TIØ4258 – Øving 1
Gruppe 45

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24. februar 2013

Del I

Brainstorming

1 Idea No. 1: "Gløshaugen StandGuide"

Students at the Norwegian University of Technology and Science, especially those belonging to the Gløshaugen campus, become accustomed to the somewhat sporadic appearance of "stands", from freebies such as coffee can be obtained, on and about the campus. This is universally perceived as a positive phenomenon by students. In fact, the only downside to this arrangement seems to be that the knowledge of the presence of such stands are spread through word-of-mouth and/or the grapevine, meaning individuals have to run around campus looking for stands. The year is 2013 – the world is more modern than ever before, is such an archaic approach really acceptable? Introducing "Gløshaugen StandGuide", a system that lets you see if there's any stands on campus at any given time and what they're offering. No more will students have to run around like headless chickens uncertain as to whether they'll find any free coffee by the end of their run or not. It's efficient, it's attractive, it's easy. It's the future. "Gløshaugen StandGuide" – because you shouldn't have to work for free (stuff).

2 Idea No. 2: "Reiseplanlegger1"

Travel planning system for transportation within Norway.

If you want to travel within Norway your options are quite plentiful. There's trains, buses, metros, trams, airplanes and what not. Norway's problem isn't that it lacks alternatives to private travel methods such as the personal car, it's that figuring out how to use these alternatives can be a soul-draining experience. The company running all public transportation in one city has its own system, which is wholly different from whatever system is in use in any other city. Knowing how to figure out what bus you need to take to get somewhere in Oslo doesn't really help you pick out the right bus in Trondheim, and vice versa. Travelling from somewhere in Oslo to somewhere in Trondheim requires that you interface with up to five[1] different providers of transportation just to plan your trip.

It shouldn't have to be that complicated. That's why we've come up with "Reiseplanlegger1", a system which aims to integrate every single method of publicly available transportation within Norway, allowing you to plan your trip through one single interface. Need to get from Skånevik to Molde using public transportation? If it's possible, we'll tell you how.

Del II

Possibility Analysis

In this part, we continue with Idea No. 2, ("Reiseplanlegger1").

3 Product Description

3.1 Problems & Solutions

To recap, the system is intended to serve as everyone's go-to service when they need to travel from some place in Norway to another place in Norway, when the distance is too great to be considered within "walking distance".

[1] 1) public transit to get to the airport transit, 2) transit to oslo airport, 3) airline, 4) airport transit from trondheim airport, 5) public transit in Trondheim

Simply put, our system makes planning one's travels easier. Life is an optimization problem. Anything that simplifies parts of it or frees up our time is arguably a solution to the problem of "not having enough time". More specifically, our system aims to solve the following problems that exist with the current model:

1. Proficient use of public transportation in some areas seem to require intricate arcane knowledge only possessed by those native to the area.
2. Information about available methods of transportation in an area is not readily available unless one knows where to look.
3. Current systems are segmented according to provider with little or no support for planning a trip outside any single provider's reach.

The first issue is solved as the system provides easy-to-understand information in the same format wherever our users are. People who have moved to or visited some place in Norway they've not been before might be familiar with this. The second issue is solved by offering this information through the system, regardless of where the user might be located. The third issue, which you might be familiar with if you've ever flown out of Trondheim[2], is also solved by the collecting of all this information in one database, allowing the system to search through all of it when looking for a viable travel route.

The key thing here is that all this information – in-land flight schedules, bus routes, train departures, trams, ferry schedules throughout the country – is all gathered up into one place, lowering the entry level for those who want to use non-private transportation. The current system is like having multiple dictionaries, with the words spread randomly between them. Why would anyone want that?

The system itself, as presented to the user, is in its most simple form just two fields – into which the user enters his or hers place of departure and desired destination – and a button that is pushed after the information is entered. A suitable route is then computed by the system and presented to the user. The route is presented in the form of a map, as well as a series of concisely formulated steps the user would have to undertake in order to reach his or her destination. This could be an app, a website or a telephone-based service. The core concept is that the user provides the system with a place of departure and desired destination, and is given a route to get there which employs as much non-private transportation as possible.

3.2 Technological Challenges

There is a variety of challenges facing a product such as a travel planner. The most prominent of which is the development of proper APIs. As of yet there are many different services available in various areas that provides information on travel planning in that area. As these services are commonly available on the web, the travel planner will be able to extract information from these when appropriate. Unfortunately this is not standardized, and all of these services will have to be uncovered manually.

The amount of data that will be processed and gathered at any step to plan a trip will be within the scope of what current technology is able to. Therefore the technological challenges from a hardware perspective will be negligible. It is the software's decision making on where it should gather data for what are that will be important. The software that handles this could have a feed-back stage so that the user can respond whether they believe the travel planner has presented a good route/method of travelling. If it is unacceptable the travel planner may learn from its mistakes and perform better next time. How the travel planner will handle these issues depends on what the expected demographic and userbase will be. If the userbase is small and exclusive, the travel planner may prioritize quality over efficiency or the urban over the suburban. This means that the travel planner will require a developmental stage that can take a significant amount of time and resources, but once it is up and running, the system will be relatively self-sufficient.

Scaling as a result of popularity might become an issue when regarding the servers. This is a problem that has been faced by many up-and-coming web based businesses. Some have handled this by preparing the community for a downtime, others have tried to perform the transition in the background.

[2]Where there's two different companies running a bus route to the airport, each listing their routes at different locations and of course neither are compatible with the regular bus system.

4 The Market

5 The Business Model