**Source Code**

Learner's Academy . Ltd Demo Admin API.

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MVP Architecture was followed:

Resource Package

1) DbResource.java

**package** com.resource;

import org.hibernate.SessionFactory;

import org.hibernate.cfg.Configuration;

public class DbResource {

public static SessionFactory getSessionFactory() {

Configuration con = new Configuration();

con.configure("hibernate.cfg.xml");

return con.buildSessionFactory();

}

}

Entity Package

2) Teacher Class

package com.entity;

import java.util.List;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.OneToMany;

import javax.persistence.Table;

@Entity

@Table(name="Teacher")

public class Teacher {

@Id

@GeneratedValue(strategy =GenerationType.IDENTITY)

private int tid;

private String tname;

private int age;

private Integer ttid;

@OneToMany

@JoinColumn(name="tsud")

private List <Subject> lstofsubjects;

@OneToMany

@JoinColumn(name="tclassid")

private List <Classes> lstofclasses;

public int getTid() {

return tid;

}

public void setTid(int tid) {

this.tid = tid;

}

public String getTname() {

return tname;

}

public void setTname(String tname) {

this.tname = tname;

}

public List<Subject> getLstofsubjects() {

return lstofsubjects;

}

public void setLstofsubjects(List<Subject> lstofsubjects) {

this.lstofsubjects = lstofsubjects;

}

public List<Classes> getLstofclasses() {

return lstofclasses;

}

public void setLstofclasses(List<Classes> lstofclasses) {

this.lstofclasses = lstofclasses;

}

public int getAge() {

return age;

}

public void setAge(int age) {

this.age = age;

}

public Integer getTtid() {

return ttid;

}

public void setTtid(Integer ttid) {

this.ttid = ttid;

}

@Override

public String toString() {

return "Teacher [tid=" + tid + ", tname=" + tname + ", age=" + age + ", ttid=" + ttid + ", lstofsubjects="

+ lstofsubjects + ", lstofclasses=" + lstofclasses + "]";

}

}

3) Subject Class

package com.entity;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.Table;

@Entity

@Table(name="Subject")

public class Subject {

@Id

@GeneratedValue(strategy =GenerationType.IDENTITY)

private int subid;

private String subjectname;

private Integer tsud;

public int getSubid() {

return subid;

}

public void setSubid(int subid) {

this.subid = subid;

}

public String getSubjectname() {

return subjectname;

}

public void setSubjectname(String subjectname) {

this.subjectname = subjectname;

}

@Override

public String toString() {

return "Subject [subid=" + subid + ", subjectname=" + subjectname + ", tsud=" + tsud + "]";

}

public Integer getTsud() {

return tsud;

}

public void setTsud(Integer tsud) {

this.tsud = tsud;

}

}

4) Students Class

package com.entity;

import java.util.List;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.ManyToOne;

import javax.persistence.Table;

@Entity

@Table(name="Students")

public class Students {

@Id

@GeneratedValue(strategy =GenerationType.IDENTITY)

private int studentid;

private String studentname;

private int studentage;

private Integer tstudentid;

@ManyToOne

@JoinColumn(name="tclassid")

private Classes classes;

public int getStudentid() {

return studentid;

}

public void setStudentid(int studentid) {

this.studentid = studentid;

}

public String getStudentname() {

return studentname;

}

public void setStudentname(String studentname) {

this.studentname = studentname;

}

public int getStudentage() {

return studentage;

}

public void setStudentage(int studentage) {

this.studentage = studentage;

}

public Integer getTstudentid() {

return tstudentid;

}

public void setTstudentid(Integer tstudentid) {

this.tstudentid = tstudentid;

}

public Classes getClasses() {

return classes;

}

public void setClasses(Classes classes) {

this.classes = classes;

}

@Override

public String toString() {

return "Students [studentid=" + studentid + ", studentname=" + studentname + ", studentage=" + studentage

+ ", tstudentid=" + tstudentid + ", classes=" + classes + "]";

}

}

5) Classes Class

package com.entity;

import java.util.List;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.OneToMany;

import javax.persistence.Table;

@Entity

@Table(name="Classes")

public class Classes {

@Id

@GeneratedValue(strategy =GenerationType.IDENTITY)

private int classid;

private String classsection;

private String classbuilding;

private Integer tclassid;

@OneToMany

@JoinColumn(name="tstudentid")

private List <Students> lstofstudents;

@OneToMany

@JoinColumn(name="tsud")

private List <Subject> lstofsubjects;

