Simplilearn FullStack Java Developer Phase 2

Project 1

GitHub Link

<https://github.com/SyedNaseemSharif/phase2project>

IDE: Eclipse JEE 2021-09

Core Libraries:

MySQL

Hibernate

JSP/Servlet/HTML

Description:

Learner’s Academy is a school that has an online management system. The system keeps track of its classes, subjects, students, and teachers. It has a back-office application with a single administrator login.

Sprint 1:

Setup Database and provide master List in Java EE for all entities

- Classes

- Subjects

- Teacher

- Student

Sprint 2:

Implement the Assignments:

- Student to class

- Subject to Teacher

- Subject to Class

Sprint 3:

Class Report

Improvements in Navigation

Clean Up

Source code –

hibernate.cfg.xml

|  |
| --- |
| <?xml version = "1.0" encoding = "utf-8"?> |
|  | <!DOCTYPE hibernate-configuration PUBLIC |
|  | "-//Hibernate/Hibernate Configuration DTD 3.0//EN" |
|  | "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd"> |
|  | <hibernate-configuration> |
|  | <session-factory> |
|  | <!-- Database connection settings --> |
|  | <property name="hibernate.dialect"> |
|  | org.hibernate.dialect.MySQLDialect</property> |
|  | <property name="connection.driver\_class">com.mysql.jdbc.Driver</property> |
|  | <property name="connection.url">jdbc:mysql://localhost:3306/LearnersAcademy</property> |
|  | <property name="connection.username">root</property> |
|  | <property name="connection.password">8951673088</property> |
|  | <property name = "hibernate.id.new\_generator\_mappings">false</property> |
|  |  |
|  | <property name="show\_sql">true</property> |
|  |  |
|  | <property name="hbm2ddl.auto">update</property> |
|  | <mapping class="program.Teacher"/> |
|  | <mapping class="program.Student"/> |
|  | <mapping class="program.Subject"/> |
|  | <mapping class="program.Classes"/> |
|  |  |
|  |  |
|  |  |
|  | </session-factory> |
|  | </hibernate-configuration> |

[AddClass.java](https://github.com/SyedNaseemSharif/phase2project/blob/main/src/main/java/program/AddClass.java)

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Session; |
|  | import org.hibernate.SessionFactory; |
|  | import org.hibernate.Transaction; |
|  |  |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AddClass |
|  | \*/ |
|  | @WebServlet("/addClass") |
|  | public class AddClass extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AddClass() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  |  |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String name = request.getParameter("class"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | //Step4; Create persistent object and add Teacher |
|  |  |
|  | Classes classes = new Classes(); |
|  | classes.setName(name); |
|  |  |
|  |  |
|  | session.save(classes); |
|  |  |
|  | // STep5: Commit transaction and close session |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewClass.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AddStudent

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Session; |
|  | import org.hibernate.SessionFactory; |
|  | import org.hibernate.Transaction; |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AddStudent |
|  | \*/ |
|  | @WebServlet("/addStudent") |
|  | public class AddStudent extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AddStudent() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String fname = request.getParameter("fname"); |
|  | String lname = request.getParameter("lname"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | //Step4; Create persistent object and add Teacher |
|  |  |
|  | Student student = new Student(); |
|  | student.setFname(fname); |
|  | student.setLname(lname); |
|  |  |
|  |  |
|  | session.save(student); |
|  |  |
|  | // STep5: Commit transaction and close sessoin |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewStudent.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AddSubject

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Session; |
|  | import org.hibernate.SessionFactory; |
|  | import org.hibernate.Transaction; |
|  |  |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AddSubject |
|  | \*/ |
|  | @WebServlet("/addSubject") |
|  | public class AddSubject extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AddSubject() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String name = request.getParameter("name"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | //Step4; Create persistent object and add Teacher |
|  |  |
|  | Subject subject = new Subject(); |
|  | subject.setName(name); |
|  |  |
|  |  |
|  | session.save(subject); |
|  |  |
|  | // STep5: Commit transaction and close sessoin |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewSubject.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AddTeacher

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Session; |
|  | import org.hibernate.SessionFactory; |
|  | import org.hibernate.Transaction; |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AddTeacher |
|  | \*/ |
|  | @WebServlet("/addTeacher") |
|  | public class AddTeacher extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AddTeacher() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String fname = request.getParameter("fname"); |
|  | String lname = request.getParameter("lname"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | //Step4; Create persistent object and add Teacher |
|  |  |
|  | Teacher teacher = new Teacher(); |
|  | teacher.setFName(fname); |
|  | teacher.setLname(lname); |
|  |  |
|  | session.save(teacher); |
|  |  |
|  | // STep5: Commit transaction and close session |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewTeachers.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AssignStudent

|  |
| --- |
| package program; |
|  |  |
|  | 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.query.Query; |
|  | import org.hibernate.Session; |
|  | import org.hibernate.SessionFactory; |
|  | import org.hibernate.Transaction; |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AssignStudent |
|  | \*/ |
|  | @WebServlet("/assignStudent") |
|  | public class AssignStudent extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AssignStudent() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | @SuppressWarnings("unused") |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String name = request.getParameter("name"); |
|  | String[] nameList = name.split(" "); |
|  | //System.out.println("NameList: " + nameList); |
|  | String classes = request.getParameter("class"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | String hql\_classes= "from Classes where name='" + classes + "'"; |
|  | @SuppressWarnings("unchecked") |
|  | List<Classes> clas = session.createQuery(hql\_classes).list(); |
|  |  |
|  | String hql\_student = "update Student s set s.classes=:n where s.fname=:sn and s.lname=:fn"; |
|  |  |
|  | @SuppressWarnings("unchecked") |
|  | Query<Student> query = session.createQuery(hql\_student); |
|  | query.setParameter("n", clas.get(0)); |
|  | query.setParameter("sn", nameList[0]); |
|  | query.setParameter("fn", nameList[1]); |
|  |  |
|  | query.executeUpdate(); |
|  |  |
|  |  |
|  | // STep5: Commit transaction and close sessoin |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewStudent.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AssignSubject

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Transaction; |
|  | import org.hibernate.query.Query; |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AssignSubject |
|  | \*/ |
|  | @WebServlet("/assignSubject") |
|  | public class AssignSubject extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AssignSubject() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | @SuppressWarnings("unused") |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String clas = request.getParameter("class"); |
|  | String subject = request.getParameter("subject"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | String hql\_clas= "from Classes where name='" + clas + "'"; |
|  | @SuppressWarnings("unchecked") |
|  | List<Classes> classes = session.createQuery(hql\_clas).list(); |
|  |  |
|  | String hql\_subject = "update Subject s set s.classes=:n where s.name=:sn"; |
|  |  |
|  | @SuppressWarnings("unchecked") |
|  | Query<Subject> query = session.createQuery(hql\_subject); |
|  | query.setParameter("n", classes.get(0)); |
|  | query.setParameter("sn", subject); |
|  |  |
|  | query.executeUpdate(); |
|  |  |
|  |  |
|  | // STep5: Commit transaction and close session |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewClass.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

