java: A servlet named “labhome.java” is created for displaying the data on webpage and giving a edit button so that the lab staff can update the report of the patient.

edit.java: A servlet named “edit.java” is created for letting the lab staff enter the report of the patient.

updateq.java: A servlet “updateq.java” is created to execute the update query in the database.

updatedReport.java: A servlet “updatedReport.java” is created to display the updated details of the patient.

3. **Describing Non-Servlet Classes & their functionalities.**

LoginMedicalStaff.java: This file is created to check the authenticity of the user, by checking the username and password of the medical staff are correct or not.

LoginLabStaff.java: This file is created to check the authenticity of the user, by checking the username and password of the lab staff are correct or not.

4. **Issues or challenges faced to build project.**

For connecting Database, Mysql wasn’t working. There was a issue with it. So I used Apache Derby to use Database.

5. **Build this application and submit the java source file and database .sql file**

Index.html

```
<html>
  <head>
    <title>COVID-19</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <a href="medicalStaff.html">Add Record</a><br><br>
    <a href="labStaff.html">Update Record</a>
  </body>
</html>
```

medicalStaff.html

```
<html>
  <head>
    <title>Add Record</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <h3>Medical Staff | Login</h3>
```

```
    <form action="medicalLogin" method="post">
      <table>
        <tr>
          <td>Enter Username</td>
          <td><input type="text" name="username" placeholder="Enter username"
required></td>
        </tr>
        <tr>
          <td>Enter Password</td>
          <td><input type="password" name="password" placeholder="Enter password"
required></td>
        </tr>
        <tr>
          <td></td>
          <td><input type="submit" value ="Login"></td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

labStaff.html

```
<html>
  <head>
    <title>Add Record</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <h3>Lab Staff | Login</h3>
    <form action="labLogin" method="post">
      <table>
        <tr>
          <td>Enter Username</td>
          <td><input type="text" name="username" placeholder="Enter username"
required></td>
        </tr>
        <tr>
          <td>Enter Password</td>
          <td><input type="password" name="password" placeholder="Enter password"
required></td>
        </tr>
        <tr>
          <td></td>
          <td><input type="submit" value ="Login"></td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

LoginLabStaff.java

```
package classes;
public class LoginLabStaff {
   public boolean authenticate(String username, String password ){
      if (username.equalsIgnoreCase("lab") && password.equalsIgnoreCase("lab123"))
      {
         return true;
      }
      return false;
   }
}
```

LoginMedicalStaff.java

```
package classes;
public class LoginMedicalStaff {
   public boolean authenticate(String username, String password ){
      if (username.equalsIgnoreCase("medical") && password.equalsIgnoreCase("medical123"))
      {
         return true;
      }
      return false;
   }
}
```

medicalLogin.hmtl

```
package servlets;

import classes.LoginMedicalStaff;
import java.io.IOException;
import java.io.PrintWriter;
import javax.jms.Session;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class medicalLogin extends HttpServlet {

   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
         throws ServletException, IOException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {

         String username = request.getParameter("username");
         String password = request.getParameter("password");
         LoginMedicalStaff m = new LoginMedicalStaff();
         boolean a = m.authenticate(username, password);

         if(a){
```

```
            HttpSession s = request.getSession();
            s.setAttribute("username", username);
            response.sendRedirect("medicalhome");
        }
        else{
            response.sendRedirect("medicalStaff.html");
        }
      }
   }

   // <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>

}
```

Medicalhome.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class medicalhome extends HttpServlet {

   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {

         out.println("<html>");
         out.println("<head><title>Home</title></head>");
         out.println("<h3>Add Patient's Details</h3>");
         out.println("<form action='showPatient' method='post'>");
         out.println("<table>");
         out.println("<tr>");
         out.println("<td>Name</td>");
         out.println("<td><input type='text' name='pname' placeholder='Enter patient name'
required></td>");
         out.println("</tr>");
         out.println("<tr>");
         out.println("<td>Aadhaar no:</td>");
         out.println("<td><input type='number' name='ano' placeholder='Enter aadhaar no'
required></td>");
         out.println("</tr>");
         out.println("<tr>");
         out.println("<td>Address:</td>");
         out.println("<td><input type='text' name='add' placeholder='Enter patient address'
required></td>");
         out.println("</tr>");
         out.println("<tr>");
         out.println("<td>Mobile no:</td>");
         out.println("<td><input type='number' name='mno' placeholder='Enter patient address'
required></td>");
         out.println("</tr>");
         out.println("<tr>");
         out.println("<td></td>");
         out.println("<td><input type='submit' value='Submit'></td>");
         out.println("</tr>");
         out.println("</table>");
         out.println("</form>");
```

