

# WHAT IS USER EXPERIENCE (UX)?

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## What is User Experience (UX)?

Mentimeter

A word cloud centered around the word "design" in a large blue font. Other words in various colors and orientations surround it, including: "attitude" (pink, vertical), "perceptions" (purple, vertical), "interaction" (black, vertical), "surveys" (black, vertical), "usability" (green, vertical), "online" (blue, horizontal), "iterative process" (green, horizontal), "interviews" (yellow, vertical), "creativity" (blue, horizontal), "testing your market" (yellow, horizontal), "design thinking" (pink, horizontal), "development" (grey, horizontal), "research" (black, vertical), and "audience" (purple, vertical).

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# INTRODUCTION TO USER EXPERIENCE (UX) DESIGN



Library

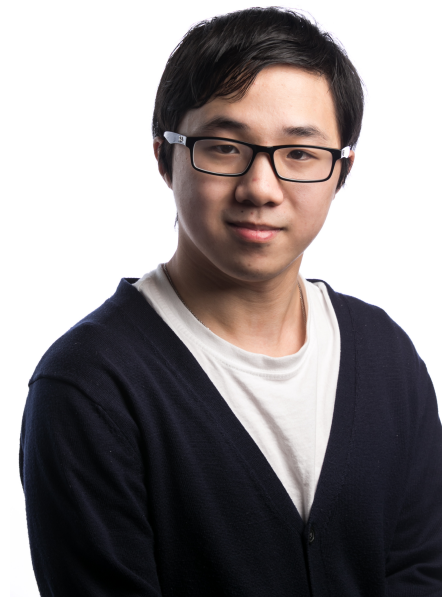
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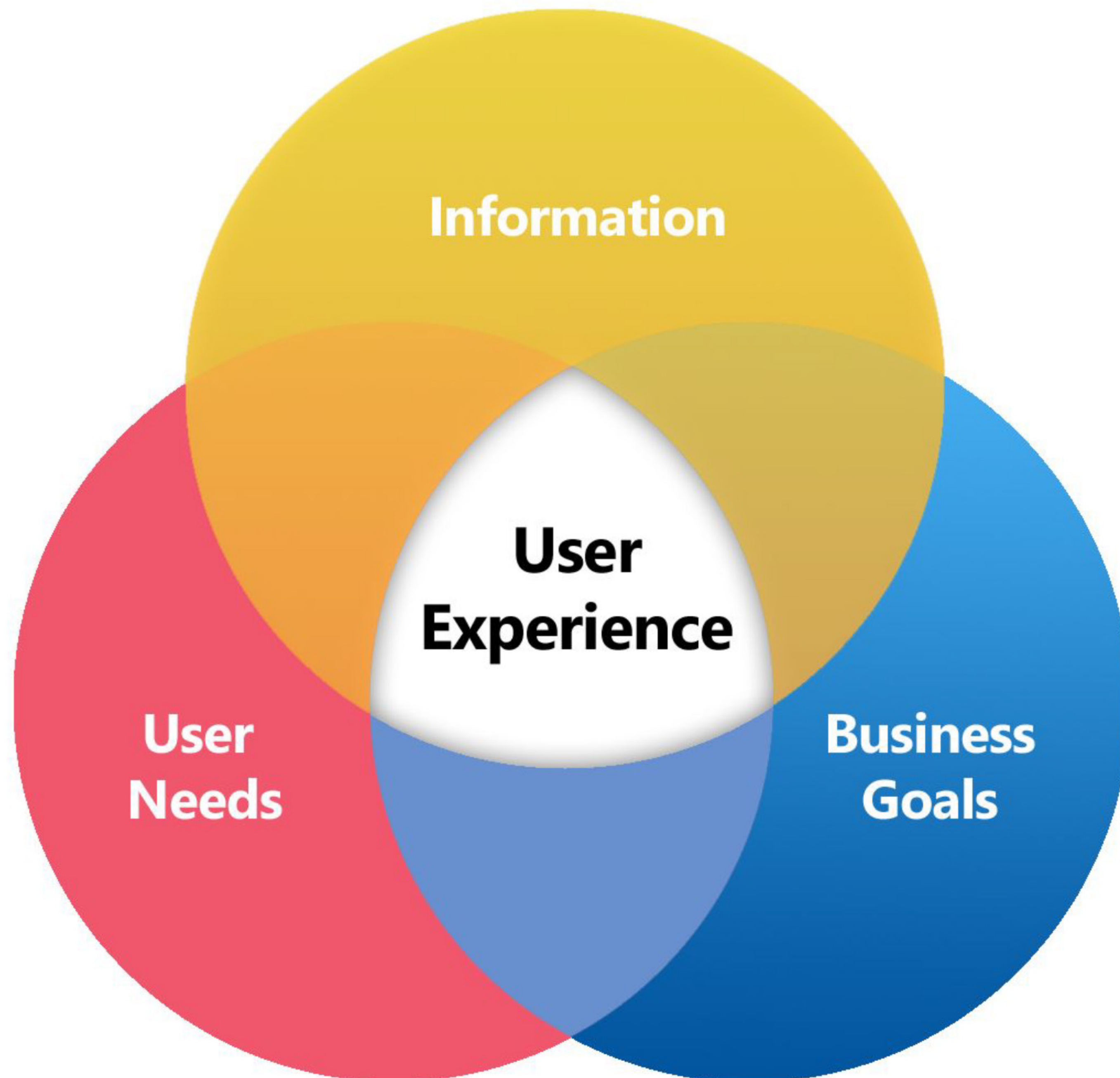
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# AGENDA

