

CS 147 Project Expo

Design Thinking for User Experience Design, Prototyping & Evaluation

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Computer Science Department
Stanford University

Autumn 2022

December 9, 2022

Outline

Course overview	6:00-6:25
Team pitches	6:25-6:45
Posters/demos/judging	6:45-8:45
Awards	8:45-9:00



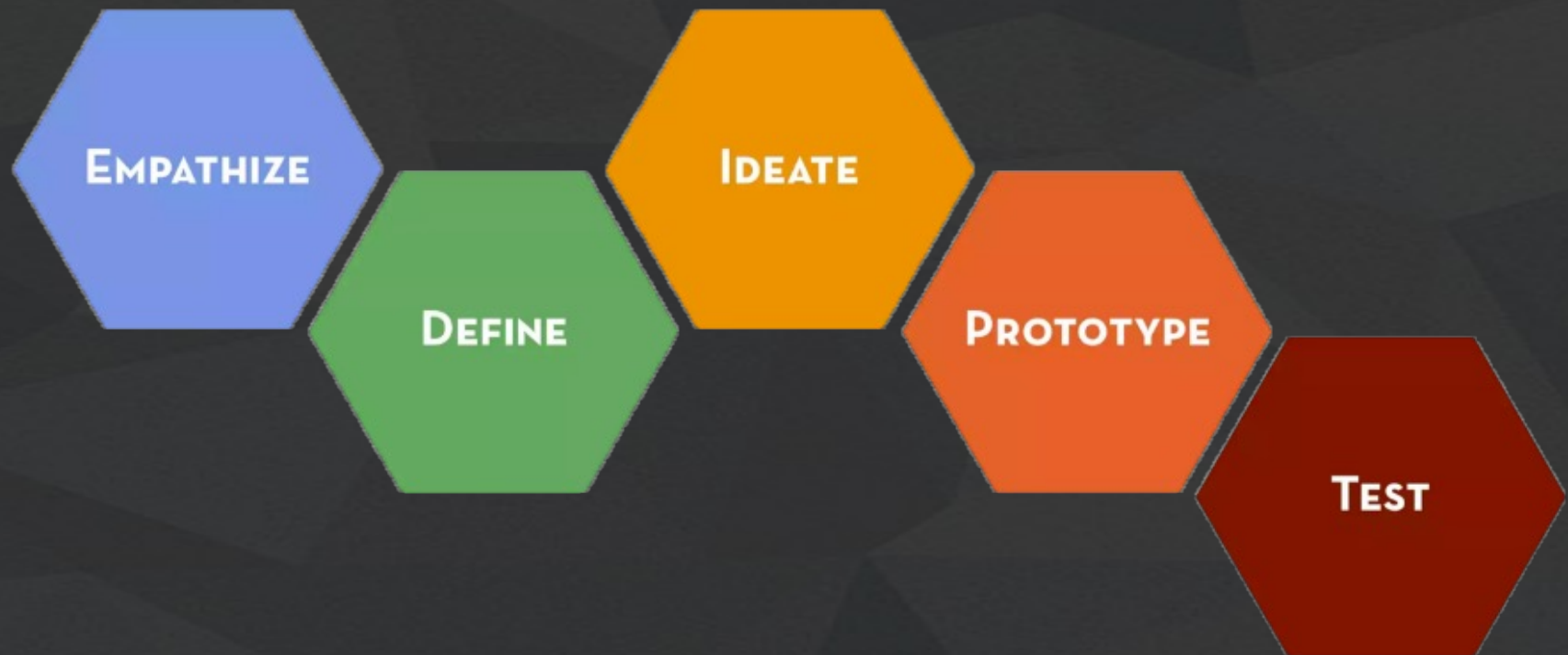
Balance

DESIGN

TECHNOLOGY



Design Thinking Process



Goal of CS 147

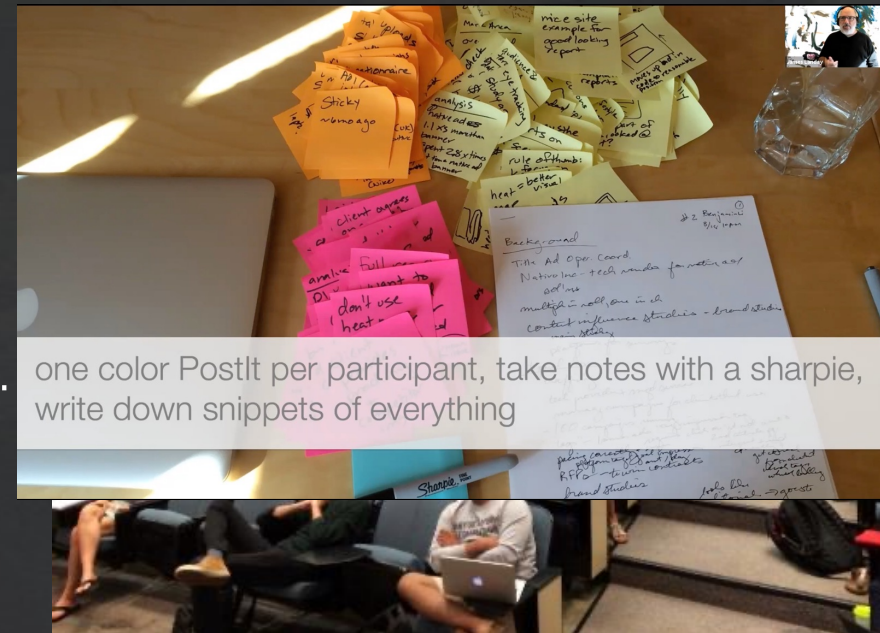
Learn to design, prototype, & evaluate UIs

- Tasks, activities & practices of prospective users
- Cognitive/perceptual constraints affecting design
- Techniques for brainstorming, ideation & prototyping
- Methods for evaluating UI designs
- Importance of iterative design for usability
- Technology used to prototype UIs

- *How to work together as a team*
- *Communicating results to a group*

Project Based Course

- Iterative design of a real UI
- Theme: mobile
- Quarter long projects
- Students
 - ~100 across CS, Symbolic Systems ...
- 25 Teams
 - 3-4 members
- 10 major group assignments
 - group work is ~60% of course grade
- Four presentations
 - every team member presents



