





















































Project Name	Back-end Admin for Learner's Academy
Developers Name	Prathamesh Chinchamatpure
Phase	Become a back-end expert
Part	Source Code

## Folder Structure:

- ✖  LearnersAcademy
  - >  Deployment Descriptor: Archetype Created Web Applic
  - ✖  Java Resources
    - ✖  src/main/java
      - ✖  com.entities
        - ✖  Class.java
          - >  Class
        - >  Students.java
        - >  Subjects.java
        - >  Teachers.java
      - ✖  com.filters
        - ✖  FilterServletRequests.java
          - >  FilterServletRequests
      - ✖  com.servlets
        - >  ClassesRetrieval.java
        - >  ClassReport.java
        - >  Login.java
        - >  StudentsRetrieval.java
        - >  SubjectsRetrieval.java
        - >  TeachersRetrieval.java
        - >  UpdateClasses.java
      - ✖  com.utilities
        - >  HibernateUtil.java

- ▼  LearnersAcademy
  - >  Deployment Descriptor: Archetype Created Web Applica
  - >  Java Resources
  - >  JavaScript Resources
  - ▼  DataBase
    -  adminportal1.sql
  - >  Deployed Resources
  - ▼  src
    - ▼  main
      - >  java
      - >  resources
      - ▼  webapp
        - >  css
        - ▼  WEB-INF
          -  web.xml
          -  AssignClassForSubjects.jsp
          -  Assignment.jsp
          -  AssignTeacherToClassForSubjects.jsp
          -  Classes.jsp
          -  ClassReport.jsp
          -  Home.jsp
          -  index.jsp
          -  Login.jsp
          -  Students.jsp
          -  Subjects.jsp
          -  Teachers.jsp
    - >  test
  - >  target
    -  pom.xml

## View:

### AssignmentClassForSubjects.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Class" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>Assignment Of Class</h1>
    </div>
</div>

<div class="w3-container">

</div>

</div>

</body>

</html>
```

## Assignment.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Class" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>Assignment</h1>
    </div>
</div>

<div class="w3-container">
    <br>
    <br>
    1. <a href="AssignTeacherToClassForSubjects.jsp" > Assign Class For
Subjects</a> <br><br>
    2. <a href="AssignTeacherToClassForSubjects.jsp" > Assign Teacher To Class
For Subjects</a>

</div>

</div>
```

```
</body>
```

```
</html>
```

## AssignTeacherToClassForSubjects.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Class" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>Assignment Of Teacher</h1>
    </div>
</div>

<div class="w3-container">

    <form action="UpdateClasses" method="post">
        <br>
        <br>
        <br>

        <label for="sections"> &nbsp;&nbsp;&nbsp; Sections &nbsp;&nbsp;&nbsp;</label>

        <select name="sections" id="sections" required>
            <option value="">select</option>
```



```

        pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Class" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>CLASSES</h1>
    </div>
</div>

<% List<Class> list=(List<Class>)request.getAttribute("class"); %>

<div class="w3-container">

<table>

        <tr>

            <!-- <th>Id</th> -->
                <th>Section</th>
                <th>Teacher</th>
                <th>Subject</th>
            <th>Time</th>

        </tr>
        <% for(Class l:list) {%>
            <tr>

```



```

                                <th><%=l.getSection()%></th>
                                <th><%=l.getTeacher() %></th>
                                <th><%=l.getSubject()%></th>
                                <th><%=l.getTime()%></th>

                                </tr>

                                <%} %>

                                </table>

</div>

</div>

</body>

</html>

```

## ClassReport.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Class" %>
<%@ page import="com.entities.Students" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

```

```

<div class="w3-container w3-grey">
  <div style="text-align:center">
    <h1>Class-Reports</h1>
  </div>
</div>

<% List<Class> list=(List<Class>)request.getAttribute("class"); %>
<% List<Students>
list1=(List<Students>)request.getAttribute("studentsOfSection1"); %>
<% List<Students>
list2=(List<Students>)request.getAttribute("studentsOfSection2"); %>
<div class="w3-container">

