## Classes

```
package com.ecommerce;
public class Classes {
private int ID;
private String classname;
public Classes() {
public Classes(String classname) {
       super();
       this.classname = classname;
public int getID() {
       return ID;
public void setID(int iD) {
       ID = iD;
public String getClassname() {
       return classname;
public void setClassname(String classname) {
       this.classname = classname;
}
}
ClassReport
package com.ecommerce;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import java.util.Set;
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 ClassReport
*/
@WebServlet(name = "ClassReports", urlPatterns = { "/ClassReports" })
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 {
               try {
                        SessionFactory factory = HibernateUtil.getSessionFactory();
                        Session session = factory.openSession();
                        List<Teacher> list = session.createQuery("from Teacher").list();
                        PrintWriter out = response.getWriter();
                        out.println("<html><body>");
                        out.println("Hibernate Session opened for School Details <br/>br>");
                        out.println("<b>Student Details</b><br>");
                        for (Teacher t : list) {
```

```
out.println("ID:"+ String.valueOf(t.getID())+ "Name:"+t.getName()+
"Age:"+t.getAge());
                                       Set<Student> student = t.getStudent();
                       out.println(", student : ");
                       for (Student s : student) {
                               out.print(s.getName() + " ");
                       }
                                               Set<Subjects> subjects = t.getSubjects();
                       out.println(", subject: ");
                       for (Subjects o : subjects) {
                               out.print(o.getName() + " ");
                       }
                       Set<Classes> classes = t.getClasses();
                       out.println(", classes : ");
                       for (Classes c : classes) {
                               out.print(c.getClassname() + " ");
                       }
                                       }
                       out.println("<html><body>");
               out.println("<b>Hibernate Session Closed</b> <br>");
               session.close();
               }catch (Exception e) {
                       e.printStackTrace();
               }
       }
        * @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 com.ecommerce;
public class Student {
private int ID;
private String name;
private int classes;
public Student() {
public Student(String name, int classes) {
      super();
      this.name = name;
      this.classes = classes;
public int getID() {
      return ID;
}
public void setID(int iD) {
      ID = iD;
public String getName() {
      return name;
public void setName(String name) {
      this.name = name;
public int getClasses() {
      return classes;
public void setClasses(int classes) {
      this.classes = classes;
}
}
```

## Subjects

```
package com.ecommerce;

public class Subjects {
  private int ID;
  private String name;
  public Subjects() {
  }
  public Subjects(String name) {
```

```
super();
      this.name = name;
public int getID() {
      return ID;
public void setID(int iD) {
      ID = iD;
public String getName() {
      return name;
public void setName(String name) {
      this.name = name;
}
Teacher
package com.ecommerce;
import java.util.Set;
public class Teacher {
private int ID;
private String name;
private int age;
private Set<Subjects> subjects;
private Set<Classes> classes;
private Set<Student> student;
public Teacher() {
public int getID() {
      return ID;
public void setID(int iD) {
      ID = iD;
public String getName() {
      return name;
}
public void setName(String name) {
      this.name = name;
public int getAge() {
      return age;
public void setAge(int age) {
      this.age = age;
public Set<Subjects> getSubjects() {
      return subjects;
public void setSubjects(Set<Subjects> subjects) {
      this.subjects = subjects;
```

```
public Set<Classes> getClasses() {
      return classes;
public void setClasses(Set<Classes> classes) {
      this.classes = classes;
public Set<Student> getStudent() {
      return student;
public void setStudent(Set<Student> student) {
      this.student = student;
}
Index.html
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>LearnersAcademy</title>
</head>
<body>
<a href="details">School Details</a><br>
</body>
</html>
Web.xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee"
http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd" id="WebApp_ID" version="3.1">
  <display-name>LearnersAcademy</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.htm</welcome-file>
    <welcome-file>default.jsp</welcome-file>
  </welcome-file-list>
  <servlet>
    <servlet-name>ClassReport</servlet-name>
    <servlet-class>com.ecommerce.ClassReport</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>ClassReport</servlet-name>
    <url-pattern>/details</url-pattern>
  </servlet-mapping>
</web-app>
Hibernate.cfg.xml
```

```
<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE hibernate-configuration PUBLIC</pre>
"-//Hibernate/Hibernate Configuration DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
  <session-factory>
   <!-- Database connection settings -->
   name="connection.url">jdbc:mysql://localhost:3306/ecommerce/property>
   cproperty name="connection.username">root
   <mapping resource="Student.hbm.xml"/>
   <mapping resource="Classes.hbm.xml"/>
   <mapping resource="Subjects.hbm.xml"/>
   <mapping resource="Teacher.hbm.xml"/>
  </session-factory>
</hibernate-configuration>
Teacher.hbm.xml
<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC</pre>
"-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com.ecommerce">
   <class name="com.ecommerce.Teacher" table="teacher">
       <id name="ID" type="int" column="ID">
           <generator class="identity"/>
       </id>
       cproperty name="name" type="string" column="name"/>
       cproperty name="age" type="int" column="age"/>
 <set name = "student" cascade="all" lazy="true">
                    <key column = "teacher_ID"/>
                    <one-to-many class="Student"/>
            </set>
        <set name="subjects" cascade="all" lazy="true">
               <key column="teacher_ID"></key>
               <one-to-many class="com.ecommerce.Subjects"/>
         </set>
        <set name="classes" cascade="all" lazy="true">
               <key column="teacher_ID"></key>
               <one-to-many class="com.ecommerce.Classes"/>
         </set>
</class>
</hibernate-mapping>
Classes.hbm.xml
<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC</pre>
```

```
"-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com.ecommerce">
    <class name="com.ecommerce.Classes" table="classes">
        <id name="ID" type="int" column="ID">
            <generator class="identity"/>
        </id>
        cproperty name="classname" type="string" column="classname"/>
    </class>
</hibernate-mapping>
Student.hbm.xml
<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC</pre>
"-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com.ecommerce">
    <class name="com.ecommerce.Student" table="student">
        <id name="ID" type="int" column="ID">
            <generator class="identity"/>
        cproperty name="name" type="string" column="name"/>
        cproperty name="classes" type="int" column="class"/>
    </class>
</hibernate-mapping>
Subjects.hbm.xml
<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC
"-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com.ecommerce">
    <class name="com.ecommerce.Subjects" table="subjects">
        <id name="ID" type="int" column="ID">
            <generator class="identity"/>
        cproperty name="name" type="string" column="name"/>
    </class>
```

</hibernate-mapping>