

# DAT515 Peer review

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## 1 Core assignment

### 1.1 Q1:

Yes, application runs as expected.

### 1.2 Q2:

Yes, the map is displaying a complete map.

### 1.3 Q3:

Yes, it is possible to query the shortest path

## 2 Optional tasks

No optional tasks.

## 3 Code quality

Code from lab2 is reused properly, no unnecessary extra code. Dijkstras is implemented and imported. Cost functions are sent to Dijkstras as expected.

## 4 Screenshots

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### Chalmers-Brunnsparken

Quickest: Chalmers, Kapellplatsen, Vasaplatsen, Grönsaktorget, Domkyrkan, Brunnsparken, 7 minutes

Shortest: Chalmers, Kapellplatsen, Vasaplatsen, Valand, Kungssportsplatsen, Brunnsparken, 2.117 km

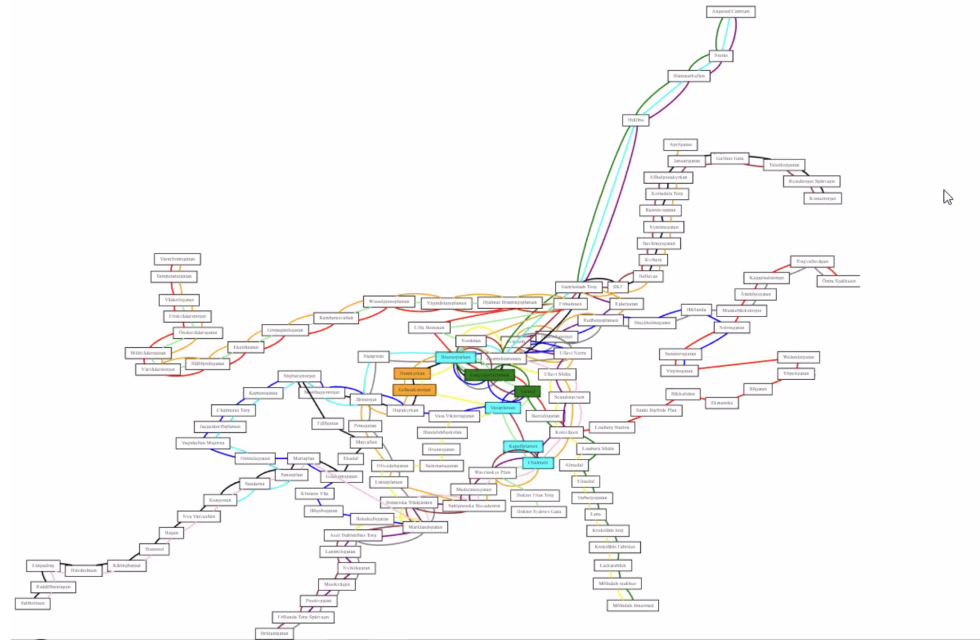


Figure 1: Screenshot of web application showing map, with a path between 'Chalmers' and 'Brunnsparken'.

```

phts.py x tramviz.py
from .trams import readTramNetwork
from .graphs import dijkstra
from .color_tram_svg import color_svg_network
import os
from django.conf import settings

def show_shortest(dep, dest):
    network = readTramNetwork()

    quickest = dijkstra(network, dep, cost=lambda u, v: network.transition_time(u, v))[dest]
    shortest = dijkstra(network, dep, cost=lambda u, v: network.geo_distance(u, v))[dest]

    timepath = 'Quickest: ' + ', '.join(quickest['path']) + ', ' + str(round(quickest['dist'], 3)) + ' minutes'
    geopath = 'Shortest: ' + ', '.join(shortest['path']) + ', ' + str(round(shortest['dist'], 3)) + ' km'

    def colors(v):
        if v in shortest['path'] and v in quickest['path']:
            return 'cyan'
        if v in shortest['path']:
            return 'green'
        if v in quickest['path']:
            return 'orange'
        else:
            return 'white'

    color_svg_network(colormap=colors)

    return timepath, geopath

```

Figure 2: Screenshot of the function `show_shortest`.