**Problem**

The graph visualization inside Neo4j is good to analyze and interact with the Smart Cities database.

The visualization for the graph is not as

**Solution**

Recreate visualization using D3.js JavaScript library.

**Neo4j to D3 process**

1. Neo4j provides a REST API that allows querying with Cypher Query Language
2. Used D3.js is a JavaScript library to create dynamic and interactive data visualizations in the web
3. An HTML page was created as a place holder for the D3 visualization
4. Read data from Neo4j using its REST API and AJAX. Data is returned on JSON
5. Transform JSON in to data for D3
6. Visualize data using D3

**D3 Visualization Functionalities**

1. Query Neo4j data using specified cypher query
2. Query Neo4j data using predefined queries
3. Query Neo4j data using predefined queries for a specified field of interest
4. Add a new node
5. Add a new edge

**Future Work**

1. Edit/Delete Node
2. Edit/Delete Edge
3. Expand/Collapse Node
4. Make the code more dynamic to be able to visualization any ontology.