

## Source Code

### Project Name:- Learner's Academy

#### login.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Login</title>
<link type="text/css" rel="stylesheet" href="css/Login.css">
</head>
<body style="background-image: url('css/background.jpg');">

<center> <h1> Admin Login </h1> </center>
<form action="AdminControllerServlet" method="get">
<div class="container">
<input type="hidden" name="command" value="LOGIN" />
<label>Username : </label>
<br/>
<input type="text" placeholder="Enter Username" name="username" required>
<br/>
<label>Password : </label>
<br/>
<input type="password" placeholder="Enter Password" name="password" required>
<br/>
<button type="submit">Login</button>
<br/>
<input type="checkbox" checked="checked"> Remember me

</div>
</form>
</body>
</html>
```

## classes-list.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>List of Classes</title>
<link type="text/css" rel="stylesheet" href="css/style.css">
</head>
<body style="background-image: url('css/background.jpg');">
<div id="page">
<jsp:include page="left-list.jsp" />
<div id="wrapper">
<div id="header">
<h3>Classes</h3>
</div>
</div>

<div id="container">
<div id="content">
<table>
<tr>
<th>Section</th>
<th>Subject</th>
<th>Teacher</th>
<th>Time</th>
<th>List of Students</th>
</tr>

<c:forEach var="tempClass" items="${CLASSES_LIST}">
<tr>

<c:url var="tempLink" value="AdminControllerServlet">
<c:param name="command" value="ST_LIST" />
<c:param name="classId" value="${tempClass.id}" />
<c:param name="section" value="${tempClass.section}" />
<c:param name="subject" value="${tempClass.subject}" />
</c:url>

<td>${tempClass.section}</td>
<td>${tempClass.subject}</td>
<td>${tempClass.teacher}</td>
<td>${tempClass.time}</td>
<td><a href="${tempLink}">List</a></td>
</tr>
</c:forEach>
</table>
</div>
</div>
</div>
</body>
</html>
```

## class-students.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Students of a Class</title>
<link type="text/css" rel="stylesheet" href="css/style.css">
</head>
<body style="background-image: url('css/background.jpg');">
<div id="page" >
<jsp:include page="left-list.jsp" />

<div id="wrapper">
<div id="header">
<h3>Students of ${SUBJECT} class section ${SECTION} </h3>
</div>
</div>

<div id="container">
<div id="content">
<table>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>age</th>
</tr>
<c:forEach var="tempStudent" items="${STUDENTS_LIST}">
<tr>
<td>${tempStudent.fname}</td>
<td>${tempStudent.lname}</td>
<td>${tempStudent.age}</td>
</tr>
</c:forEach>
</table>
</div>
</div>
</div>
</body>
</html>
```

# students-list.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>List of Students</title>
<link type="text/css" rel="stylesheet" href="css/style.css">
</head>
<body style="background-image: url('css/background.jpg');">
<div id="page" >
<jsp:include page="left-list.jsp" />

<div id="wrapper">
<div id="header">
<h3>Students</h3>
</div>
</div>

<div id="container">
<div id="content">
<table>
<tr>

<th>First Name</th>
<th>Last Name</th>
<th>age</th>

</tr>
<c:forEach var="tempStudent" items="${STUDENT_LIST }">
<tr>
<td>${tempStudent.fname}</td>
<td>${tempStudent.lname}</td>
<td>${tempStudent.age}</td>
</tr>
</c:forEach>
</table>
</div>
</div>
</div>

</body>
</html>
```

# Subjects-list.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>List of Subjects</title>
<link type="text/css" rel="stylesheet" href="css/style.css">
</head>
<body style="background-image: url('css/background.jpg');">
<div id="page">
<jsp:include page="left-List.jsp" />