@OneToMany

@JoinColumn(name="ttid")

private List <Teacher> lstofteachers;

public int getClassid() {

return classid;

}

public void setClassid(int classid) {

this.classid = classid;

}

public String getClasssection() {

return classsection;

}

public void setClasssection(String classsection) {

this.classsection = classsection;

}

public String getClassbuilding() {

return classbuilding;

}

public void setClassbuilding(String classbuilding) {

this.classbuilding = classbuilding;

}

public List<Students> getLstofstudents() {

return lstofstudents;

}

public void setLstofstudents(List<Students> lstofstudents) {

this.lstofstudents = lstofstudents;

}

public List<Subject> getLstofsubjects() {

return lstofsubjects;

}

public void setLstofsubjects(List<Subject> lstofsubjects) {

this.lstofsubjects = lstofsubjects;

}

public List<Teacher> getLstofteachers() {

return lstofteachers;

}

public void setLstofteachers(List<Teacher> lstofteachers) {

this.lstofteachers = lstofteachers;

}

public Integer getTclassid() {

return tclassid;

}

public void setTclassid(Integer tclassid) {

this.tclassid = tclassid;

}

@Override

public String toString() {

return "Classes [classid=" + classid + ", classsection=" + classsection + ", classbuilding=" + classbuilding

+ ", tclassid=" + tclassid + ", lstofstudents=" + lstofstudents + ", lstofsubjects=" + lstofsubjects

+ ", lstofteachers=" + lstofteachers + "]";

}

}

Controller Packages

7) LearnerController Teacher - Servlet

package com.controller;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Iterator;

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 com.entity.Teacher;

import com.service.TeacherService;

/\*\*

\* Servlet implementation class LearnerController

\*/

@WebServlet("/LearnerController")

public class LearnerController extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public LearnerController() {

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

TeacherService ps = new TeacherService();

List<Teacher> listOfTeachers = ps.findAllTeacher();

pw.println("Number of Teachers are "+listOfTeachers.size());

Iterator<Teacher> ii = listOfTeachers.iterator();

while(ii.hasNext()) {

Teacher p = ii.next();

pw.println("<div>");

pw.println("<span>Teacher ID is "+p.getTid()+" Teacher Name is "+ p.getTname()+" with age "+ p.getAge()+"</span>");

pw.println("</div>");

}

RequestDispatcher rd = request.getRequestDispatcher("viewTeacher.jsp");

rd.include(request, response);

}

/\*\*

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

\*/

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

String tname = request.getParameter("tname");

int age = Integer.parseInt(request.getParameter("age"));

Teacher t = new Teacher();

t.setTname(tname);

t.setAge(age);

TeacherService ts = new TeacherService();

String result = ts.storeTeacher(t);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("home.jsp");

rd.include(request, response);

}

}

8) LearnerControllerClasses - Servlet

package com.controller;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Iterator;

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 com.entity.Classes;

import com.entity.Subject;

import com.service.ClassesService;

import com.service.SubjectService;

/\*\*

\* Servlet implementation class LearnerControllerClasses

\*/

@WebServlet("/LearnerControllerClasses")

public class LearnerControllerClasses extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public LearnerControllerClasses() {

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

ClassesService ps = new ClassesService();

List<Classes> listOfClasses = ps.findAllClasses();

pw.println("Number of Classes are "+listOfClasses.size());

Iterator<Classes> ii = listOfClasses.iterator();

while(ii.hasNext()) {

Classes p = ii.next();

pw.println("<div>");

pw.println("<span>Classroom ID is "+p.getClassid()+" Classroom Building is "+ p.getClassbuilding()+ " Classroom section is "+p.getClasssection()+ " Students assigned "+ p.getLstofstudents()+" Teachers assigned"+ p.getLstofteachers()+"</span>");

pw.println("</div>");

}

RequestDispatcher rd = request.getRequestDispatcher("viewClasses.jsp");

rd.include(request, response);

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

String classBuilding = request.getParameter("classBuilding");

String classSection = request.getParameter("classSection");

Classes t = new Classes();

t.setClassbuilding(classBuilding);

t.setClasssection(classSection);

ClassesService ts = new ClassesService();

String result = ts.storeClasses(t);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("addClasses.jsp");

rd.include(request, response);

}

}

9) LearnerControllerStudent - Servlet

package com.controller;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Iterator;

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 com.entity.Classes;

import com.entity.Students;

import com.service.ClassesService;

import com.service.StudentsService;

