**WEEK-3**

**SPRING DATA JPA WITH SPRING BOOT, HIBERNATE**

**Spring Data JPA - Quick Example**

**File Name: Country.java**

package com.harika.jpaexample.model;

import jakarta.persistence.\*;

@Entity

@Table(name = "country")

public class Country {

@Id

@Column(name = "co\_code")

private String code;

@Column(name = "co\_name")

private String name;

// Getters & 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; }

@Override

public String toString() {

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

}

}

**FileName:CountryRepository.java**

package com.harika.jpaexample.repository;

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

import com.harika.jpaexample.model.Country;

public interface CountryRepository extends JpaRepository<Country, String> {}

**FileName: CountryService.java**

package com.harika.jpaexample.service;

import java.util.List;

import java.util.Optional;

import org.springframework.stereotype.Service;

import com.harika.jpaexample.model.Country;

import com.harika.jpaexample.repository.CountryRepository;

@Service

public class CountryService {

private final CountryRepository repo;

public CountryService(CountryRepository repo) {

this.repo = repo;

}

public List<Country> getAllCountries() {

return repo.findAll();

}

public Optional<Country> getCountry(String code) {

return repo.findById(code);

}

public Country saveCountry(Country country) {

return repo.save(country);

}

public void deleteCountry(String code) {

repo.deleteById(code);

}

public Country updateCountryName(String code, String newName) {

Country country = repo.findById(code)

.orElseThrow(() -> new RuntimeException("Country not found"));

country.setName(newName);

return repo.save(country);

}

}

**File Name:JpaExampleApplication.java**

package com.harika.jpaexample;

import java.util.List;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.boot.CommandLineRunner;

import org.springframework.context.annotation.Bean;

import com.harika.jpaexample.model.Country;

import com.harika.jpaexample.service.CountryService;

@SpringBootApplication

public class JpaExampleApplication {

public static void main(String[] args) {

SpringApplication.run(JpaExampleApplication.class, args);

}

@Bean

public CommandLineRunner run(CountryService service) {

return args -> {

List<Country> countries = service.getAllCountries();

countries.forEach(c ->

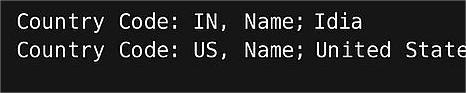
System.out.println("Country Code: " + c.getCode() + ", Name: " + c.getName()));

};

}

}

**OUTPUT:**

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