<div id="wrapper">

<div id="header">
<h3>Subjects</h3>
</div>
</div>

<div id="container">

<div id="content">

<table>
<tr>

<th>Name</th>
<th>Shortcut</th>

</tr>

<c:forEach var="tempSubject" items="${SUBJECTS_LIST }">
<tr>

<td>${tempSubject.name}</td>
<td>${tempSubject.shortcut}</td>

</tr>

</c:forEach>

</table>
</div>
</div>
</div>

</body>
</html>
```

## teachers-list.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>List of Teachers</title>
<link type="text/css" rel="stylesheet" href="css/style.css">
</head>
<body style="background-image: url('css/background.jpg');">
<div id="page">
<jsp:include page="left-list.jsp" />

<div id="wrapper">
<div id="header">
<h3>Teachers</h3>
</div>
</div>

<div id="container">
<div id="content">
<table>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>age</th>
</tr>
<c:forEach var="tempStudent" items="${TEACHERS_LIST}">
<tr>
<td>${tempStudent.fname}</td>
<td>${tempStudent.lname}</td>
<td>${tempStudent.age}</td>
</tr>
</c:forEach>

</table>
</div>
</div>
</div>

</body>
</html>
```

## DBConnection.java

```
package admin;

import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.ArrayList;
import java.util.List;

import javax.sql.DataSource;

import model.Student;
import model.Subject;
import model.Teacher;
import model.Class;

public class DBConnection {

    private DataSource dataSource;

    public DBConnection(DataSource dataSource) {
        this.dataSource = dataSource;
    }

    public List<Student> getStudents() {

        List<Student> students = new ArrayList<>();

        Connection myConn = null;
        Statement myStmt = null;
        ResultSet myRs = null;

        try {

            // get a connection
            myConn = dataSource.getConnection();

            // create sql stmt
            String sql = "SELECT * FROM students";
            myStmt = myConn.createStatement();

            // execute query
            myRs = myStmt.executeQuery(sql);

            // process result
            while (myRs.next()) {
```

```

// retrieve data from result set row
int id = myRs.getInt("id");
String firstName = myRs.getString("fname");
String lastName = myRs.getString("lname");
int age = myRs.getInt("age");
int aclass = myRs.getInt("class");

// create new student object
Student tempStudent = new Student(id, firstName, lastName, age, aclass);

// add it to the list of students
students.add(tempStudent);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return students;

}

public List<Teacher> getTeachers() {

List<Teacher> teachers = new ArrayList<>();

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM teachers";
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

// process result
while (myRs.next()) {

```



```

// retrieve data from result set row
int id = myRs.getInt("id");
String firstName = myRs.getString("fname");
String lastName = myRs.getString("lname");
int age = myRs.getInt("age");

// create new student object
Teacher temp = new Teacher(id, firstName, lastName, age);

// add it to the list of students
teachers.add(temp);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return teachers;

}

public List<Subject> getSubjects() {

List<Subject> subjects = new ArrayList<>();

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM subjects";
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

// process result
while (myRs.next()) {

```

```

// retrieve data from result set row
int id = myRs.getInt("id");
String name = myRs.getString("name");
String shortcut = myRs.getString("shortcut");

// create new student object
Subject temp = new Subject(id, name, shortcut);

// add it to the list of students
subjects.add(temp);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return subjects;

}

public List<Class> getClasses() {

List<Class> classes = new ArrayList<>();

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM classes";
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

// process result
while (myRs.next()) {

// retrieve data from result set row
int id = myRs.getInt("id");

```

```

int section = myRs.getInt("section");
int subject = myRs.getInt("subject");
int teacher = myRs.getInt("teacher");
String time = myRs.getString("time");

Teacher tempTeacher = loadTeacher(teacher);
Subject tempSubject = loadSubject(subject);

String teacher_name = tempTeacher.getFname() + " " + tempTeacher.getLname();

// create new student object
Class temp = new Class(id, section, teacher_name, tempSubject.getName(), time);

// add it to the list of students
classes.add(temp);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return classes;

}

public Teacher loadTeacher(int teacherId) {

Teacher theTeacher = null;

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM teachers WHERE id = " + teacherId;
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

```

```

// process result
while (myRs.next()) {

// retrieve data from result set row
int id = myRs.getInt("id");
String fname = myRs.getString("fname");
String lname = myRs.getString("lname");
int age = myRs.getInt("age");
theTeacher = new Teacher(id, fname, lname, age);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return theTeacher;

}

public Subject loadSubject(int subjectId) {

Subject theSubject = null;

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM subjects WHERE id = " + subjectId;
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

// process result
while (myRs.next()) {

// retrieve data from result set row
int id = myRs.getInt("id");
String name = myRs.getString("name");