AssignTeacher

|  |
| --- |
| package program; |
|  |  |
|  | 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 org.hibernate.Transaction; |
|  | import org.hibernate.query.Query; |
|  |  |
|  |  |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class AssignTeacher |
|  | \*/ |
|  | @WebServlet("/assignTeacher") |
|  | public class AssignTeacher extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public AssignTeacher() { |
|  | 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 { |
|  | response.setContentType("text/html"); |
|  | @SuppressWarnings("unused") |
|  | PrintWriter out = response.getWriter(); |
|  |  |
|  | // Step 1: Get details , user has entered |
|  | String name = request.getParameter("name"); |
|  | String[] nameArray = name.split(" "); |
|  | //System.out.println("NameList: " + nameList); |
|  | String subject = request.getParameter("subject"); |
|  |  |
|  | // Step2: Create session |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session session = sf.openSession(); |
|  |  |
|  | // Step 3: Begin Transaction |
|  | Transaction tx = session.beginTransaction(); |
|  |  |
|  | String hql\_teacher= "from Teacher where fname='" + nameArray[0] + "'" + " and lname='" + nameArray[1] + "'"; |
|  | @SuppressWarnings("unchecked") |
|  | List<Teacher> teachers = session.createQuery(hql\_teacher).list(); |
|  |  |
|  | String hql\_subject = "update Subject s set s.teacher=:n where s.name=:sn"; |
|  |  |
|  | @SuppressWarnings("unchecked") |
|  | Query<Subject> query = session.createQuery(hql\_subject); |
|  | query.setParameter("n", teachers.get(0)); |
|  | query.setParameter("sn", subject); |
|  |  |
|  | query.executeUpdate(); |
|  |  |
|  |  |
|  | // STep5: Commit transaction and close session |
|  | tx.commit(); |
|  | session.close(); |
|  |  |
|  | RequestDispatcher dispatcher = getServletContext().getRequestDispatcher("/viewTeachers.jsp"); |
|  | dispatcher.forward(request, response); |
|  | } |
|  |  |
|  | } |

Classes

|  |
| --- |
| package program; |
|  | import javax.persistence.Column; |
|  | import javax.persistence.Entity; |
|  | import javax.persistence.GeneratedValue; |
|  | import javax.persistence.Id; |
|  | import javax.persistence.OneToMany; |
|  | import javax.persistence.Table; |
|  |  |
|  | import java.util.List; |
|  |  |
|  | import javax.persistence.CascadeType; |
|  |  |
|  | @Entity |
|  | @Table(name="class\_table") |
|  | public class Classes { |
|  |  |
|  | @Id |
|  | @GeneratedValue |
|  | private int class\_id; |
|  |  |
|  | @Column(name="class\_name") |
|  | private String name; |
|  |  |
|  | @OneToMany(cascade= CascadeType.ALL, mappedBy="classes") |
|  | private List<Student> students; |
|  |  |
|  | @OneToMany(cascade= CascadeType.ALL, mappedBy="classes") |
|  | private List<Subject> subjects; |
|  |  |
|  | public List<Student> getStudents() { |
|  | return students; |
|  | } |
|  |  |
|  | public void setStudents(List<Student> students) { |
|  | this.students = students; |
|  | } |
|  |  |
|  | public List<Subject> getSubjects() { |
|  | return subjects; |
|  | } |
|  |  |
|  | public void setSubjects(List<Subject> subjects) { |
|  | this.subjects = subjects; |
|  | } |
|  |  |
|  | public int getClass\_id() { |
|  | return class\_id; |
|  | } |
|  |  |
|  | public void setClass\_id(int class\_id) { |
|  | this.class\_id = class\_id; |
|  | } |
|  |  |
|  | public String getName() { |
|  | return name; |
|  | } |
|  |  |
|  | public void setName(String name) { |
|  | this.name = name; |
|  | } |
|  |  |
|  |  |
|  |  |
|  | } |

Hibernate.Util

|  |
| --- |
| package program; |
|  | 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 standardRegistry = new StandardServiceRegistryBuilder() |
|  | .configure("hibernate.cfg.xml").build(); |
|  | Metadata metaData = new MetadataSources(standardRegistry).getMetadataBuilder().build(); |
|  | sessionfactory = metaData.getSessionFactoryBuilder().build(); |
|  | } catch (Throwable th) { |
|  | throw new ExceptionInInitializerError(th); |
|  | } |
|  | } |
|  |  |
|  | public static SessionFactory getSessionFactory() { |
|  | return sessionfactory; |
|  | } |
|  | } |