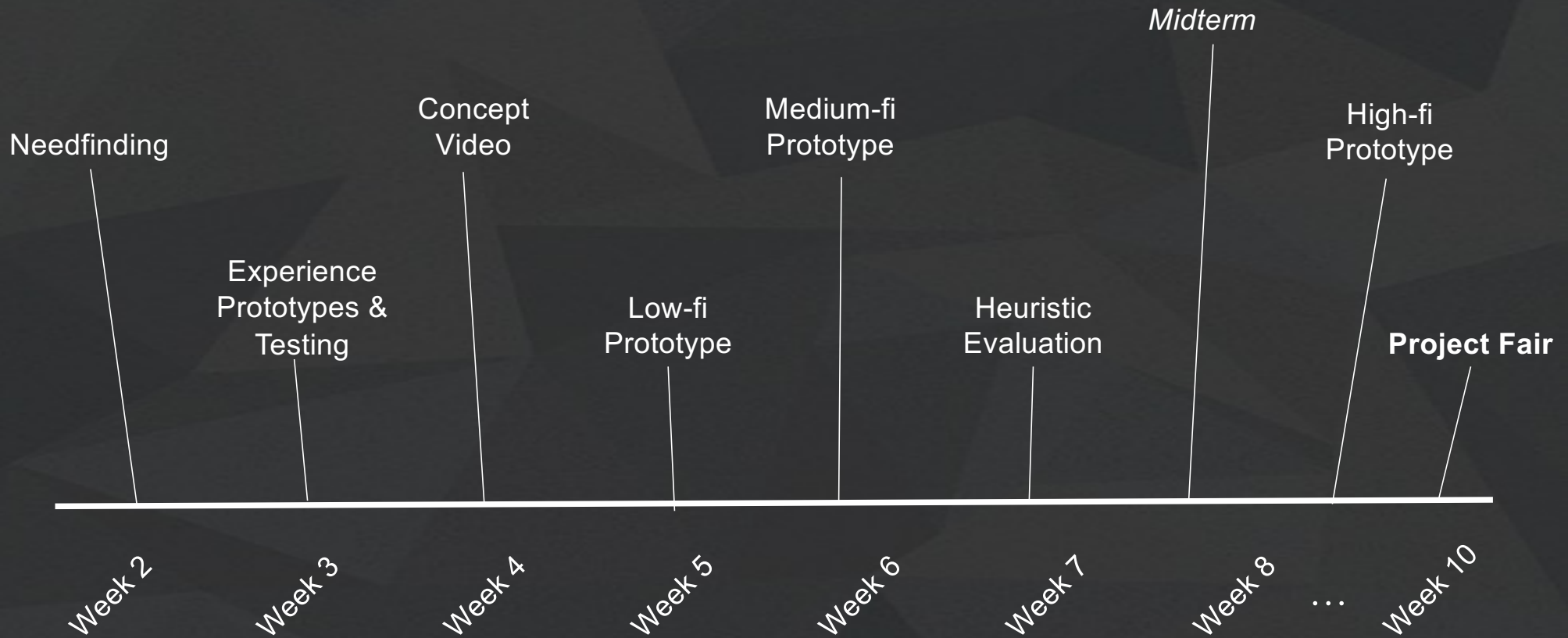
one color PostIt per participant, take notes with a sharpie, write down snippets of everything

Design Studios

Teams attend small weekly studio (9-16 students)
-critique/feedback in more intimate environment



