

TimeToLive



Andreas Ulvesand
ulvesand@kth.se



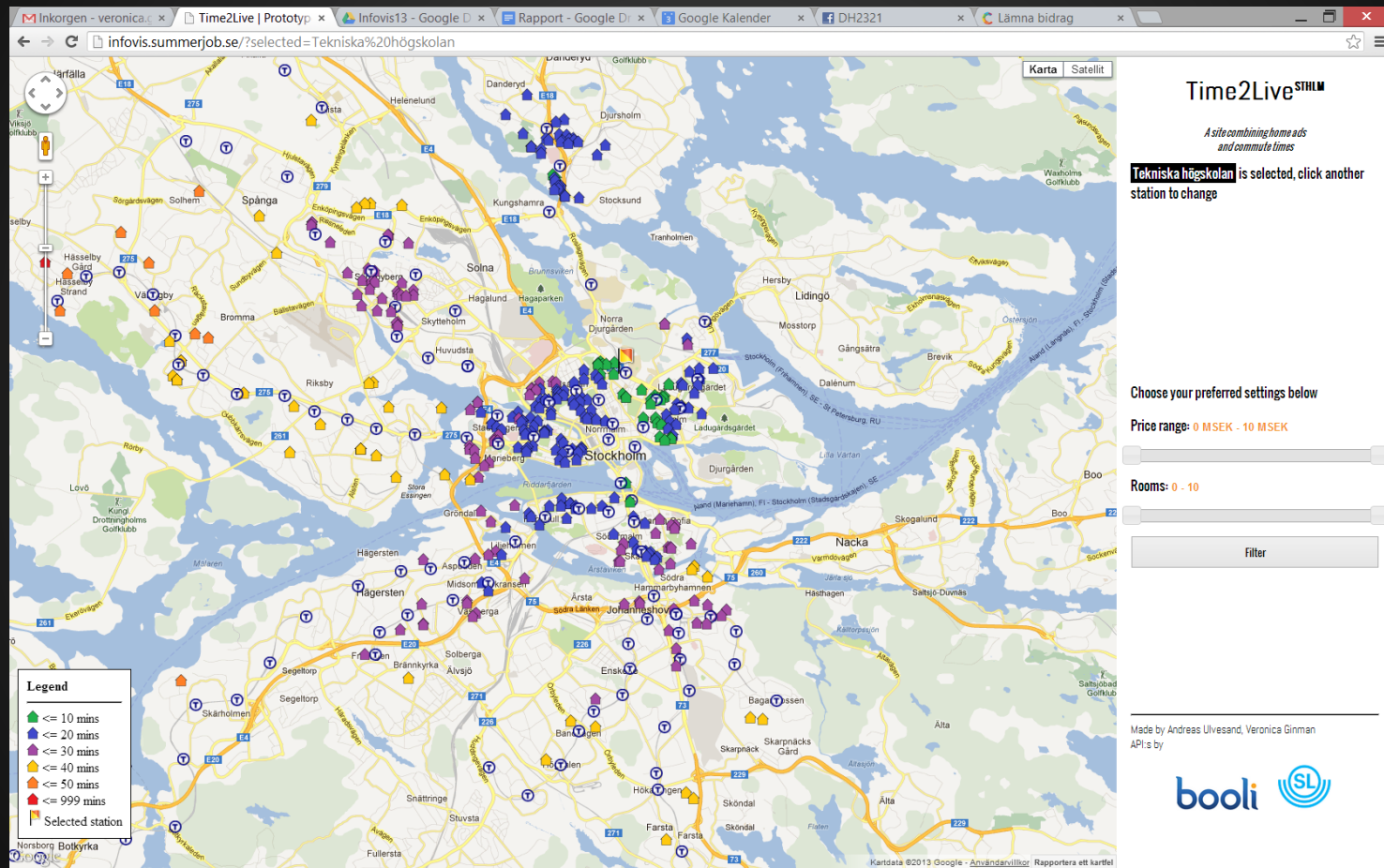
Veronica
Ginman
vginman@kth.se

Information Visualization

DH 2321

2013/03/04

TimeToLive



Outline

- Motivation
- Goals and Challenges
- Methods and Techniques
- DEMO
- Lessons Learned
- Conclusions and Future Work
- Discussion

