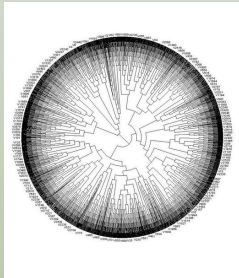




DKE

<http://www.findke.ovgu.de>

Background



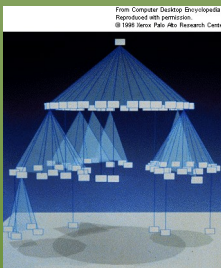
Source: <http://revolution-computing.typepad.com/.a/6a010534b1db25970b0120a56d0b8f970b-500wi>

Task

References



Source: <http://infosthetics.com/archive/s/docuburst2.jpg>



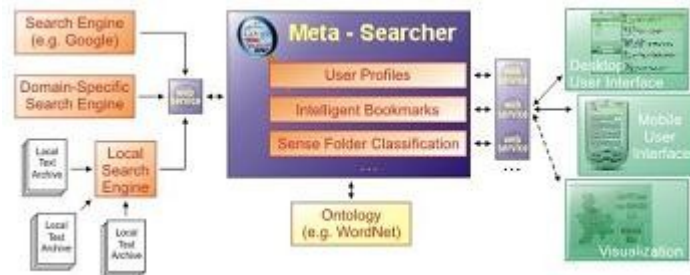
Source: http://www.yourdictionary.com/images/computer/_PARCIV3.GIF

Contact

Bachelor Thesis / Master Thesis / Diploma Thesis:

Comparison and User-Oriented Study of Different Visualizations of Hierarchically Structured Search Result Sets

Often a simple result list is not sufficient since this list often contains thousand of entries. One approach to avoid this is **structuring the result set hierarchically**. The DKE group has a system (CARSA), which can provide this via different methods such as classification and clustering.



Source: <http://ernestodeluca.de/bilder/carsa.JPG>

Goal of this thesis would be the comparison of existing methods to visualize hierarchies towards information search via objective design criteria, psychological research results and user specific characteristics. Perhaps the development of own visualization techniques is necessary. Especially interesting is the combination of known data with new data in a common hierarchy visualization. Goal is a prototypical implementation, which is integrated in the existing system. The system should be evaluated by a small user study. Good knowledge in Java programming would be good since the system is written in Java. After consultation the interface can also be implemented in other programming languages as well.

Visualization methods in general:

- Colin Ware: Information Visualization: Perception for Design
- Robert Spence: Information Visualization: Design for Interaction
- Jones: Keeping Found Things Found

Visualizing hierarchies:

- Visualizing hierarchies: <http://www.willsfamily.org/gwills/papers/VISUALIZING%20HIERARCHIES.pdf>
- Visualizing of changes using hierarchical data: www.vgvc.org/PDF/slides/2007/infovis/info_s08p01.pdf
- Shneiderman / Plaisant: Treemaps for space-constrained visualization of hierarchies: <http://www.cs.umd.edu/hcil/treemap-history/>

Psychology:

- David G. Meyers: Psychology (8th edition), here esp. chapters „perception“, „learning“ and „memory“

User Studies:

- Thoughts on user studies: Why, How and When: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.3.4118&rep=rep1&type=pdf>

Further resources can be handled out easy by the supervisors.

The thesis is allowed to be written in german or english language.

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