Group 23 - Google Maps 2.0

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1 Introduction

2 Issue and Background

The background of this project will be described in this chapter. Furthermore will the main issues also be described.

2.1 Background

The purpose of this project is creating a program, that can visualize map data. This map data is from OpenStreetMap [1] and will be the source of data throughout the project. The scope of the project is being able to (smoothly) visualize the whole of Denmark, while allowing the user to zoom, pan, etc. The program shall also support many other standard map features as described in **ANOTHER** chapter[2]. Being able to visualize such large data sets requires implementing efficient algorithms which allows the program to sort in the data set and only display relevant[3] element.
OpenStreetMap is an "Open data"[4] project founded by the OSM Foundation and is built by a community of mappers who collects, contributes and maintains cartography data. Anyone can contribute to the data allowing the community to drive the project, emphasizing local knowledge.

2.2 Issue

The main issue addressed in this project is dealing with a very large data set. This means developing and using efficient algorithms that solves the problems in a reasonable amount of time. The first example of this is loading the huge data file holding all the information about the map. Deciding what to draw, when to draw, etc. will be one of the main focuses in this project. The second example is manipulating and searching in the data file. This is an issue in the route finding algorithm, which has to take speed limits and distances of many possible routes in account, to find the fastest route.

[1] **REFERENCE TIL OSM HJEMMESIDE**
[2] Reference til kravliste
[3] "Relevant" here is purposely vague, since this will be part of the project to figure out.
[4] "Open data" means free to use, with credit to contributors.

3 Problem Analysis

We have chosen to have an iterative design process. Which allows us to have more analysis and designs of our project. We start by analysing and designing for a simple working prototype with root from handin4.[**?**]

3.1 Verb/Noun method

For our first analysis of classes and methods, we started with handin4's class/methods and then picked features from our the list of requirements.[**?**]

3.2 CRC cards

3.3 UML-diagrams

4 User Guide and Example

5 Technical Description of The Program

6 Testing

7 Conclusion

8 References

A Appendix