

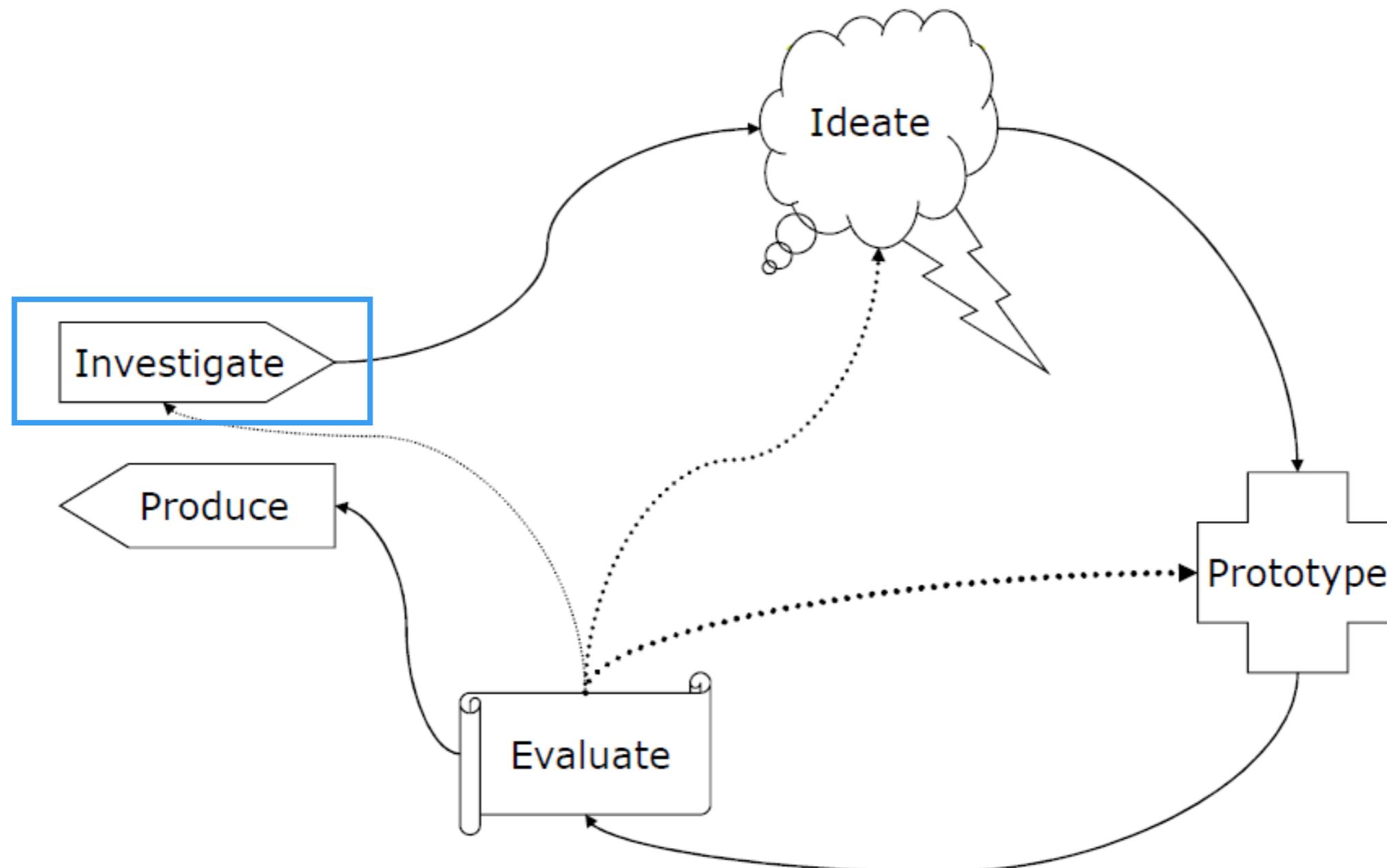
# Human-Computer Interaction

CPSC 481 - Spring 2019

## Investigation

Adapted from Tony Tang

# Investigate



# Investigation phase goals

- Understand the state of the world, the state of our users, and what the problem is.
- How can we go about doing this?

