

## Spring Project

This exercise aims to bring together your learnings from this week in a single exercise. You are only provided with high level steps and must work through using the notes and previous exercises for information when needed.

The steps to be followed are:

1. Design and implement a microservice to provide a simple network management configuration.

The REST functionality should support

1. Add a network node
2. Get an individual node by id
3. Update a node
4. Delete a node

Each node should have the following data:

id: integer (generated on server as unique id)

Name: string

Location(town/city): string

Latitude: int

Longitude: int

2. Implement your API using Spring boot - start with add a node. Store the node data for all added nodes in memory to begin with in a suitable data structure
3. Write some tests for your service and make sure they pass.
4. Add endpoints for the other operations described above (get an individual node by id, update and delete node) and write tests for all operations

### **Bonus:**

1. Add a persistence layer to your service that will store the data in a relational database using JPA. This will replace the in memory store you have.