Project Process Timeline



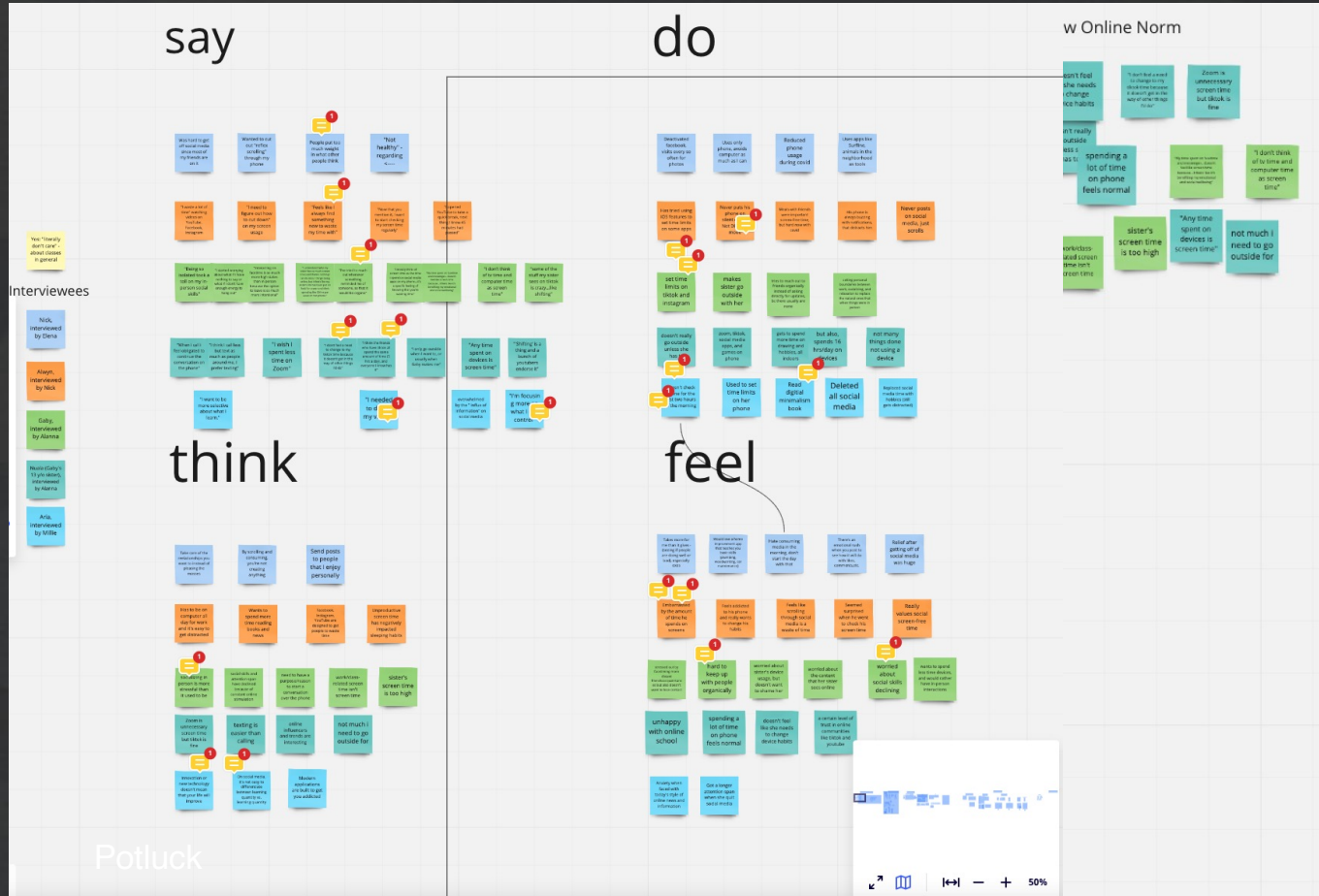
User-centered Design: Needfinding

- Observe existing practices for inspiration
- Make sure key questions answered
- Ethical questions in design w/ underserved communities

Peekaboo!



Unpacking the Needfinding





budder

Develop Point of Views (Person + Insight + Challenge) Brainstorm on How Might We Solve

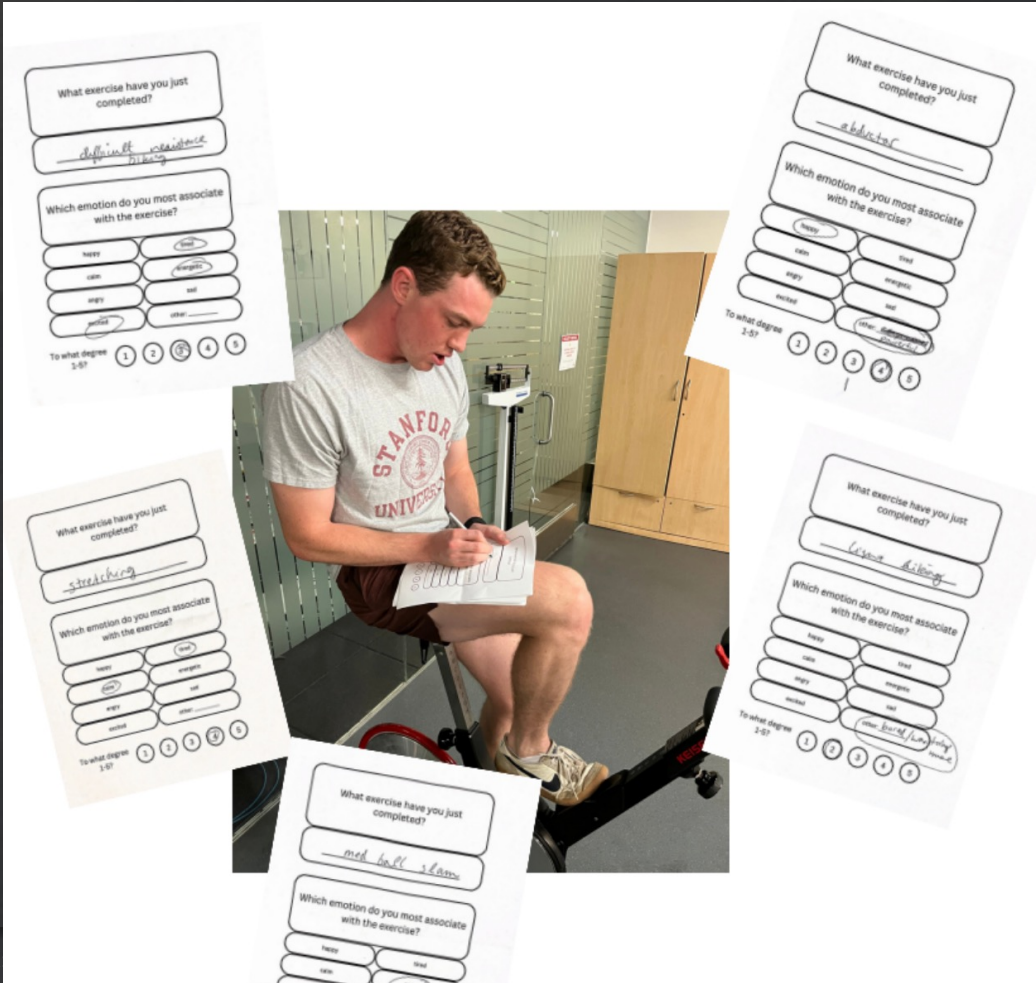


Experience Prototype to Test Assumptions



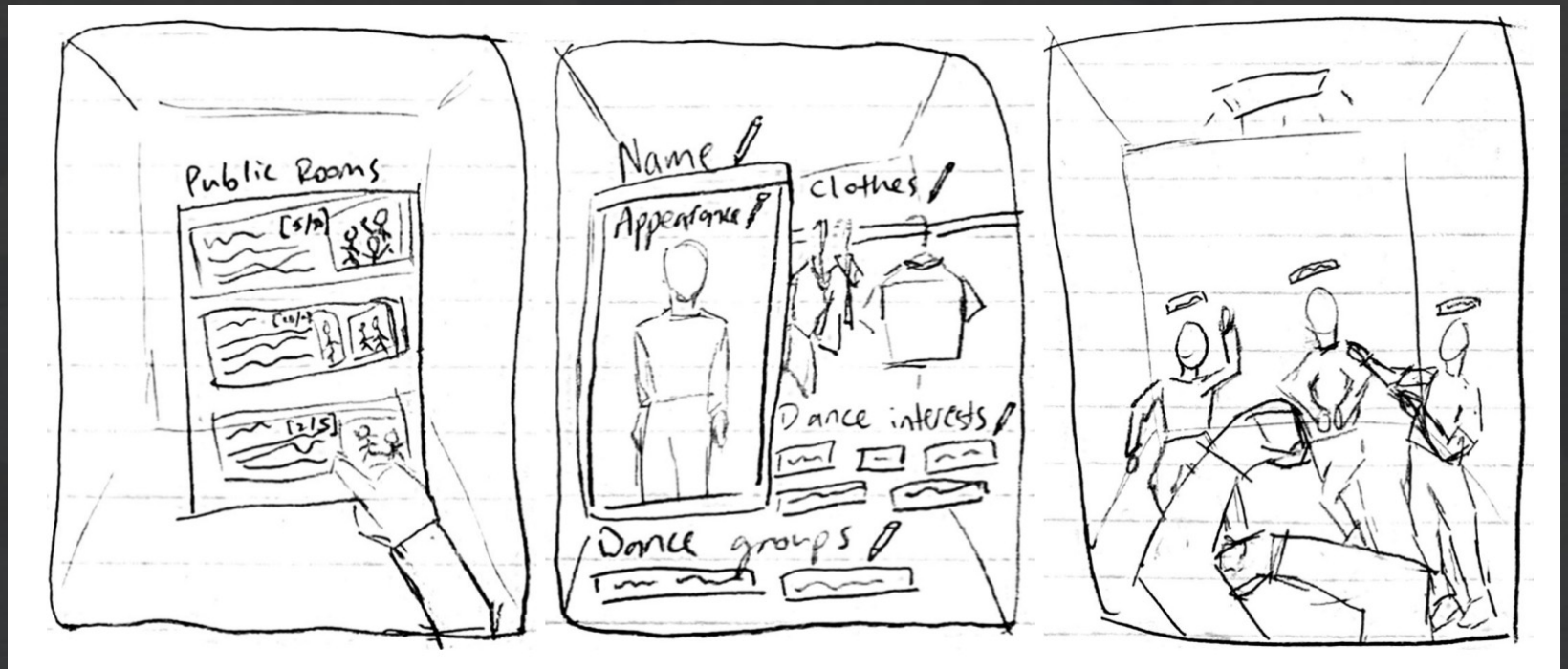
Struggle Bus

Experience Prototype to Test Assumptions



eMotion

Sketching & Storyboarding



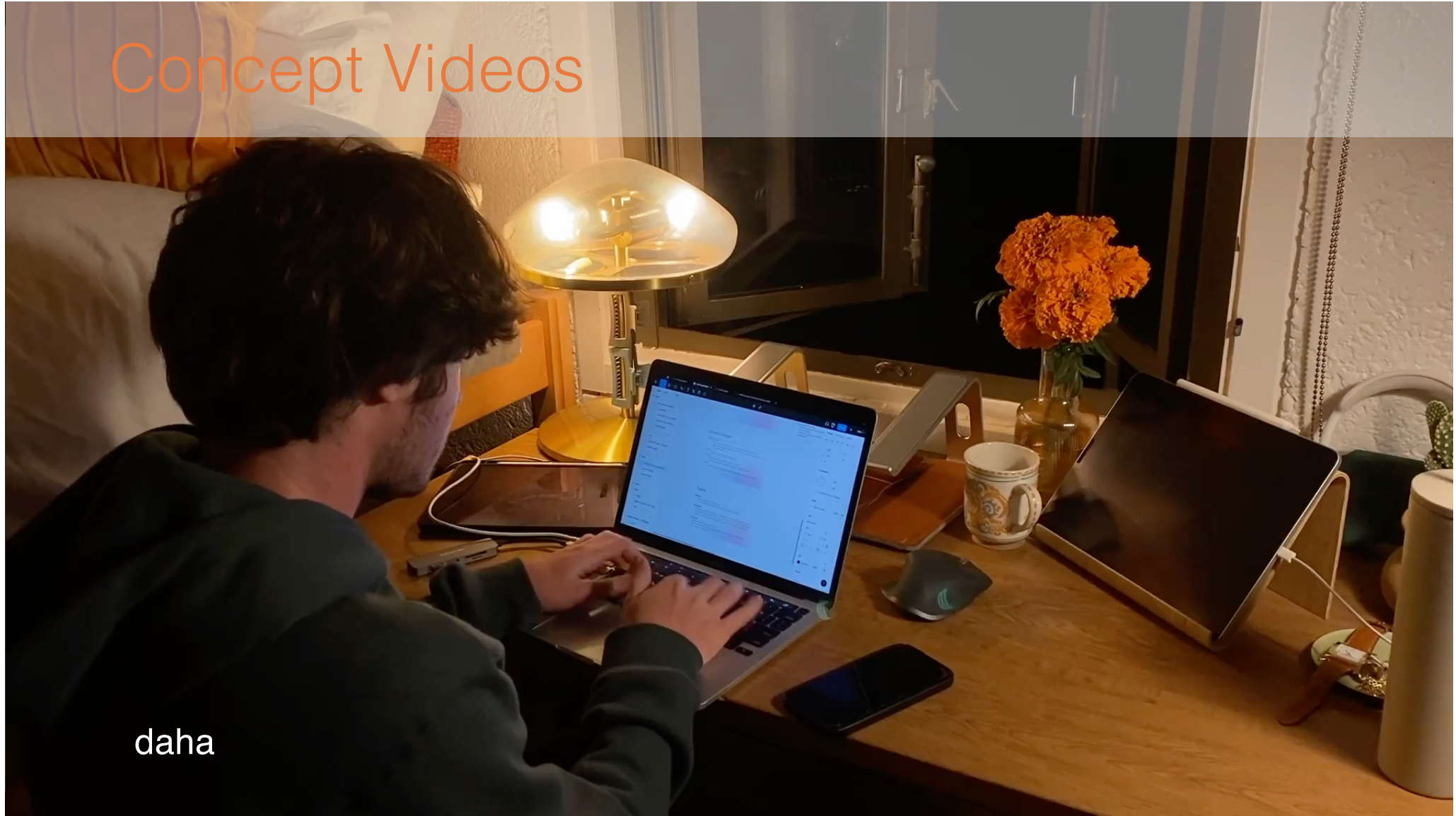
house

Concept Videos: Planning Storyboards



