

User interface visualizing multiple data sources for local history and genealogy

Background

Would you like to do your diploma work together with an entrepreneurial company? TrackuBack is a startup company focusing on bringing genealogy research to life by the use of modern visualization techniques in concert with multiple use of newly digitized history data sources.

Genealogy research is a popular hobby movement that is growing fast. Historical interest combines with a users identity, and lets the user be placed in the flow of history. Through such a portal, one can – with inspiring tools – meet ones background and culture in a wholly new way. The recent advances in genetic genealogy, such as low cost DNA tests and the ongoing digitalization of the cultural heritage, have made an even larger amount of information accessible.

A personal portal with family research as the base, can make history fresh and exciting. An individual becomes her own archaeologist, digging through information layers, finding her own treasures and can put it together with other researchers. In this way, collective research can bring individual history to life with people and stories far back in time.

At the same time, existing digital tools for genealogy are getting outdated. The graphics are rigid and slow, mostly built in the 80's and 90's. Many alternatives that could improve understanding, navigation and excitement are missing. The databases on the other hand are well constructed and the source material is massive. There are also millions of users all over the world. Visualization of genealogy has great possibilities for innovation to become a deeply inspiring tool for history.

Today the genealogy information is usually added into a personal family-tree database using the file format 'GEDcom' (GEnealogical Data COMmunication) that includes descriptions of ones relatives. The information attached to each historic person in GEDcom may be detailed, often including dates for personal events, and precise placenames. This information can be complemented with any other anecdotes and data that add life and flavour to that person. A GEDcom file can include thousands of persons. Although lots of time is spent on adding data into the family-tree, little support is given by available software to visualize the content and make it a story with depth and life. By combining open data with the users own work, deeper understanding can be reached by visualizing the context in which family history and place history comes to life.

Thesis description

The purpose of this thesis is to combine at least three datasources, such as SVAR, GEDcom, modern maps, Wikis, Riksantikvarieämbetets fornsök in an interface tailored for the need of genealogists and local historians

The project involves:

- Analysis of current visualization interfaces for the representation of historic data sources

- Target group needs analysis
- Design and implementation of an interactive visualization interface for flexible and multiperspective representation of data
- Layout and navigation experience of the implemented interface evaluated by a focus group
- Reporting of the results. What are the main findings? Which are the largest obstacles to overcome in the visualisation process.

Challenges to be addressed:

- How to combine / switch between strategic overview and detailed information view?
- How to tradeoff an intuitive interface with an information intensive data?
- How to fulfil the needs for inspiration, search and archiving (reporting) in the same interface?
- How to explore relevant data in an efficient and inspirational tool? (tradeoff the number of answers)
- How to achieve a simple archiving interface using few number of clicks?
- An efficient tool to support scientific methods based on reasoning and cross referencing?

Qualifications

The project is appropriate for students with good programming skills and an interest in information visualization and data analysis. Historical interest and an enterprising personality are welcome. Students will be co-supervised by Per Filipsson and Hjalmar Granberg at TrackuBack AB.

Contact persons

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