COS787 – Spatial databases

Assignment 4: OSM application design
Due Date: 24 May 2019 (Friday)

Instructions:

This is an individual assignment and cannot be completed in groups.

The aim of this assignment is to present a use case for an application that would use OpenStreetMap data and the design of the application.

For this assignment, you have to do the following:

- A description of the use case and the application you would suggest that relies on OpenStreetMap data.
- What type of database would you recommend for this application? This should be motivated by scientific literature and your own opinions.
- An UML model of the database design you would use.

Content of the report for this assignment:

The assignment is limited to 5 pages.

Your report should include the following aspects:

1. A clear use case of a problem you would be able to solve using the data available in the OpenStreetMap database.
2. A detailed description of the application that you would suggest to solve this problem.
   a. Include information on high-level requirements of the application, but with a focus on the database aspects of the application.
3. The best type of database to use for implementing this application.
   a. Use scientific literature to motivate your suggestion.
   b. Example of a system that you would use, for example PostgreSQL, dbo4 or MongoDB.
4. An UML class diagram to provide an overview of the data the application would need and the relationships between the tables.
5. Include all required references in the document.

Instruction for submission:

- A single PDF document needs to be submitted to ClickUP.
- Ensure that your student number and name is clearly visible.
- No late submissions will be accepted.
- If the instructions are not followed, you will be penalized.

The end.