Spring Data JPA with Spring Boot, Hibernate

**Add a new country**

**application.properties**

spring.application.name=orm-learn

logging.level.org.springframework=info

logging.level.com.cognizant=debug

logging.level.org.hibernate.SQL=trace

logging.level.org.hibernate.type.descriptor.sql=trace

logging.pattern.console=%d{dd-MM-yy} %d{HH:mm:ss.SSS} %-20.20thread %5p %-25.25logger**{25}** %25M %4L %m%n

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver

spring.datasource.url=jdbc:mysql://localhost:3306/ormlearn

spring.datasource.username=root

spring.datasource.password=Tsandhya@24

spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQLDialect

spring.jpa.hibernate.ddl-auto=update

**Country.java**

package com.cognizant.orm\_learn.model;

import jakarta.persistence.Column;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

import jakarta.persistence.Table;

@Entity

@Table(name = "country")

public class Country {

@Id

@Column(name = "code")

private String code;

@Column(name = "name")

private String name;

public String getCode() {

return code;

}

public void setCode(String code) {

this.code = code;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

@Override

public String toString() {

return "Country [code=" + code + ", name=" + name + "]";

}

}

**CountryRepository.java**

package com.cognizant.orm\_learn.Repository;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.stereotype.Repository;

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

@Repository

public interface CountryRepository extends JpaRepository<Country, String> {

}

**CountryService.java**

package com.cognizant.orm\_learn.Service;

import java.util.Optional;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

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

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

@Service

public class CountryService

@Autowired

private CountryRepository countryRepository;

@Transactional

public void addCountry(Country country) {

countryRepository.save(country);

}

@Transactional

public Country findCountryByCode(String countryCode) throws CountryNotFoundException {

Optional<Country> result = countryRepository.findById(countryCode);

if (!result.isPresent()) {

throw new CountryNotFoundException("Country not found with code: " + countryCode);

}

return result.get();

}

}

**OrmLearnApplication.java**

package com.cognizant.orm\_learn;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import com.cognizant.orm\_learn.Service.CountryNotFoundException;

import com.cognizant.orm\_learn.Service.CountryService;

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

@SpringBootApplication

public class OrmLearnApplication {

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

private static CountryService countryService;

public static void main(String[] args) throws CountryNotFoundException {

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

countryService = context.getBean(CountryService.class);

getCountryTest();

testAddCountry();

}

private static void getCountryTest() throws CountryNotFoundException {

LOGGER.info("Start");

Country country = countryService.findCountryByCode("IN");

LOGGER.debug("Country: {}", country);

LOGGER.info("End");

}

private static void testAddCountry() throws CountryNotFoundException {

LOGGER.info("Start");

Country country = new Country();

country.setCode("XY");

country.setName("Xyland");

countryService.addCountry(country);

Country addedCountry = countryService.findCountryByCode("XY");

LOGGER.debug("Added Country: {}", addedCountry);

LOGGER.info("End");

}

}

**CountryNotFoundException**

package com.cognizant.orm\_learn.Service;

public class CountryNotFoundException extends Exception {

public CountryNotFoundException(String message) {

super(message);

}

}

**OUTPUT**

