**Hands on 1: Spring Data JPA - Quick Example** 

pom.xml

<?xml version="1.0" encoding="UTF-8"?>

<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>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>3.5.3</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.cognizant</groupId>

<artifactId>orm-learn</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>orm-learn</name>

<description>Demo project for Spring Data JPA and Hibernate</description>

<url/>

<licenses>

<license/>

</licenses>

<developers>

<developer/>

</developers>

<scm>

<connection/>

<developerConnection/>

<tag/>

<url/>

</scm>

<properties>

<java.version>17</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter</artifactId>

</dependency>

<dependency>

<groupId>com.mysql</groupId>

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

<version>8.0.33</version>

</dependency>

<dependency>

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

<artifactId>hibernate-core</artifactId>

<version>6.4.4.Final</version> <!-- or use a version compatible with Spring Boot 3.2+ -->

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

</project>

com.cognizant.orm\_learn.model – Country.java

package com.cognizant.orm\_learn.model;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

import jakarta.persistence.Column;

import jakarta.persistence.Table;

*@Entity*

*@Table*(name="country")

public class Country {

*@Id*

*@Column*(name="co\_code")

private String code;

*@Column*(name="co\_name")

private String name;

// getters and setters

public void setCode(String code) {

this.code = code;

}

public void setName(String name) {

this.name = name;

}

*@Column*(name="co\_name")

public String getName() {

return name;

}

*@Column*(name="co\_code")

public String getCode() {

return code;

}

// toString()

*@Override*

public String toString() {

return "Country {name=" + name + ", code=" + code + "}";

}

}

com.cognizant.orm\_learn.repository – CountryRepository.java

package com.cognizant.orm\_learn.model;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

import jakarta.persistence.Column;

import jakarta.persistence.Table;

*@Entity*

*@Table*(name="country")

public class Country {

*@Id*

*@Column*(name="co\_code")

private String code;

*@Column*(name="co\_name")

private String name;

// getters and setters

public void setCode(String code) {

this.code = code;

}

public void setName(String name) {

this.name = name;

}

*@Column*(name="co\_name")

public String getName() {

return name;

}

*@Column*(name="co\_code")

public String getCode() {

return code;

}

// toString()

*@Override*

public String toString() {

return "Country {name=" + name + ", code=" + code + "}";

}

}

com.cognizant.orm\_learn.service – CountryService.java

package com.cognizant.orm\_learn.service;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import com.cognizant.orm\_learn.model.Country;

import com.cognizant.orm\_learn.repository.CountryRepository;

*@Service*

public class CountryService{

*@Autowired*

private CountryRepository countryRepository;

*@Transactional*

public List<Country> getAllCountries() {

return countryRepository.findAll();

}

}

com.cognizant.orm\_learn – OrmLearnApplication.java

package com.cognizant.orm\_learn;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import java.util.List;

import org.springframework.context.ApplicationContext;

import com.cognizant.orm\_learn.model.Country;

import com.cognizant.orm\_learn.service.\*;

*@SpringBootApplication*

public class OrmLearnApplication {

private static final Logger ***LOGGER*** = LoggerFactory.*getLogger*(OrmLearnApplication.class);

private static CountryService *countryService*;

public static void main(String[] args) {

ApplicationContext context = SpringApplication.*run*(OrmLearnApplication.class, args);

*countryService* = context.getBean(CountryService.class);

*testGetAllCountries*();

// SpringApplication.run(OrmLearnApplication.class, args);

// LOGGER.info("Inside main");

}

private static void testGetAllCountries() {

***LOGGER***.info("Start");

List<Country> countries = *countryService*.getAllCountries();

***LOGGER***.debug("countries={}", countries);

***LOGGER***.info("End");

}

}

Output

