



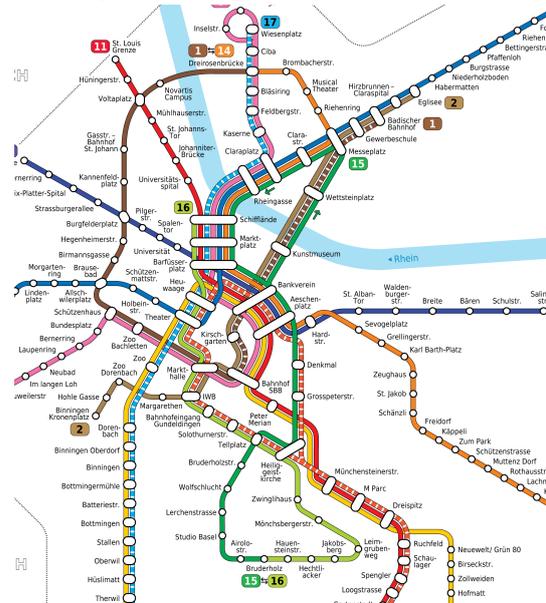
Master Thesis:

Personalized Filtering of Real Estate Offers

This document describes the subject and the general time schedule of the master thesis of Thomas Bürli, beginning in the spring term 2013. Adaptations or changes can be agreed upon by the advisors.

Assessing the personal value of real estate offerings is a tedious and time consuming task. The limited filtering capabilities of current real estate platforms fail to help deciding what flat to rent or what house to buy. When looking for a place to live, one of the most important factors is the amount of time that it takes to get from the new home to work and back. Filtering real estate offerings based on such factors is impossible right now.

Especially when moving into a new city, the problem of finding the geographical sweet spot that is suited best for the given workplaces and personal interests is a very hard problem. A smart filter could dramatically assist in such a situation as the number of offerings could be drastically reduced. The goal of this thesis is facilitate the search real estate offerings based on personal factors such as commute and other geographical preferences. Towards this end, Thomas will develop an application that allows to filter Swiss real estate offerings based on public or personal transport constraints. The resulting application should allow to easily add more geographical constraints such as schools or grocery stores.



Requirements: Good programming skills and some creativity are advantageous. The student(s) should be able to work independently on this topic.

Contacts

- Pascal Bissig: bissigp@tik.ee.ethz.ch, ETZ G61.3
- Philipp Brandes: philipp.brandes@tik.ee.ethz.ch, ETZ G64.2

Detailed Project Outline

We denote the following primary tasks mandatory (on the right side you find a rough estimate for the time that we allocate to the respective task):

- Research about existing solutions (★)
- Identify most suitable information sources for the required data (public/personal transport, real estate) (★)
- Gathering of the required data (crawler, format conversion, etc) (★★)
- Design and implement algorithms to efficiently rate real estate offerings (★★)
- Implement user interface that makes the system accessible (★★★)
- Design and implement interface to allow for additional constraints (★★★)
- Write a report documenting the development process and the final status of the application and discuss the findings (★★★)
- Prepare a presentation about the results of your work (★★)

The Student's Duties

- One meeting per week with the advisors to discuss current matters
- Regular check-ins into the provided *revision control system* (Subversion or Git)
- A presentation of the progress (15 min) after two months.
- A final presentation (15 min) of the work and results obtained in the semester thesis
- A final report (English or German), presenting work and results