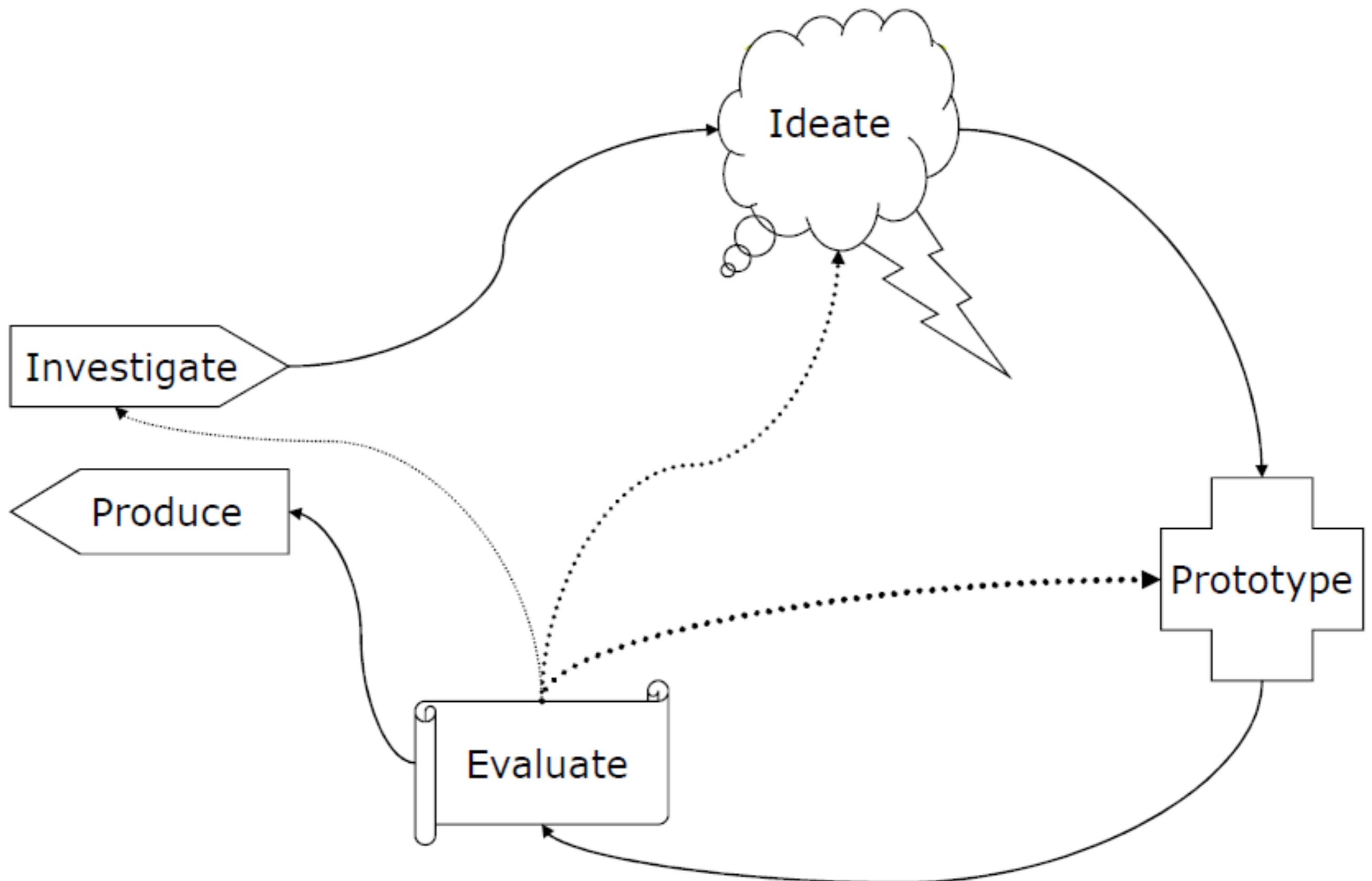


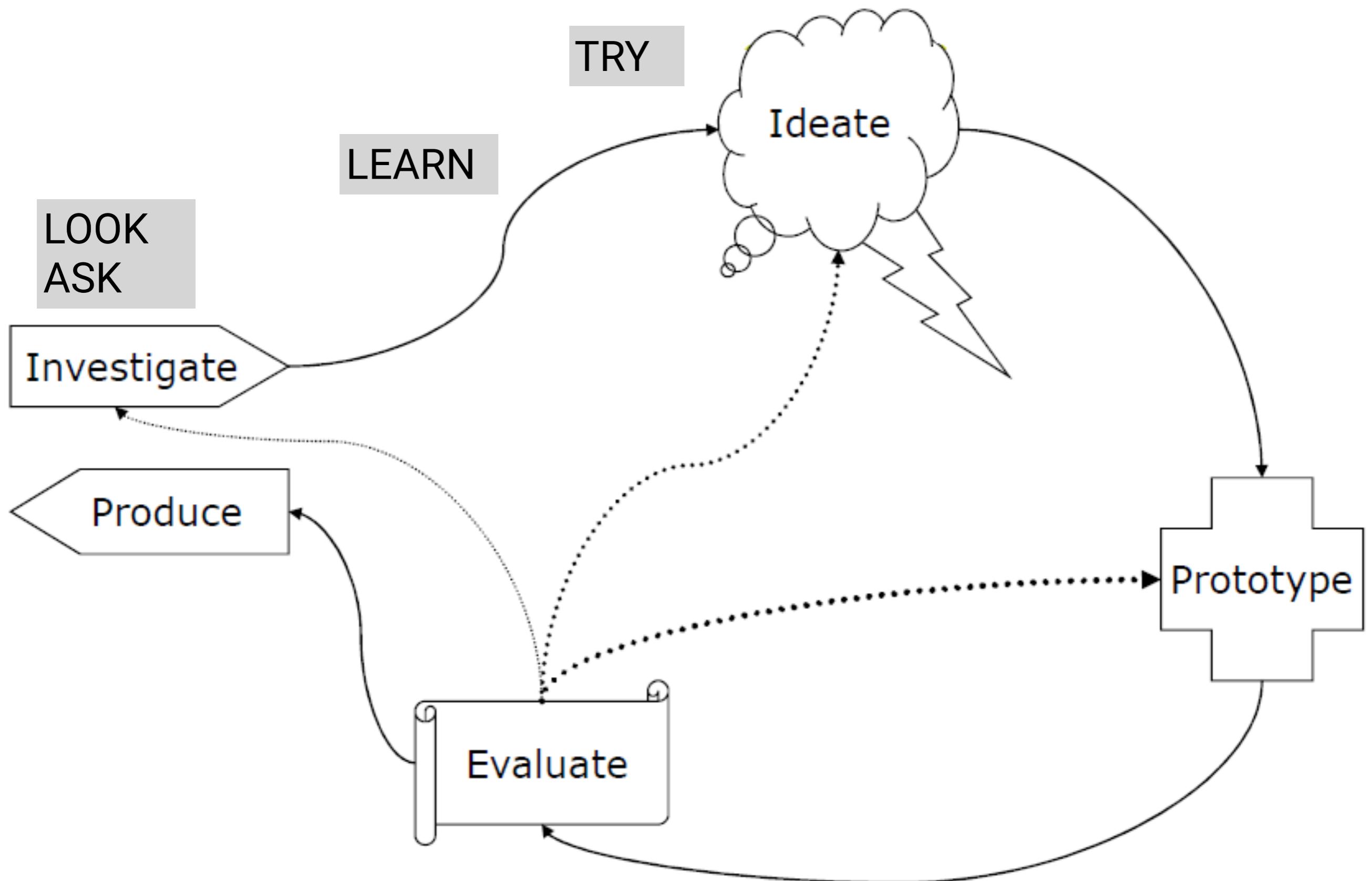
Human-Computer Interaction

CPSC 481 - Spring 2019

TRY

Adapted from Tony Tang







Learn

Look

Ask

Try

Empathy Tools

HOW: Use tools like clouded glasses and weighted gloves to experience processes as though you yourself have the abilities of different users.

WHY: This is an easy way to prompt an empathic understanding for users with disabilities or special conditions.

IDEO designers wore gloves to help them evaluate the suitability of cords and buttons for a home-health monitor designed for people with reduced dexterity and tactile sensation.

Empathy Tools in Vancouver

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- Three teams: wheelchair team; double stroller (twins); and blurred glasses + wonky joints.
- Each assigned basic tasks. For example, go to the store and buying something; take the Skytrain station from one stop to another etc.
- Results: Vancouver still kind of stinks for people who are not fully able-bodied.