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  - Only kind of: people are really good only at framing their needs within the language of their current designs
  - Henry Ford: “*If I had asked my customers what they wanted, they would have said a faster horse.*”
  - **Often, people can't see past their immediate problems to the possibilities**

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- How many hours did you sleep last Thursday night?

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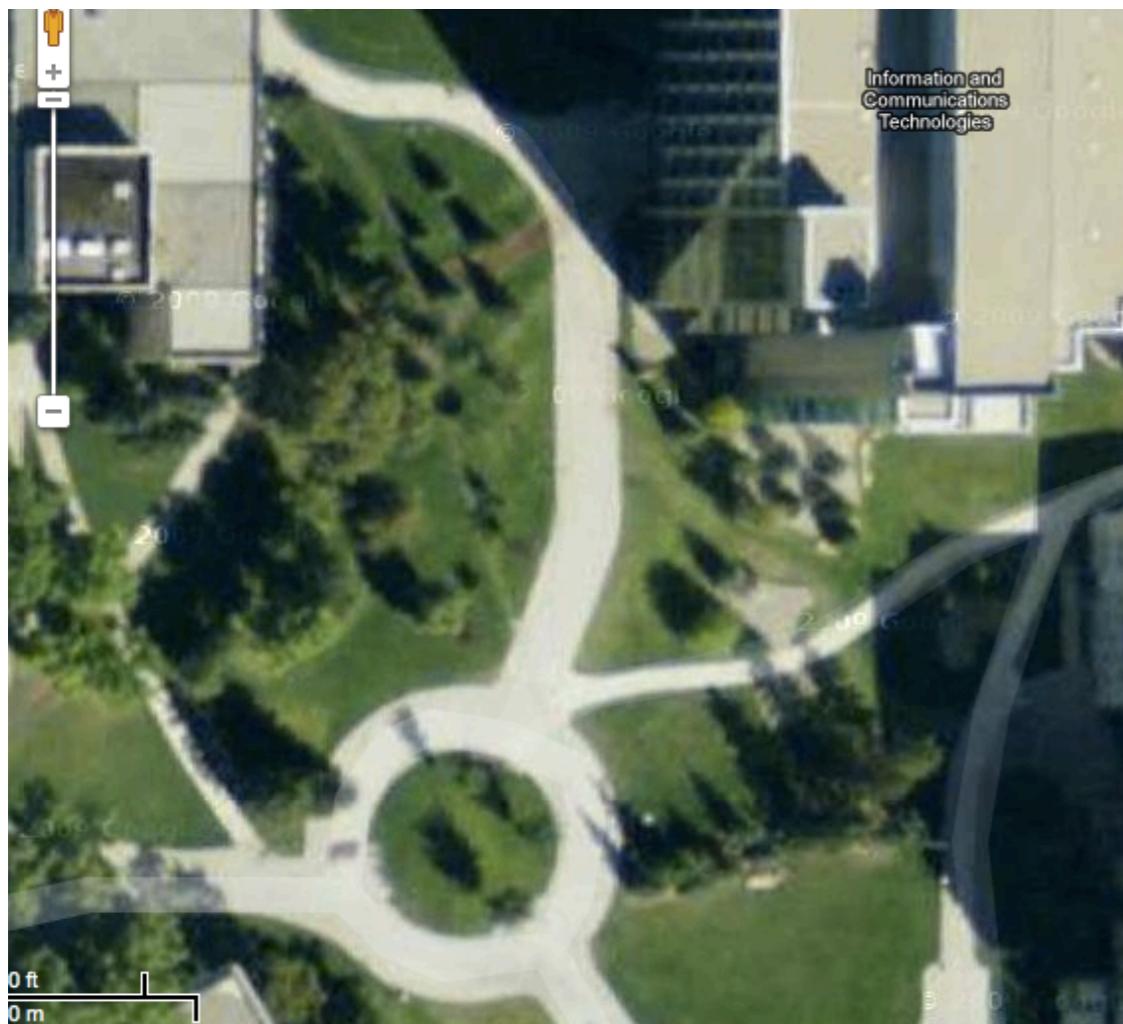
- How many hours did you sleep last night?
- How many hours did you sleep last Thursday night?
- **People have a bad memory.**

# What people say...

- Where do people need to walk around campus?

