**Spring REST Hands on Exercises**

**Hands on 1**

Software Pre-requisites

MySQL Server 8.0

MySQL Workbench 8

STS

Maven

Create a STS Project using Spring Initializr

Go to <https://start.spring.io/>

Change Group as “com.ust”

Change Artifact Id as “rest-learn”

Click on menu and select "Spring Boot DevTools",”spring-boot-starter-web”, "Spring Data JPA" and "MySQL Driver"

Click Generate and download the project as zip

Extract the zip in root folder to STS Workspace

Import the project in STS "File > Import > Maven > Existing Maven Projects > Click Browse and select extracted folder > Finish"

In rest-learn STS project, open src/main/resources/application.properties and include the below database configuration

# Database configuration

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=root

# Hibernate configuration

spring.jpa.hibernate.ddl-auto=validate

spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQL5Dialect

Open STS with rest-learn project

Create new package com.ust.rest-learn.model

Copy the Country class from orm-learn project and paste under the above package.

Create new package com.ust.rest-learn.repository

Copy the CountryRepository from orm-learn project and paste under the above package.

Create new package com.ust.rest-learn.service

Copy the CountryService from orm-learn project and paste under the above package.

Create a new package com.ust.rest-learn.controller.

Create class CountryController inside the above package.

**Copy the code below and paste inside the CountryController class**

import org.springframework.web.bind.annotation.DeleteMapping;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.PostMapping;

import org.springframework.web.bind.annotation.PutMapping;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RestController;

import org.springframework.web.bind.annotation.Autowired;

import com.ust.rest-learn.model.Country;

import com.ust.rest-learn.service.CountryService;

@RestController

public class CountryController {

@Autowired

CountryService countryService;

@GetMapping("/countries/{code}")

public Country getCountry(@PathVariable String code) {

Country country= countryService.findCountryByCode(code);

return country;

}

@GetMapping("/countries")

public List<Country> getAllCountries() {

List<Country> countries= countryService.getAllCountries()

return countries;

}

@PostMapping("/countries")

public Country createCountry(@RequestBody Country country) {

countryService.addCountry(country);

return country;

}

@DeleteMapping("/countries/{code}")

public Country deleteCountry(@PathVariable String code) {

countryService.deleteCountry(code) ;

return country;

}

@PutMapping("/countries/{code}")

public Country updateCountry(@PathVariable String code,@RequestBody Country country ) {

countryService.updateCountry(code,country.getName()) ;

return country;

}

**Run the application and test using PostMan**.