Team Wheelchair: SkyTrain Fail



Team Wheelchair: Bathroom Fail



Team Elderly

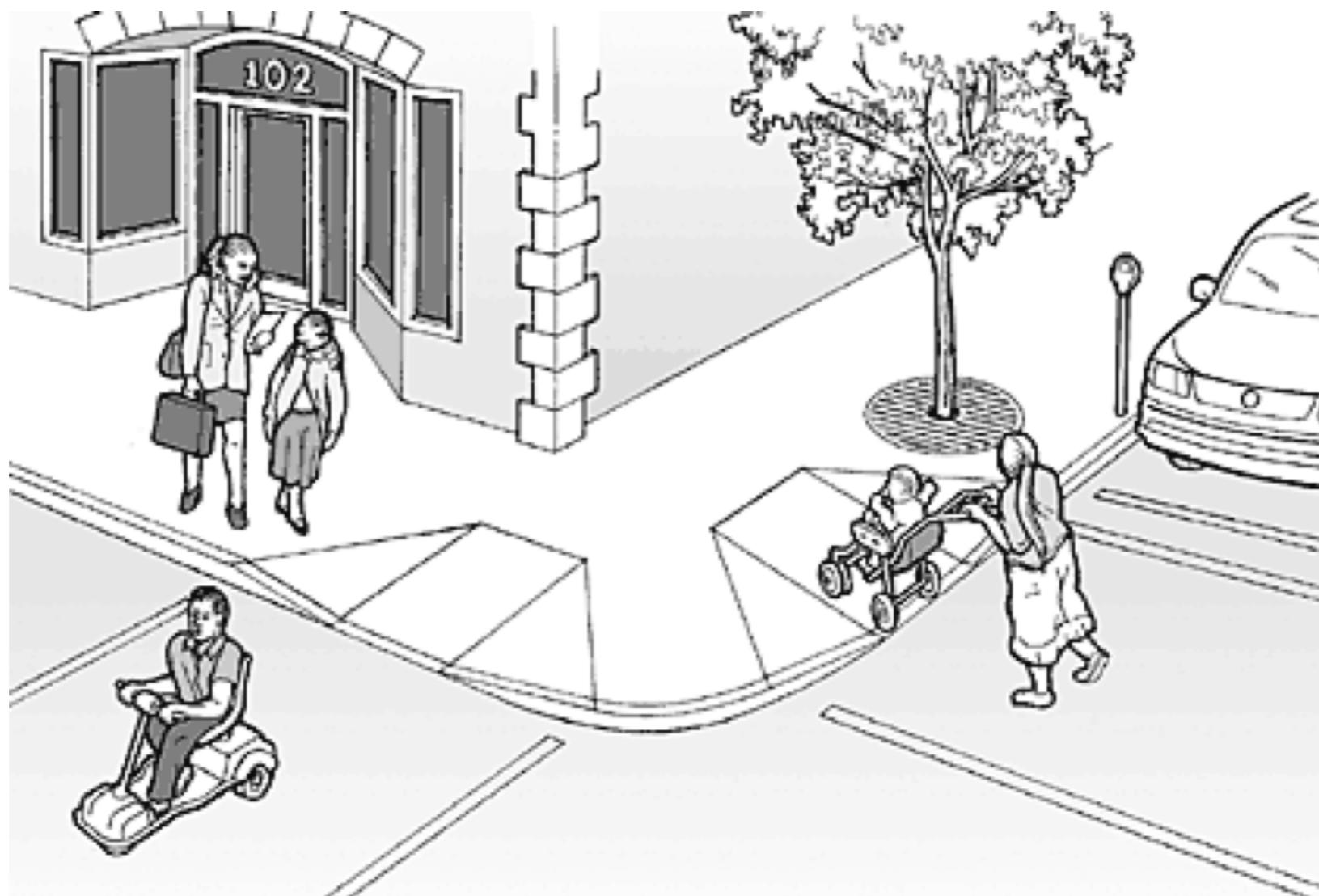


Team Elderly: Shopping Fail



Why design for the most extreme conditions?

- The designs can benefit everyone





Learn

Look

Ask

Try

Role-Playing

HOW: Identify the stakeholders involved in the design problem and assign those roles to members of the team.