```

```

<br>
<br>
<table>

```

```

  <tr> SECTION 1 REPORT</tr>
    <tr>

      <!-- <th>Id</th> -->
      <th>Section</th>
      <th>Teacher</th>
      <th>Subject</th>
      <th>Students</th>

    </tr>

    <th rowspan=<%list.size();%>>

1

    </th>
    &emsp;&emsp;
    <th>
      <%for(Class l:list) {%>

        <%if(l.getSection()==1){ %>
          <%=l.getTeacher() %><br>
        <%} %>

      <%} %>
    </th>

    <th>
      <%for(Class l:list) {%>

        <%if(l.getSection()==1){ %>
          <%=l.getSubject() %><br>
        <%} %>

      <%} %>
    </th>

    <th>

```

```

        <%for(Students l:list1) {%>
            <%if(l.getSection()==1){ %>
                <%=l.getFname()+" "+l.getLname() %><br>
            <%} %>
        <%} %>
    </th>

```

```

    </table>

```

```

<br>
<br>

```

```

<table>

```

```

<tr> SECTION 2 REPORT</tr>
    <tr>

```

```

        <!-- <th>Id</th> -->
        <th>Section</th>
        <th>Teacher</th>
        <th>Subject</th>
        <th>Students</th>

```

```

    </tr>

```

```

    <th rowspan=<%list.size();%>>

```

```

2

```

```

    </th>

```

```

    &emsp;&emsp;

```

```

    <th>

```

```

        <%for(Class l:list) {%>

```

```

            <%if(l.getSection()==2){ %>
                <%=l.getTeacher() %><br>
            <%} %>

```

```

        <%} %>

```

```

    </th>

```

```

    <th>

```

```

        <%for(Class l:list) {%>

```

```

            <%if(l.getSection()==2){ %>

```

```

                <%=l.getSubject() %><br>
            <%} %>
        <%} %>
    </th>

    <th>
        <%for(Students l:list2) {%>

            <%if(l.getSection()==2){ %>
                <%=l.getFname()+" "+l.getLname() %><br>

            <%} %>

        <%} %>
    </th>

</table>

</div>

</div>

</body>

</html>

```

## Home.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>

```

```

        <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
        <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
        <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>Admin Portal</h1>
    </div>
</div>

<div class="w3-container">
Please use navigation sidebar to navigate.
</div>

</div>

</body>

</html>

```

## Index.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.EProduct" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

```

```
</div>
```

```
<div style="margin-left:25%">
```

```
<div class="w3-container w3-grey">  
  <div style="text-align:center">  
    <h1>CLASSES</h1>  
  </div>  
</div>
```

```
<% List<EProduct> list=(List<EProduct>)request.getAttribute("eproduct"); %>
```

```
<div class="w3-container">
```

```
<table>
```

```
    <tr>
```

```
        <th>Name</th>  
        <th>Price</th>  
        <th>DateAdded</th>
```

```
    </tr>
```

```
<% for(EProduct l:list) {%>  
    <tr>  
        <th><%=l.getID()%></th>  
        <th><%=l.getName()%></th>  
        <th><%=l.getPrice()%></th>  
    </tr>  
<%} %>
```

```
    </table>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

## Login.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Login</title>
<link type="text/css" rel="stylesheet" href="css/Login.css">
</head>
<body>

    <div class="center">
        <div class="center1">
<h1> Admin Login </h1>

        <form action="Login" method="post">

            <label>Username : </label>
            <input type="text" placeholder="Enter Username" name="username"
required>
            <br><br>
            <label>Password : </label>
            <input type="password" placeholder="Enter Password" name="password"
required>
            <br><br>
            <div class="center1">
                <button type="submit">Login</button>
            </div>
            <br/>

            <br>
            <input type="checkbox" checked="checked"> Remember me

        </form>
    </div>
</div>

</body>
</html>
```

## Students.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Students" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
```

```

<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
  <h3 class="w3-bar-item">ADMIN PORTAL</h3>
  <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
  <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
  <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
  <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
  <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
  <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
  <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
  <div style="text-align:center">
    <h1>STUDENTS</h1>
  </div>
</div>

<% List<Students> list=(List<Students>)request.getAttribute("students"); %>

<div class="w3-container">

<table>

    <tr>

        <!-- <th>Id</th> -->
        <th>Id</th>
        <th>FirstName</th>
        <th>LastName</th>
        <th>Age</th>
        <th>Section</th>

