

USER INTERFACE DESIGN + PROTOTYPING + EVALUATION

## Problem Finding

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CS 147 Studio  
 CA First Last  
 Time, Location  
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\* slides based on those of Prof. Tad Hirsch, UW Design

## Wicked Problems

**Ill-defined**  
 Complex, interrelated  
 Multiple stakeholders, differing perspectives  
*Example: Air pollution*

**No stopping rule**  
 Problems are managed, not solved  
 Examples: *Aging*

## Implications for Design

Solutions depend on how the problem is Framed... and vice-versa

Solutions are not optimal  
 There's no right or wrong... but there is better and worse

Every problem is unique  
 Creative approaches are required

## Approach

1. Explore the problem
2. Find a leverage point
3. Design an intervention
4. See what happens
5. Repeat



## Methods

### Concept mapping

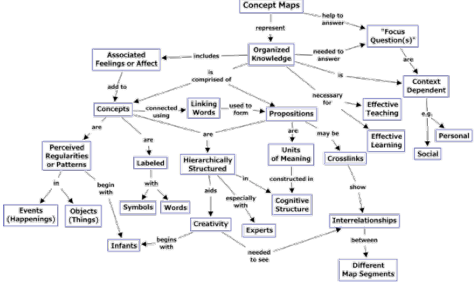
create a model  
 find out what you already know

### Ideation

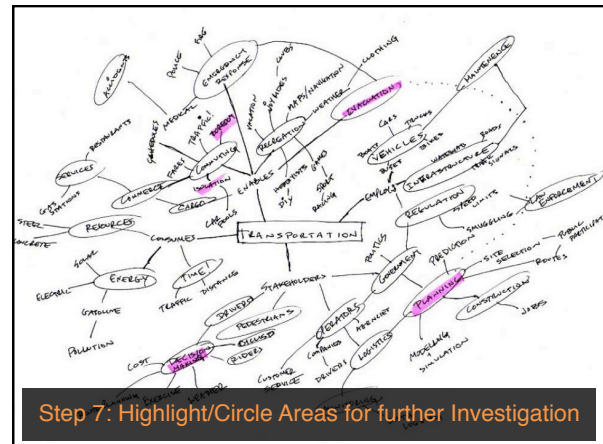
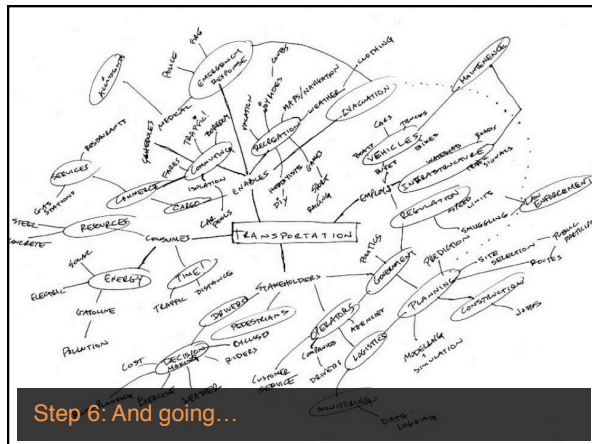
explore a solution space

## Concept mapping

A technique for visualizing relationships between ideas







	SUBSTANTIAL?	FEASIBLE?	INTERESTED?
EMERGENCY EVALUATION	Y	?	Y
TRANSPORTATION PLANNING	Y	N	?
DAILY DECISION MAKING	Y	Y	?
MAKING COMMUTING FUN	N	Y	N

Step 8: Edit and Prioritize

### Next step: Research + Analysis

- How big a problem is it? (market)
- Whose problem is it? (stakeholders)
- What's already out there? (competition)
- How are things done currently? (status quo)
- How can they be improved? (innovation)

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