# Danmarkskort

Gruppe 18:

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## 1 Introduction

# 2 Background and problem area

- 2.1 Problem area
- 2.2 Usability requirements
- 2.3 System requirements

# 3 Analysis

## 4 User manual

5 Technical description

6 User and system test

7 Reflection on process

## 8 Conclusion

## 9 Index

### 9.1 Problem description - Noun and Verb Method

The map show the roads, buildings and other cartographic landmarks within Denmark. The map is created from a .osm file embedded with the program, the user can also add another .osm file to load a map of their choosing. Every cartographic landmark has a color, a number of tags and sub-tags, buildings have addresses and roads have names. Possible actions for the user are displayed with a user-interface, these actions include; searching, zooming, color-change and route-finding.

The User can search on addresses, possible matches to the searched address will be shown. Selected matches will display the location on the map. The user can draw a route between two searched adresses or by clicking on the map, a description on how to proceed through the route is displayed by text, the route is the shortest route and changes depending on the method of transportation, methods of transportation include car, bike and walking. Cars can travel through routes composed of streets and highways, bikes can travel through bike lanes and walking allows travel through sidewalks. The user can zoom in and out of the map and the level of the zoom is shown. The name of roads is displayed the user can hover the mouse cursor over the road. The user can change the color of the map and filter the Cartographic elements shown on the map. The map adapts the layout depending on the size of the window.

| Noun           | Verbs         |
|----------------|---------------|
| roads          | show          |
| buildings      | created       |
| landmark       | add           |
| map            | load          |
| .osm file      | actions       |
| landmarks      | displayed     |
| color          | searching     |
| tags           | zooming       |
| sub-tags       | color-change  |
| addresses      | route-finding |
| roads          | search        |
| names          | searched      |
| user-interface | shown         |
| address        | selected      |
| route          | display       |
| description    | draw          |
| text           | clicking      |
| shortest route | changes       |
| car            | travel        |
| bike           | composed      |
| walking        | allows travel |
| cars           | zoom          |
| routes         | change        |
| location       | filter        |
| user           | adapts        |
| level          | hover         |
| sidewalks      |               |
| mouse cursor   |               |
| layout         |               |
| size           |               |
| window         |               |
| highways       |               |
| bikes          |               |

#### 9.2 Background/verb

In 2004 wiki launched OpenStreetMap which revolutionised the way we map the world. OpenStreetMap made it easier to get an overview over parts of the world and made it much easier to transform real life cartography into data. In Denmark, OpenStreetMap have been utilized by rejseplanen.dk to make it possible for customers of public transport to map and plan their journey ahead of time.

In contrast to Google Maps OpenStreetMap is open source which makes it much easier to manipulate for the individual user.

Technologies such as this have made it easier to make GPS solutions for cars, bicycles, cell phones etc. Before online maps people had to rely on physical books (which took up space, where heavy, and not handy too use) in order to plan their journey. Furthermore having the cartographic data on a pc expands the ease of usability for multiple applications. If you for instance want to calculate the distance between two different points on a map having the cartographic data on a pc makes it much easier to calculate compared to having to do it by hand. Having the data on a pc makes it much easier to compare multiple different ways between two points to calculate which one is the shortest.

## 9.3 Log

#### 9.3.1 9. of March

We started the day off by talking about how far each group member had come in the previous handins, so we could get a general feel of how well-versed each group member was in the "source material". Afterwards we agreed that we should get Noun/Verb method and CRC-Cards done by friday, so we could push it to the Git repository. We also agreed that we should have agendas and goals for upcoming meetings.

#### 9.3.2 11. of March

#### Agenda

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Log Insert text

Goals accomblished today Insert text