/\*\*

\* Servlet implementation class LearnerControllerStudent

\*/

@WebServlet("/LearnerControllerStudent")

public class LearnerControllerStudent extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public LearnerControllerStudent() {

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

StudentsService ps = new StudentsService();

List<Students> listOfStudents = ps.findAllStudents();

pw.println("Number of Students are "+listOfStudents.size());

ClassesService ss = new ClassesService();

List<Classes> listOfClasses = ss.findAllClasses();

Iterator<Classes> ll = listOfClasses.iterator();

Iterator<Students> ii = listOfStudents.iterator();

for(int a=0;a < listOfClasses.size();a++) {

Classes px = ll.next();

while(ii.hasNext()) {

Students p = ii.next();

pw.println("<div>");

pw.println("<span>Student ID is "+p.getStudentid()+" Student Name is "+ p.getStudentname()+" with age "+ p.getStudentage() + "</span>");

pw.println("</div>");

if(p.getTstudentid() == px.getTclassid() ) {

pw.println("<div>");

pw.println("<span>Assigned to Class " + px.studentsMapped()+ "</span>");

pw.println("</div>");

}

}

}

RequestDispatcher rd = request.getRequestDispatcher("viewStudent.jsp");

rd.include(request, response);

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

String stname = request.getParameter("stname");

int age = Integer.parseInt(request.getParameter("age"));

Students t = new Students();

t.setStudentname(stname);

t.setStudentage(age);

StudentsService ts = new StudentsService();

String result = ts.storeStudents(t);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("addStudent.jsp");

rd.include(request, response);

}

10) LearnerControllerSubject - Servlet

package com.controller;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Iterator;

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 com.entity.Subject;

import com.service.SubjectService;

/\*\*

\* Servlet implementation class LearnerControllerSubject

\*/

@WebServlet("/LearnerControllerSubject")

public class LearnerControllerSubject extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public LearnerControllerSubject() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

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

\*/

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

SubjectService ps = new SubjectService();

List<Subject> listOfSubjects = ps.findAllSubject();

pw.println("Number of Subjects are "+listOfSubjects.size());

Iterator<Subject> ii = listOfSubjects.iterator();

while(ii.hasNext()) {

Subject p = ii.next();

pw.println("<div>");

pw.println("<span>Subject ID is "+p.getSubid()+" Subject Name is "+ p.getSubjectname()+"</span>");

pw.println("</div>");

}

RequestDispatcher rd = request.getRequestDispatcher("ViewSubjects.jsp");

rd.include(request, response);

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

String subname = request.getParameter("subname");

Subject t = new Subject();

t.setSubjectname(subname);

SubjectService ts = new SubjectService();

String result = ts.storeSubject(t);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("addSubjects.jsp");

rd.include(request, response);

}

}

12) AssignClassToStudent - Servlet

package com.controller;

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.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.service.ClassesService;

import com.service.StudentsService;

/\*\*

\* Servlet implementation class AssignClassToStudent

\*/

@WebServlet("/AssignClassToStudent")

public class AssignClassToStudent extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public AssignClassToStudent() {

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

PrintWriter pw = response.getWriter();

response.setContentType("text/html");

int classid = Integer.parseInt(request.getParameter("classid"));

int studentid = Integer.parseInt(request.getParameter("studentid"));

StudentsService ts = new StudentsService();

String result = ts.assignStudentClass(classid,studentid);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("assignStudentClass.jsp");

rd.include(request, response);

}

}

13) AssignSubjectToClass - Servlet

package com.controller;

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.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.service.SubjectService;

/\*\*

\* Servlet implementation class AssignSubjectToClass

\*/

@WebServlet("/AssignSubjectToClass")

public class AssignSubjectToClass extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public AssignSubjectToClass() {

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

PrintWriter pw = response.getWriter();

PrintWriter pw1 = response.getWriter();

response.setContentType("text/html");

int subid = Integer.parseInt(request.getParameter("subid"));

int classid = Integer.parseInt(request.getParameter("classid"));

SubjectService ts = new SubjectService();

String result = ts.assignTeacherToSubjects(subid, classid);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("assignTeacherSubject.jsp");

rd.include(request, response);

}

}

14) AssignTeacherClass - Servlet

package com.controller;

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.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.service.ClassesService;

import com.service.StudentsService;

import com.service.TeacherService;

/\*\*

\* Servlet implementation class AssignTeacherClassSubject

\*/

@WebServlet("/AssignTeacherClassSubject")

public class AssignTeacherClassSubject extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public AssignTeacherClassSubject() {