InitHibernate

|  |
| --- |
| package program; |
|  | import java.io.IOException; |
|  |  |
|  |  |
|  | import java.io.PrintWriter; |
|  |  |
|  | 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; |
|  |  |
|  | /\*\* |
|  | \* Servlet implementation class InitHibernate |
|  | \*/ |
|  | @WebServlet("/init") |
|  | public class InitHibernate extends HttpServlet { |
|  | private static final long serialVersionUID = 1L; |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#HttpServlet() |
|  | \*/ |
|  | public InitHibernate() { |
|  | super(); |
|  | // TODO Auto-generated constructor stub |
|  | } |
|  |  |
|  | /\*\* |
|  | \* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response) |
|  | \*/ |
|  | protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException { |
|  | try { |
|  | PrintWriter out = response.getWriter(); |
|  | out.println("<html><body>"); |
|  |  |
|  | SessionFactory factory = HibernateUtil.getSessionFactory(); |
|  |  |
|  | Session session = factory.openSession(); |
|  | if (session!=null) |
|  | { |
|  | out.println("Hibernate Session opened.<br>"); |
|  | session.close(); |
|  | out.println("Hibernate Session closed.<br>"); |
|  |  |
|  | out.println("</body></html>"); |
|  | } |
|  |  |
|  |  |
|  |  |
|  |  |
|  | } catch (Exception ex) { |
|  | throw ex; |
|  | } |
|  |  |
|  | } |
|  |  |
|  | /\*\* |
|  | \* @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); |
|  | } |
|  |  |
|  | } |

Student

|  |
| --- |
| package program; |
|  | import javax.persistence.CascadeType; |
|  | import javax.persistence.Column; |
|  | import javax.persistence.Entity; |
|  | import javax.persistence.GeneratedValue; |
|  | import javax.persistence.Id; |
|  | import javax.persistence.JoinColumn; |
|  | import javax.persistence.ManyToOne; |
|  | import javax.persistence.Table; |
|  |  |
|  | @Entity |
|  | @Table(name="student\_table") |
|  | public class Student { |
|  |  |
|  | @Id |
|  | @GeneratedValue |
|  | private int student\_id; |
|  |  |
|  | @Column(name="fname") |
|  | private String fname; |
|  |  |
|  | @Column(name="lname") |
|  | private String lname; |
|  |  |
|  | @ManyToOne(cascade=CascadeType.ALL) |
|  | @JoinColumn(name="class\_id") |
|  | private Classes classes; |
|  |  |
|  | public int getStudent\_id() { |
|  | return student\_id; |
|  | } |
|  |  |
|  | public void setStudent\_id(int student\_id) { |
|  | this.student\_id = student\_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 Classes getClasses() { |
|  | return classes; |
|  | } |
|  |  |
|  | public void setClasses(Classes classes) { |
|  | this.classes = classes; |
|  | } |
|  |  |
|  |  |
|  |  |
|  | } |

Subject

|  |
| --- |
| package program; |
|  | import javax.persistence.CascadeType; |
|  | import javax.persistence.Column; |
|  | import javax.persistence.Entity; |
|  | import javax.persistence.GeneratedValue; |
|  | import javax.persistence.Id; |
|  | import javax.persistence.JoinColumn; |
|  | import javax.persistence.ManyToOne; |
|  | import javax.persistence.Table; |
|  |  |
|  | @Entity |
|  | @Table(name="subject\_tables") |
|  | public class Subject { |
|  |  |
|  | @Id |
|  | @GeneratedValue |
|  | private int subject\_id; |
|  |  |
|  | @Column(name="subject\_name") |
|  | private String name; |
|  |  |
|  | @ManyToOne(cascade= CascadeType.ALL) |
|  | @JoinColumn(name="teacher\_id") |
|  | private Teacher teacher; |
|  |  |
|  | @ManyToOne(cascade=CascadeType.ALL) |
|  | @JoinColumn(name="class\_id") |
|  | private Classes classes; |
|  |  |
|  | public Classes getClasses() { |
|  | return classes; |
|  | } |
|  |  |
|  | public void setClasses(Classes classes) { |
|  | this.classes = classes; |
|  | } |
|  |  |
|  | public int getSubject\_id() { |
|  | return subject\_id; |
|  | } |
|  |  |
|  | public void setSubject\_id(int subject\_id) { |
|  | this.subject\_id = subject\_id; |
|  | } |
|  |  |
|  | public String getName() { |
|  | return name; |
|  | } |
|  |  |
|  | public void setName(String name) { |
|  | this.name = name; |
|  | } |
|  |  |
|  | public Teacher getTeacher() { |
|  | return teacher; |
|  | } |
|  |  |
|  | public void setTeacher(Teacher teacher) { |
|  | this.teacher = teacher; |
|  | } |
|  |  |
|  |  |
|  |  |
|  |  |
|  | } |