WHY: By enacting the activities within a real or imagined context, the team can trigger empathy for actual users and raise other relevant issues.

Designing a medical device, the IDEO team role-played a situation involving a doctor, a nurse, a patient, and an anesthesiologist to simulate the interdependent tasks demanded of the operating room staff.



Learn

Look

Ask

Try

Be Your Customer

HOW: Ask the client to describe, outline, or enact their typical customer's experience.

WHY: This is a helpful way to reveal the client's perceptions of their customer and provide an informative contrast to actual customer experiences.

An IDEO innovation workshop designing desktop printers began with an exploration of the client's preconceptions about how people choose and purchase a printer.



Learn

Look

Ask

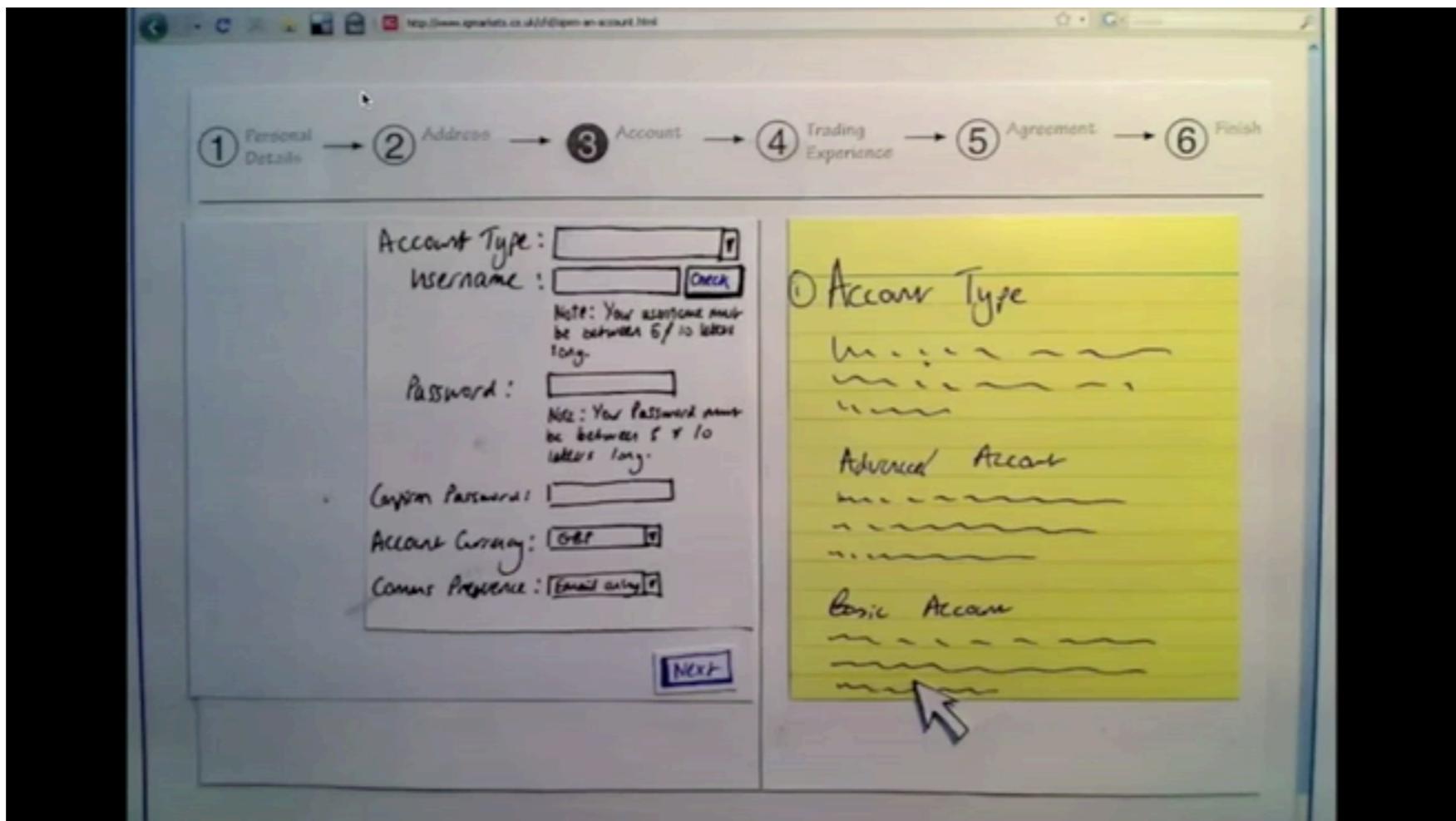
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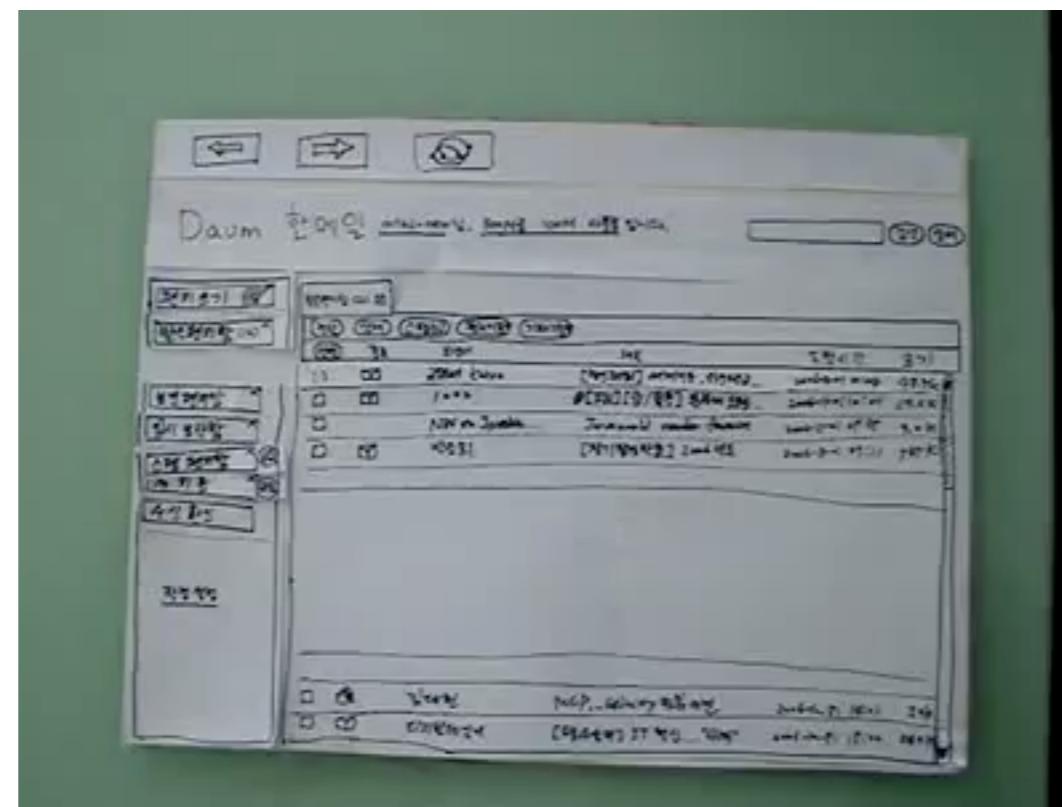
Paper Prototyping

