**AuditMan Coding Metrics**

1. **LoginModel.java**

|  |
| --- |
| Package Model; |
|  |  |
|  | import java.sql.DriverManager; |
|  | import java.sql.ResultSet; |
|  | import java.sql.SQLException; |
|  |  |
|  | import javax.servlet.http.HttpSession; |
|  |  |
|  | import com.mysql.jdbc.Connection; |
|  | import com.mysql.jdbc.Statement; |
|  |  |
|  | public class LoginModel |
|  | { |
|  | public boolean flag=true; |
|  | public LoginModel(HttpSession hs) |
|  | { |
|  | String uname=(String)hs.getAttribute("Id"); |
|  | String pass=(String)hs.getAttribute("Password"); |
|  | try |
|  | { |
|  | Class.forName("com.mysql.jdbc.Driver"); |
|  | Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/auditman", "root", ""); |
|  | Statement s=(Statement)con.createStatement(); |
|  | ResultSet r=s.executeQuery("SELECT \* FROM `list` WHERE `Id`='"+uname+"' AND `Password`='"+pass+"'"); |
|  | if(!r.next()) |
|  | flag=false; |
|  | else |
|  | { |
|  | hs.setAttribute("Position", r.getString("Position")); |
|  | hs.setAttribute("Name", r.getString("Name")); |
|  | hs.setAttribute("Address", r.getString("Address")); |
|  | hs.setAttribute("Aadhar", r.getString("Aadhar")); |
|  | hs.setAttribute("Email", r.getString("Email")); |
|  | hs.setAttribute("Mobile", r.getString("Mobile")); |
|  | } |
|  | } |
|  | catch(ClassNotFoundException e) |
|  | { |
|  | e.printStackTrace(); |
|  | } |
|  | catch(SQLException e) |
|  | { |
|  | e.printStackTrace(); |
|  | } |
|  | } |
|  | } |

**(a) Lines of Code (LOC)**

The above code has 46 LOC (Lines of Code).

**(b) Cyclomatic Complexity**

The cyclomatic complexity of the above code is 4.

**2. loginControl.java**

|  |
| --- |
| package Controller; |
|  |  |
|  | import java.io.IOException; |
|  | import javax.servlet.ServletException; |
|  | 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; |
|  |  |
|  | import Model.LoginModel; |
|  | @WebServlet("/loginControl") |
|  | public class loginControl extends HttpServlet |
|  | { |
|  | private static final long serialVersionUID = 1L; |
|  | public loginControl() |
|  | { |
|  | super(); |
|  | } |
|  | protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException |
|  | { |
|  | String uname=request.getParameter("uname"); |
|  | String pass=request.getParameter("pass"); |
|  | HttpSession hs=request.getSession(); |
|  | hs.setAttribute("Id", uname); |
|  | hs.setAttribute("Password", pass); |
|  | LoginModel ob=new LoginModel(hs); |
|  | if(ob.flag==false) |
|  | response.sendRedirect("LogineError.jsp"); |
|  | else |
|  | response.sendRedirect((String)hs.getAttribute("Position")+".jsp"); |
|  | } |
|  | } |

**(a) Lines of Code (LOC)**

The above code has 33 LOC (Lines of Code).

**(b) Cyclomatic Complexity**

* The cyclomatic complexity of loginControl is 1.
* The cyclomatic complexity of doPost is 2.