Contextual Design Mind Maps
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Dr. Geri Georg, Instructor
georg@colostate.edu

Invented by Tony Buzan, long, long ago....
Why Mind Maps?

“1. Radiant Thinking:

...Every smell, taste, sound or sensation can be represented as a set of associated thoughts and reactions occurring in our brains thus these actions can cause an onslaught of ideas and thoughts. This mental process is known as “Radiant Thinking”. Your brain is a giant machine of associations, to operate it you just need the right ‘key’.

2. The Hemispheres of the Brain – Left Brain Vs Right Brain:

Our brains are divided into two hemispheres, left and right, which perform a wide range of intellectual tasks called “cortical skills.” These include: logic, rhythm, line, colour, lists, daydreams, numbers, imagination, speech and spacial awareness. The more both sides of your brain work together to integrate these skills, the more brain capacity you will have. ... a Mind Map ... involves numerous active cortical skills.

3. The Power of Images

...Images activate numerous cortical skills which, again, improve our memory and our ability to associate ideas and concepts. Different people have different learning styles but individuals have a recognition accuracy of images between 85 and 95%. So a mind map, which is essentially an image once completed, is an ideal resource to stimulate this brain activity.”

What’s a Mind Map?

“A Mind Map is a powerful graphic technique which provides a universal key to unlock the potential of the brain. It harnesses the full range of cortical skills – word, image, number, logic, rhythm, colour and spatial awareness – in a single, uniquely powerful manner. In so doing, it gives you the freedom to roam the infinite expanses of your brain. A Mind Map can be applied to every aspect of life where improved learning and clearer thinking will enhance human performance.” – Tony Buzan

http://www.tonybuzan.com/about/mind-mapping/
What’s a Mind Map?

“... basically a diagram that connects information around a central subject. I like to think of it like a tree, although it has more of a radial structure. In any case, at the center is your main idea, say, poetry, and the branches are subtopics or related ideas, such as types of poetry, famous poets, and poetry publications. Greater levels of detail branch out from there and branches can be linked together.” -- Melanie Pinola

https://lifehacker.com/how-to-use-mind-maps-to-unleash-your-brains-creativity-1348869811
How to Draw a Mind Map

5. The structure that should develop will be a 'radiant hierarchy', with ideas radiating out from your central theme and main branches.

4. Experiment with different ways of linking and emphasising different aspects. Use highlighters, codes and arrows as necessary.

3. The lines make the associations between ideas as clear as possible. Make them flowing and organic, each line the same length as the word or image. Always ensure that lines connect to the end of the line at the previous level. Typically lines will be thicker at the centre and thinner further out.

1. Start at the centre of a blank, landscape page, ideally with a colourful image to represent your subject.

2. Use words and pictures throughout your map. Wherever possible use single KEY words, printed along a line. Each word or picture sits on its own line.
This site shows how to build a mind map from start to finish; talks about how radial thinking works.
Another Example
Contextual Design/Inquiry Mind Maps

In lieu of a book, you’ll need to study Contextual Design topics on your own, using various sets of slides, guides, and mind maps.

There is a collection of mind maps I made from the 1st edition of the CD book which is no longer available, later augmented.

I used the FreeMind software, available from:

http://freemind.sourceforge.net/wiki/index.php/Main_Page

The maps are in a zip file located under the Resources tab of the class website. The zip file is called CD-CI-MM.zip and is ~32K. Start with ‘Class-ContextualDesign-2018.mm’

There are links in the maps to other maps.

Since I was mostly just taking notes, there aren’t pictures in these. Further, the software just changed colors with the level of the hierarchy, instead of along an entire branch.

The following slides show several examples starting from the 1st mind map: Class-ContextualDesign-2018.mm
When you open Class-ContextualDesign-2018.mm in FreeMind, you should see this. The central node “idea” is the 2 books I referenced. You can click on the circle at the end of the ‘Overarching goals’ branch to see the next level of detail of that branch, shown on the next slide.
We see there are 4 goals of Contextual Design; and each of them can be expanded since there is a circle at the end of each branch (some circles aren’t shown in the exported png for some reason, but they can be seen when you open the file).
You can expand by clicking on the circles at the end of each branch, or you can select a node (e.g. ‘see breadth of data...’) and click the big ‘+’ sign on the tool bar (it’s clunky and gray on my toolbar), which unfolds the node to the end of the branch. To fold the node back up you click on the big ‘-’ sign.
Similarly, here’s the expansion of the second goal:


Overarching goals

- See breadth of data without being overwhelmed
- Representation: see work practice and system structure as a whole
- Support vision of complete solution
- Make work, system concrete, explicit, sharable

Design tasks

- Design questions

Contextual Inquiry
And the third:
And the fourth:
Here’s the expansion of the Contextual Inquiry branch:

Note the red arrow in the node name. If you click on it, you go to a new mind map dealing with the contextual inquiry topic.
We clicked on the red arrow to open the Contextual Inquiry mind map. It is partially expanded below. It links to several other mind maps.
This is the complete Interpretation mind map from the link in the Contextual Inquiry mind map. It has links to other mind maps dealing with how to create the different work models.
Back to the original mind map (Class-ContextualDesign-2018.mm). This is the design tasks branch.
And this is the design questions branch.
Structure of the CD Mind Maps

The top level mind map is Class-ContextualDesign-2018.mm

- Links to Class-ContextualInquiry.mm, which links to:
  - CIIterpretation.mm – happens after every observation
    - Links to:
      - CIFlowModel.mm – what it is, required notations
      - CISequenceModel.mm – what it is, required notations
      - CIArtifactModel.mm – what it is, required notations
      - CIculturalModel.mm – what it is, required notations
      - CIPhysicalModel.mm – what it is, required notations
      - CIInterSession.mm – how to run it, what should happen, jobs team members need to do
  - CIConsolidation.mm – critical step in CI
    - Links to: CIConAffinityDiagram.mm – what and ‘how to’ build the affinity diagram
    - CIPrinciples.mm – 4 critical principles of CI
    - CIFocus.mm – your project will need one before observations
    - CIParticulars.mm – structure of a field observation/interview
    - CIIInterviewDesign.mm
How CD relates to the Project

The nodes in orange upper case letters on slides 15, 18, and 19 are the things that you will be doing as part of your project over the semester.

The next slide is a copy of one shown in class that has these nodes in blue upper case letters and without the intermediate nodes from the main branches of Contextual Design to the last nodes. The circled numbers are grouped on the left side of the image according to what part of the project they belong.

Note that the mind maps mostly relate to Part 1 of the Project, covering details of Contextual Inquiry.
1. Gives us individual information
   - coding (e.g. labels/work models)

2. “Summarizes” individual data into a general version of models
   - preserves variations
   - creates affinity diagram

3. Create Personas

4. Walking the models and affinity helps develop the vision of the re-design

5. Create scenarios for re-designed work

6. Create low-fidelity prototype: storyboards

7. Evaluate with users and another team

8. Modify design, create high-fidelity prototype

9. Design questions

- FIELD OBSERVATION
- MODEL WORK
- CONSOLIDATE
- PERSONAS
- VISION
- REDesign WORK: SCENARIos
- STORYBOARDS
- PROTOTYPE
- EVALUATE
- IMPLEMENT

Contextual Design
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