KB onderzoek lab: planning document
Clemens Neudecker, 30-10-2013

Main ideas/use case
"Etalage voor onderzoek"
We want to show results from research projects that KB participates in but also interesting software demos from others that apply well to our data. The lab can act as a window for showcasing such applications both, internally (e.g. let other departments in KB see what we are doing, promote interesting tools for the line organization), and also externally (our end users, researchers, citizen scientists, etc.).

"A space for experimentation with prototypes"
We want an environment where we ourselves but also other can experiment with new innovative technologies, but which may not be mature enough for productive use yet. In this sense the lab can act as a staging environment where we expose access to prototypes that we could otherwise not give.

"More interaction with users"
We want to involve our users more with our collections and create a stronger bond with them, especially researchers. The lab design is built around this idea: we present clusters of activities where users can really interact with our tools and content, rather than only list projects there.

Concept
"kbresearch.nl 2.0"
The concept does not foresee a lot of work on creating the lab. Indeed, one of the drivers for it is the fact that there already reside many interesting demos and prototypes from diverse projects on kbresearch.nl, but the environment has naturally grown over time and is unstructured and not intuitive to use. Thus we will focus on creating a new, simple but "sexy" frontend for the already existing demos and apps, and mainly add the user interaction (web 2.0 aspect) rather than adding new tools or features.

"Focus on activities"
A main point in the lab is to let the user do more than just search. Following an investigation into the available tools and demos, the following six main activities have been identified:
- Find: all demos around searching and browsing
- Get: all the information about getting our data, collaboration with data services
- Analyze: test our text analysis and visualization tools for KB datasets
- Enhance: improve the quality of KB data with OCR corrections and semantic tags
- Connect: make relationships between KB data and those of others, e.g. B&G
- Share: share ideas& experiences, document findings and results, discuss with others

"One uniform environment"
Currently many demos reside either on web pages of long finished projects, across several kbresearch.nl web pages, with third parties (e.g. UVA, SurfSara, etc.). The idea of the lab is to create a single environment with a common design that embeds all these in it, so that the user gets the feeling he is not constantly being referred to other places and projects. It also creates more traffic and usage of our web sites.

"The physical lab"
An interesting idea is to complement the virtual online lab with a physical lab space, that is a room at KB where there is access to certain demos and data for experimentation. We could then e.g. invite external researchers to present and discuss their work (a demo in the lab?), run events, conduct hackathons, and so forth. This could again be used internally (as a sort of Kennissessies), externally (as a sort of seminar), or both. It would bring together people from inside and outside KB working with innovative approaches and foster the communication and knowledge exchange between us and them. It could also be a space to host "embedded researchers".

Research
"Other examples"
To get a good idea of what others are doing, we had a look at some of the most interesting other "library labs" projects.
- Harvard Library Innovation Lab (http://librarylab.law.harvard.edu/)
Probably the first example of such project, and by far the most ambitious one to date. A fixed team of librarians and developers run projects, exhibitions, talks and create software apps.
- New York Public Library Labs (http://www.nypl.org/collections/labs)
Similar as Harvard, the library runs a unit with developers that are teamed with either collections specialists or external scholars to create innovative new apps. Also real-life events.
- BnF GallicaLabs (http://gallicalabs.bnf.fr/)
GallicaLabs is where users can try out new Gallica features in beta and give their feedback. Also includes a blog to report on new activities.
- BL Labs (http://labs.bl.uk/)
The British Library received funding from Mellon foundation to create their lab. It is built around three topics: 1) Training for internal staff, inviting key DH people to give talks 2) Run hackathons and small competitions about new ideas and tools 3) Revisit licensing and open up access to collections where possible
- HumLab (http://www.humlab.umu.se/en)
HumLab is not based in a library but at Umea University. The lab team does involve people from the university library though. Often quoted as an example lab, the people come together here in a modern multi-media space and discuss new ideas that they then also try to follow up with projects. Often includes media installations or works as well.

"Scoping"
In order not to duplicate efforts or provoke conflicts with other ongoing activities we had a look at what is happening in Nederlab/CLARIAH, the KB-Usability lab, and of course Delpher. While Nederlab has some overlap, it was decided that we can still pursue our own lab, as we have other goals and cannot rely on Nederlab completely. There is good contact and exchange with the Delpher team, so a coupling of Delpher and the lab will also be planned.

"Inventarisation of existing demos and apps"
In order to get an understanding of what software and data we had available to populate the lab, we had to investigate in depth the applications that were produced in the past by Onderzoek, and also elsewhere, rate them by categories such as maturity, applicability in the lab and effort required to support. From that we derive a prioritized list of roughly what demos will be made available and when.

Communication
"Internally"
The concept and demo for the lab were discussed within Onderzoek, within Afdelingsoverleg & DH werkgroep, with Data services, with IT, with M&D, with OLS, with COMM.

"Externally"
At the given moment we will get in touch with COMM about dissemination and a possible launch event, and also the planning of events in the physical lab.

Resources
"Technical"
For the lab (but also for other reasons) the old server running kbresearch.nl had to be replaced with a newer and also more powerful machine. This was requested from IT in June, and the server was delivered to us in September. Two weeks were reserved for the migration and testing of the new environment. After all programmer and users checked their applications were still working, the old server was decommissioned on 21 October.

"Human"
Below is the implementation plan for the lab. Phase I-IV require no IT support. Starting from Phase V, small assignments will be given to programmers and some of Onderzoek staff. The effort will be kept to an absolute minimum, but where possible there will be made use of the research programmer to improve the user experience in the lab. It is also envisaged to run small (1-day) KB internal hackathons to progress the state of the lab. A meeting will be held with IT following completion of Phase IV to assign tasks based on the issue tracker. The effort for these tasks varies between half a day (to integrate an existing demo) and a month (implement new features like user support).
A more accurate planning of time and effort will only be possible following the assignment of tasks from the issue tracker in a meeting with IT that is planned for the beginning of November.

"Dependencies"
The lab also has dependencies on some ongoing KB projects:
- Verijkingsinfrastruktuur: it would be very desirable to have the enrichment infrastructure ready and coupled with the lab so that user enrichments on our data can be stored in the enrichment database (and possible later taken over into production)
- Toegangsrechten: with the lab we want to advertise our data and provide simple ways to get access. The most desired ways of access are direct download (only possible for public domain dataset) and API access. For giving API access to our collections via SRU/OAI in the lab, the project Toegangsrechten must first deliver the required infrastructure.

In addition, the lab requires at least the following continuous resources to be maintained:
- 0.5 day a week Technical Coordinator (system status, new demos, features)
- 0.5 day a week Technical Support (system administration)
- 0.5 day a week User support (answer questions, manage contacts, user feedback)
- 0.5 day a week Communication & Dissemination (in case real-life events are conducted)

Implementation
Phase I - completed

Defining the use case, concept, research, initial communication

Phase II - completed
Initial Design (interaction, simple), initial Demo (html+css), review initial demo

Phase III- completed
kbresearch.nl server hardware migration

Phase IV - ongoing
Prototype implementation (selection of initial demos, revised design, some demos working), review prototype
→ Signoff to proceed with development (some efforts for IT)
→ Development assignments (issue tracker)

Phase V – not started
Alpha implementation (demos finalised, design finalised, most demos functional), issues from issue tracker, communication & event planning
→ Closed test (selected & limited audience)

Phase VI – not started
Beta implementation (all demos functional, some interconnected), issues from issue tracker, communication & event planning
→ Open test (public)

Phase VII – not started
RELEASE
Issues from issue tracker, new demos, regular events (internal/external)