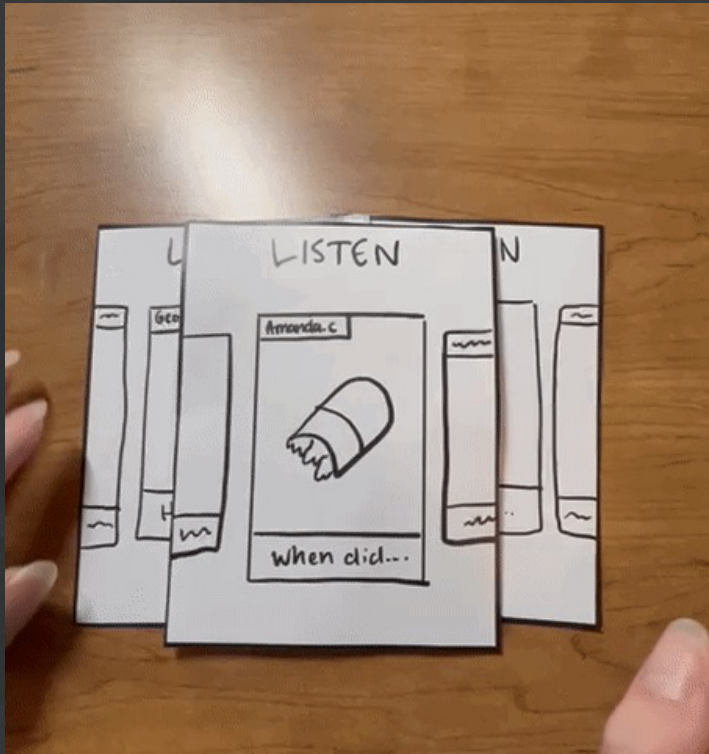
inspyre

Concept Videos

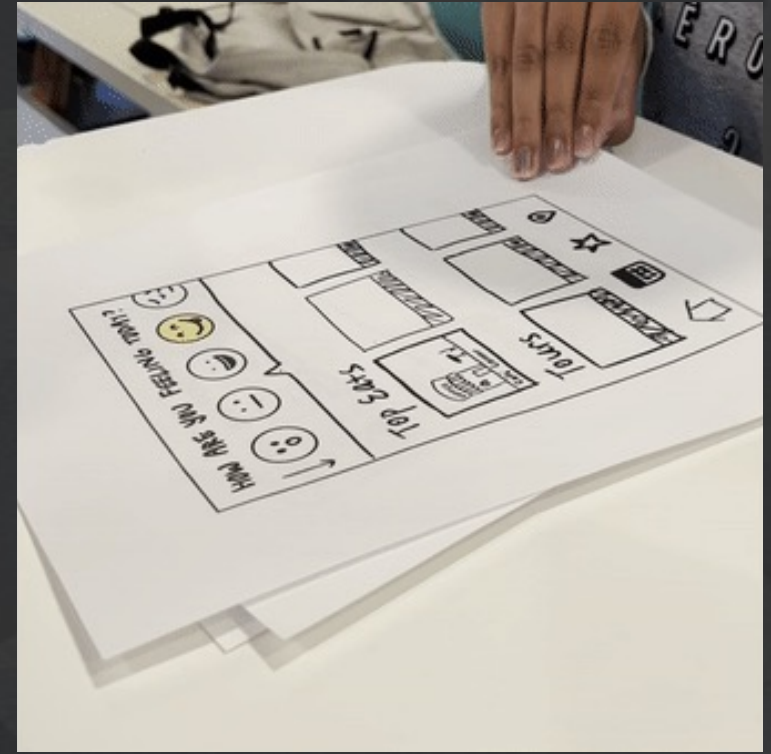


daha

Low-fi Prototyping & Testing



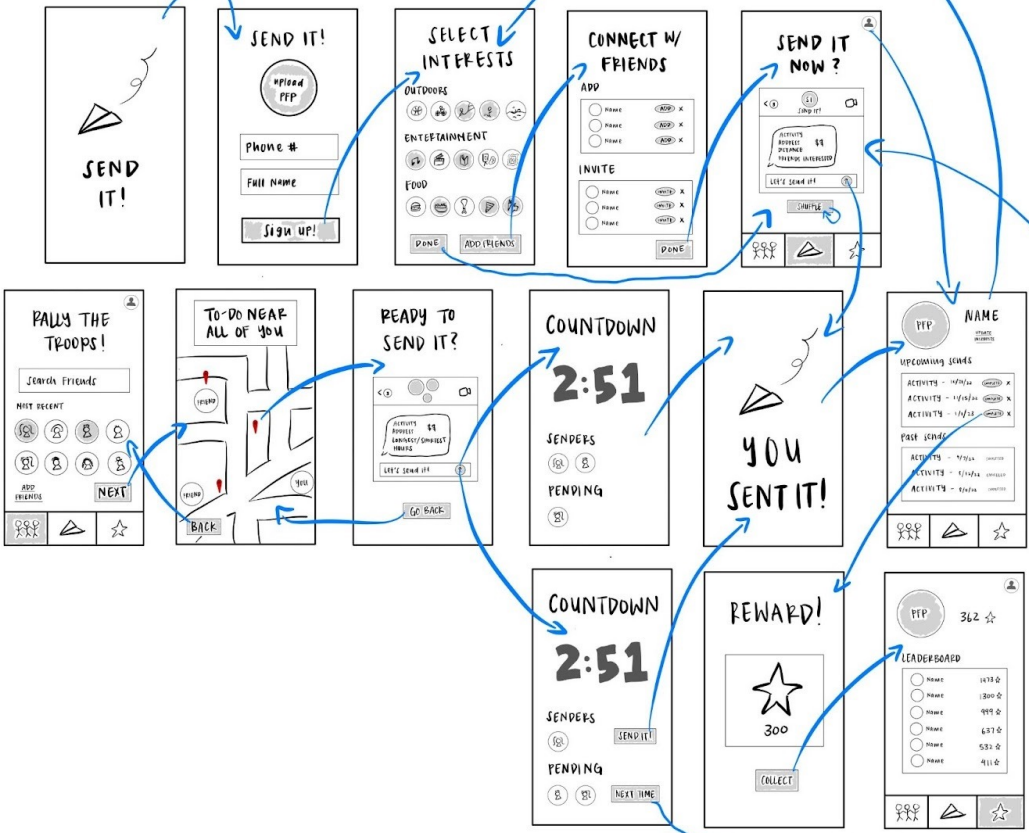
StoreaTime



UnCover

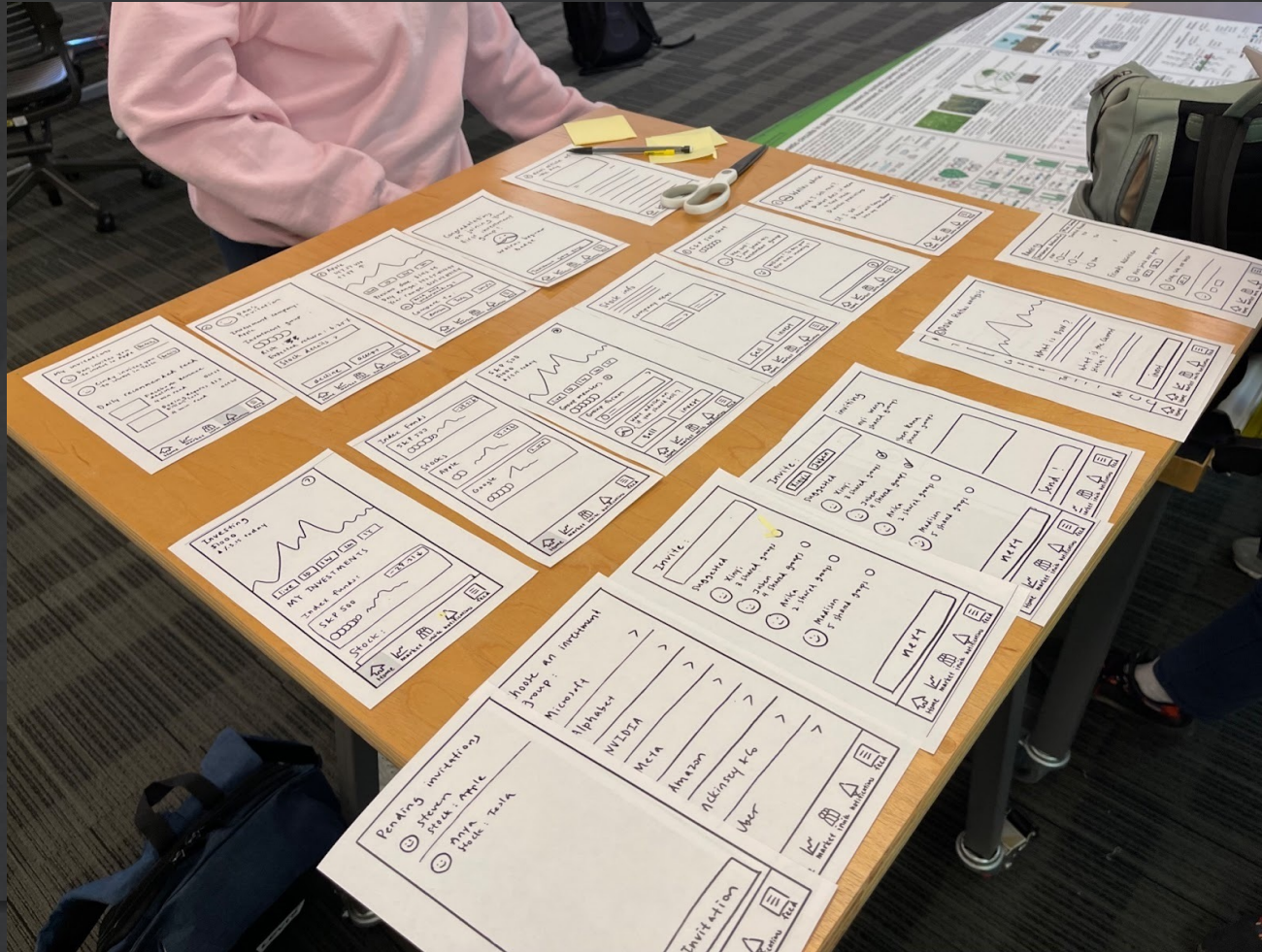
Low-fi Prototyping & Testing

ENTIRE SYSTEM



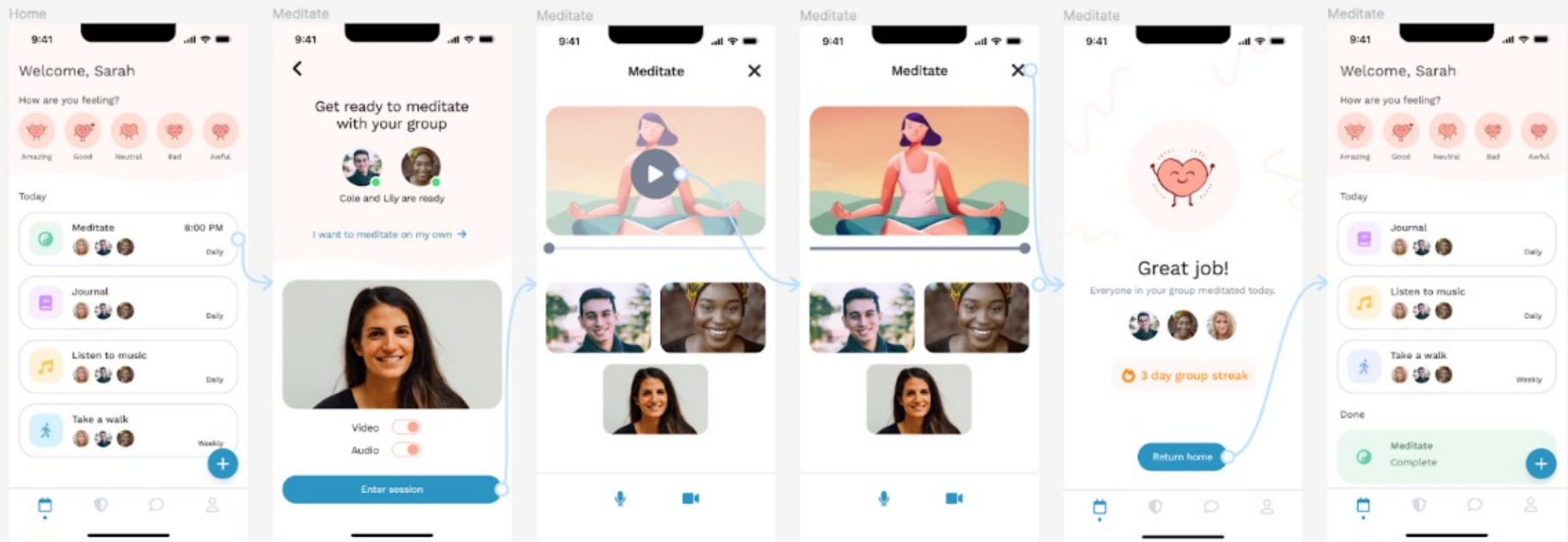
Send It

Low-fi Prototyping & Testing



Interactive Prototypes

Medium Fidelity



Home screen with a mood check-in and tasks for the day

Meditation preview screen to see which friends are available and adjust audio and video settings