Teacher

|  |
| --- |
| package program; |
|  | import java.util.List; |
|  |  |
|  | import javax.persistence.CascadeType; |
|  | import javax.persistence.Column; |
|  | import javax.persistence.Entity; |
|  | import javax.persistence.GeneratedValue; |
|  | import javax.persistence.Id; |
|  | import javax.persistence.OneToMany; |
|  | import javax.persistence.Table; |
|  |  |
|  | @Entity |
|  | @Table(name="teacher\_table") |
|  | public class Teacher { |
|  |  |
|  | @Id |
|  | @GeneratedValue |
|  | private int teacher\_id; |
|  |  |
|  | @Column(name="first\_name") |
|  | private String fname; |
|  |  |
|  | @Column(name="last\_name") |
|  | private String lname; |
|  |  |
|  | @OneToMany(cascade=CascadeType.ALL, mappedBy="teacher") |
|  | private List<Subject> subjects; |
|  |  |
|  | public int getTeacher\_id() { |
|  | return teacher\_id; |
|  | } |
|  |  |
|  | public void setTeacher\_id(int teacher\_id) { |
|  | this.teacher\_id = teacher\_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 List<Subject> getSubjects() { |
|  | return subjects; |
|  | } |
|  |  |
|  | public void setSubjects(List<Subject> subjects) { |
|  | this.subjects = subjects; |
|  | } |
|  |  |
|  |  |
|  |  |
|  | } |

**ClassReport.jsp**

|  |
| --- |
| <%@page import="program.Student"%> |
|  | <%@page import="program.Teacher"%> |
|  | <%@page import="program.Subject"%> |
|  | <%@page import="program.Classes"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  | <%String clas = request.getParameter("class");%> |
|  | <h1>Class Report for <%=clas%></h1> |
|  |  |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Classes> classes = hibernateSession.createQuery("from Classes cl where cl.name='" + clas + "'").list(); |
|  | Classes clasForReport = classes.get(0); |
|  | %> |
|  | <table> |
|  | <tr> |
|  | <th>Subject Name </th> |
|  | <th>Teacher Name </th> |
|  | </tr> |
|  | <% |
|  | for(Subject subject: clasForReport.getSubjects()){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + subject.getName() + "</td>"); |
|  | out.print("<td>" + getTeacherName(subject) + "</td>"); |
|  | out.print("</tr>"); |
|  | } |
|  | %> |
|  | </table> |
|  | <%! |
|  | public String getTeacherName(Subject subject){ |
|  | Teacher teacher = subject.getTeacher(); |
|  | String name; |
|  | String lname; |
|  |  |
|  | if(teacher != null){ |
|  | name=teacher.getfname(); |
|  | lname = teacher.getLname(); |
|  |  |
|  | return name + " " + lname; |
|  | }else{ |
|  | return "No Teacher assigned"; |
|  | } |
|  | } |
|  | %> |
|  | <table> |
|  | <br> |
|  | <tr> |
|  | <th>Listed Students</th> |
|  | </tr> |
|  | <% |
|  | for(Student student : clasForReport.getStudents()){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + student.getfname() + " " + student.getlname() + "</td>"); |
|  | out.print("</tr>"); |
|  | } |
|  | %> |
|  | </table> |
|  | </body> |
|  | </html> |

