**Hands on 7: Add a new country**

* Create new method in CountryService.

@Transactional

public void addCountry(Country country)

* Invoke save() method of repository to get the country added.

countryRepository.save(country)

* Include new testAddCountry() method in OrmLearnApplication. Perform steps below:
  + Create new instance of country with a new code and name
  + Call countryService.addCountry() passing the country created in the previous step.
  + Invoke countryService.findCountryByCode() passing the same code used when adding a new country
  + Check in the database if the country is added

**Solution:**

* Project: Maven
* Language: Java
* Spring Boot: Latest stable (e.g., 3.2.x)
* Group: com.example
* Artifact: country-app
* Name: country-app
* Package Name: com.example.country-app
* Packaging: Jar
* Java: 21

Add Dependencies:

* Spring Web
* Spring Data JPA
* H2 Database

**File name application.properties:**

# H2 database

spring.datasource.url=jdbc:h2:mem:testdb

spring.datasource.driverClassName=org.h2.Driver

spring.datasource.username=sa

spring.datasource.password=

# JPA

spring.jpa.show-sql=true

spring.jpa.hibernate.ddl-auto=update

spring.jpa.database-platform=org.hibernate.dialect.H2Dialect

# H2 console

spring.h2.console.enabled=true

spring.h2.console.path=/h2-console

**File Name Country.java:**

package com.example.countryapp.model;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

@Entity

public class Country {

@Id

private String code;

private String name;

// Getters and Setters

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;

}

}

**File name CountryRepository:**

package com.example.countryapp.repository;

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

import com.example.countryapp.model.Country;

public interface CountryRepository extends JpaRepository<Country, String> {

}

**File name CountryService:**

package com.example.countryapp.service;

import com.example.countryapp.model.Country;

import com.example.countryapp.repository.CountryRepository;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

@Service

public class CountryService {

@Autowired

private CountryRepository countryRepository;

@Transactional

public void addCountry(Country country) {

countryRepository.save(country);

}

public Country findCountryByCode(String code) {

return countryRepository.findById(code).orElse(null);

}

}

**Testing file name CountryAppApplication.java:**

package com.example.countryapp;

import com.example.countryapp.model.Country;

import com.example.countryapp.service.CountryService;

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

import org.springframework.boot.CommandLineRunner;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class CountryAppApplication implements CommandLineRunner {

@Autowired

private CountryService countryService;

public static void main(String[] args) {

SpringApplication.run(CountryAppApplication.class, args);

}

@Override

public void run(String... args) throws Exception {

testAddCountry();

}

void testAddCountry() {

Country country = new Country();

country.setCode("JP");

country.setName("Japan");

countryService.addCountry(country);

Country added = countryService.findCountryByCode("JP");

if (added != null) {

System.out.println("Added Country: " + added.getCode() + " - " + added.getName());

} else {

System.out.println("Country not found!");

}

}

}

**OUTPUT**:

