Administrative Stuff

Questions for project posted

Aiming for assignment grades by Monday

Tomorrow: work session

Alternate Ways of Prototyping

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CS-570 Introduction to Human-computer Interaction

"What I hear, I forget.

What I see, I remember.

What I **do**, I **understand**."

-Lao Tse

"**Experience Prototype** is any kind of representation, in any medium, that is designed to understand, explore, or communicate what it might be like to engage with the product, space, or system we are designing."

- Jane Fulton Suri

Experience Prototyping

An approach or a set of techniques for prototyping situations, users, settings, design ideas, etc.

Commonly used in:

Understanding existing user experiences

Exploring design ideas

Communicating ideas to an audience

Evaluating design ideas

Understanding
user experiences

Understanding User Experiences

Disabilities

e.g., designing for the visually impaired

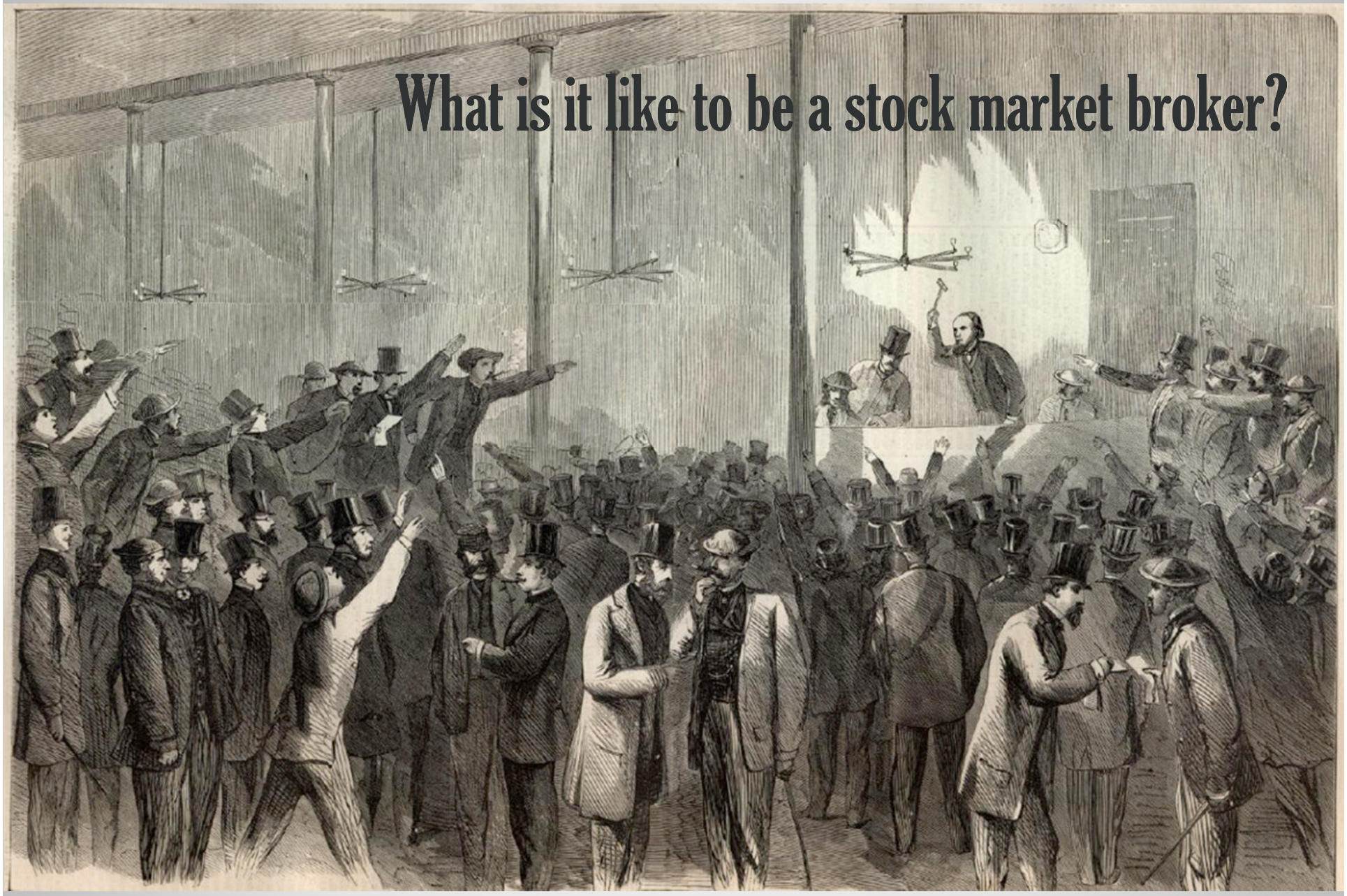
Environmental factors

e.g., designing for South Pole workers

Task demands

e.g., designing for stock market brokers

What is it like to be a stock market broker?



Constraint Simulation

Visual impairment

Rheumatoid Arthritis

Deafness

Dyslexia

ADD

Pregnancy

Disability Simulation Kit:
Arthritis Simulation Gloves

Videos!

What About For Software?

JAWS demo

Web: W3C accessibility

Designing for disabilities

Questions?

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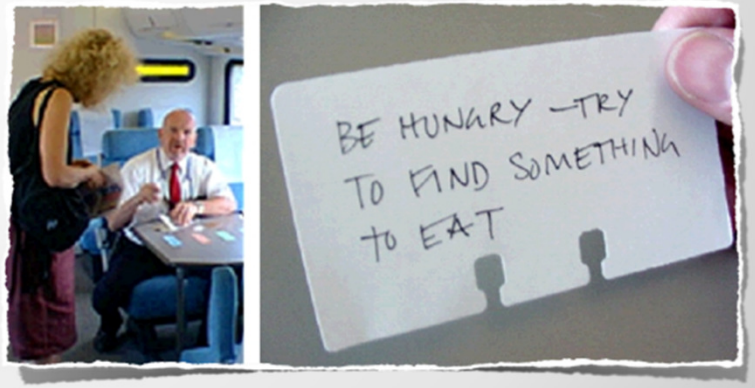
Bodystorming, Role-playing, Enactment

Role-playing

Physically acting out what happens where users interact with products or services

Deliberately assuming a character role in a constructed scene