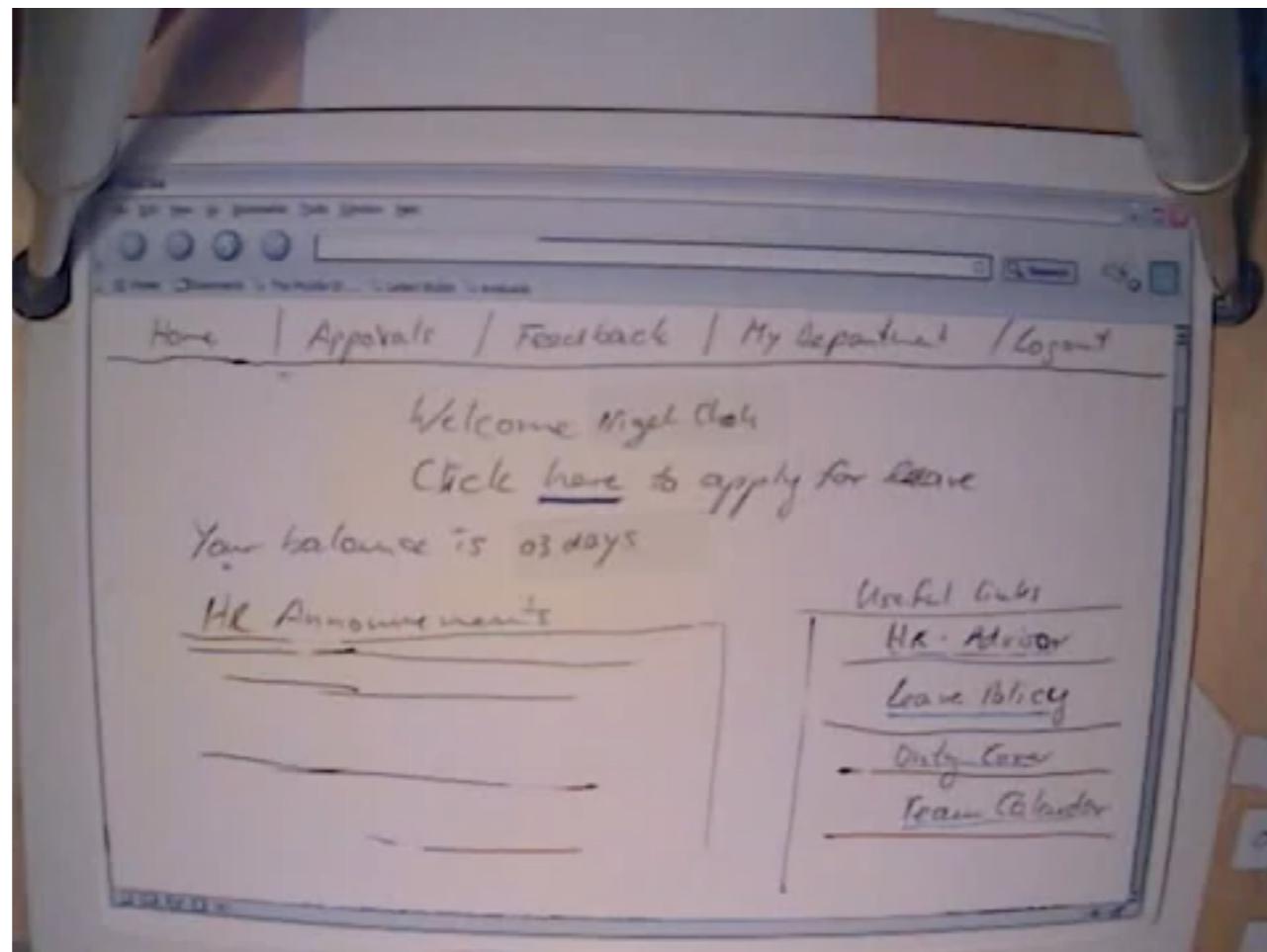
HOW: Rapidly sketch, layout, and evaluate interaction design concepts for basic usability.