Motivation

- Physical distance not necessarily related to commute time
- People are always stressed, not having enough time
- Save a little time each day makes a lot in the long run
- Interesting visualization of time as a distance a possibility

Goals and Challenges

Goals

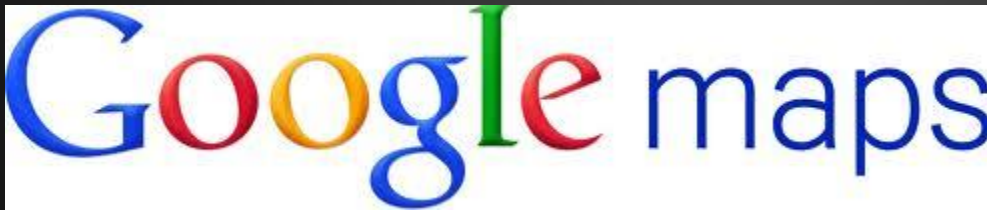
- Interesting to see time as a “distance” rather than actual distance in meters
- Provides a useful application for finding your new home in the optimal location
- Allows you to save time each day

Challenges

- Limitations in data gathering and display
- First time working with the APIs
- Only useful if you travel with SL not car or bike

Methods and Techniques

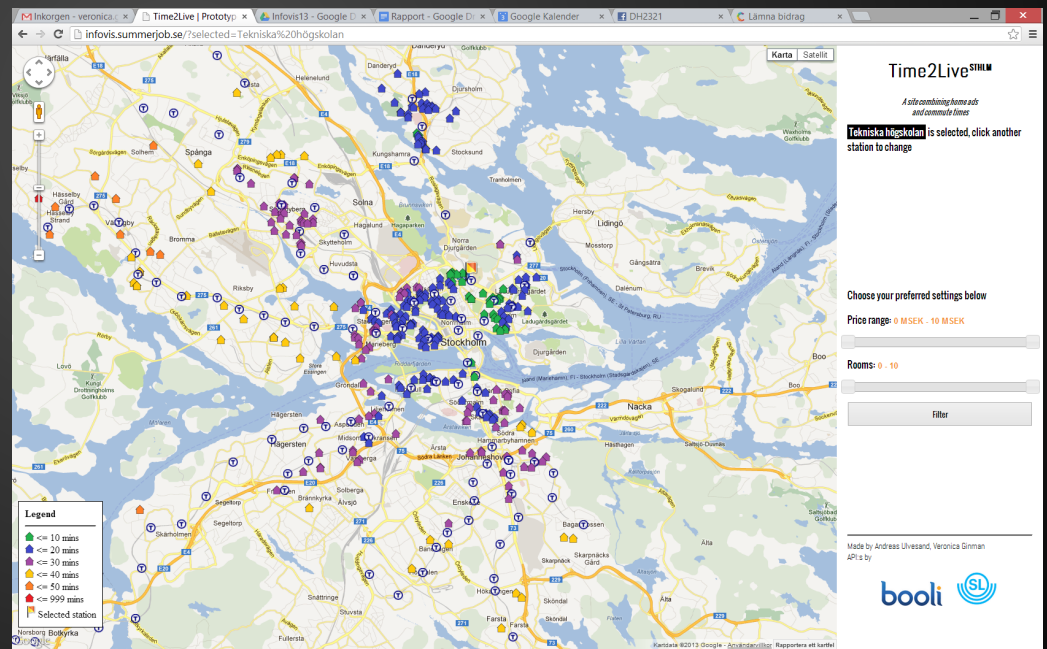
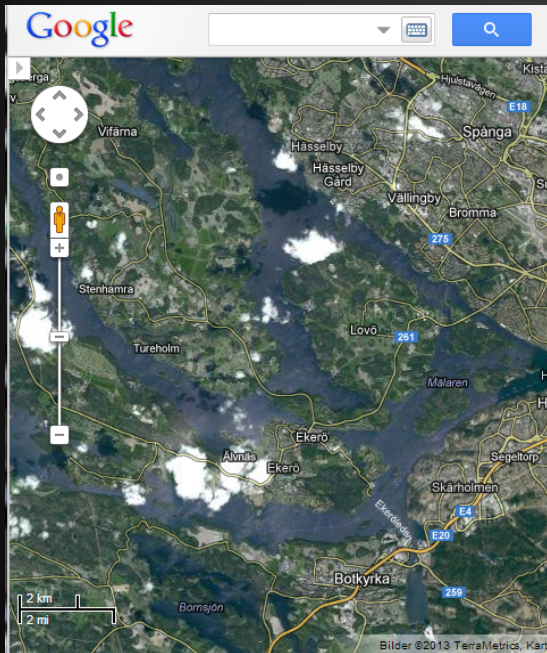
- Google Maps API
- Data APIs – SL for commute times and Booli for ads
- Time algorithm