Being "in the moment" which enables vivid and focused exploration of the situation



Bodystorming

Bodystorming

Two methods:

A method for bringing the design activity into the studied situation

A method to enact a design through roleplaying

Method 1: In-situ Brainstorming

Bringing the design activity into the studied situation

Similarity of the bodystorming environment to the studied one

Addresses the following shortcomings:

- Difficult to document complex activities/interactions
- Observations are highly subjective
- Design activity disconnected from the observation

Embodied Interaction

"…the idea of 'being there' and living with data in embodied ways."

Enables observations of activities that are:

Psychological (e.g., user needs)

Social (e.g., interpersonal)

Interactional (e.g., collaboration)

Procedure

1. Conduct preliminary observation & documentation
2. Select interesting phenomena and edit into design question (e.g., "How could technology help the elderly in remembering product information?")
3. Participants go to a representative environment (e.g., If studying a shopping experience, designers go to a shopping mall)
4. Designers work on one question at a time where the experience is observable
5. Act out the activities studied in the design task
6. Record generated ideas on-site
7. Discuss ideas in groups

Method 2: Role-playing Design Ideas

Enacting design ideas

Taking roles: user, system, co-users, help provider, etc.

Following a scenario

Video!

Speed Dating

Why Use Speed Dating?

Creating opportunity for multiple, low-cost engagements

Build on experiences (problematic situations) people currently have

Speed Dating

Consists of two activities:

Need validation

Matching observed opportunities and perceived needs

User enactments

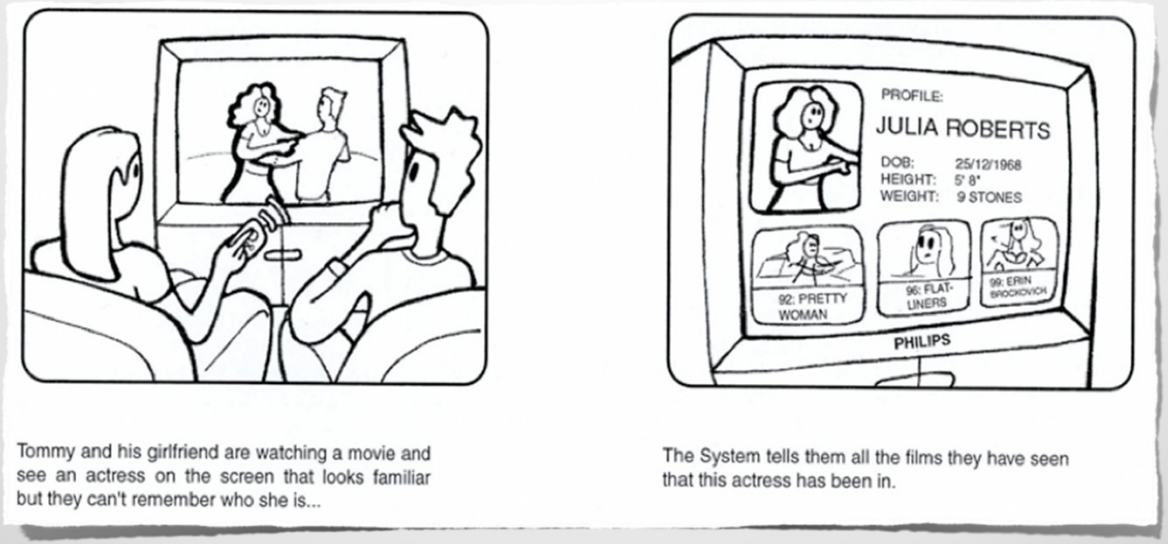
Users role-play, walk through a set of scenarios, and react to design ideas

Need Validation Example 1

Need: Supplemental information on narrative TV content

Lead: Have you ever been watching a movie nad seen an actor you recognized but couldn't place? Would you like to find out who they are?

Discuss: When does this happen, where they are, what resources are available. What other information would you like to know…clothes, location, song title…?