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

PrintWriter pw = response.getWriter();

PrintWriter pw1 = response.getWriter();

response.setContentType("text/html");

int classid = Integer.parseInt(request.getParameter("classid"));

int tid = Integer.parseInt(request.getParameter("tid"));

TeacherService ts = new TeacherService();

String result = ts.assignTeacherClass(classid,tid);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("assignTeacherClass.jsp");

rd.include(request, response);

}

}

15) AssignTeacherToSubject - Servlet

package com.controller;

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.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import com.service.SubjectService;

import com.service.TeacherService;

/\*\*

\* Servlet implementation class AssignTeacherToSubject

\*/

@WebServlet("/AssignTeacherToSubject")

public class AssignTeacherToSubject extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public AssignTeacherToSubject() {

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

PrintWriter pw = response.getWriter();

PrintWriter pw1 = response.getWriter();

response.setContentType("text/html");

int subid = Integer.parseInt(request.getParameter("subid"));

int tid = Integer.parseInt(request.getParameter("tid"));

SubjectService ts = new SubjectService();

String result = ts.assignTeacherToSubjects(subid, tid);

pw.println(result);

RequestDispatcher rd = request.getRequestDispatcher("assignTeacherSubject.jsp");

rd.include(request, response);

}

}

DAO Package

15) ClassesDao

package com.dao;

import java.util.List;

import javax.persistence.TypedQuery;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import com.entity.Classes;

import com.entity.Students;

import com.resource.DbResource;

public class ClassesDao {

public int storeClasses(Classes classes) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

tran.begin();

session.save(classes);

tran.commit();

return 1;

}catch(Exception e) {

return 0;

}

}

public List<Classes> findAllClasses() {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

TypedQuery tq = session.createQuery("from Classes");

List<Classes> lstofclasses = tq.getResultList();

return lstofclasses;

}

public int assignClassToTeacher(int classid,int tid) {

try {

SessionFactory sf1 = DbResource.getSessionFactory();

Session session1 = sf1.openSession();

Transaction tran1 = session1.getTransaction();

Classes emp1 = session1.get(Classes.class, classid);

if(emp1==null) {

System.out.println("Record not present");

}else {

tran1.begin();

emp1.setTclassid1(tid);

session1.update(emp1);

tran1.commit();

}

return 1;

}catch(Exception e) {

return 0;

}

}

}

16) ClassesDao

package com.dao;

import java.util.Iterator;

import java.util.List;

import javax.persistence.TypedQuery;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import com.entity.Classes;

import com.entity.Students;

import com.resource.DbResource;

import com.service.ClassesService;

public class StudentsDao {

public int storeStudents(Students student) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

tran.begin();

session.save(student);

tran.commit();

return 1;

}catch(Exception e) {

return 0;

}

}

public List<Students> findAllStudents() {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

TypedQuery tq = session.createQuery("from Students");

List<Students> lstOfStudents = tq.getResultList();

return lstOfStudents;

}

public int assignStudenttoClass(int classid,int studentid) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

Students emp = session.get(Students.class, studentid);

if(emp==null) {

System.out.println("Record not present");

}else {

tran.begin();

emp.setTstudentid(classid);

session.update(emp);

tran.commit();

}

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

}

16) SubjectDao

package com.dao;

import java.util.List;

import javax.persistence.TypedQuery;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import com.entity.Subject;

import com.entity.Teacher;

import com.resource.DbResource;

public class SubjectDao {

public int storeSubject(Subject subject) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

tran.begin();

session.save(subject);

tran.commit();

return 1;

}catch(Exception e) {

return 0;

}

}

public List<Subject> findAllSubjects() {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

TypedQuery tq = session.createQuery("from Subject");

List<Subject> lstofsubjects = tq.getResultList();

return lstofsubjects;

}

public int assignTeachertoSubject(int subid,int tid) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

Subject emp = session.get(Subject.class, subid);

if(emp==null) {

System.out.println("Record not present");

}else {

tran.begin();

emp.setTsud1(tid);

session.update(emp);

tran.commit();

}

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

public int assignSubjectToClass(int subid,int classid) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

Subject emp = session.get(Subject.class, classid);

if(emp==null) {

System.out.println("Record not present");

}else {

tran.begin();

emp.setTsud(classid);

session.update(emp);

tran.commit();

}

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

}

17) TeacherDao

package com.dao;

import java.util.List;

import javax.persistence.TypedQuery;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import com.entity.Students;

import com.entity.Teacher;

import com.resource.DbResource;

public class TeacherDao {

SessionFactory sf;

public TeacherDao() {

sf = DbResource.getSessionFactory();

