**Add a new country**

**Spring Data JPA with Spring Boot, Hibernate**

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In Java applications, interacting with a relational database involves object-relational In a typical database-driven application, **adding new records** is a core functionality. Using **Spring Data JPA**, we can simplify the process of adding records like countries into the database by leveraging built-in repository methods. The save() method provided by **JpaRepository** helps us persist both new and updated entities with minimal code. This section demonstrates how to **add a new country** to the database using Spring Data JPA with a clean service layer and proper transaction management.

**Objective:**

To demonstrate how to insert a new country record into the country table using Spring Data JPA.

To understand the use of the save() method provided by JpaRepository.

To test and verify that the newly added country is persisted correctly.

To maintain a clean separation of concerns using the Service layer for business logic.

**Implementation:**

### Setup a Project Initialization

### ****Open Spring Initializer****

Group: com.cognizant

Artifact: orm-learn

Dependencies:

Spring Boot DevTools

Spring Data JPA

MySQL Driver

### ****Open a Existing Maven Project****:

File > Import > Maven > Existing Maven Projects

**Add method in Service: CountryService.java**

@Service

public class CountryService {

@Autowired

private CountryRepository countryRepository;

@Transactional

public void addCountry(Country country) {

countryRepository.save(country); // Adds or updates country

}

public Country findCountryByCode(String code) {

return countryRepository.findById(code).orElse(null); // Optional retrieval

}

}

**Add testAddCountry() in Main Application**

@SpringBootApplication

public class OrmLearnApplication {

private static CountryService countryService;

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

public static void main(String[] args) {

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

countryService = context.getBean(CountryService.class);

testAddCountry(); // Call the test

}

private static void testAddCountry() {

LOGGER.info("Start - testAddCountry");

Country country = new Country();

country.setCode("JP");

country.setName("Japan");

countryService.addCountry(country);

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

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

LOGGER.info("End - testAddCountry");

}

}

**Run this application and check you DB**

SELECT \* FROM country WHERE co\_code = 'JP';