WelcomePage.html

|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="ISO-8859-1"> |
|  | <title>Welcome to Learners Academy</title> |
|  | </head> |
|  | <body style="background-color:bisque;"> |
|  | <h1>Welcome to administrative portal for the Learner’s Academy</h1> |
|  | <p>What you want to do?</p> |
|  | <table> |
|  | <tr> |
|  | <th>Add Items</th> |
|  | <th>View Items</th> |
|  | </tr> |
|  | <tr> |
|  | <td><a href="addClasses.html">Add Class</a><br/></td> |
|  | <td><a href="viewClass.jsp">View Classes</a><br/></td> |
|  | </tr> |
|  | <tr> |
|  | <td><a href="addSubject.html">Add Subject</a><br/></td> |
|  | <td><a href="viewSubject.jsp">View Subjects</a><br/></td> |
|  | </tr> |
|  | <tr> |
|  | <td><a href="addTeacher.html">Add Teacher</a><br/></td> |
|  | <td><a href="viewTeachers.jsp">View Teachers</a><br/></td> |
|  | </tr> |
|  | <tr> |
|  | <td><a href="addStudent.html">Add Student</a><br/></td> |
|  | <td><a href="viewStudent.jsp">View Students</a><br/></td> |
|  | </tr> |
|  | </table> |
|  | <br> |
|  | <a href="assignStudentToClass.jsp">Assign Student to Class</a><br> |
|  | <a href="assignTeacherToSubject.jsp">Assign Teacher to Class</a><br> |
|  | <a href="assignSubjectToClass.jsp">Assign Subject to Class</a><br> |
|  | <a href="chooseClassReport.jsp">Choose Class for report</a> |
|  | <p><a href="init">Click here to check if your database is connected properly</a><p> |
|  |  |
|  | </body> |
|  | </html> |

addClasses

|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <h1>Add Class</h1> |
|  | <form action="addClass" method="post"> |
|  | <label for="class">Class:</label><br> |
|  | <input type="text" id="class" name="class"><br> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

addStudent.html

|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <h1>Add Student</h1> |
|  | <form action="addStudent" method="post"> |
|  | <label for="fname">Name</label><br> |
|  | <input type="text" id="fname" name="fname"><br> |
|  | <label for="lname">Last Name</label><br> |
|  | <input type="text" id="lname" name="lname"><br> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

addSubject

|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <h1>Add Subject</h1> |
|  | <form action="addSubject" method="post"> |
|  | <label for="name">Subject Name:</label><br> |
|  | <input type="text" id="name" name="name"><br> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

addTeacher

|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <h1>Add Teacher</h1> |
|  | <form action="addTeacher" method="post"> |
|  | <label for="name">Name:</label><br> |
|  | <input type="text" id="fname" name="fname"><br> |
|  | <label for="lname">Last name</label><br> |
|  | <input type="text" id="lname" name="lname"><br> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  |  |
|  |  |
|  | </body> |
|  | </html> |

AssignStudenttoClass

|  |
| --- |
| <%@page import="program.Classes"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="program.Student"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  |  |
|  | <h1>Assign a Student to a Class</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Student> students = hibernateSession.createQuery("from Student").list(); |
|  | List<Classes> classes = hibernateSession.createQuery("from Classes").list(); |
|  | %> |
|  | <form action="assignStudent" method="post"> |
|  | <table> |
|  | <tr> |
|  | <th>Student Name </th> |
|  | <th>Class Name </th> |
|  | </tr> |
|  | <tr> |
|  | <td> |
|  | <select name="name"> |
|  | <% |
|  | for (Student student : students){ |
|  | out.print("<option>" + student.getfname() + " " + student.getlname()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  |  |
|  | <td> |
|  | <select name="class"> |
|  | <% |
|  | for (Classes clas : classes){ |
|  | out.print("<option>" + clas.getName()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  | </tr> |
|  | </table> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  |  |
|  | </body> |
|  | </html> |

