## **Project Structure**

- one-to-one-example

  output
  - - # com.hibernate.one\_to\_one\_example
      - Address.java
      - App.java
      - > I Employee.java
      - › I HibernateUtil.java
    - → B resources
      - in hibernate.cfg.xml
  - > # src/test/java
  - > March JRE System Library [J2SE-1.5]
  - Maven Dependencies
  - > 🗁 src
  - > 🗁 target
    - pom.xml

#### **Step 1: Create Maven Project**

- 1. Open your IDE (e.g., IntelliJ IDEA, Eclipse).
- 2. Create a new Maven project.
  - Group ID: com.hibernate
  - Artifact ID: one-to-one-example

## Step 2: Add the below Dependencies to pom.xml

- 1. mysql-connector-j
- 2. hibernate-core (hibernate-core)
- 3. jakarta.persistence-api (jakarta.persistence )

## Step-3 Create the below Classes

- 1. Create the Employee class in the com.hibernate.one to one example package.
- 2. Create the Address class in the com.hibernate.one\_to\_one\_example package.

# Class: Employee

```
package com.hibernate.one_to_one_example;
import jakarta.persistence.*;
@Entity
@Table(name="employeemaster")
public class Employee {
      @Id
      @GeneratedValue(strategy=GenerationType.AUTO)
      @PrimaryKeyJoinColumn
```

```
private int employeeld;
       @Column
       private String name;
       @Column
       private String email;
       @OneToOne(targetEntity=Address.class,cascade=CascadeType.ALL)
       private Address address;
       public void setEmployeeId(int employeeId) { this.employeeId = employeeId;}
       public int getEmployeeId() { return employeeId; }
       public void setName(String name) { this.name = name; }
       public String getName() { return name; }
       public void setEmail(String email) { this.email = email; }
       public String getEmail() { return email; }
       public Address getAddress() { return address; }
       public void setAddress(Address address) { this.address = address; }
}
Class: Address
package com.hibernate.one to one example;
import jakarta.persistence.*;
@Entity
@Table(name="addressmaster")
public class Address {
       @Id
       @GeneratedValue(strategy=GenerationType.AUTO)
       private int addressId;
       private String addressLine1,city,state,country;
       private int pincode;
       @OneToOne(targetEntity=Employee.class)
       private Employee employee;
       public int getAddressId() {return addressId;}
       public void setAddressId(int addressId) { this.addressId = addressId;}
       public String getAddressLine1() { return addressLine1; }
       public void setAddressLine1(String addressLine1) { this.addressLine1 = addressLine1; }
       public String getCity() { return city; }
       public void setCity(String city) { this.city = city; }
```

```
public String getState() { return state; }
     public void setState(String state) { this.state = state;}
     public String getCountry() { return country; }
     public void setCountry(String country) { this.country = country; }
     public int getPincode() { return pincode; }
     public void setPincode(int pincode) { this.pincode = pincode; }
     public Employee getEmployee() { return employee; }
     public void setEmployee(Employee employee) { this.employee = employee; }
}
Step 4: Create the hibernate.cfg.xml File
Create an XML file named hibernate.cfg.xml with the following content inside the resources folder.
<?xml version="1.0" encoding="UTF-8"?>
<hibernate-configuration>
     <session-factory>
           com.mysql.cj.jdbc.Driver 
           property name="hibernate.connection.url">
                 jdbc:mysql://localhost:3306/hibernateDB
           </property>
           connection.username">root
           cproperty name="hibernate.connection.password">password/property>
           cproperty name="show_sql">true
           property name="format_sql">true/property>
           <mapping class="com.hibernate.one_to_one_example.Employee"/>
           <mapping class="com.hibernate.one_to_one_example.Address"/>
```

```
</session-factory>
</hibernate-configuration>
```

**Note:** Ensure the MySQL database hibernateDB exists, and replace the username and password with your actual MySQL credentials.

#### Step 5: Create the HibernateUtil Class

Create the HibernateUtil class in the com.hibernate.one\_to\_one\_example package:

package com.hibernate.one\_to\_one\_example;

```
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
public class HibernateUtil {
       private static final SessionFactory sessionFactory = buildSessionFactory();
       private static SessionFactory buildSessionFactory() {
              SessionFactory sessionFactory = null;
              try {
                      Configuration configuration = new Configuration();
                      configuration.configure("resources/hibernate.cfg.xml");
                      sessionFactory = configuration.buildSessionFactory();
              }
              catch (Exception e) { e.printStackTrace(); }
              return sessionFactory;
       }
       public static SessionFactory getSessionFactory() {
              return sessionFactory;
       }
}
Step-6 Now add the below lines of code into App.java class file.
package com.hibernate.one_to_one_example;
import org.hibernate.Session;
import org.hibernate.Transaction;
public class App {
  public static void main( String[] args ) {
       Session session = HibernateUtil.getSessionFactory().openSession();
       Transaction tran = null;
       try {
              tran = session.beginTransaction();
              Employee employee = new Employee();
              employee.setName("Maksud Vahora");
              employee.setEmail("maksud.vahora72@gmail.com");
              Address address = new Address();
              address.setAddressLine1("Station Road, Park Enclave");
              address.setCity("Vadodara");
              address.setState("Gujarat");
              address.setCountry("India");
              address.setPincode(322560);
```

```
employee.setAddress(address);
    address.setEmployee(employee);

    session.persist(employee);
    tran.commit();
    System.out.println("Record inserted successfully !");

    session.close();
}
catch (Exception e) {
    System.out.println("Error :" + e.getMessage());
}
}
```

**Step-7** Right click on App.java file and Run the application