Methods and Techniques

- Google Maps API

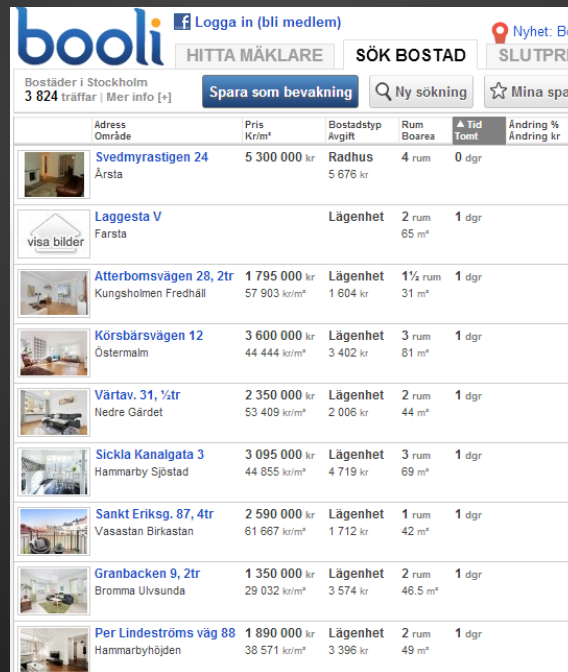
- Based on Google Maps web app, Javascript












Methods and Techniques

- Data APIs

- Booli API: fetch data dynamically using PHP



The screenshot shows the Booli website interface. At the top, there's a navigation bar with the Booli logo, a login button, and search filters. Below the navigation bar, there's a table listing various real estate properties. Each row includes a small image of the property, the address, the price, the type of property, the number of rooms, and the area. The table is sorted by price, with the most expensive properties at the top.

Adress Område	Pris Krim*	Bostadstyp Avgift	Rum Boarea	Tid Tomt	Ändring % Ändring kr
 Svedmyrastigen 24 Årsta	5 300 000 kr	Radhus 5 676 kr	4 rum	0 dgr	
 Laggesta V Farsta		Lägenhet	2 rum 65 m²	1 dgr	
 Atterbomsvägen 28, 2tr Kungsholmen Fredhäll	1 795 000 kr 57 903 kr/m²	Lägenhet	1½ rum 31 m²	1 dgr	
 Körsbärsvägen 12 Östermalm	3 600 000 kr 44 444 kr/m²	Lägenhet	3 rum 81 m²	1 dgr	
 Värtav. 31, 1/2tr Nedre Gärdet	2 350 000 kr 53 409 kr/m²	Lägenhet	2 rum 44 m²	1 dgr	
 Sickla Kanalgata 3 Hammarby Sjöstad	3 095 000 kr 44 855 kr/m²	Lägenhet	3 rum 69 m²	1 dgr	
 Sankt Eriksg. 87, 4tr Vasastan Birkastan	2 590 000 kr 61 667 kr/m²	Lägenhet	1 rum 42 m²	1 dgr	
 Granbacken 9, 2tr Bromma Ulvsunda	1 350 000 kr 29 032 kr/m²	Lägenhet	2 rum 46,5 m²	1 dgr	
 Per Lindströms väg 88 Hammarbyhöjden	1 890 000 kr 38 571 kr/m²	Lägenhet	2 rum 49 m²	1 dgr	