}

public int storeTeacher(Teacher teacher) {

try {

Session session = sf.openSession();

Transaction tran = session.getTransaction();

tran.begin();

session.save(teacher);

tran.commit();

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

public List<Teacher> findAllTeacher() {

Session session = sf.openSession();

TypedQuery tq = session.createQuery("from Teacher");

List<Teacher> lstofTeachers = tq.getResultList();

return lstofTeachers;

}

public int assignTeachertoClass(int classid,int tid) {

try {

SessionFactory sf = DbResource.getSessionFactory();

Session session = sf.openSession();

Transaction tran = session.getTransaction();

Teacher emp = session.get(Teacher.class, tid);

int temp = classid;

if(emp==null) {

System.out.println("Record not present");

}else {

tran.begin();

emp.setTtid(temp);

session.update(emp);

tran.commit();

}

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

}

Service Package

17) ClassesService

**package com.service;**

**import java.util.List;**

**import com.dao.ClassesDao;**

**import com.entity.Classes;**

**import com.entity.Students;**

**public class ClassesService {**

**ClassesDao pd = new ClassesDao();**

**public String storeClasses(Classes classes) {**

**if(pd.storeClasses(classes)>0) {**

**return "Class data stored successfully";**

**}else {**

**return "Class details didn't save correctly, please try again later";**

**}**

**}**

**public List<Classes> findAllClasses() {**

**return pd.findAllClasses();**

**}**

**public String assignClasstoTeachers(int classid, int studentid) {**

**if(pd.assignClassToTeacher((classid),studentid)>0) {**

**return " Class data stored successfully ";**

**}else {**

**return " Class details didn't save correctly, please try again late r ";**

**}**

**}**

**}**

18) StudentService

**package com.service;**

**import java.util.List;**

**import com.dao.StudentsDao;**

**import com.entity.Students;**

**public class StudentsService {**

**StudentsDao pd = new StudentsDao();**

**public String storeStudents(Students student) {**

**if(pd.storeStudents(student)>0) {**

**return "Student data stored successfully";**

**}else {**

**return "Student details didn't save correctly, please try again later";**

**}**

**}**

**public List<Students> findAllStudents() {**

**return pd.findAllStudents();**

**}**

**public String assignStudentClass(int classid,int studentid) {**

**if(pd.assignStudenttoClass(classid,studentid)>0) {**

**return " Student data stored successfully ";**

**}else {**

**return " Student details didn't save correctcly, please try again later ";**

**}**

**}**

**}**

19) StudentService

**package com.service;**

**import java.util.List;**

**import com.dao.SubjectDao;**

**import com.entity.Subject;**

**public class SubjectService {**

**SubjectDao pd = new SubjectDao();**

**public String storeSubject(Subject subject) {**

**if(pd.storeSubject(subject)>0) {**

**return "Subject data stored successfully";**

**}else {**

**return "Subject details didn't save correctly, please try again later";**

**}**

**}**

**public List<Subject> findAllSubject() {**

**return pd.findAllSubjects();**

**}**

**public String assignTeacherToSubjects(int subid,int tid) {**

**if(pd.assignTeachertoSubject(subid,tid)>0) {**

**return " Teacher data stored successfully ";**

**}else {**

**return " Teacher details didn't save correctcly, please try again later ";**

**}**

**}**

**public String assignSubjectToClass(int subid,int classid) {**

**if(pd.assignTeachertoSubject(subid,classid)>0) {**

**return " Teacher data stored successfully ";**

**}else {**

**return " Teacher details didn't save correctcly, please try again later ";**

**}**

**}**

**}**

20) StudentService

**package com.service;**

**import java.util.List;**

**import com.dao.TeacherDao;**

**import com.entity.Teacher;**

**public class TeacherService {**

**TeacherDao pd = new TeacherDao();**

**public String storeTeacher(Teacher teacher) {**

**if(pd.storeTeacher(teacher)>0) {**

**return "Teacher data stored successfully";**

**}else {**

**return "Teacher details didn't save correctly, please try again later";**

**}**

**}**

**public List<Teacher> findAllTeacher() {**

**return pd.findAllTeacher();**

**}**

**public String assignTeacherClass(int classid,int tid) {**

**if(pd.assignTeachertoClass(classid,tid)>0) {**

**return " Teacher data stored successfully ";**

**}else {**

**return " Teacher details didn't save correctcly, please try again later ";**

**}**

**}**

**}**