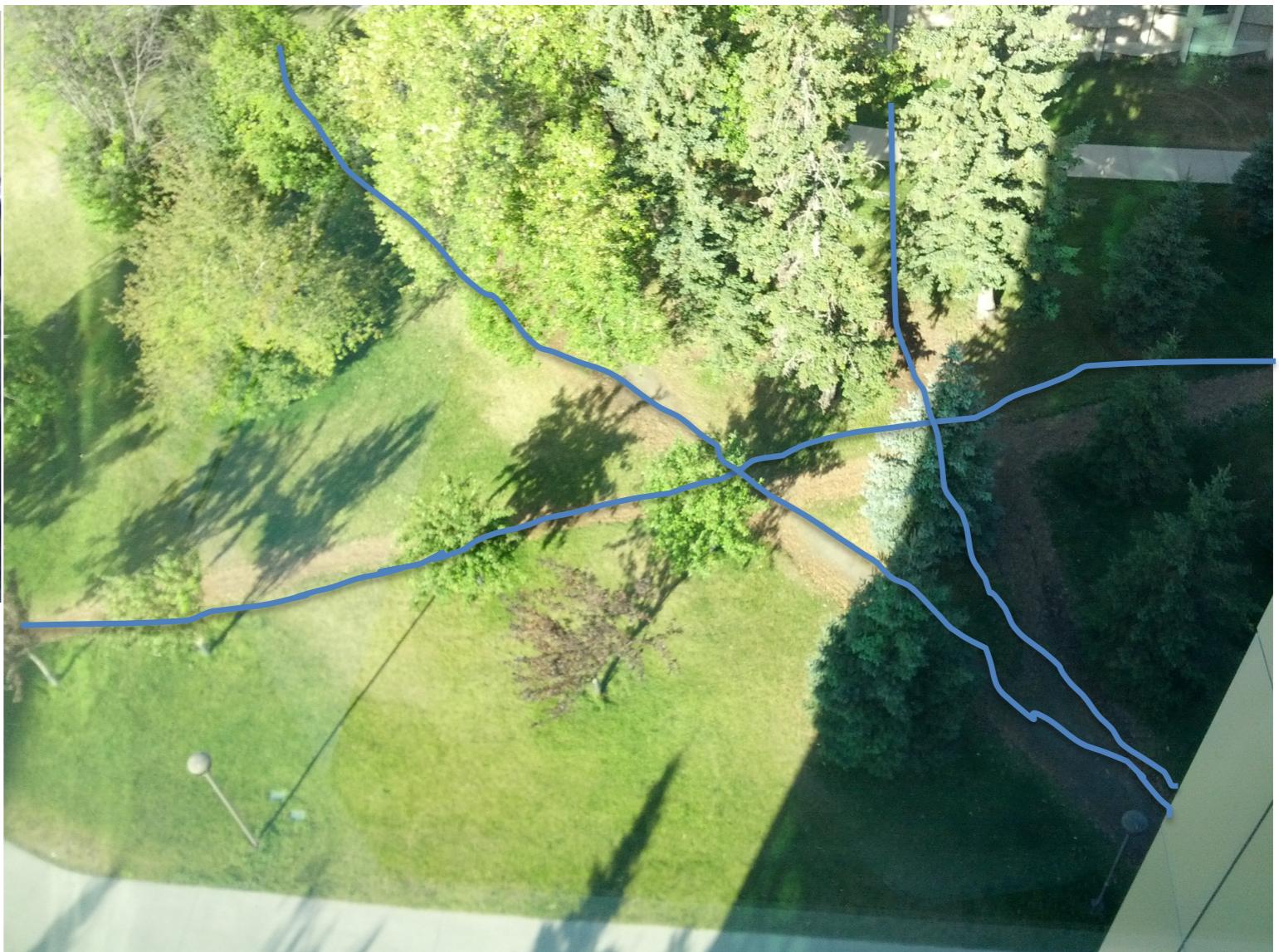