```

```

String shortcut = myRs.getString("shortcut");

theSubject = new Subject(id, name, shortcut);

}

} catch (Exception e) {
// TODO: handle exception
} finally {
// close JDBC objects
close(myConn, myStmt, myRs);
}
return theSubject;

}

public Class loadClass(int classId) {

Class theClass = null;

Connection myConn = null;
Statement myStmt = null;
ResultSet myRs = null;

try {

// get a connection
myConn = dataSource.getConnection();

// create sql stmt
String sql = "SELECT * FROM classes WHERE id = " + classId;
myStmt = myConn.createStatement();

// execute query
myRs = myStmt.executeQuery(sql);

// process result
while (myRs.next()) {

// retrieve data from result set row
int id = myRs.getInt("id");
int section = myRs.getInt("section");
int subject = myRs.getInt("subject");
int teacher = myRs.getInt("teacher");
String time = myRs.getString("time");

Teacher tempTeacher = loadTeacher(teacher);
Subject tempSubject = loadSubject(subject);

```

```
String teacher_name = tempTeacher.getFname() + " " + tempTeacher.getLname();
```

```
}
```

```
} catch (Exception e) {  
    // TODO: handle exception  
} finally {  
    // close JDBC objects  
    close(myConn, myStmt, myRs);  
}  
return theClass;
```

```
}
```

```
public List<Student> loadClassStudents(int classId) {
```

```
    List<Student> students = new ArrayList<>();
```

```
    Connection myConn = null;  
    Statement myStmt = null;  
    ResultSet myRs = null;
```

```
    try {
```

```
        // get a connection  
        myConn = dataSource.getConnection();
```

```
        // create sql stmt  
        String sql = "SELECT * FROM students WHERE class = " + classId;  
        myStmt = myConn.createStatement();
```

```
        // execute query  
        myRs = myStmt.executeQuery(sql);
```

```
        // process result  
        while (myRs.next()) {
```

```
            // retrieve data from result set row  
            int id = myRs.getInt("id");  
            String firstName = myRs.getString("fname");  
            String lastName = myRs.getString("lname");  
            int age = myRs.getInt("age");  
            int aclass = myRs.getInt("class");
```

```
            // create new student object  
            Student tempStudent = new Student(id, firstName, lastName, age, aclass);  
            students.add(tempStudent);
```

```

    }

    } catch (Exception e) {
    // TODO: handle exception
    } finally {
    // close JDBC objects
    close(myConn, myStmt, myRs);
    }
    return students;

}

private void close(Connection myConn, Statement myStmt, ResultSet myRs) {

    try {
    if (myRs != null) {
    myRs.close();
    }
    if (myStmt != null) {
    myStmt.close();
    }
    if (myConn != null) {
    myConn.close();
    }
    } catch (Exception e) {
    e.printStackTrace();
    }
    }
}

```

## AdminControllerServlet.java

```
package admin;

import java.io.IOException;
import java.util.List;

import javax.annotation.Resource;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.sql.DataSource;

import model.*;
import model.Class;
//import main.java.model.Subject;
//import main.java.model.Teacher;
//import main.java.model.Class;

/**
 * Servlet implementation class AdminControllerServlet
 */
@WebServlet("/AdminControllerServlet")
public class AdminControllerServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    private DBConnection dbconnection;

    @Resource(name = "administrative-portal")
    private DataSource datasource;

    @Override
    public void init() throws ServletException {

        super.init();

        // create instance of db util, to pass in conn pool object
        try {
            dbconnection = new DBConnection(datasource);
        } catch (Exception e) {
            throw new ServletException(e);
        }
    }
}
```



```

    }

}

/**
 * @see HttpServlet#HttpServlet()
 */
public AdminControllerServlet() {
    super();
    // TODO Auto-generated constructor stub
}

@Override
protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws
ServletException, IOException {

    doGet(req, resp);
}

/**
 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
 * response)
 */
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    // TODO Auto-generated method stub
    try {

        // read the "command" parameter
        String command = request.getParameter("command");

        if (command == null) {
            command = "CLASSES";
        }

        // if no cookies
        if (!getCookies(request, response) && (!command.equals("LOGIN"))) {

            response.sendRedirect("/Administrative-Portal/login.jsp");
        }

        else {

            // if there is no command, how to handle

            // route the data to the appropriate method
            switch (command) {