    </tr>
    <% for(Students l:list) {%>
        <tr>

            <th><%=l.getId()%></th>
            <th><%=l.getFname() %></th>
            <th><%=l.getLname()%></th>
            <th><%=l.getAge() %></th>
            <th><%=l.getSection()%>

        </tr>

```



```
<%} %>
```

```
</table>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

## Subjects.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Subjects" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>
    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

<div style="margin-left:25%">

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>SUBJECTS</h1>
    </div>
</div>

<% List<Subjects> list=(List<Subjects>)request.getAttribute("subjects"); %>
```

```

<div class="w3-container">

<table>

    <tr>

    <th>Id</th>
        <th>SubjectName</th>
        <th>ShortName</th>

    </tr>
    <% for(Subjects l:list) {%>
        <tr>

            <th><%=l.getId()%></th>
            <th><%=l.getName() %></th>
            <th><%=l.getShortcut()%></th>

        </tr>

    <%} %>

    </table>

</div>

</div>

</body>

</html>

```

## Teachers.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.List"%>
<%@ page import="com.entities.Teachers" %>

<!DOCTYPE html>
<html>
<title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="css/dashboard.css">
<link rel="stylesheet" href="css/portal.css">
<body>

<!-- Sidebar -->
<div class="w3-sidebar w3-light-grey w3-bar-block" style="width:25%">
    <h3 class="w3-bar-item">ADMIN PORTAL</h3>
    <a href="class?command=classesfetch" class="w3-bar-item w3-button">CLASSES</a>

```

```

    <a href="teachers?command=teachersfetch" class="w3-bar-item w3-
button">TEACHERS</a>
    <a href="students?command=studentsfetch" class="w3-bar-item w3-
button">STUDENTS</a>
    <a href="subjects?command=subjectsfetch" class="w3-bar-item w3-
button">SUBJECTS</a>
    <a href="Assignment.jsp" class="w3-bar-item w3-button">ASSIGNMENT</a>
    <a href="reporting?command=reportcreation" class="w3-bar-item w3-button">CLASS-
REPORT</a>
    <a href="Login.jsp" class="w3-bar-item w3-button">LOGOUT</a>

</div>

```

```

<div style="margin-left:25%">

```

```

<div class="w3-container w3-grey">
    <div style="text-align:center">
        <h1>TEACHERS</h1>
    </div>
</div>

```

```

<% List<Teachers> list=(List<Teachers>)request.getAttribute("teachers"); %>

```

```

<div class="w3-container">

```

```

<table>

```

```

        <tr>
            <th>Id</th>
            <th>FirstName</th>
            <th>LastName</th>
            <th>Age</th>

        </tr>
        <% for(Teachers l:list) {%>
            <tr>
                <th><%=l.getId()%></th>
                <th><%=l.getFname() %></th>
                <th><%=l.getLname()%></th>
                <th><%=l.getAge()%></th>

            </tr>
        <%} %>

```

```

        </table>

</div>

```

```

</div>

```

```
</body>
```

```
</html>
```

## **Filter**

### **FilterServletRequests.java**

```
package com.filters;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.Filter;
import javax.servlet.FilterChain;
import javax.servlet.FilterConfig;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServletRequest;

/**
 * Servlet Filter implementation class FilterServletRequests
 */
public class FilterServletRequests implements Filter {

    /**
     * Default constructor.
     */
    public FilterServletRequests() {

        // TODO Auto-generated constructor stub

    }

    /**
     * @see Filter#destroy()
     */
}
```

```

public void destroy() {

    // TODO Auto-generated method stub

}

/**
 * @see Filter#doFilter(ServletRequest, ServletResponse, FilterChain)
 */

public void doFilter(ServletRequest request, ServletResponse response, FilterChain
chain) throws IOException, ServletException {

    // TODO Auto-generated method stub

    // place your code here

    HttpServletRequest req=(HttpServletRequest)request;
    Cookie []cookies =req.getCookies();
    Boolean check=false,check1=false;
    PrintWriter out=response.getWriter();
    Boolean cookieUserNameExists=false,cookiePasswordExists=false;
    //response.sendRedirect("Home.jsp");
    if(cookies==null) {

        out.println("Kindly Login . You are redirecting to Login Page");
        RequestDispatcher rd=request.getRequestDispatcher("Login.jsp");
        rd.forward(request,response);
    }else {
        for(Cookie c:cookies) {
            if(c.getName().equals("userName")) {
                cookieUserNameExists=true;
            }
            if(c.getName().equals("passWord")) {
                cookiePasswordExists=true;
            }
        }
        if(cookieUserNameExists && cookiePasswordExists) {
            // pass the request along the filter chain