- What is UX & design thinking? ➡ Menti
- UX and business/entrepreneurship
- UX design thinking process
- Design challenge
- Wrap up





User Experience Design (UXD) implements design thinking and various strategies to deliver a pleasant, smooth, and seamless overall experience to end users while interacting with the organization's product or services.

# The ROI of UX

UX work can reduce development inefficiencies

**1. Avoid 50% rework and bug fixes**

**2. Reduce 33- 50% development time**



**3. 50% more accurate estimates for build time and cost**

**4. 90% reduction in support costs after usability testing**

**5. 83% increases in Key Performance Indicators**



# WHAT IS DESIGN THINKING?

“Design Thinking is an iterative process in which we seek to **understand the user, challenge assumptions**, and **redefine problems** in an attempt to **identify alternative strategies and solutions** that might not be instantly apparent with our level of understanding.”

- Dam and Teo, Interaction Design Foundation



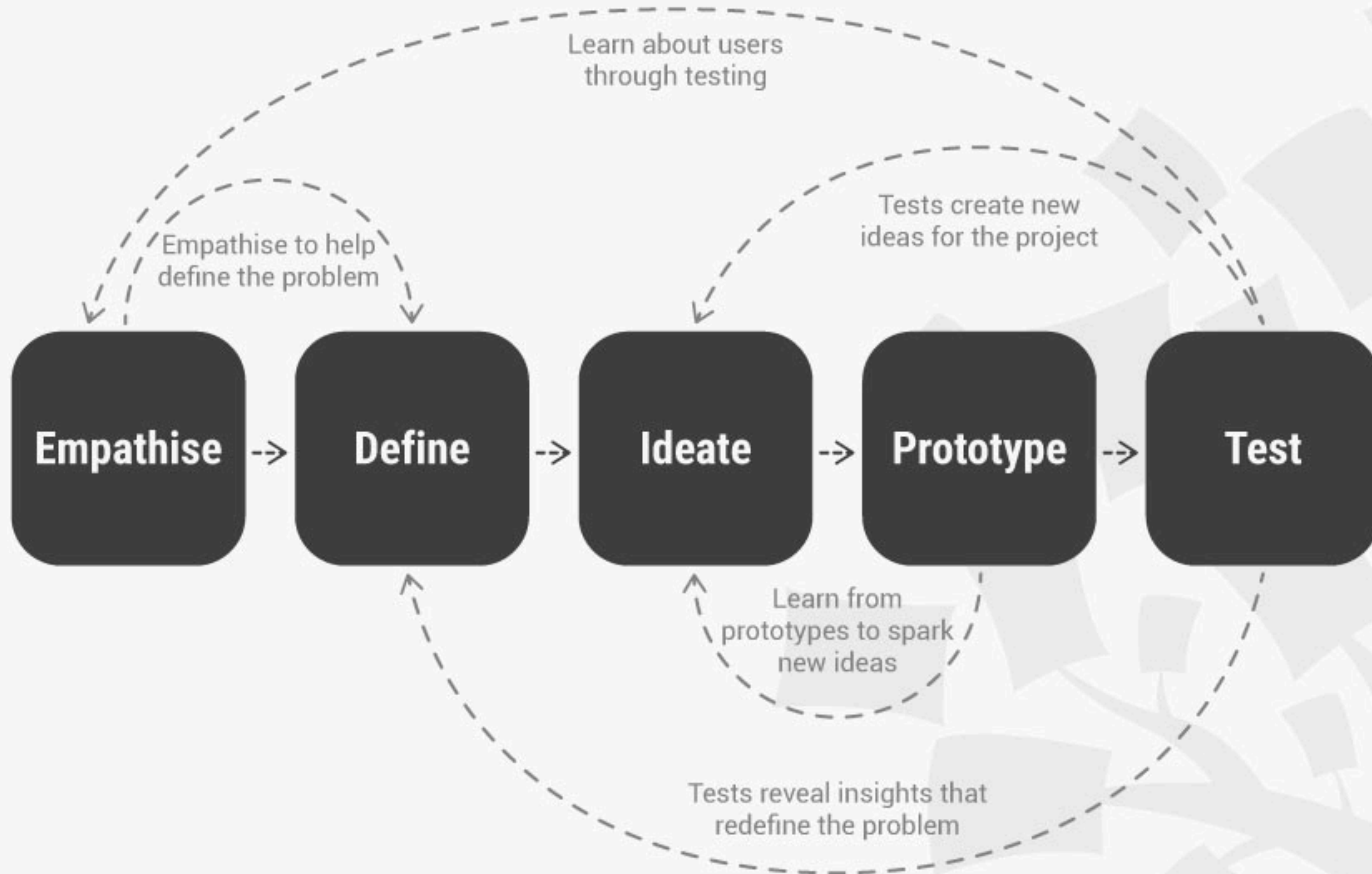


HOW DO WE “DO UX”?

