**Implement services for managing Country**

## *1. application.properties*

### ➤ For ****H2****:

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

spring.datasource.driverClassName=org.h2.Driver

spring.datasource.username=sa

spring.datasource.password=

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

spring.jpa.hibernate.ddl-auto=update

spring.h2.console.enabled=true

## *2. Create Country Entity*

import jakarta.persistence.\*;

@Entity

public class Country {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

private Long id;

private String name;

private String capital;

public Country() {}

public Country(String name, String capital) {

this.name = name;

this.capital = capital;

}

public Long getId() {

return id;

}

public void setId(Long id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getCapital() {

return capital;

}

public void setCapital(String capital) {

this.capital = capital;

}

}

## *3. Create CountryRepository*

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

public interface CountryRepository extends JpaRepository<Country, Long> {

Country findByName(String name);

}

## *4. Create CountryService*

import java.util.List;

public interface CountryService {

Country saveCountry(Country country);

Country getCountryById(Long id);

List<Country> getAllCountries();

Country updateCountry(Long id, Country updatedCountry);

void deleteCountry(Long id);

}

1. ***Implement CountryServiceImpl***

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

import org.springframework.stereotype.Service;

import java.util.List;

@Service

public class CountryServiceImpl implements CountryService {

@Autowired

private CountryRepository countryRepository;

@Override

public Country saveCountry(Country country) {

return countryRepository.save(country);

}

@Override

public Country getCountryById(Long id) {

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

}

@Override

public List<Country> getAllCountries() {

return countryRepository.findAll();

}

@Override

public Country updateCountry(Long id, Country updatedCountry) {

Country existing = countryRepository.findById(id).orElse(null);

if (existing != null) {

existing.setName(updatedCountry.getName());

existing.setCapital(updatedCountry.getCapital());

return countryRepository.save(existing);

}

return null;

}

@Override

public void deleteCountry(Long id) {

countryRepository.deleteById(id);

}

}

## *6. Create CountryController*

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

import org.springframework.web.bind.annotation.\*;

import java.util.List;

@RestController

@RequestMapping("/api/countries")

public class CountryController {

@Autowired

private CountryService countryService;

@PostMapping

public Country createCountry(@RequestBody Country country) {

return countryService.saveCountry(country);

}

@GetMapping("/{id}")

public Country getCountry(@PathVariable Long id) {

return countryService.getCountryById(id);

}

@GetMapping

public List<Country> getAllCountries() {

return countryService.getAllCountries();

}

@PutMapping("/{id}")

public Country updateCountry(@PathVariable Long id, @RequestBody Country country) {

return countryService.updateCountry(id, country);

}

@DeleteMapping("/{id}")

public String deleteCountry(@PathVariable Long id) {

countryService.deleteCountry(id);

return "Country deleted successfully!";

}

}