```

```

        chain.doFilter(request, response);
    }else {
        out.println("You are not Login. Please Login.");
    }
}

// chain.doFilter(request, response);
}

/**
 * @see Filter#init(FilterConfig)
 */
public void init(FilterConfig fConfig) throws ServletException {
    // TODO Auto-generated method stub
}
}

```

## Database Connectivity Support:

### HibernateUtil.java

```

package com.utilities;

import org.hibernate.SessionFactory;
import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;

public class HibernateUtil {

    private static final SessionFactory sessionFactory;

    static {
        try{
            StandardServiceRegistry serviceregistry=new
StandardServiceRegistryBuilder().configure("hibernate.cfg.xml").build();
            Metadata metadata=new
MetadataSources(serviceregistry).getMetadataBuilder().build();
            sessionFactory=metadata.getSessionFactoryBuilder().build();
        }catch(Throwable th) {
            throw new ExceptionInInitializerError();
        }
    }
}

```

```

        }
    }

    public static SessionFactory getSessionFactory() {
        return sessionFactory;
    }
}

```

## Different Servlet Programs

### 1.ClassesRetrieval.java

```

package com.servlets;

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

import javax.servlet.RequestDispatcher;
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 org.hibernate.Session;
import org.hibernate.SessionFactory;

import com.entities.Class;
import com.utilities.HibernateUtil;

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

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

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
     response)

```

```

        */
        protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
            // TODO Auto-generated method stub
            //response.getWriter().append("Served at:
            ").append(request.getContextPath());
            PrintWriter out=response.getWriter();

            SessionFactory factory=HibernateUtil.getSessionFactory();

            Session session=factory.openSession();

            List<Class> list = session.createQuery("From Class").list();

            session.close();
            //request.setAttribute("Product_LIST", students);

            /*for(EProduct p: list)
            {
                out.println("ID:" + String.valueOf(p.getID()) + ",Name: "+p.getName() + ",Price:
                "+String.valueOf(p.getPrice() + ",Date Added: "+p.getDateAdded().toString() + "<br>"));
            }*/

            request.setAttribute("class", list);

            RequestDispatcher rd=request.getRequestDispatcher("Classes.jsp");
            rd.forward(request, response);
        }

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

```

## 2.ClassReport.java

```

package com.servlets;

import java.io.IOException;

import java.util.ArrayList;

import java.util.List;

```



```

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import com.entities.Class;
import com.entities.Students;
import com.utilities.HibernateUtil;
/**
 * Servlet implementation class ClassReport
 */
public class ClassReport extends HttpServlet {
    private static final long serialVersionUID = 1L;
    /**
     * @see HttpServlet#HttpServlet()
     */
    public ClassReport() {
        super();
        // TODO Auto-generated constructor stub
    }
    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        // Section
        //Teachers Name from class Table as per section

```

```
//Subjects for that section from class table
```

```
//Students from student table as per section
```

```
SessionFactory factory=HibernateUtil.getSessionFactory();
```

```
Session session=factory.openSession();
```

```
List<Class> list = session.createQuery("From Class").list();
```

```
session.close();
```

```
ClassReport classReport=new ClassReport();
```

```
List<Students> studentsListOfSection1=classReport.getStudentsBySection(1);
```

```
List<Students> studentsListOfSection2=classReport.getStudentsBySection(2);
```

```
request.setAttribute("class", list);
```

```
request.setAttribute("studentsOfSection1", studentsListOfSection1);
```

```
request.setAttribute("studentsOfSection2", studentsListOfSection2);
```

```
RequestDispatcher rd=request.getRequestDispatcher("ClassReport.jsp");
```

```
rd.forward(request, response);
```

```
}
```

```
/**
```

```
 * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse  
response)
```

```
 */
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)  
throws ServletException, IOException {
```

```
    // TODO Auto-generated method stub
```

```
    doGet(request, response);
```

```
}
```

```
public List<Students> getStudentsBySection(int section){
```

```

SessionFactory factory=HibernateUtil.getSessionFactory();

Session session=factory.openSession();

List<Students> studentsList=session.createQuery("From Students").list();

session.close();

List<Students> listOfSection=new ArrayList<Students>();

for(Students s:studentsList) {
    if(s.getSection()==section) {
        listOfSection.add(s);
    }
}

return listOfSection;
}
}

```

### **3.StudentsRetrieval**

```

package com.servlets;

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

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import org.hibernate.Session;
import org.hibernate.SessionFactory;

import com.entities.Students;
import com.utilities.HibernateUtil;

```

```

/**
 * Servlet implementation class StudentsRetrieval
 */
public class StudentsRetrieval extends HttpServlet {
    private static final long serialVersionUID = 1L;

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

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        SessionFactory factory=HibernateUtil.getSessionFactory();

        Session session=factory.openSession();

        List<Students> list=session.createQuery("From Students").list();

        session.close();

        request.setAttribute("students", list);

        RequestDispatcher rd=request.getRequestDispatcher("Students.jsp");
        rd.forward(request, response);

        //response.getWriter().append("Served at :").append("StudentsRetrieval");
    }

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

```

#### **4.SubjectsRetrieval.java**

```
package com.servlets;

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

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import org.hibernate.Session;
import org.hibernate.SessionFactory;

import com.entities.Subjects;
import com.utilities.HibernateUtil;

/**
 * Servlet implementation class SubjectsRetrieval
 */
public class SubjectsRetrieval extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

```

    }

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

        SessionFactory factory=HibernateUtil.getSessionFactory();

        Session session=factory.openSession();

        List<Subjects> list=session.createQuery("From Subjects").list();

        session.close();

        request.setAttribute("subjects", list);

        RequestDispatcher rd=request.getRequestDispatcher("Subjects.jsp");
        rd.forward(request, response);
        //response.getWriter().append("Served at: ").append("SubjectsRetrieval");
    }

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

```

```
        doGet(request, response);
    }
}
```

## **5.TeachersRetrieval**

```
package com.servlets;
```

```
import java.io.IOException;
```

```
import java.util.List;
```

```
import javax.servlet.RequestDispatcher;
```

```
import javax.servlet.ServletException;
```

```
import javax.servlet.http.HttpServlet;
```

```
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
```

```
import org.hibernate.Session;
```

```
import org.hibernate.SessionFactory;
```

```
import com.entities.Teachers;
```

```
import com.utilities.HibernateUtil;
```

```
/**
```

```
 * Servlet implementation class TeachersRetrieval
```

```
 */
```

```
public class TeachersRetrieval extends HttpServlet {
```

```
    private static final long serialVersionUID = 1L;
```

```
/**
```

```
 * @see HttpServlet#HttpServlet()
```

```

*/

public TeachersRetrieval() {

    super();

    // TODO Auto-generated constructor stub

}

/**
 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
 */

protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

    // TODO Auto-generated method stub

    SessionFactory factory=HibernateUtil.getSessionFactory();

    Session session=factory.openSession();

    List<Teachers> list=session.createQuery("From Teachers").list();

    session.close();

    request.setAttribute("teachers", list);

    RequestDispatcher rd=request.getRequestDispatcher("Teachers.jsp");
    rd.forward(request, response);

    //response.getWriter().append("Served at: ").append("TeachersRetrieval");

}

/**

```



```

        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
        */

        protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

            // TODO Auto-generated method stub

            doGet(request, response);

        }

    }

```

## **6.UpdateClasses.java**

```

package com.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 org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.Transaction;

import com.entities.*;
import com.entities.Class;
import com.utilities.HibernateUtil;

/**
 * Servlet implementation class UpdateClasses
 */

```

```

public class UpdateClasses extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.getWriter().append("Served at: ").append(request.getContextPath());
    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
response)
     */
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        Class c=new Class();//form com.entities.Class

        String section=request.getParameter("sections");
        String teacher=request.getParameter("teachers");

```

```

String subject=request.getParameter("subjects");
String time =request.getParameter("time");
c.setSection(Integer.parseInt(section));
c.setSubject(subject);
c.setTeacher(teacher);
c.setTime(time);
PrintWriter out=response.getWriter();
Transaction transaction=null;
//out.println(section+" "+teacher+" "+subject+" "+time);
try {
SessionFactory factory=HibernateUtil.getSessionFactory();
//doGet(request, response);