THE DESIGN PROCESS



# DESIGN THINKING: A NON-LINEAR PROCESS





# PHASE 1

## EMPATHIZE









# PHASE 3

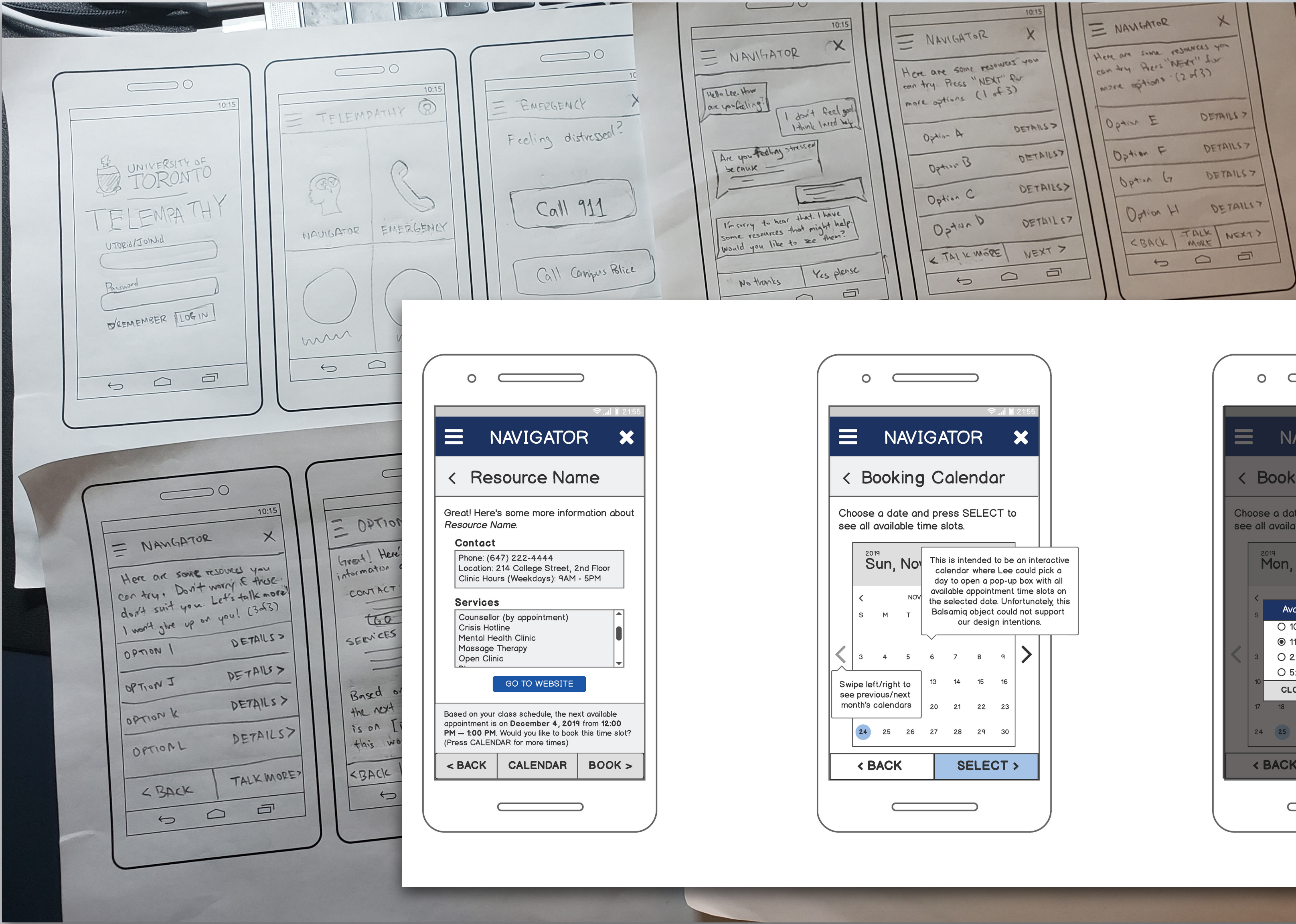
## IDEATE





# PHASE 4

## PROTOTYPE





# PHASE 5

## TEST





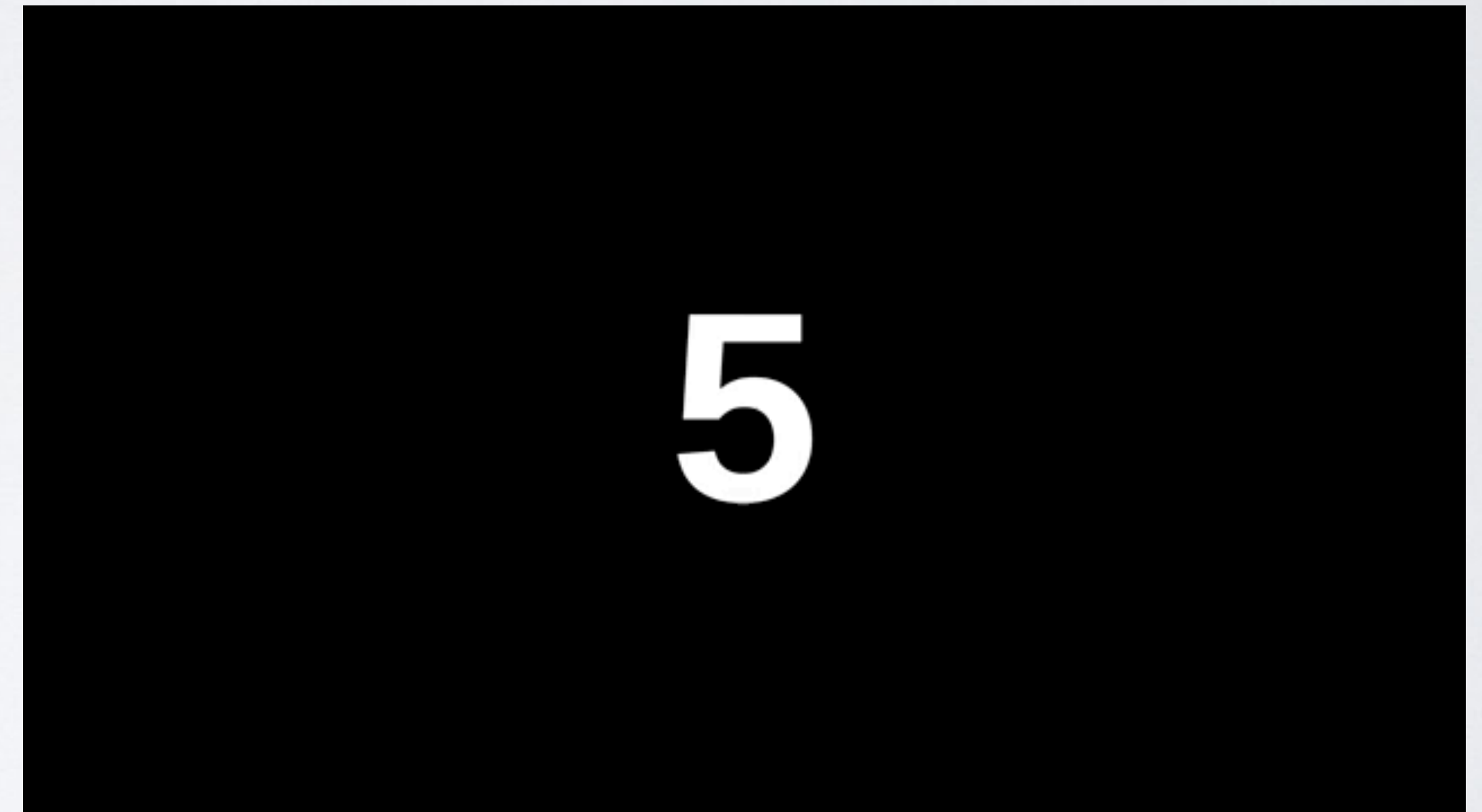
# YOUR DESIGN CHALLENGE

Redesign the electronic device purchasing experience

# STEP 1: EMPATHIZE

You are a 20 year-old student looking to get a new, affordable replacement for your phone, which just broke—how will you approach this process?