AssignSubjectToClass

|  |
| --- |
| <%@page import="program.Subject"%> |
|  | <%@page import="program.Classes"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  |  |
|  | <h1>Assign a Subject to a Class</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Classes> classes = hibernateSession.createQuery("from Classes").list(); |
|  | List<Subject> subjects = hibernateSession.createQuery("from Subject").list(); |
|  | %> |
|  | <form action="assignSubject" method="post"> |
|  | <table> |
|  | <tr> |
|  | <th>Class Name </th> |
|  | <th>Subject Name </th> |
|  | </tr> |
|  | <tr> |
|  | <td> |
|  | <select name="class"> |
|  | <% |
|  | for (Classes clas : classes){ |
|  | out.print("<option>" + clas.getName()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  |  |
|  | <td> |
|  | <select name="subject"> |
|  | <% |
|  | for (Subject subject : subjects){ |
|  | out.print("<option>" + subject.getName()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  | </tr> |
|  | </table> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

AssignTeacherToSubject

|  |
| --- |
| <%@page import="program.Subject"%> |
|  | <%@page import="program.Teacher"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  |  |
|  | <h1>Assign a Teacher to a Subject</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Teacher> teachers = hibernateSession.createQuery("from Teacher").list(); |
|  | List<Subject> subjects = hibernateSession.createQuery("from Subject").list(); |
|  | %> |
|  |  |
|  | <form action="assignTeacher" method="post"> |
|  | <table> |
|  | <tr> |
|  | <th>Student Name </th> |
|  | <th>Subject Name </th> |
|  | </tr> |
|  | <tr> |
|  | <td> |
|  | <select name="name"> |
|  | <% |
|  | for (Teacher teacher : teachers){ |
|  | out.print("<option>" + teacher.getfname() + " " + teacher.getLname()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  |  |
|  | <td> |
|  | <select name="subject"> |
|  | <% |
|  | for (Subject subject : subjects){ |
|  | out.print("<option>" + subject.getName()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  | </tr> |
|  | </table> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

ChooseClassReport

|  |
| --- |
| <%@page import="program.Classes"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  |  |
|  | <h1>Choose a Class for Report Page</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Classes> classes = hibernateSession.createQuery("from Classes").list(); |
|  | %> |
|  |  |
|  | <form action="ClassReport.jsp" method="post"> |
|  | <table> |
|  | <tr> |
|  | <th>Class Name </th> |
|  |  |
|  | </tr> |
|  |  |
|  | <tr> |
|  | <td> |
|  | <select name="class"> |
|  | <% |
|  | for (Classes clas : classes){ |
|  | out.print("<option>" + clas.getName()); |
|  | out.print("</option>"); |
|  | } |
|  | %> |
|  | </select> |
|  | </td> |
|  | </tr> |
|  | </table> |
|  | <input type="submit" value="Submit"> |
|  | </form> |
|  | </body> |
|  | </html> |

ViewClass

|  |
| --- |
| <%@page import="program.Subject"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.Classes"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  | <a href="addClasses.html">Add Class</a><br> |
|  | <a href="assignSubjectToClass.jsp">Assign Subject to Class</a><br> |
|  |  |
|  | <h1>The Following Classes are listed</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Classes> classes = hibernateSession.createQuery("from Classes").list(); |
|  | %> |
|  | <table> |
|  | <tr> |
|  | <th>Class Name </th> |
|  | <th>Subject Name</th> |
|  | </tr> |
|  | <% |
|  | for(Classes clas : classes){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + clas.getName() + "</td>"); |
|  |  |
|  | StringBuffer buf = new StringBuffer(); |
|  | boolean first = true; |
|  | for (Subject subject : clas.getSubjects()){ |
|  | if(first== true){ |
|  | buf.append("<td>" + subject.getName() + "</td>"); |
|  | buf.append("</tr>"); |
|  | first = false; |
|  | }else{ |
|  | buf.append("<tr><td></td>"); |
|  | buf.append("<td>" + subject.getName() + "</td>"); |
|  | buf.append("</tr>"); |
|  | } |
|  |  |
|  | } |
|  | out.print(buf.toString()); |
|  | } |
|  | %> |
|  | </table> |
|  | </body> |
|  | </html> |