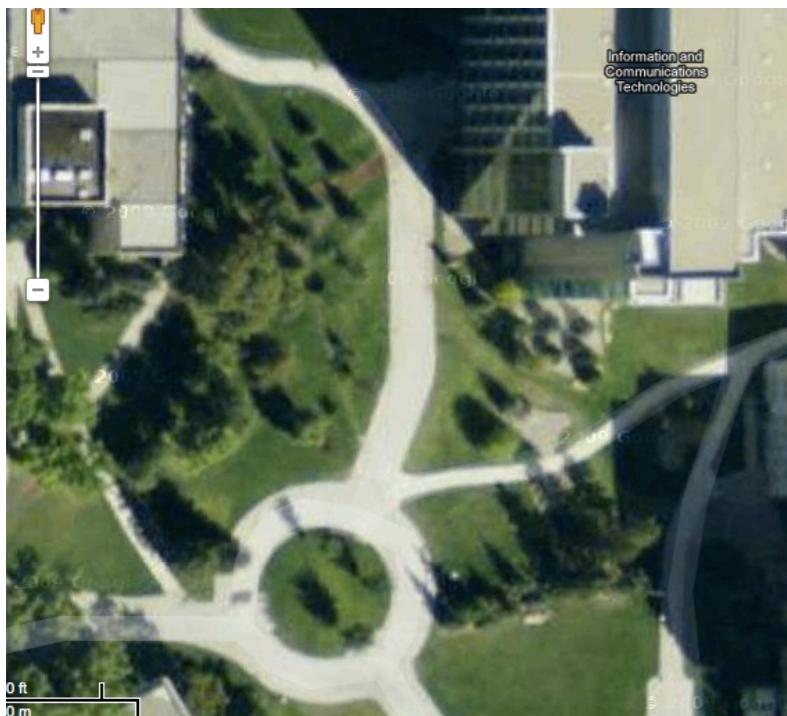
# What people say...