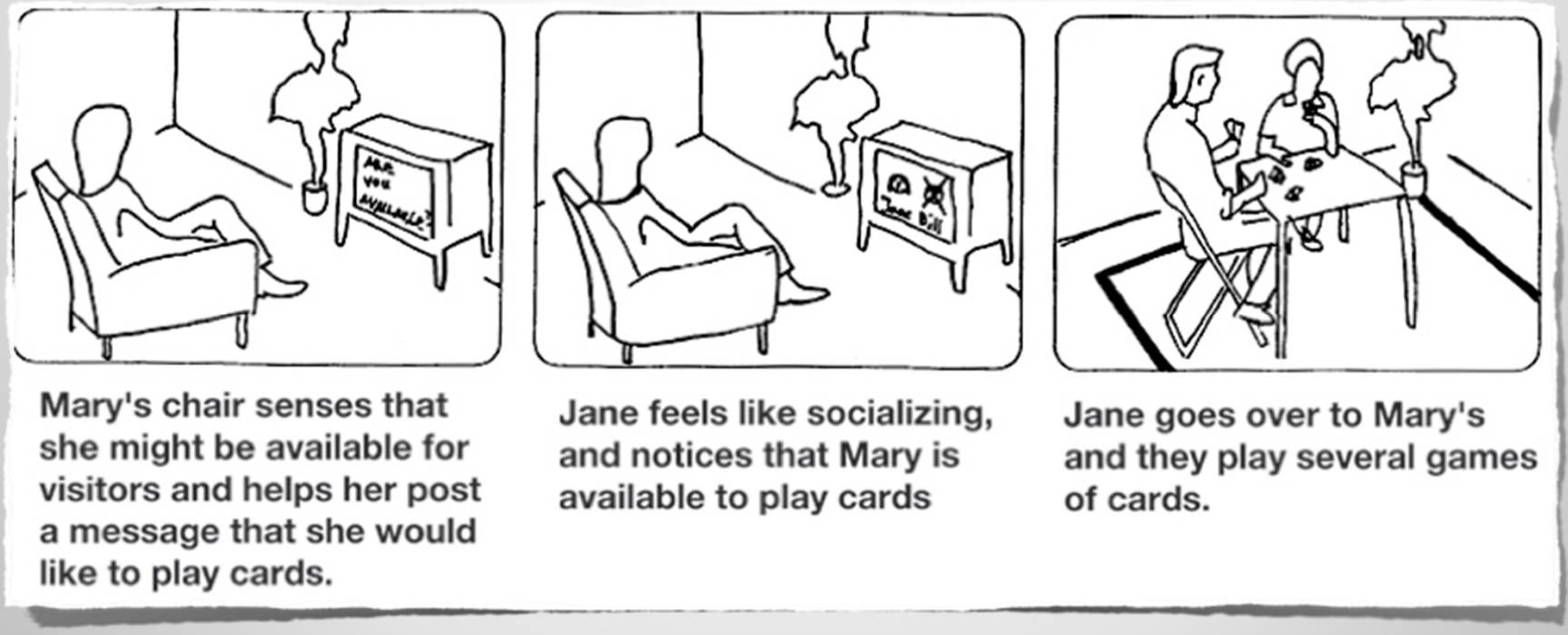


Need Validation Example 2

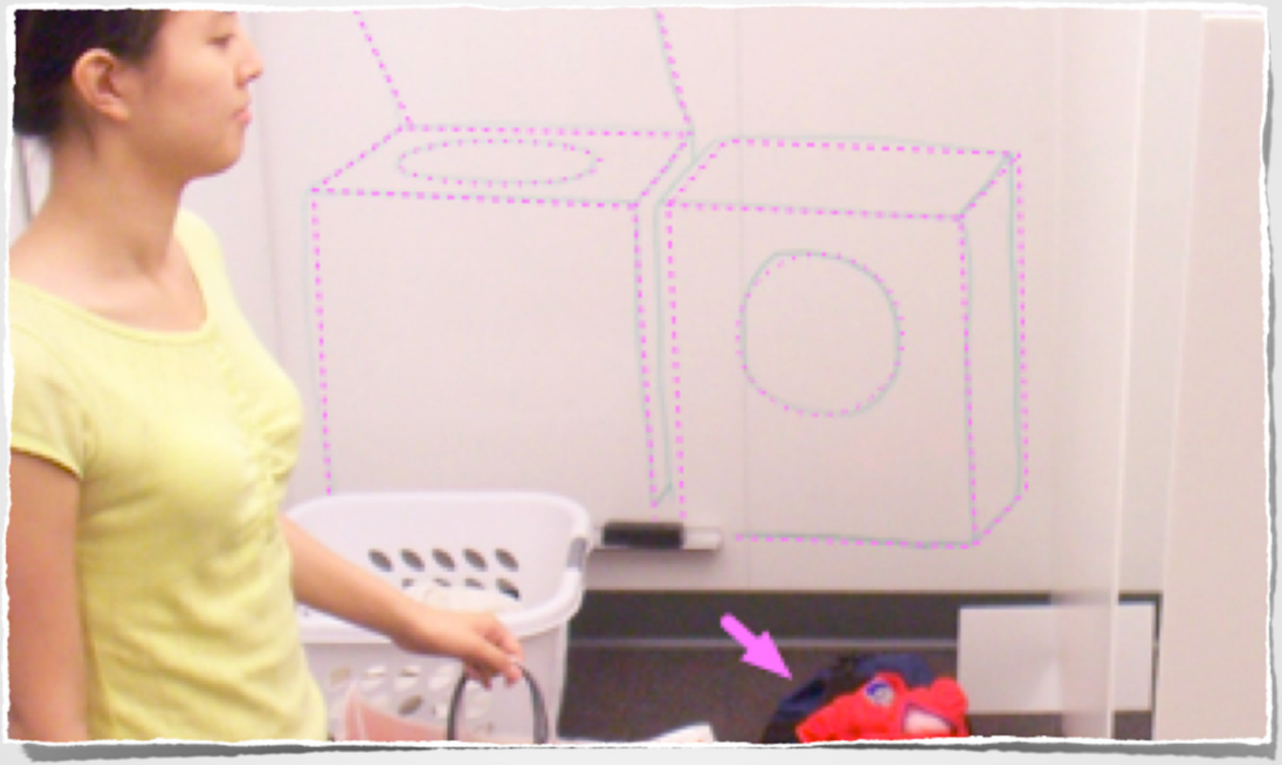
Need: To express or know availability for social interaction

Lead: Have you ever wished you could know if a friend was free before you made a phone call? Do you ever wish you could communicate this information to your friends so they could include you in their plans?

