

Mapping the Guide: Using Concept Maps to Ease Resource Guide Design

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Background

Assignment: A Resource Guide for a graduate level class on Information Architecture

Problems:

- Only limited experience with creating and designing resource guides
- No background or even rudimentary knowledge of information architecture

Resources:

- Class syllabus from previous semester
- Support and assistance of class instructor
- Class textbook- *Information Architecture for the World Wide Web*

Challenges: How to overcome knowledge gap while simultaneously building an effective resource guide

Solution: Plan and design using concept maps and a program called CmapTools (developed by Joseph D. Novak at the Institute for Human and Machine Cognition (IHMC))

Methodology

Using the class syllabus, the Terms list, the various drawn maps and plans, and the Terms Concept Map, I set out to flesh out the IA LibGuide as a concept map. I used the title of the Guide, “Information Architecture and UX”, as the top level term of the concept map. Based on my research and understanding of the course, I chose four distinct topics/terms to use as tabs within the LibGuide: Information Architecture, User-Centered Design, Usability Testing/Evaluation, and Related Topics (Figure 1).

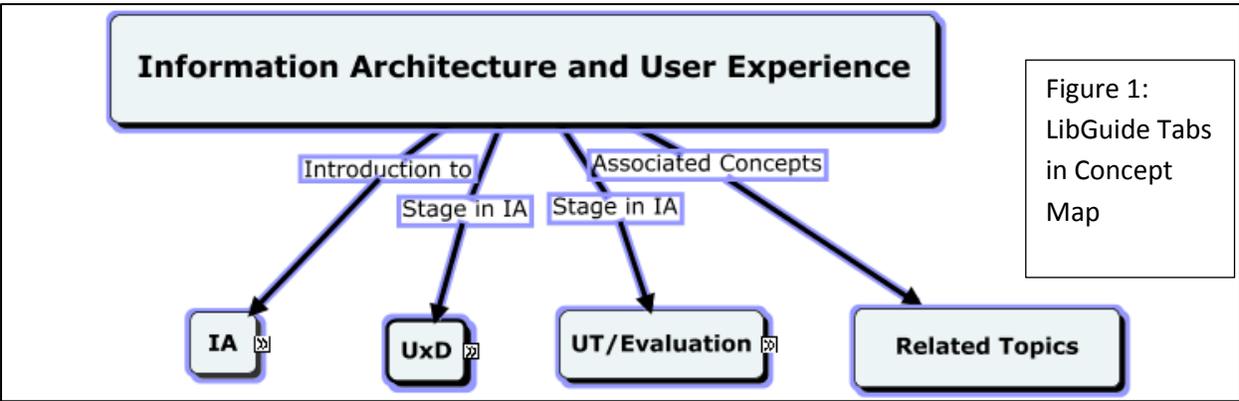


Figure 1:
LibGuide Tabs
in Concept
Map

From each of these four tabs, I fleshed out further their subject and content organization using sub-tabs. I was able to mimic tab structure with nodes in CmapTools, as seen in Figure 2 and 3. Although I did not have a chance to explore every feature of the program, CmapTools allows you to insert images and hyperlinks into the maps, providing even more options for really planning out one's content.