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# What people say...

- Sometimes, people **forget workarounds** that they have already established to solve problems



# What people say...

- Where should we put the hand sanitizer?

# What people say...

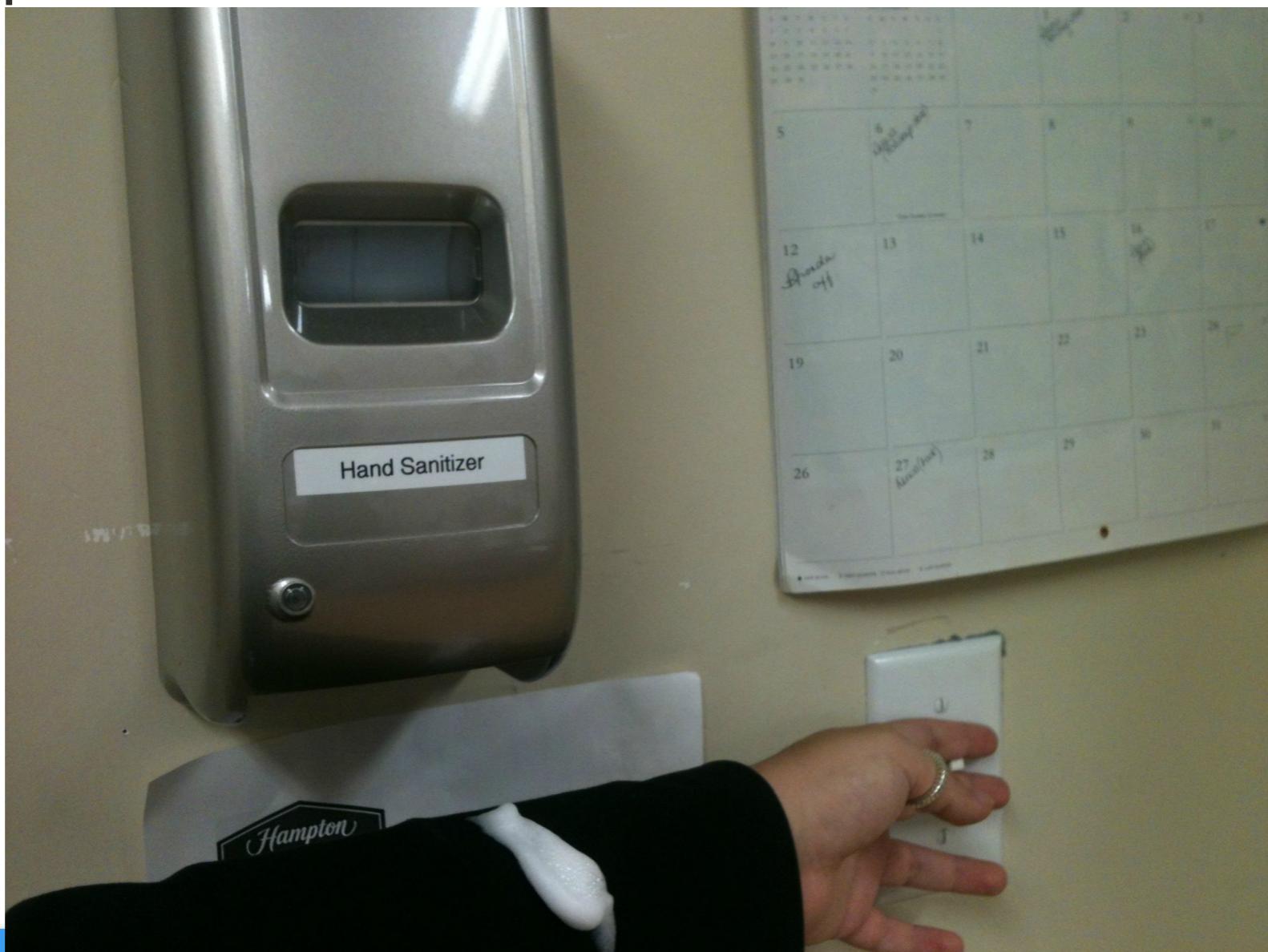
- Where should we put the hand sanitizer?
- On the way out the door, after we turn off the computer,  
after we turn off the printer, turn off the lights, etc...

# What people say...



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- People can be bad at predicting what they'd prefer if it is only hypothetical.



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- People are really good at telling us a few things:
  - What they are **doing** right now.
  - How they are **feeling** right now.
  - What their **goal** is right now.

# Combine Interview with Observation

- Watch people in their own environment
- Watch people do everyday tasks
- Opportunities for new designs arise from:
  - Workarounds
  - Breakdowns
  - Unexpected uses of existing tools

# Two messages

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- Using a combination of what they are good at telling us, and observing them can tell us a lot
  - = mismatches between what they say and what they do often lead keys to new designs

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- Using a combination of what they are good at telling us, and observing them can tell us a lot
  - = mismatches between what they say and what they do often lead keys to new designs
- Your assumptions are likely to be wrong. To discover more, assume that your assumptions are **always** wrong.