```

```

        case "STUDENTS":
            studentsList(request, response);
            break;

        case "TEACHERS":
            teachersList(request, response);
            break;

        case "SUBJECTS":
            subjectList(request, response);
            break;

        case "CLASSES":
            classestList(request, response);
            break;

        case "ST_LIST":
            classStudentsList(request, response);
            break;

        case "LOGIN":
            login(request, response);
            break;

        default:
            classestList(request, response);

    }
}
} catch (Exception e) {
    throw new ServletException(e);
}
// response.getWriter().append("Served at: ").append(request.getContextPath());
}

```

private void studentsList(HttpServletRequest request, HttpServletResponse response) throws Exception {

```

    // get students from db util
    List<Student> students = dbconnection.getStudents();

    // add students to the request
    request.setAttribute("STUDENT_LIST", students);

    // send it to the jsp view page
    RequestDispatcher dispatcher = request.getRequestDispatcher("/list-students.jsp");
    dispatcher.forward(request, response);

```

```

}

```

```

        private void teachersList(HttpServletRequest request, HttpServletResponse response) throws
Exception {
            // get students from db util
            List<Teacher> teachers = dbconnection.getTeachers();

            // add students to the request
            request.setAttribute("TEACHERS_LIST", teachers);

            // send it to the jSP view page
            RequestDispatcher dispatcher = request.getRequestDispatcher("/teachers-list.jsp");
            dispatcher.forward(request, response);

        }

```

```

        private void subjectList(HttpServletRequest request, HttpServletResponse response) throws
Exception {
            // get subjects from db util
            List<Subject> subjects = dbconnection.getSubjects();

            // add subjects to the request
            request.setAttribute("SUBJECTS_LIST", subjects);

            // send it to the jSP view page
            RequestDispatcher dispatcher = request.getRequestDispatcher("/subjects-list.jsp");
            dispatcher.forward(request, response);

        }

```

```

        private void classestList(HttpServletRequest request, HttpServletResponse response) throws
Exception {
            // get subjects from db util
            List<Class> classes = dbconnection.getClasses();

            // add subjects to the request
            request.setAttribute("CLASSES_LIST", classes);

            // send it to the jSP view page
            RequestDispatcher dispatcher = request.getRequestDispatcher("/classes-list.jsp");
            dispatcher.forward(request, response);

        }

```

```

        private void login(HttpServletRequest request, HttpServletResponse response) throws Exception
{
            String username = request.getParameter("username");
            String password = request.getParameter("password");

```

```

        if (username.toLowerCase().equals("admin") &&
password.toLowerCase().equals("admin")) {

            Cookie cookie = new Cookie(username, password);

            // Setting the maximum age to 1 day
            cookie.setMaxAge(86400); // 86400 seconds in a day

            // Send the cookie to the client
            response.addCookie(cookie);
            classestList(request, response);
        } else {
            RequestDispatcher dispatcher = request.getRequestDispatcher("/login.jsp");
            dispatcher.forward(request, response);
        }
    }

    private void classStudentsList(HttpServletRequest request, HttpServletResponse response)
throws Exception {

        int classId = Integer.parseInt(request.getParameter("classId"));
        String section = request.getParameter("section");
        String subject = request.getParameter("subject");

        // get subjects from db util
        List<Student> students = dbconnection.loadClassStudents(classId);

        // add subjects to the request
        request.setAttribute("STUDENTS_LIST", students);
        request.setAttribute("SECTION", section);
        request.setAttribute("SUBJECT", subject);
        // send it to the jSP view page
        RequestDispatcher dispatcher = request.getRequestDispatcher("/class-students.jsp");
        dispatcher.forward(request, response);
    }

    private boolean getCookies(HttpServletRequest request, HttpServletResponse response) throws
Exception {
        boolean check = false;
        Cookie[] cookies = request.getCookies();
        // Find the cookie of interest in arrays of cookies
        for (Cookie cookie : cookies) {
            if (cookie.getName().equals("admin") && cookie.getValue().equals("admin")) {
                check = true;
                break;
            }
        }
        return check;
    }