Discuss: When, where, activities, modes of communication



User Enactment Example



Mom passes the laundry

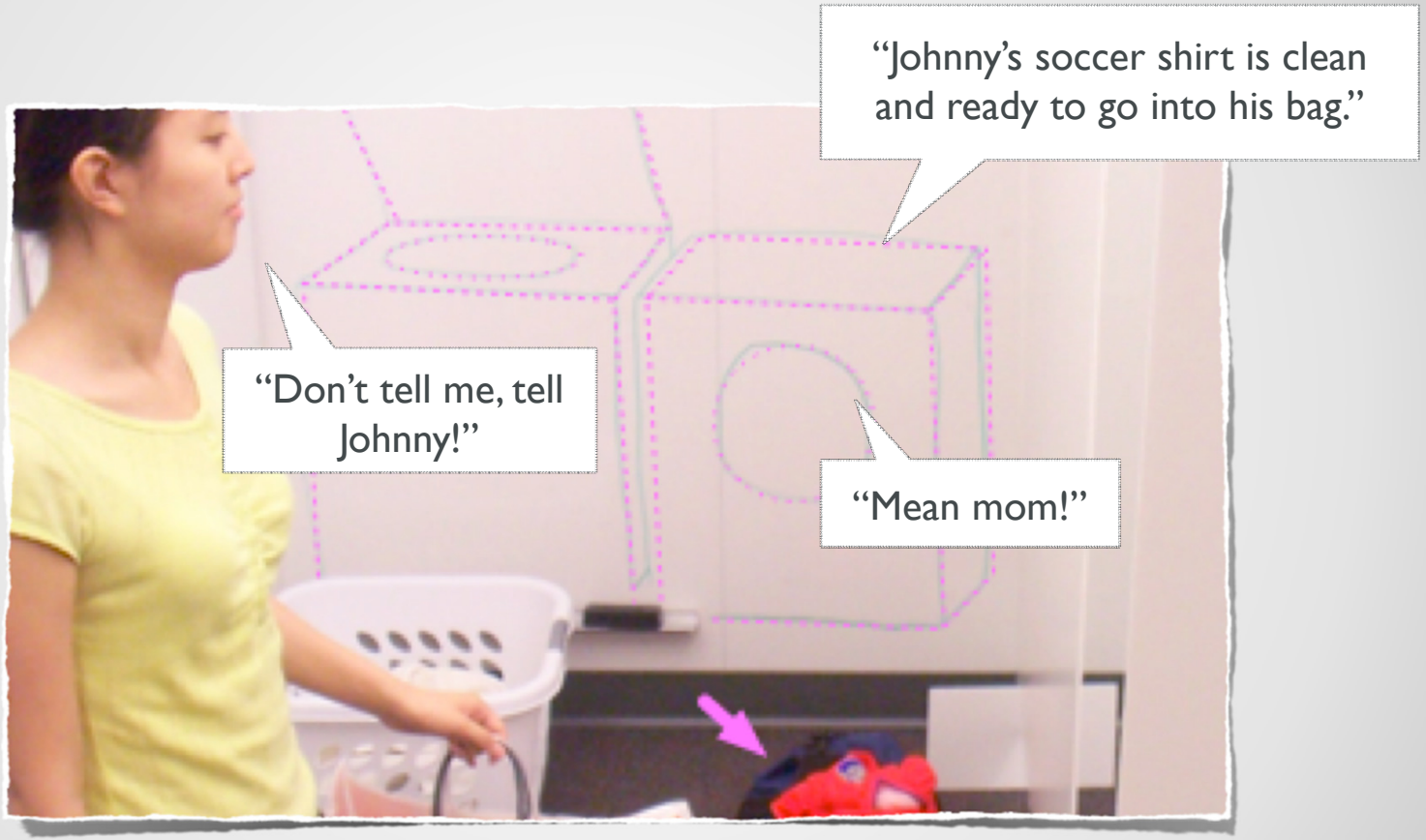
User Enactment Example

The Smart Home reminds

User Enactment Example

The user responds

User Enactment Example



The "Smart" Home responds

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Communicating Ideas

Prototypes that go out to "the wild"

Provides the full experience

Not a finished product

Can be Wizard-of-Oz'd

Questions?

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Robots for Humanity

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