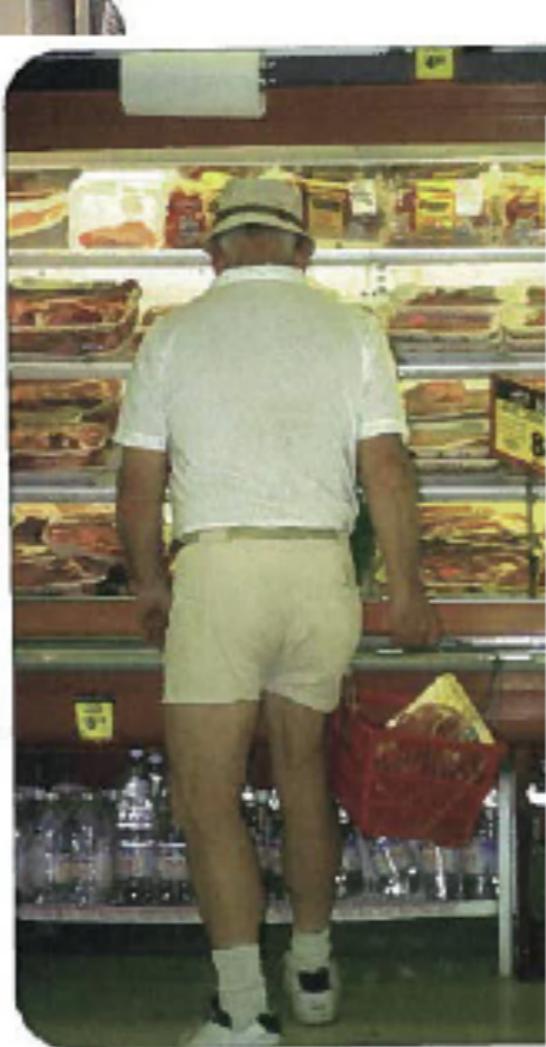
# IDEO Method Cards



# LOOK at what people really do



FLY ON THE WALL



A DAY IN THE LIFE



SHADOWING



PERSONAL INVENTORY



# ASK users for help



COLLAGE



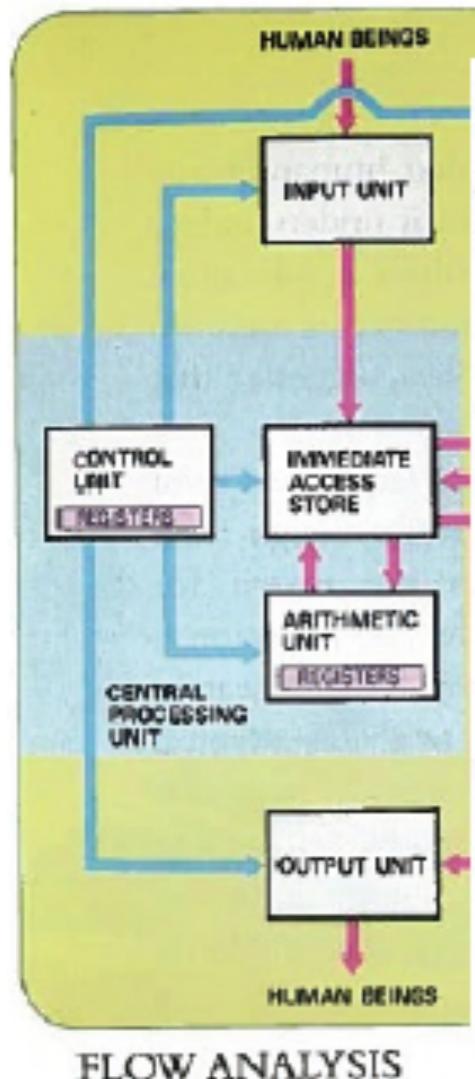
CONCEPTUAL LANDSCAPE



CARD SORT



LEARN from the facts you  
gather



# TRY it yourself



Assume you are  
wrong!

# Acknowledgements

- Tony Tang
- Lora Oehlberg
- Ehud Sharlin
- Frank Maurer
- Saul Greenberg

# Course information

- Website
  - GitHub Pages <https://silvadasilva.github.io/CPSC481-2019S/>
- Communications
  - Slack <https://cpsc481-2019s.slack.com/>
- Readings and Slides
  - Posted online at the main website