WHY: This is good way to quickly organize, articulate, and visualize interaction design concepts.

Sketching out various screens and testing their sequence helped the IDEO team to demonstrate the logic necessary for a successful interaction with an in-store inventory database.









Learn

Look

Ask

Try

Quick-and-Dirty Prototyping

HOW: Using any materials available, quickly assemble possible forms or interactions for evaluation.

WHY: This is a good way to communicate a concept to the team and evaluate how to refine the design.

IDEO team members designing a shopping device quickly prototyped various concepts to evaluate qualities like weight, size, and orientation.



Learn

Look

Ask

Try

Try It Yourself

HOW: Use the product or prototype you are designing.

WHY: Trying the product being designed prompts the team to appreciate the experience the actual users might have.

By wearing a prototype medical device throughout their daily activities, the team understood the physical, social, and emotional implications for patients who might use it.



Summary

- Apply TRY techniques once you start getting ideas to test them early for their feasibility
 - Can lead to more robust prototypes later

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- Apply TRY techniques once you start getting ideas to test them early for their feasibility
 - Can lead to more robust prototypes later
- Techniques worth thinking about/remembering
 - Empathy tools; role playing; be your costumer; paper prototyping; quick and dirty prototyping; try it out

Summary: Design Methods

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- Choosing the right techniques can end up being **trial and error**
 - Some will give you good insights, others might not
- Try to recognize early on if you're not learning anything and move on to something else
- Remember that above all, you should **triangulate**
 - Use multiple, complementary methods to gain both a broad and deep understanding from multiple angles

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