Methods and Techniques

- Data APIs

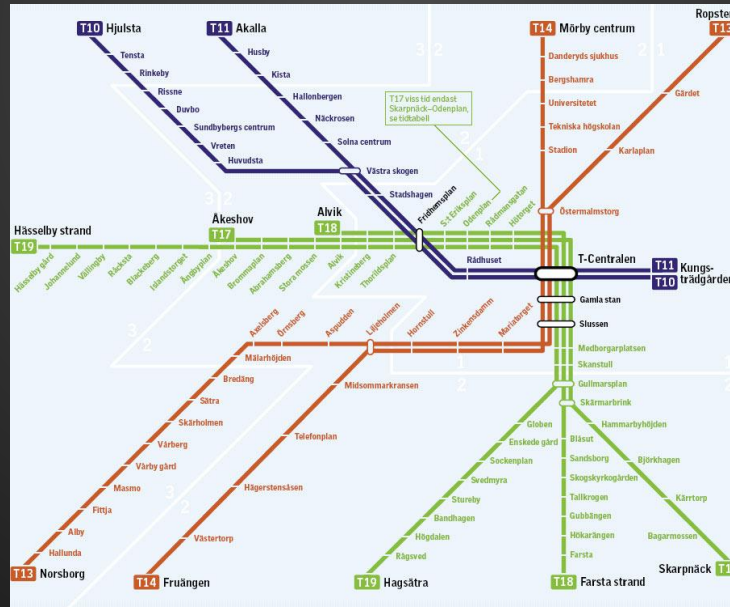
- Booli API: fetch data dynamically using PHP
- SL API: fetch data *once* using Java

The screenshot shows the SL website's trip planning interface. At the top, there's a navigation bar with links like 'Lättläst', 'Kontakta oss', 'Webbkarta', and a search bar. Below this is a menu with 'Resenär', 'Företagare', 'Om SL', and 'Visitor'. The main content area is titled 'Reseplanerare' and includes a sidebar with options like 'Planera resa', 'Välja biljett', and 'Resegaranti & resevillkor'. The main form allows users to enter 'Från' (From) and 'Till' (To) locations, select travel preferences (e.g., 'Jag vill tidigast åka'), and specify a date and time. A 'Sök resa' button is present. Below the form, a section titled 'Reseförslag' shows a suggested route from 'Fruängen' to 'Tekniska högskolan' on Sunday, March 3rd, with a duration of 24 minutes. The route details include departure times (20:05 and 20:29) and the specific line (tunnelbanans röda linje 14).

Methods and Techniques

• Time algorithm

- Start with nearest station, go in each direction until we find the goal station.
 - Challenge: changing lines



DEMO

Lessons Learned

- Difficulties
 - Limitations with the SL API
 - New to Javascript
- Lessons learned
 - Do thorough pre-study
 - Use debugger

Conclusion and Future Work

- Goals achieved:

- Visualizes the time and the distance
- Easy to use

- We would like to:

- Add more stations for busses and trains
- Develop the algorithm for time calculation
- Perhaps allow the user to search from any address/point, not just stations
- Work on the colour representations
- Add more filters and visualization options
- Use AJAX to not have to reload the page when changing station

Thank you!

Questions?

Veronica Ginman {vginman@kth.se}

Andreas Ulvesand {ulvesand@kth.se}

Mario Romero {email4@kth.se}

In case they ask

Extra Slides

Group Members

- Andreas Ulvesand
 - Computer Science, master thesis soon
 - Software dev, self-employed...?
- Veronica Ginman
 - Computer Science working on bachelors degree at the moment
 - Will study HCI for master studies