Group meditation screen that shows a synced guiding video and your friends' videos

Completion screen that notifies you if your entire group has completed the task and of any continuing streaks

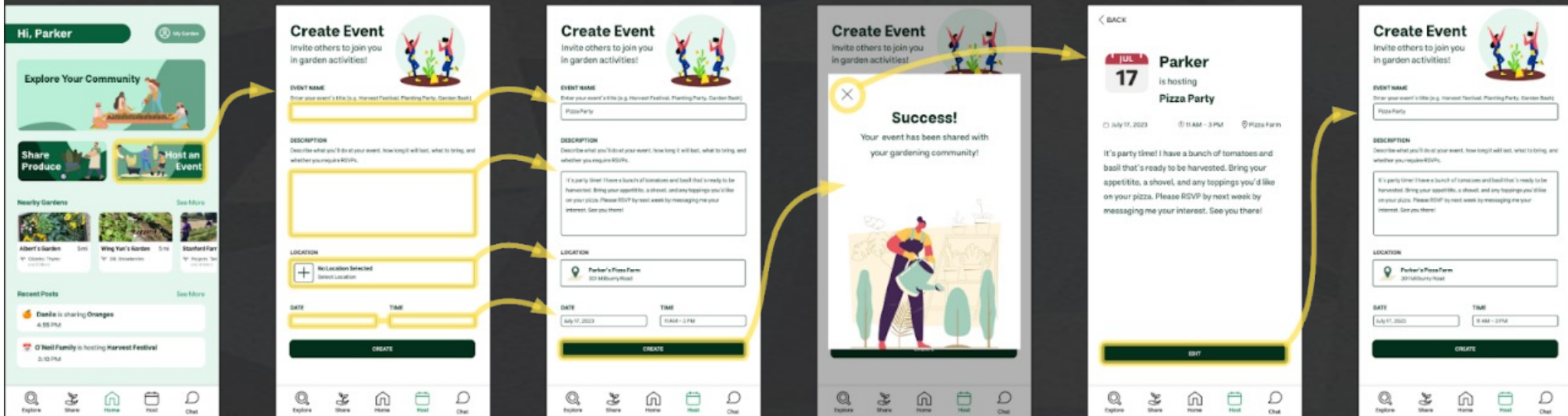
After you have completed a task, it gets sorted into the "Done" section. If the whole group has completed it, it is marked as "Complete" and the entire bar is filled in

Kokoro

Interactive Prototypes

Medium Fidelity

Medium Task: Schedule and edit an event at your garden



Hosting an event can be done by tapping the call to action or selecting the Host nav tab.

Hosting an event is done by filling out a form which will become visible to neighboring gardeners.

User enters event name, description, location, date, and time.

Popup modal indicates success.

The event information is now public and will appear on the user's garden page and in search results.

The user can edit their event details and resubmit at any time.

GardenShare

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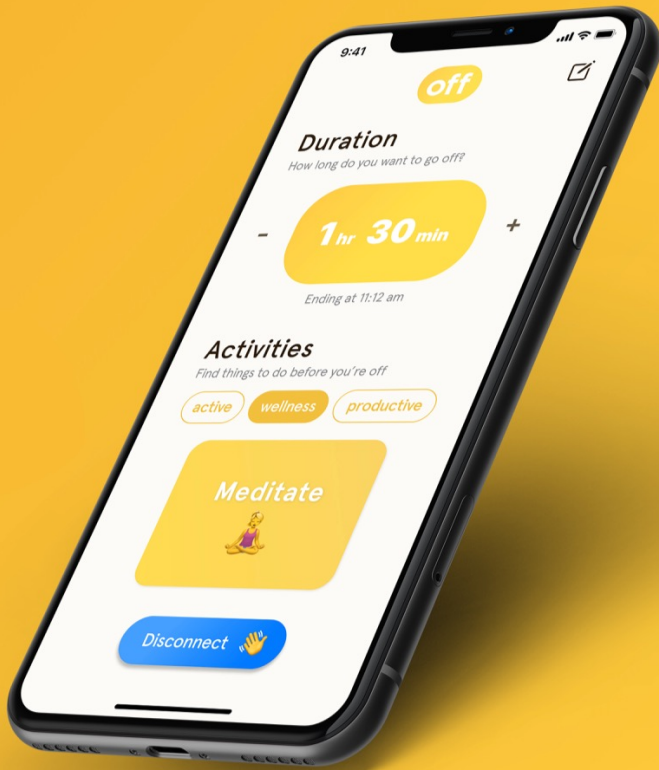
dt+UX: Design Thinking for User Experience Design, Prototyping & Evaluation