```

```
}  
}
```

## TestServlet.java

```
package admin;  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.ResultSet;  
import java.sql.Statement;  
  
import javax.annotation.Resource;  
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.sql.DataSource;  
  
/**  
 * Servlet implementation class TestServlet  
 */  
@WebServlet("/TestServlet")  
public class TestServlet extends HttpServlet {  
    private static final long serialVersionUID = 1L;  
  
    //Define datasource/connection pool for reference  
  
    @Resource(name="administrative-portal")  
    private DataSource dataSource;  
  
    /**  
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)  
     */  
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws  
ServletException, IOException {  
  
        // Set the printwriter  
        PrintWriter out = response.getWriter();  
        response.setContentType("text/plain");  
  
        // establish connection to the DB  
        Connection myConn = null;
```

```
Statement myStmt = null;
ResultSet myRs = null;

try {

    myConn = dataSource.getConnection();
    //create a sql statement
    String sql = "select * from students";
    myStmt = myConn.createStatement();

    //execute the sql statement
    myRs = myStmt.executeQuery(sql);

    //process the resultset
    while(myRs.next()) {
        String fname = myRs.getString("fname");
        out.println(fname);
    }
    catch(Exception e) {
        e.printStackTrace();
    }
}
}
```

## Class.java

```
package model;

public class Class {

    private int id;
    private int section;
    private String teacher;
    private String subject;
    private String time;

    public Class(int id, int section, String teacher, String subject, String time)
    {
        super();
        this.id = id;
        this.section = section;
        this.teacher = teacher;
        this.subject = subject;
        this.time = time;
    }

    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public int getSection() {
        return section;
    }
    public void setSection(int section) {
        this.section = section;
    }
    public String getTeacher() {
        return teacher;
    }
    public void setTeacher(String teacher) {
        this.teacher = teacher;
    }
    public String getSubject() {
        return subject;
    }
    public void setSubject(String subject) {
        this.subject = subject;
    }
    public String getTime() {
        return time;
    }
    public void setTime(String time) {
        this.time = time;
    }
}
```

## Student.java

```
package model;

public class Student {
    private int id;
    private String fname;
    private String lname;
    private int age;
    private int aclass;

    public Student(int id, String fname, String lname, int age, int aclass) {
        super();
        this.id = id;
        this.fname = fname;
        this.lname = lname;
        this.age = age;
        this.aclass = aclass;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    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 int getAge() {
        return age;
    }

    public void setAge(int age) {
        this.age = age;
    }

    public int getAclass() {
        return aclass;
    }

    public void setAclass(int aclass) {
        this.aclass = aclass;
    }

    @Override
    public String toString() {
        return "Student [id=" + id + ", fname=" + fname + ", lname=" + lname +
        ", age=" + age + ", aclass=" + aclass + "]";
    }
}
```



## Subjects.java

```
package model;

public class Subject {

    private int id;
    private String name;
    private String shortcut;

    public Subject(int id, String name, String shortcut ) {
        super();
        this.id = id;
        this.name = name;
        this.shortcut = shortcut;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getShortcut() {
        return shortcut;
    }

    public void setShortcut(String shortcut) {
        this.shortcut = shortcut;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}
```

## Teachers.java

```
package model;

public class Teacher {

    private int id;
    private String fname;
    private String lname;
    private int age;

    public Teacher(int id, String fname, String lname, int age) {
        super();
        this.id = id;
        this.fname = fname;
        this.lname = lname;
        this.age = age;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    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 int getAge() {
        return age;
    }

    public void setAge(int age) {
        this.age = age;
    }
}
```