Session session=factory.openSession();

transaction=session.beginTransaction();

session.save(c);

transaction.commit();
}catch(Exception e) {
    if(transaction!=null) {
        transaction.rollback();
    }

    e.printStackTrace();
}
}

```

```
}
```

## Login.java

```
package com.servlets;

import java.io.IOException;
import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

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

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

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

        Cookie userName=new
Cookie("userName",request.getParameter("username"));
        Cookie passWord=new
Cookie("passWord",request.getParameter("password"));

        Cookie cookie=null;
        Cookie []cookies =request.getCookies();
        Boolean check=false,check1=false;
        PrintWriter out=response.getWriter();
        Boolean cookieUserNameExists=false,cookiePasswordExists=false;
        //response.sendRedirect("Home.jsp");
    }
}
```

```

        for(Cookie c:cookies) {
            if(c.getName().equals("userName")) {
                cookieUserNameExists=true;
            }
            if(c.getName().equals("passWord")) {
                cookiePasswordExists=true;
            }
        }
        if(!cookieUserNameExists && !cookiePasswordExists)
        {
            if((userName.getValue().equals("Admin")) &&
(passWord.getValue().equals("Admin"))) )
            {
                response.addCookie(userName);
                response.addCookie(passWord);
                userName.setMaxAge(3600);
                passWord.setMaxAge(3600);
                RequestDispatcher
rd=request.getRequestDispatcher("/Home.jsp");
                rd.forward(request, response);
            }else {
                out.println("Enter Valid credential");
            }
        }else {
            if((userName.getValue().equals("Admin")) &&
(passWord.getValue().equals("Admin"))) )
            {
                RequestDispatcher
rd=request.getRequestDispatcher("/Home.jsp");
                rd.forward(request, response);
            }else {
                out.println("Enter Valid credential");
            }
        }
    }

}

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

}

```

```
}
```

## Entities

### 1.Class.java

```
package com.entities;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Table;

@Entity
@Table(name="class")
public class Class {

    @Id @GeneratedValue(strategy=GenerationType.IDENTITY)
    @Column(name="ID")
    private int id;

    @Column(name="section")
    private int section;

    @Column(name="teacher")
    private String teacher;

    @Column(name="subject")
    private String subject;

    @Column(name="time")
    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 Class() {}
    @Override
    public String toString() {
```

```

        return "Class [id=" + id + ", section=" + section + ", teacher=" + teacher + ",
subject=" + subject + ", 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;
    }
}

```

## 2.Students.java

```

package com.entities;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;

@Entity

```

```
@Table(name="students")
public class Students {

    @Id @GeneratedValue
    @Column(name="Id")
    private int id;

    @Column(name="fname")
    private String fname;

    @Column(name="lname")
    private String lname;

    @Column(name="age")
    private int age;

    @Column(name="section")
    private int section;

    // @Column(name="assignedclass")
    // private int aclass;

    public Students(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 getSection() {
        return section;
    }

    public void setSection(int section) {
        this.section = section;
    }

    public Students() {

    }
}
```



```

        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;
        }
    */
}

```

### 3.Subjects.java

```
package com.entities;
```

```
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;

@Entity
@Table(name="subjects")
public class Subjects {

    @Id @GeneratedValue
    @Column(name="ID")
    private int id;

    @Column(name="subjectname")
    private String name;

    @Column(name="shortcut")
    private String shortcut;

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

    public Subjects() {

    }

    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public String getShortcut() {
        return shortcut;
    }
    public void setShortcut(String shortcut) {
```

```

        this.shortcut = shortcut;
    }

}

```

#### 4.Teachers.java

```

package com.entities;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;

@Entity
@Table(name="teachers")
public class Teachers {

    @Id @GeneratedValue
    @Column(name="id")
    private int id;

    @Column(name="fname")
    private String fname;

    @Column(name="lname")
    private String lname;

    @Column(name="age")
    private int age;

    public Teachers() {

    }

    public Teachers(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;
    }
}

```

## Web.xml

```

<!DOCTYPE web-app PUBLIC
"-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd" >