22

Interactive Prototypes

Hi-Fidelity

off



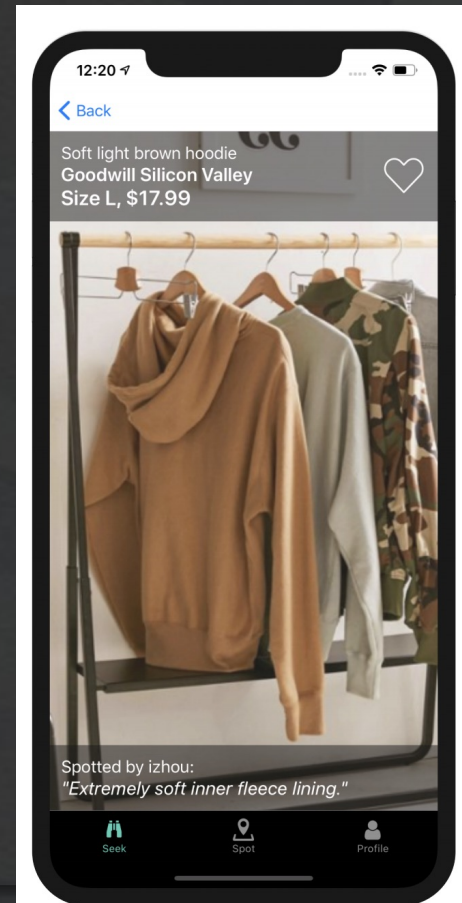
December 9, 2022

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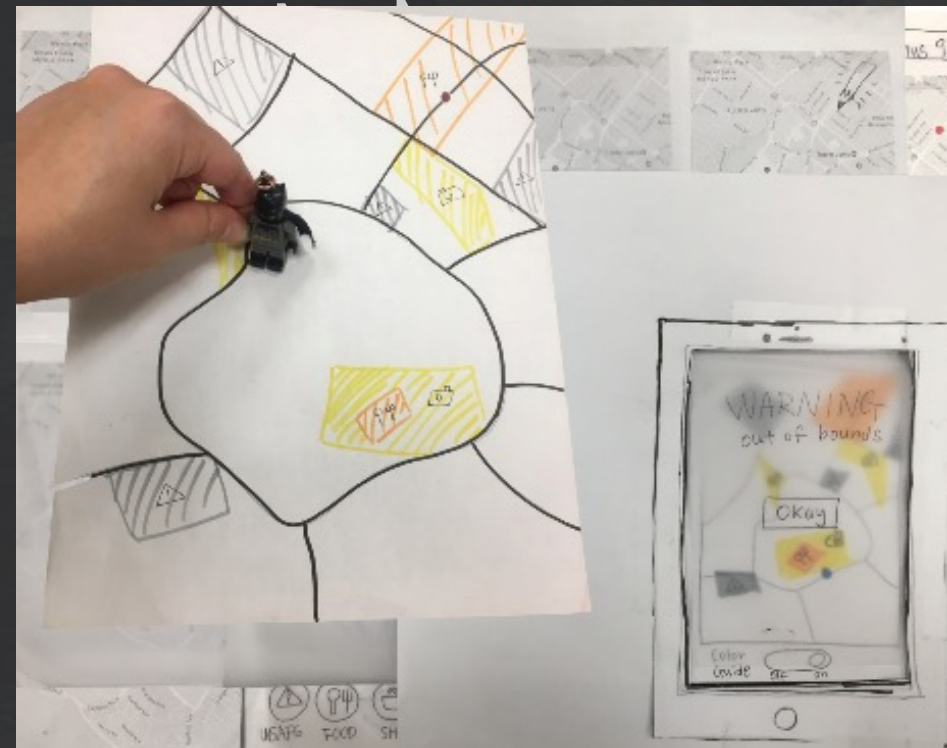
dt+UX: Design Thinking for User Experience Design, Prototyping & Evaluation

thread



Evaluation

- Test with real customers (participants)
 - w/ interactive prototype
 - low-fi with paper “computer”
- Low-cost techniques
 - expert evaluation (Heuristic Evaluation)
 - online testing



Wanderlust

<http://cs147.stanford.edu>

- Project web sites w/ all materials
- Lecture topics, slides, & video
- Homework assignments

The Projects

- 12 Judges will be picking the best projects (announced at 8:45 PM)

- Students will have a say by voting for *The Students Choice Award*

<http://bit.ly/cs147-au22-best-pitch>

Thanks! Get Involved!

- Mentor teams in CS 194H (next quarter)
- Hire students and interns
- Support this project fair financially & HCI+Design research at Stanford

The Judges

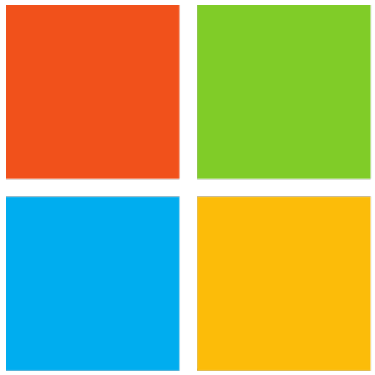
- Siamak (Ash) Ashrafi
- Nicolas Ayoub
- Guadelupe Babio
- Chris Bennett
- Terrell Ibanez
- Cindy Jiang
- Alen Malaki
- Michael Murphy
- Christina Pan
- Ted Selker
- Javy Wang
- Sean White

THANK YOU!



NAUTILUS
GLOBAL INVESTMENT

THANK YOU!



Microsoft

The Projects

The Students Choice Award

<http://bit.ly/cs147-au22-best-pitch>

We are checking your attendance based on this and on Bingo!

The Judges

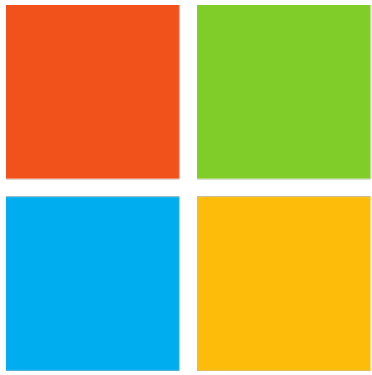
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- Sean White

THANK YOU!



NAUTILUS
GLOBAL INVESTMENT

THANK YOU!



Microsoft

Student Choice / Best Pitch

daha

Wallus

Career Backpack

Best Poster

Whisper

Struggle Bus

Wallus

Greatest Societal Impact

Polarity
FoodZone

GardenShare

Kokoro

Most Novel Product

Trove

Dishcovery

CircLing

Best Website

StoreaTime

EduCare

Career Backup

Best Concept (3)

daha

Dishcovery

House

Best Demo (3)

EduCare

Trove

FoodZone

Best Visual Design (3)

CircLing

Send It!

StoreaTime

Bingo Raffle Winner

Peter Ling

Nicolas Caminero

Camilla Pernell

Best Overall Project
CircLing

Send It!

Dishcover