

## Problem Finding & Research (Group)

***Due: Friday, September 26, 2014 (11:59 PM)***

### Overview

Your assignment is to do concept mapping on a problem or application domain. Use the theme of the studio that you are assigned to. Using this technique generate 7-10 concept areas that are promising for further research. From those pick the 3-4 best areas and analyze which might make sense to do further work on for the class.

### Concept Map

Concept Mapping is a way to quickly come up and reflect on some problems/solutions in a particular thematic area. The steps:

1. List 10-20 words (or “concepts”) associated with the topic
2. Group them into named categories
3. Start diagramming
4. Add categories + examples
5. Label relationships between concepts (e.g., enables, employs, stakeholders, consumes, etc.)
6. Keep going until you lose momentum (and/or run out of time)
7. Highlight/Circle 6-10 concept areas for further investigation
8. Prioritize the 6-10 concept areas (i.e., create matrix of significance, feasibility, your interests) & select 3-4

You should generate 6-10 problems/applications/concepts in your theme and then using the prioritization matrix select 3-4 concept areas to follow-up with a brief description/justification (this would be the starting point for further research/analysis described in the presentation).

### Deliverable

Your **group** will submit a PowerPoint/KeyNote/Google presentation deck summarizing your work (online submission system) by Friday at 11:59 PM, September 26, 2014. ***We’d suggest 3-5 slides in total.*** You must **include pictures of your concept mapping** result (the big graph) and the prioritization matrix. Your slides should follow the outline below.

1. Theme (title), Team Member (names), Studio CA, Studio Time – [1 slide]
2. Concept Map Result (image showing what you produced) [1-2 slides] (take a picture w/ your phones)
3. Top 3-4 Problems
  1. Show prioritization matrix for 6-10 [1 slide]
  2. Give a sentence describing and a sentence justifying the selection of each of 3-4 top concept areas [1-2 slides]

## **Grading Rubric (100 points)**

### **Theme Title & Team Member Names (10 points)**

Introductions should include each member's name, picture, major, and outside interests. Also include your studio CA's name and studio time.

### **Problem Space Exploration (60 points)**

Ideas brainstormed should be categorized, diagrammed, and connected in a way that makes sense. Key problems/applications/concepts should become apparent through this step. There should be 6-10 good problems/applications/concepts identified by highlighting/circling on the concept map.

### **Problem Prioritization (30 points)**

Prioritize the top 6-10 problems/applications/concept areas using the priority matrix technique. Give a sentence describing and a sentence justifying each of the top 3-4 concept areas that remain. Concept areas selected for focus should offer opportunity for innovation as well as make sense for using technology to solve.