<web-app>
    <display-name>Archetype Created Web Application</display-name>
    <filter>
        <filter-name>FilterServletRequests</filter-name>
        <display-name>FilterServletRequests</display-name>
        <description></description>
        <filter-class>com.filters.FilterServletRequests</filter-class>
    </filter>
    <filter-mapping>
        <filter-name>FilterServletRequests</filter-name>
        <url-pattern>/class</url-pattern>
        <!-- <url-pattern>/students</url-pattern>
            <url-pattern>/subjects</url-pattern>-->
    </filter-mapping>
    <filter-mapping>
        <filter-name>FilterServletRequests</filter-name>
        <url-pattern>/students</url-pattern>
    </filter-mapping>

    <filter-mapping>
        <filter-name>FilterServletRequests</filter-name>
        <url-pattern>/subjects</url-pattern>
    </filter-mapping>

    <filter-mapping>
        <filter-name>FilterServletRequests</filter-name>
        <url-pattern>/teachers</url-pattern>
    </filter-mapping>

```

```

</filter-mapping>

<filter-mapping>
    <filter-name>FilterServletRequests</filter-name>
    <url-pattern>/UpdateClasses</url-pattern>
</filter-mapping>

<filter-mapping>
    <filter-name>FilterServletRequests</filter-name>
    <url-pattern>/reporting</url-pattern>
</filter-mapping>

<filter-mapping>
    <filter-name>FilterServletRequests</filter-name>
    <url-pattern>/Assignment.jsp</url-pattern>
</filter-mapping>

<filter-mapping>
    <filter-name>FilterServletRequests</filter-name>
    <url-pattern>/AssignClassForSubjects.jsp</url-pattern>
</filter-mapping>

<filter-mapping>
    <filter-name>FilterServletRequests</filter-name>
    <url-pattern>/AssignTeacherToClassForSubjects.jsp</url-
pattern>
</filter-mapping>

<servlet>
    <servlet-name>Login</servlet-name>
    <display-name>Login</display-name>
    <description></description>
    <servlet-class>com.servlets.Login</servlet-class>
</servlet>
<servlet>
    <servlet-name>ClassesRetrieval</servlet-name>
    <display-name>ClassesRetrieval</display-name>
    <description></description>
    <servlet-class>com.servlets.ClassesRetrieval</servlet-class>
</servlet>
<servlet>
    <servlet-name>StudentsRetrieval</servlet-name>
    <display-name>StudentsRetrieval</display-name>
    <description></description>
    <servlet-class>com.servlets.StudentsRetrieval</servlet-class>
</servlet>
<servlet>
    <servlet-name>SubjectsRetrieval</servlet-name>
    <display-name>SubjectsRetrieval</display-name>
    <description></description>
    <servlet-class>com.servlets.SubjectsRetrieval</servlet-class>
</servlet>
<servlet>
    <servlet-name>TeachersRetrieval</servlet-name>

```

```

        <display-name>TeachersRetrieval</display-name>
        <description></description>
        <servlet-class>com.servlets.TeachersRetrieval</servlet-class>
    </servlet>
    <servlet>
        <servlet-name>UpdateClasses</servlet-name>
        <display-name>UpdateClasses</display-name>
        <description></description>
        <servlet-class>com.servlets.UpdateClasses</servlet-class>
    </servlet>
    <servlet>
        <servlet-name>ClassReport</servlet-name>
        <display-name>ClassReport</display-name>
        <description></description>
        <servlet-class>com.servlets.ClassReport</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>Login</servlet-name>
        <url-pattern>/Login</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>ClassesRetrieval</servlet-name>
        <url-pattern>/class</url-pattern>
    </servlet-mapping>

    <servlet-mapping>
        <servlet-name>StudentsRetrieval</servlet-name>
        <url-pattern>/students</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>SubjectsRetrieval</servlet-name>
        <url-pattern>/subjects</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>TeachersRetrieval</servlet-name>
        <url-pattern>/teachers</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>UpdateClasses</servlet-name>
        <url-pattern>/UpdateClasses</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>ClassReport</servlet-name>
        <url-pattern>/reporting</url-pattern>
    </servlet-mapping>
    <welcome-file-list>
        <welcome-file>Login.html</welcome-file>
        <welcome-file>Login.htm</welcome-file>
        <welcome-file>Login.jsp</welcome-file>
        <welcome-file>default.html</welcome-file>
        <welcome-file>default.htm</welcome-file>
        <welcome-file>default.jsp</welcome-file>
    </welcome-file-list>

```

```

</web-app>

```