```
            out.println("<a href='index.html'>Log out</a>");
            out.println("</html>");
        }
    }

    // <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>

}
```

showPatient.java

```
package servlets;
```

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class showPatient extends HttpServlet {

   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException, ClassNotFoundException, SQLException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {

         out.println("<!DOCTYPE html>");
         out.println("<html>");
         out.println("<head>");
         out.println("<title>Add Report</title>");
         out.println("</head>");
         String name = request.getParameter("pname");
         String aadhaar = request.getParameter("ano");
         String address = request.getParameter("add");
         String mobileno = request.getParameter("mno");
         String report_result = "-";
         String uid = name+mobileno;

         Class.forName("org.apache.derby.jdbc.ClientDriver");
         Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/COVID-
19","gov","gov");
         PreparedStatement ps = con.prepareStatement("insert into record values(?,?,?,?,?,?)");
         ps.setString(1, uid);
         ps.setString(2, name);
         ps.setString(3, aadhaar);
         ps.setString(4, address);
         ps.setString(5, mobileno);
         ps.setString(6, report_result);

         if(ps.executeUpdate()!=0){
            out.println("Patient Added Successfully!!!");
         }
         else{
            out.println("Sorry, try again!!!");
         }

         out.println("<br><a href='medicalhome'>Back</a>");
```

```
            out.println("</html>");
        }
    }

    // <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 {
        try {
            processRequest(request, response);
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(showPatient.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(showPatient.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    /**
     * 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 {
        try {
            processRequest(request, response);
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(showPatient.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(showPatient.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
```

```
    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>

}
```

logoutMedical.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class logoutMedical extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {

            HttpSession session=request.getSession();
            session.invalidate();
            response.sendRedirect("medicalStaff.html");

        }
    }

    // <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>

}
```

labLogin.java

```
package servlets;

import classes.LoginLabStaff;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class labLogin extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {

            String username = request.getParameter("username");
            String password = request.getParameter("password");
            LoginLabStaff l = new LoginLabStaff();
            boolean a = l.authenticate(username, password);

            if(a){
                HttpSession s = request.getSession();
                s.setAttribute("username", username);
```

```
            response.sendRedirect("labhome");
        }
        else{
            response.sendRedirect("labStaff.html");
        }
      }
   }

   // <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>

}
```

Labhome.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class labhome extends HttpServlet {

   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException, ClassNotFoundException, SQLException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {

         HttpSession s = request.getSession();
         String username = s.getAttribute("username").toString();

         out.println("<!DOCTYPE html>");
         out.println("<html>");
         out.println("<head>");
         out.println("<title>Edit Report</title>");
         out.println("</head>");
         Class.forName("org.apache.derby.jdbc.ClientDriver");
         Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/COVID-
19","gov","gov");

         PreparedStatement ps = con.prepareStatement("select * from record");
         ResultSet rs = ps.executeQuery();

         out.println("<table border='1px'>");
         out.println("<th>UID</th>");
         out.println("<th>Name</th>");
         out.println("<th>Aadhaar No</th>");
         out.println("<th>Address</th>");
         out.println("<th>Mobile No</th>");
         out.println("<th>Report Result</th>");
         out.println("<th>Edit</th>");

         while(rs.next()){
            out.println("<tr>");
```

```
            out.println("<td>"+rs.getString("uid")+"</td>");
            out.println("<td>"+rs.getString("name")+"</td>");
            out.println("<td>"+rs.getString("aadhaar")+"</td>");
            out.println("<td>"+rs.getString("address")+"</td>");
            out.println("<td>"+rs.getString("mobileno")+"</td>");
            out.println("<td>"+rs.getString("report_result")+"</td>");
            out.println("<td>"+"<a class='edit' href='edit?uid=" +
rs.getString("uid")+"'>Edit</a>"+"</td>");
            out.println("</tr>");
          }
          out.println("</table>");
          out.println("<br><a href='index.html'>Log out</a>");
          out.println("</html>");
      }
    }

    // <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 {
      try {
          processRequest(request, response);
      } catch (ClassNotFoundException ex) {
          Logger.getLogger(labhome.class.getName()).log(Level.SEVERE, null, ex);
      } catch (SQLException ex) {
          Logger.getLogger(labhome.class.getName()).log(Level.SEVERE, null, ex);
      }
    }

    /**
     * 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 {
      try {
          processRequest(request, response);
```

```
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(labhome.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(labhome.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

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

}
```