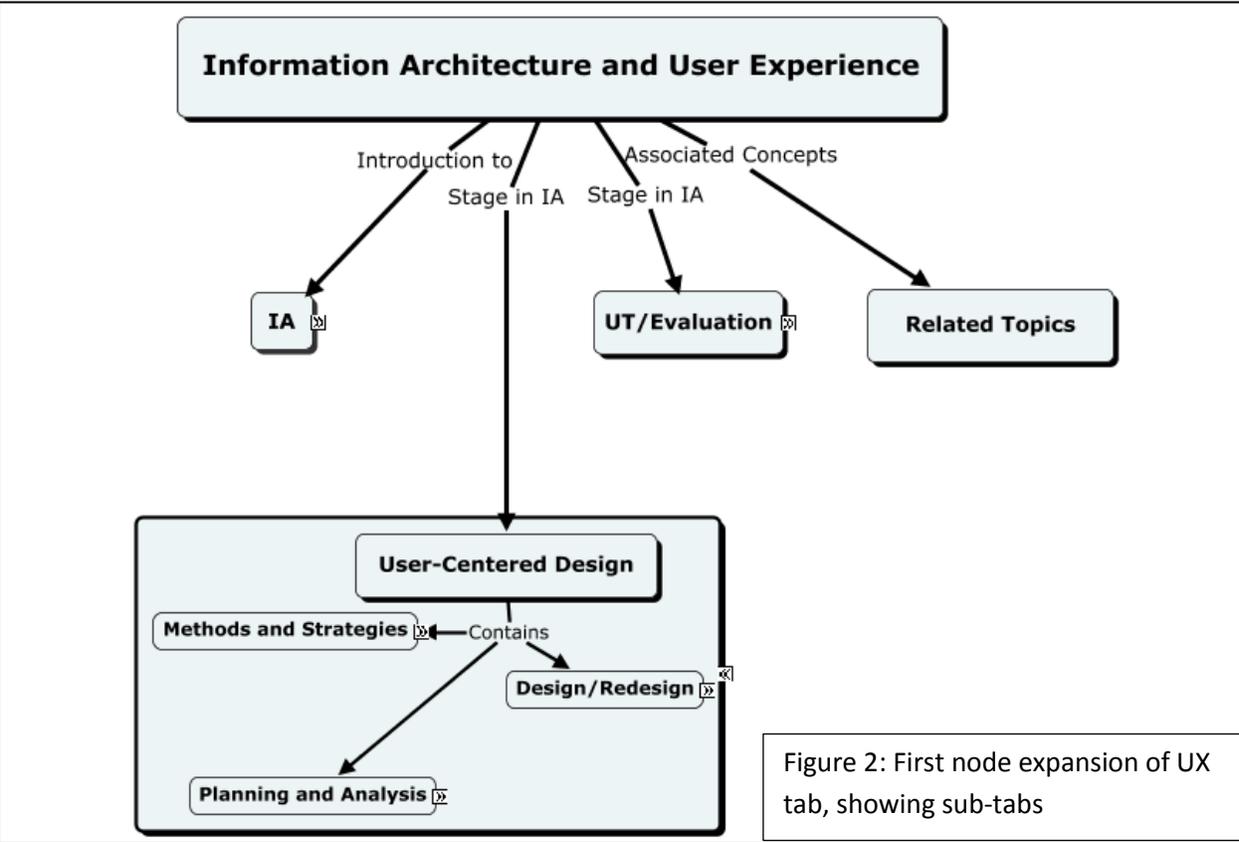


Figure 2: First node expansion of UX tab, showing sub-tabs

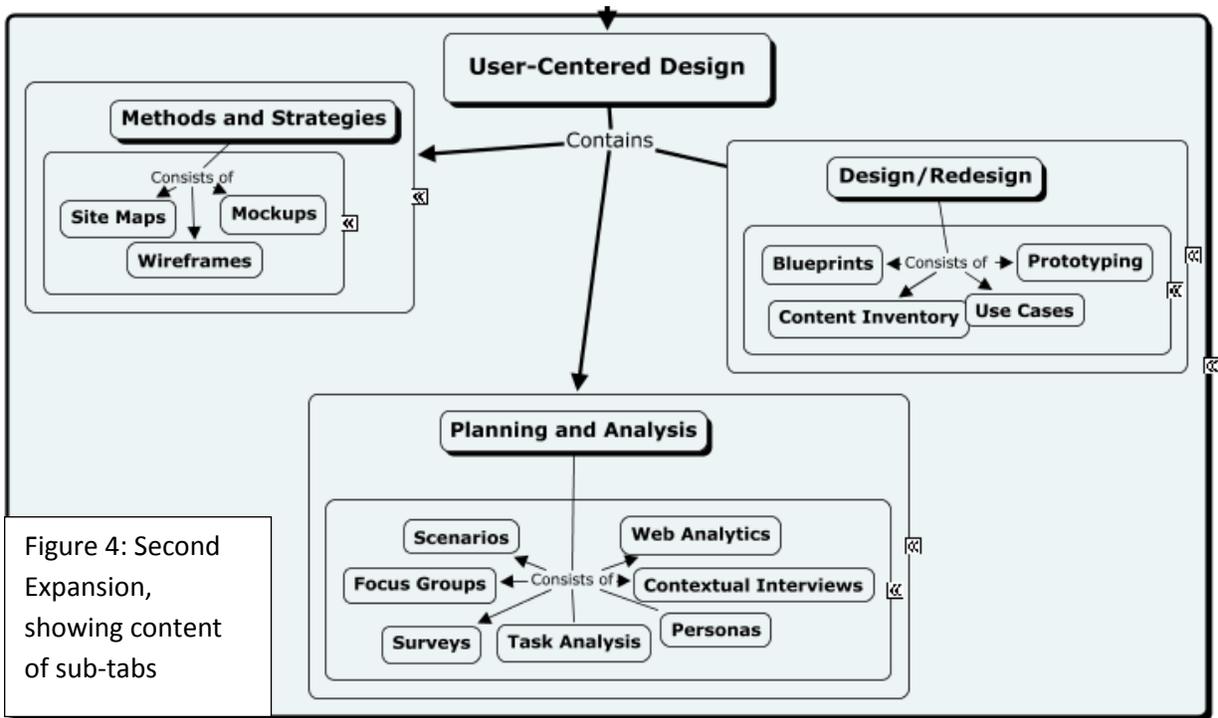


Figure 4: Second Expansion, showing content of sub-tabs

Applications

Concept maps not only provide a more organized approach to resource guide creation; they also can result in more improved and effective guide design. As laid out in Novak and Canas (2006), concept maps provide opportunities for *meaningful learning*, "...the assimilation of new concepts and prepositions into existing concept and prepositional frameworks held by the learner". The top-down, hierarchical structure of concept maps translates well into the tabular and boxed-based content structure of resource guide, allowing for the learning benefits inherent in concept maps to be passed on to a guide. A well-constructed guide based on concept maps will lead to an improved learning experience for users, especially in the context of class-based guides. Users will be able to start at a tab which should correspond to a general/basic term or idea in a particular subject in which they are familiar, and then explore first boxes and then sub-tabs on more and more specific topics, learning through context as they go along. The end result is a user who comes away from the guide having learning a bit more about a topic and who is able to easily tie that new information to preexisting knowledge.

References

- Ausubel, D. P., Novak, J. D., & Hanesian, H. (1978). *Educational psychology: A cognitive view* (2nd ed.). New York: Holt, Rinehart and Winston.
- Morville, P., & Rosenfeld, L. (2007). *Information architecture for the World Wide Web* (3rd ed.). Sebastopol, CA: O'Reilly, c2007
- Novak, J. D. (2002). "Meaningful learning: The essential factor for conceptual change in limited or inappropriate propositional hierarchies leading to empowerment of learners". *Science Education*, 86(4), 548-571.
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