## CSS Files

### Add-student-style.css:-

```
form {  
    margin-top: 10px;  
}  
  
label {  
    font-size: 16px;  
    width: 100px;  
    display: block;  
    text-align: right;  
    margin-right: 10px;  
    margin-top: 8px;  
    margin-bottom: 8px;  
}  
  
input {  
    width: 250px;  
    border: 1px solid #666;  
    border-radius: 5px;  
    padding: 4px;  
    font-size: 16px;  
}  
  
.save {  
    font-weight: bold;  
    width: 130px;  
    padding: 5px 10px;
```

```
margin-top: 30px;
background: #cccccc;
}
```

```
table {
border-style:none;
width:50%;
}
```

```
tr:nth-child(even) {background: #FFFFFF}
tr:nth-child(odd) {background: #FFFFFF}
```

```
tr {
border-style:none;
text-align:left;
}
```

### **login.css:-**

```
Body {
font-family: Calibri, Helvetica, sans-serif;
background-color: pink;
}
```

```
button {
justify-content: center;
background-color: #4CAF50;
width: 100%;
color: white;
padding: 15px;
```

```
    margin: 10px 0px;
    border: none;
    cursor: pointer;
  }
form {
    border: 1.4px solid black;
    width: 45%;
    margin: 0 auto;
}
input[type=text], input[type=password] {
    justify-content: center;
    width: 100%;
    margin: 8px 0;
    padding: 12px 20px;
    display: inline-block;
    border: 2px solid green;
    box-sizing: border-box;
}
button:hover {
    opacity: 0.7;
}

.container {
    justify-content: center;
    padding: 15px;
    background-color: #FFF8DC;
}
```

## **style.css:-**

```
html, body{
```

```
    padding:0px;
```

```
    font-family:Verdana, Arial, Helvetica, sans-serif;
```

```
    margin-left: 103px; /* Same as the width of the sidenav */
```

```
}
```

```
table {
```

```
    border-collapse:collapse;
```

```
    border:1px solid gray;
```

```
    font-family: Tahoma,Verdana,Segoe,sans-serif;
```

```
    width:72%;
```

```
}
```

```
th {
```

```
    border-bottom:1px solid gray;
```

```
    background:none repeat scroll 0 0 #0775d3;
```

```
    padding:10px;
```

```
    color: #FFFFFFF;
```

```
}
```

```
tr {
```

```
    border-top:1px solid gray;
```

```
    text-align:center;
```

```
}
```

```
tr:nth-child(even) {background: #FFFFFFF}
```

```
tr:nth-child(odd) {background: #BBBBBB}
```

```
#wrapper {width: 100%; text-align: center; }
```

```
#header {width: 72%; background: #0775d3; margin-top: 0px; padding:5px 0px 15px 0px;}
```

```
#header h3 {width: 100%; margin:auto; color: #FFFFFF;}
```

```
#container {width: 100%; margin:auto}
```

```
#container h3 {color: #000;}
```

```
#container #content {margin-top: 20px;}
```

```
.add-student-button {
```

```
    border: 1px solid #666;
```

```
    border-radius: 5px;
```

```
    padding: 4px;
```

```
    font-size: 12px;
```

```
    font-weight: bold;
```

```
    width: 120px;
```

```
    padding: 5px 10px;
```

```
    margin-bottom: 15px;
```

```
    background: #cccccc;
```

```
}
```

```
.sidenav {
```

```
    height: 100%;
```

```
    width: 200px;
```

```
    border-color: #FFFFFF;
```

```
    position: fixed;
```

```
z-index: 1;
top: 0;
left: 0;
background-color: #000080;
overflow-x: hidden;
padding-top: 20px;
}
```

```
.sidenav a {
padding: 6px 6px 6px 32px;
text-decoration: none;
font-size: 25px;
color: white;
display: block;
}
```

```
.sidenav a:hover {
color: blue;
}
```

```
@media screen and (max-height: 450px) {
.sidenav {padding-top: 15px;}
.sidenav a {font-size: 18px;}
}
```

```
#page{

height: 100%;
```



```
}
```

```
#logo{
```

```
    font-family: 'Trebuchet MS', sans-serif;
```

```
    text-align: center;
```

```
    color: white;
```

```
}
```

```
.bar-item{
```

```
    border-color: #FFFFFF;
```

```
    border-width: 3px;
```

```
    border-bottom: .5px solid rgba(255, 255, 255, 0.247);
```

```
}
```