Edit.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class updatedReport extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code. */
            HttpSession s = request.getSession();
            String username = s.getAttribute("username").toString();

            Class.forName("org.apache.derby.jdbc.ClientDriver");
            Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/COVID-
19","gov","gov");
```

```
            PreparedStatement ps = con.prepareStatement("select * from record");
            ResultSet rs = ps.executeQuery();

            out.println("<table border='1px'>");
            out.println("<th>UID</th>");
            out.println("<th>Name</th>");
            out.println("<th>Aadhaar No</th>");
            out.println("<th>Address</th>");
            out.println("<th>Mobile No</th>");
            out.println("<th>Report Result</th>");
            out.println("<th>Edit</th>");

            while(rs.next()){
                out.println("<tr>");
                out.println("<td>"+rs.getString("uid")+"</td>");
                out.println("<td>"+rs.getString("name")+"</td>");
                out.println("<td>"+rs.getString("aadhaar")+"</td>");
                out.println("<td>"+rs.getString("address")+"</td>");
                out.println("<td>"+rs.getString("mobileno")+"</td>");
                out.println("<td>"+rs.getString("report_result")+"</td>");
                out.println("<td>"+"<a class='edit' href='edit?uid=" +
rs.getString("uid")+"'>Edit</a>"+"</td>");
                out.println("</tr>");
            }
            out.println("</table>");
            out.println("<br><a href='index.html'>Log out</a>");
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(updatedReport.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(updatedReport.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    // <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>

}
```

Updateq.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class updateq extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code. */
```

```
            String uid = request.getParameter("uid");
            String report = request.getParameter("report");

            HttpSession s = request.getSession();
            String username = s.getAttribute("username").toString();

            Class.forName("org.apache.derby.jdbc.ClientDriver");
            Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/COVID-
19","gov","gov");

            PreparedStatement ps = con.prepareStatement("update record set report_result = ? where
uid = ?");

            ps.setString(1, report);
            ps.setString(2, uid);

            if(ps.executeUpdate()!=0) {
               response.sendRedirect("updatedReport");
            }

            else{
               out.println("Sorry Try Again!");
            }

        } catch (ClassNotFoundException ex) {
            Logger.getLogger(updateq.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(updateq.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    // <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>

}
```

updatedReport.java

```
package servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class updatedReport extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code. */
            HttpSession s = request.getSession();
            String username = s.getAttribute("username").toString();
```

```
        Class.forName("org.apache.derby.jdbc.ClientDriver");
        Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/COVID-
19","gov","gov");

        PreparedStatement ps = con.prepareStatement("select * from record");
        ResultSet rs = ps.executeQuery();

        out.println("<table border='1px'>");
        out.println("<th>UID</th>");
        out.println("<th>Name</th>");
        out.println("<th>Aadhaar No</th>");
        out.println("<th>Address</th>");
        out.println("<th>Mobile No</th>");
        out.println("<th>Report Result</th>");
        out.println("<th>Edit</th>");

        while(rs.next()){
           out.println("<tr>");
           out.println("<td>"+rs.getString("uid")+"</td>");
           out.println("<td>"+rs.getString("name")+"</td>");
           out.println("<td>"+rs.getString("aadhaar")+"</td>");
           out.println("<td>"+rs.getString("address")+"</td>");
           out.println("<td>"+rs.getString("mobileno")+"</td>");
           out.println("<td>"+rs.getString("report_result")+"</td>");
           out.println("<td>"+"<a class='edit' href='edit?uid=" +
rs.getString("uid")+"'>Edit</a>"+"</td>");
           out.println("</tr>");
        }
        out.println("</table>");
        out.println("<br><a href='index.html'>Log out</a>");
     } catch (ClassNotFoundException ex) {
        Logger.getLogger(updatedReport.class.getName()).log(Level.SEVERE, null, ex);
     } catch (SQLException ex) {
        Logger.getLogger(updatedReport.class.getName()).log(Level.SEVERE, null, ex);
     }
  }

  // <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>

}
```