

1941017082_Spring Boot Exercise

Product Table:

```
CREATE TABLE product (  
    id int NOT NULL AUTO_INCREMENT,  
    name varchar(255) NOT NULL,  
    price decimal(10,2) NOT NULL,  
    PRIMARY KEY (id)  
);
```

Customer Table:

```
CREATE TABLE customer (  
    id int NOT NULL AUTO_INCREMENT,  
    name varchar(255) NOT NULL,  
    address varchar(255) NOT NULL,  
    PRIMARY KEY (id)  
);
```

Manufacturer Table:

```
CREATE TABLE manufacturer (  
    id int NOT NULL AUTO_INCREMENT,
```

```
name varchar(255) NOT NULL,  
  
PRIMARY KEY (id)  
  
);
```

class table:

```
CREATE TABLE `class` (  
  `class_id` int(11) NOT NULL AUTO_INCREMENT,  
  `class_name` varchar(255) NOT NULL,  
  `class_code` varchar(255) NOT NULL,  
  `class_description` text NOT NULL,  
  `class_size` int(11) NOT NULL,  
  `class_room` varchar(255) NOT NULL,  
  `class_time` time NOT NULL,  
  `class_date` date NOT NULL,  
  PRIMARY KEY (`class_id`)  
)
```

1) insert a new record inside product table

```
Product product = new Product();  
  
product.setName("");  
  
product.setManufacturer("");
```

```
productRepository.save(product);
```

2) update an existing record in product table

```
Product product = productRepository.findOne(1L);
```

```
product.setName("");
```

```
product.setManufacturer("");
```

```
productRepository.save(product);
```

3) delete an existing record from product table

```
Product product = productRepository.findOne(1L);
```

```
productRepository.delete(product);
```

4) execute an query and return the manufacturer list for a given product name

```
List<Product> products = productRepository.findByName("");
```

```
for (Product product : products) {
```

```
    System.out.println(product.getManufacturer());
```

```
}
```

service

```
package jp.mitsuruog.springboot.sample.Customer.service;
```

```
import jp.mitsuruog.springboot.sample.Customer.domain.Customer;

import
jp.mitsuruog.springboot.sample.Customer.repository.CustomerRepository;

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

import org.springframework.data.domain.Page;

import org.springframework.data.domain.Pageable;

import org.springframework.stereotype.Service;
```

```
import java.util.List;
```

```
@Service
```

```
public class CustomerService {
```

```
    @Autowired
```

```
    CustomerRepository customerRepository;
```

```
    public Page<Customer> findAll(Pageable pageable) {
```

```
        return customerRepository.findAllOrderByName(pageable);
```

```
    }
```

```
    public Customer findById(Integer id) {
```

```
        return customerRepository.findOne(id);  
    }  
  
    public Customer create(Customer customer) {  
        return customerRepository.save(customer);  
    }  
  
    public Customer update(Customer customer) {  
        return customerRepository.save(customer);  
    }  
  
    public void delete(Integer id) {  
        customerRepository.delete(id);  
    }  
}
```

model

```
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
@SpringBootApplication
```

```
public class DemoApplication {  
    public static void main(String[] args) {
```

```
        SpringApplication.run(DemoApplication.class, args);  
    }  
}
```

Dao

```
public class UserDao implements Dao<User> {  
  
    private List<User> users = new ArrayList<>();  
  
    public UserDao() {  
        users.add(new User("John", "john@domain.com"));  
        users.add(new User("Susan", "susan@domain.com"));  
    }  
  
    @Override  
    public Optional<User> get(long id) {  
        return Optional.ofNullable(users.get((int) id));  
    }  
  
    @Override  
    public List<User> getAll() {
```

```
        return users;
    }
}
```

@Override

RestController

```
package es.macero.dev;
```

```
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.annotation.Bean;
import springfox.documentation.builders.PathSelectors;
import springfox.documentation.builders.RequestHandlerSelectors;
import springfox.documentation.spi.DocumentationType;
import springfox.documentation.spring.web.plugins.Docket;
import springfox.documentation.swagger2.annotations.EnableSwagger2;
```

@SpringBootApplication

@EnableSwagger2

```
public class SpringBootRestControllerExampleApplication {
```

```
    public static void main(String[] args) {
```

```
SpringApplication.run(SpringBootRestControllerExampleApplication.class,  
args);
```

```
}
```

```
@Bean
```

```
public Docket api() {
```

```
    return new Docket(DocumentationType.SWAGGER_2)
```

```
        .select()
```

```
        .apis(RequestHandlerSelectors.any())
```

```
        .paths(PathSelectors.regex("/getCustomersDetails"))
```

```
        .build();
```

```
}
```

```
}
```

Pom.xml

```
<project xmlns="https://maven.apache.org/POM/4.0.0"  
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
    xsi:schemaLocation="https://maven.apache.org/POM/4.0.0  
http://maven.apache.org/maven-v4_0_0.xsd">
```

```
    <modelVersion>4.0.0</modelVersion>
```

```
    <groupId>com.customer</groupId>
```

```
    <artifactId>customer-ws-spring-boot</artifactId>
```


<version>2.3.0</version>

<name>Spring Boot</name>

<description>web services using Spring Boot.</description>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.1.1.RELEASE</version>

</parent>

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

<java.version>11</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

```
<groupId>org.springframework.boot</groupId>  
<artifactId>spring-boot-starter-actuator</artifactId>  
</dependency>  
<dependency>  
<groupId>org.springframework.boot</groupId>  
<artifactId>spring-boot-starter-data-jpa</artifactId>  
</dependency>
```

<!-- Dependencies for Unit Testing -->

```
<dependency>  
<groupId>org.springframework.boot</groupId>  
<artifactId>spring-boot-starter-test</artifactId>  
<scope>test</scope>  
</dependency>  
<dependency>  
<groupId>org.springframework.security</groupId>  
<artifactId>spring-security-test</artifactId>  
<scope>test</scope>  
</dependency>  
<dependency>  
<groupId>com.google.guava</groupId>  
<artifactId>guava</artifactId>
```

<version>27.0.1-jre</version>

<scope>test</scope>

</dependency>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

<configuration>

<executable>>true</executable>

</configuration>

<executions>

<execution>

<goals>

<goal>build-info</goal>

</goals>

</execution>

</executions>

</plugin>

</plugins>

</build>

</project>