

Day8_Assignment:

CitizenPassportHibernate:

Citizen.java:

```
Package com.example.entity;

import jakarta.persistence.*;

@Entity

public class Citizen {

    @Id

    @GeneratedValue(strategy = GenerationType.IDENTITY)

    private int id;

    private String name;

    @OneToOne(cascade = CascadeType.ALL)

    @JoinColumn(name = "passport_id")

    private Passport passport;

    public int getId() { return id; }


    public String getName() { return name; }

    public void setName(String name) { this.name = name; }

    public Passport getPassport() { return passport; }

    public void setPassport(Passport passport) { this.passport = passport; }

}
```

Passport.java:

```
package com.example.entity;

import jakarta.persistence.*;

@Entity
```

```

public class Passport {

    @Id

    @GeneratedValue(strategy = GenerationType.IDENTITY)

    private int id;


    private String passportNumber;

    public int getId() { return id; }

    public String getPassportNumber() { return passportNumber; }

    public void setPassportNumber(String passportNumber) { this.passportNumber =
passportNumber; }

}

```

HibernateUtil.java:

```

package com.example.util;


import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
import entity.Citizen;
import entity.Passport;

public class HibernateUtil {

    private static final SessionFactory sessionFactory;


    static {

        try {

            sessionFactory = new Configuration()

                .configure("hibernate.cfg.xml")

                .addAnnotatedClass(Citizen.class)

                .addAnnotatedClass(Passport.class)

```

```

        .buildSessionFactory();
    } catch (Throwable ex) {
        throw new ExceptionInInitializerError(ex);
    }
}

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

```

App.java:

```

package com.example.app;

import entity.Citizen;
import entity.Passport;
import util.HibernateUtil;
import org.hibernate.Session;

public class App {
    public static void main(String[] args) {
        Passport passport = new Passport();
        passport.setPassportNumber("A123456789");

        Citizen citizen = new Citizen();
        citizen.setName("John Doe");
        citizen.setPassport(passport);
    }
}

```

```

    Session session = HibernateUtil.getSessionFactory().openSession();

    session.beginTransaction();

    session.persist(citizen); // will cascade to save passport

    session.getTransaction().commit();

    session.close();

    System.out.println("Citizen and Passport saved successfully.");
}
}

```

Hibernate.cfg.xml:

```

<?xml version='1.0' encoding='utf-8'?>
<!DOCTYPE hibernate-configuration PUBLIC
    "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
    "http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">

<hibernate-configuration>

    <session-factory>

        <property
name="hibernate.connection.driver_class">com.mysql.cj.jdbc.Driver</property>

        <property
name="hibernate.connection.url">jdbc:mysql://localhost:3306/testdb</property>

        <property name="hibernate.connection.username">root</property>

        <property name="hibernate.connection.password">Swetha@57</property>

        <property name="hibernate.dialect">org.hibernate.dialect.MySQLDialect</property>

        <property name="hibernate.hbm2ddl.auto">update</property>

        <property name="hibernate.show_sql">true</property>

    </session-factory>

</hibernate-configuration>

```

Pom.xml:

```
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <groupId>com.example</groupId>

  <artifactId>HibernateDemo</artifactId>

  <version>0.0.1-SNAPSHOT</version>


  <properties>

    <maven.compiler.source>17</maven.compiler.source>

    <maven.compiler.target>17</maven.compiler.target>

  </properties>


  <dependencies>

    <!-- https://mvnrepository.com/artifact/org.hibernate.orm/hibernate-core -->
    <dependency>

      <groupId>org.hibernate.orm</groupId>

      <artifactId>hibernate-core</artifactId>

      <version>7.0.8.Final</version>

    </dependency>


    <!-- https://mvnrepository.com/artifact/com.mysql/mysql-connector-j -->
    <dependency>

      <groupId>com.mysql</groupId>

      <artifactId>mysql-connector-j</artifactId>

      <version>9.3.0</version>
```

</dependency>

<!-- https://mvnrepository.com/artifact/jakarta.persistence/jakarta.persistence-api -->

>

<dependency>

<groupId>jakarta.persistence</groupId>

<artifactId>jakarta.persistence-api</artifactId>

<version>3.2.0</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.jboss.logging/jboss-logging -->

<dependency>

<groupId>org.jboss.logging</groupId>

<artifactId>jboss-logging</artifactId>

<version>3.6.1.Final</version>

</dependency>

</dependencies>

<build>

<plugins>

<!-- Compiler Plugin -->

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.11.0</version>

<configuration>

<source>17</source>

<target>17</target>

```
        </configuration>
    </plugin>
</plugins>
</build>

</project>
```

SQL Query:

```
CREATE DATABASE citizen_passport_db;
USE citizen_passport_db;
SELECT * FROM Passport;
SELECT * FROM Citizen;
```