ViewStudent

|  |
| --- |
| <%@page import="program.Student"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  | <a href="addStudent.html">Add Student</a><br> |
|  | <a href="assignStudentToClass.jsp">Assign Student</a> |
|  |  |
|  | <h1>The Following Students are listed</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Student> students = hibernateSession.createQuery("from Student").list(); |
|  | %> |
|  | <table> |
|  | <tr> |
|  | <th>Name </th> |
|  | <th>Last Name </th> |
|  | <th>Assigned Class </th> |
|  | </tr> |
|  | <% |
|  | for(Student student : students){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + student.getfname() + "</td>"); |
|  | out.print("<td>" + student.getlname() + "</td>"); |
|  | out.print("<td>" + getClassName(student) + "</td>"); |
|  | out.print("</tr>"); |
|  | } |
|  | %> |
|  | </table> |
|  |  |
|  | <%! |
|  | public String getClassName(Student student){ |
|  | if (student.getClasses() == null){ |
|  | return "no class assigned"; |
|  | } |
|  | else{ |
|  | return student.getClasses().getName(); |
|  | } |
|  | } |
|  | %> |
|  | </body> |
|  | </html> |

ViewSubject

|  |
| --- |
| <%@page import="program.Subject"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  | <a href="addSubject.html">Add Subject</a><br> |
|  |  |
|  | <h1>The Following Subjects are listed</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Subject> subjects = hibernateSession.createQuery("from Subject").list(); |
|  | %> |
|  | <table> |
|  | <tr> |
|  | <th>Subject Name </th> |
|  | </tr> |
|  | <% |
|  | for(Subject subject : subjects){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + subject.getName() + "</td>"); |
|  | out.print("</tr>"); |
|  | } |
|  | %> |
|  | </table> |
|  |  |
|  |  |
|  |  |
|  | </body> |
|  | </html> |

ViewTeacher

|  |
| --- |
| <%@page import="program.Subject"%> |
|  | <%@page import="program.Teacher"%> |
|  | <%@page import="java.util.List"%> |
|  | <%@page import="org.hibernate.Session"%> |
|  | <%@page import="program.HibernateUtil"%> |
|  | <%@page import="org.hibernate.SessionFactory"%> |
|  | <%@ page language="java" contentType="text/html; charset=UTF-8" |
|  | pageEncoding="UTF-8"%> |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <meta charset="UTF-8"> |
|  | <title>Insert title here</title> |
|  | </head> |
|  | <body> |
|  |  |
|  | <a href="WelcomePage.html">Back to Main Menu</a><br> |
|  | <a href="addTeacher.html">Add Teacher</a><br> |
|  | <a href="assignTeacherToSubject.jsp">Assign Teacher to Subject</a><br> |
|  |  |
|  | <h1>The Following Teachers are listed</h1> |
|  | <% |
|  | SessionFactory sf = HibernateUtil.getSessionFactory(); |
|  | Session hibernateSession = sf.openSession(); |
|  | List<Teacher> teachers = hibernateSession.createQuery("from Teacher").list(); |
|  | %> |
|  | <table> |
|  | <tr> |
|  | <th>First Name </th> |
|  | <th>Last Name </th> |
|  | <th>Assigned Class</th> |
|  | </tr> |
|  | <% |
|  | for(Teacher teacher : teachers){ |
|  | out.print("<tr>"); |
|  | out.print("<td>" + teacher.getfname() + "</td>"); |
|  | out.print("<td>" + teacher.getLname() + "</td>"); |
|  |  |
|  | StringBuffer buf = new StringBuffer(); |
|  | boolean first = true; |
|  | for (Subject subject : teacher.getSubjects()){ |
|  | if(first== true){ |
|  | buf.append("<td>" + subject.getName() + "</td>"); |
|  | buf.append("</tr>"); |
|  | first = false; |
|  | }else{ |
|  | buf.append("<tr><td></td><td></td>"); |
|  | buf.append("<td>" + subject.getName() + "</td>"); |
|  | buf.append("</tr>"); |
|  | } |
|  |  |
|  | } |
|  | out.print(buf.toString()); |
|  | } |
|  | %> |
|  | </table> |
|  |  |
|  | </body> |
|  | </html> |