Optimal information architecture and metaphors can be designed in close cooperation with users, making usability more predictable.

**Service Oriented Interfaces (SOI)**

Within the institutes of the Max Planck Society there are many different needs for new or improved software solutions. It is almost impossible to build individual GUIs on top of them.

Interfaces developed by UIE use basic patterns, based upon a style guide for web applications. As far as possible, new services are built on reusable components, so that new interface elements will be implemented along with proven ones. Every component has a defined pattern, css definitions and (JavaScript) behavior and is documented in detail.

**Examples**

One of the first interfaces to go through a complete usability lifecycle is the eSciDoc publication management solution (PubMan). Interfaces for digital collections of books and images are addressed as well.

Please find more information at http://colab.mpdl.mpg.de/mediawiki

Category: User_Interface_Engineering

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Why User Interface Engineering?

Human centered design
The UIE Team actively participates in the release process of each service, with influence on scope, design and implementation of software applications.

UIE shapes usability, accompanying all phases from requirements to specification and productive deployment. For this purpose, the requirements of expert users – such as scientists and librarians – are taken into account.

Analysis & Evaluation

Information architecture
Browsing, manipulating and analyzing specific and complex research material in an easy and intuitive way is the key to provide more user satisfaction.

Page flows support the design of complex workflows, because they break down interaction into understandable portions.

Participation through workshops and interviews
Modern web applications are expected to deliver a high degree of usability. User participation within the development process is essential to meet those expectations. To balance the developer’s perspective, proven methods such as workshops and usability tests are applied to ensure the necessary degree of user participation in interface development.

UIE Workshops can help clarify
  - how users approach their tasks
  - how they expect the interface to behave
  - employed metaphors

Usability Interviews
Deriving quantitative measures for usability improvements is neither expensive nor time-consuming: An analysis based on the ‘thinking aloud’-method only takes a few days, while delivering reliable data.

The image depicts an analysis of usability interviews with librarians and scientists.

Conception & Design by Prototyping
From early drafts to productive use, each interface is designed and visualized using interface prototypes to provide an outlook on the solution at an early point in time. Short iteration cycles enable usability evaluation right from the beginning.