


API REST solution to store data in memory

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Additional scripts:

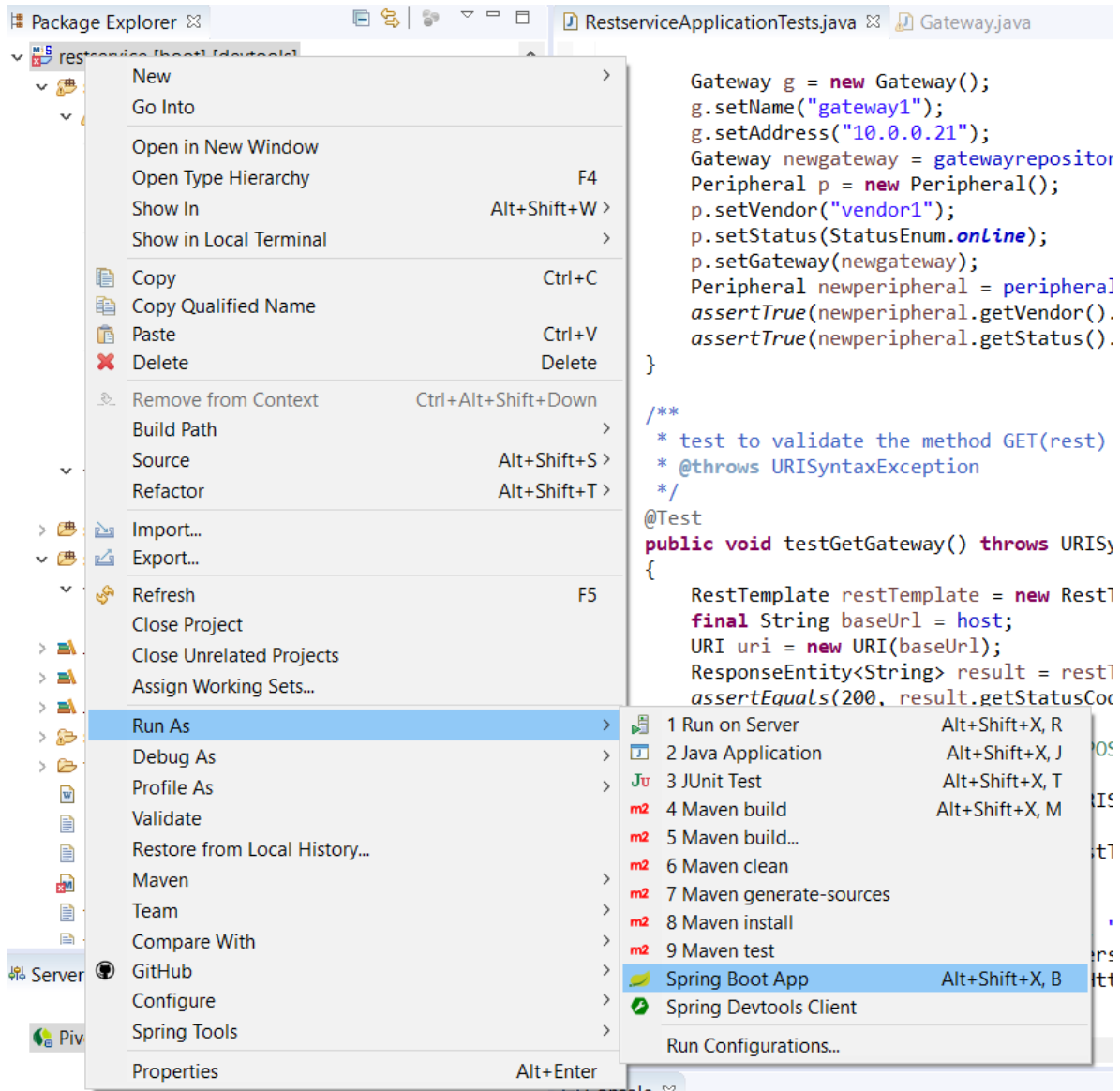
1- JSON to import a collection to POSTMAN with all the API endpoints.

 Musala collection.postman_collection.json

Project scaffold:

```
restservice [boot] [devtools]
src/main/java
├── com.musala.restservice
│   ├── controller
│   │   ├── GatewayController.java
│   │   └── PeripheralController.java
│   ├── model
│   │   ├── Gateway.java
│   │   ├── Peripheral.java
│   │   └── StatusEnum.java
│   ├── repository
│   │   ├── IGatewayRepository.java
│   │   ├── IPeripheralRepository.java
│   │   └── RestserviceApplication.java
│   └── exception
│       └── CustomResponseException.java
├── src/main/resources
├── src/test/java
│   └── com.musala.restservice
│       └── RestserviceApplicationTests.java
```

To run project:

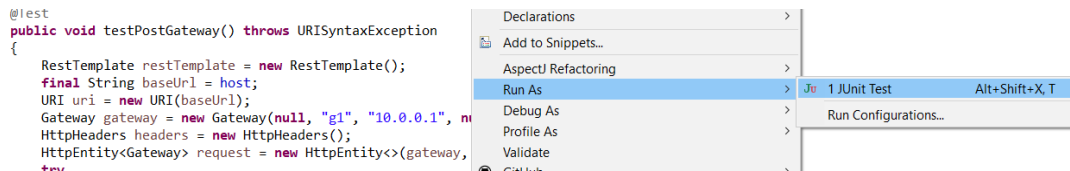


To run TESTS:

Right click inside the class:

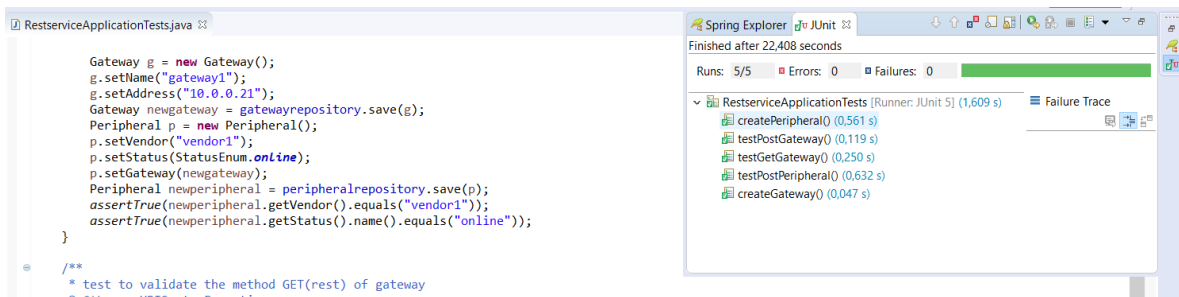


RestserviceApplicationTests.java



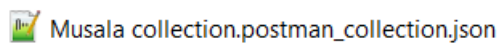
There are 4 tests to evaluate the correct functioning of the program:

- 1-createPeripheral (test to validate the peripheralRepository method save peripheral)
- 2-testPostGateway (test to validate the Gateway method POST(rest) running one gateway insertion)
- 3-testGetGateway (test to validate the method GET(rest) of gateway)
- 4-createGateway (test to validate the gatewayRepository method save gateway)

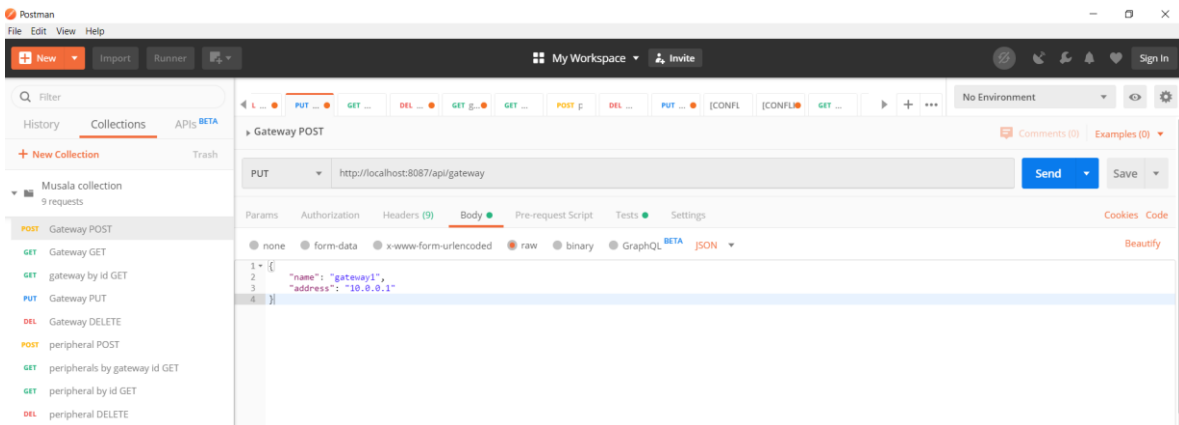


To test the API in POSTMAN

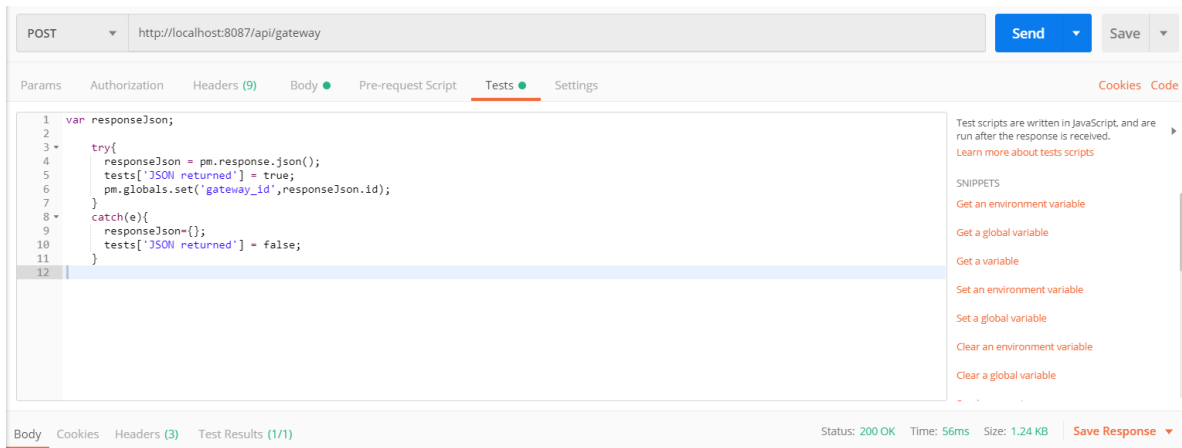
1-import collection file to POSTMAN



2-execute endpoints requests



Other tests with POSTMAN:



Example of Java 8 expressions used in the project:

```
@PutMapping("/gateway/{id}")
public Gateway updateGateway(@PathVariable UUID id, @Valid @RequestBody Gateway gatewayUpdated) {
    return gatewayrepository.findById(id)
        .map(gateway -> {
            gateway.setName(gatewayUpdated.getName());
            gateway.setAddress(gatewayUpdated.getAddress());
            return gatewayrepository.save(gateway);
        }).orElseThrow(() -> new CustomResponseException("Gateway not found with id " + id));
}
```