- **Groups of 2\***
  - A: Designer
  - B: Customer
- **Take turns interviewing each other (3 minutes each)**
  - $A \rightarrow B$
  - $B \rightarrow A$



\*If there aren't enough people, please join a group of two



## STEP 2: EMPATHIZE

What is important to the customer? What are they trying to use the device for?  
What matters to them?

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- Brainstorm individually, writing down your ideas on sticky notes **(3 minutes)**
  - Use something visible (e.g. sharpie or black marker)
  - One insight per note!

## STEP 3: **DEFINE**

What insights have we gathered?

- Get into **teams of 3 or 4** and cluster similar insights together
- 5 minutes
- Generate **needs statements**



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“[Name] **needs a way** to [address this **need**] so that [they benefit in this **way**].”



# STEP 4: **IDEATE**

How might we...?

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- **On your own**, brainstorm potential solutions for any needs statement (**3 minutes**)
- **Quantity > Quality**
  - No artistic ability required
  - Aim for 7-10 ideas each
- Don't be afraid of pitching absurd ideas!

# STEP 5: IDEATE

Cluster similar ideas

- Cluster similar ideas (3 minutes)
  - Same teams as before
  - Give each a cluster a label

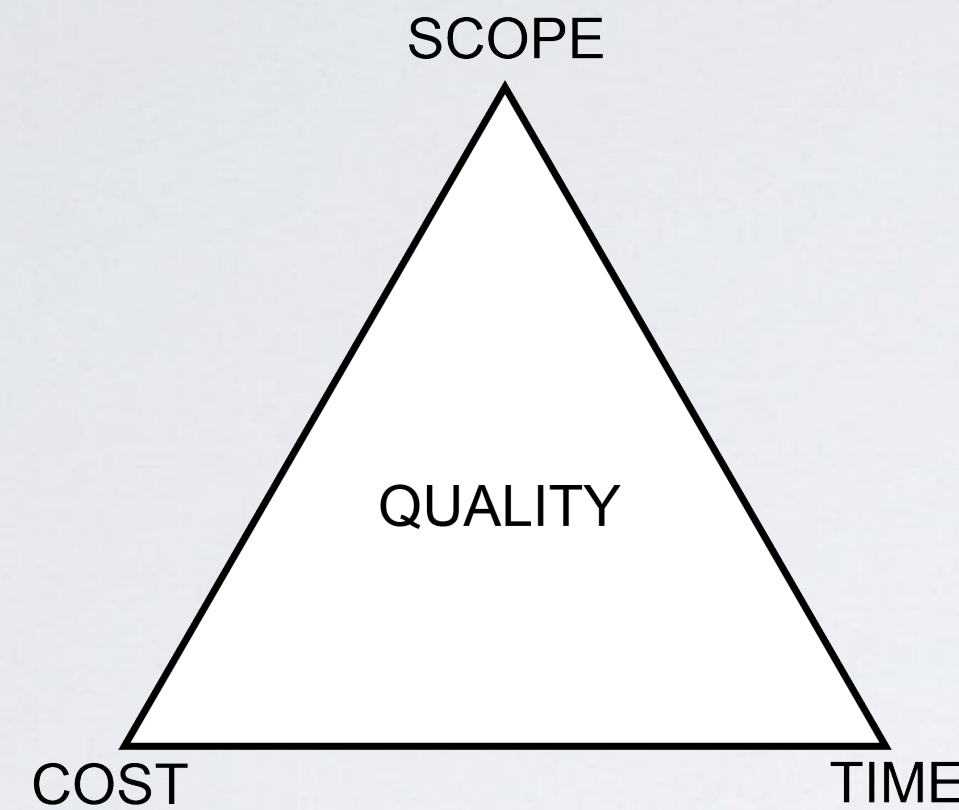


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# STEP 6: **IDEATE**

Narrowing our choices



- Individually evaluate the idea(s) based on the following two criteria (2 minutes)
  - *Feasibility* ● x 4
  - *Impact* ● x 4
- Please do not consult with others!
- You may vote more than once for the same idea

5



# STEP 7: IDEATE

Selecting the best idea

- In your teams, place your votes next to the ideas and tally up the final count. **(4 minutes)**
  - Draw **green** and **red** circles next to your idea to indicate your vote!

Feasibility



Impact



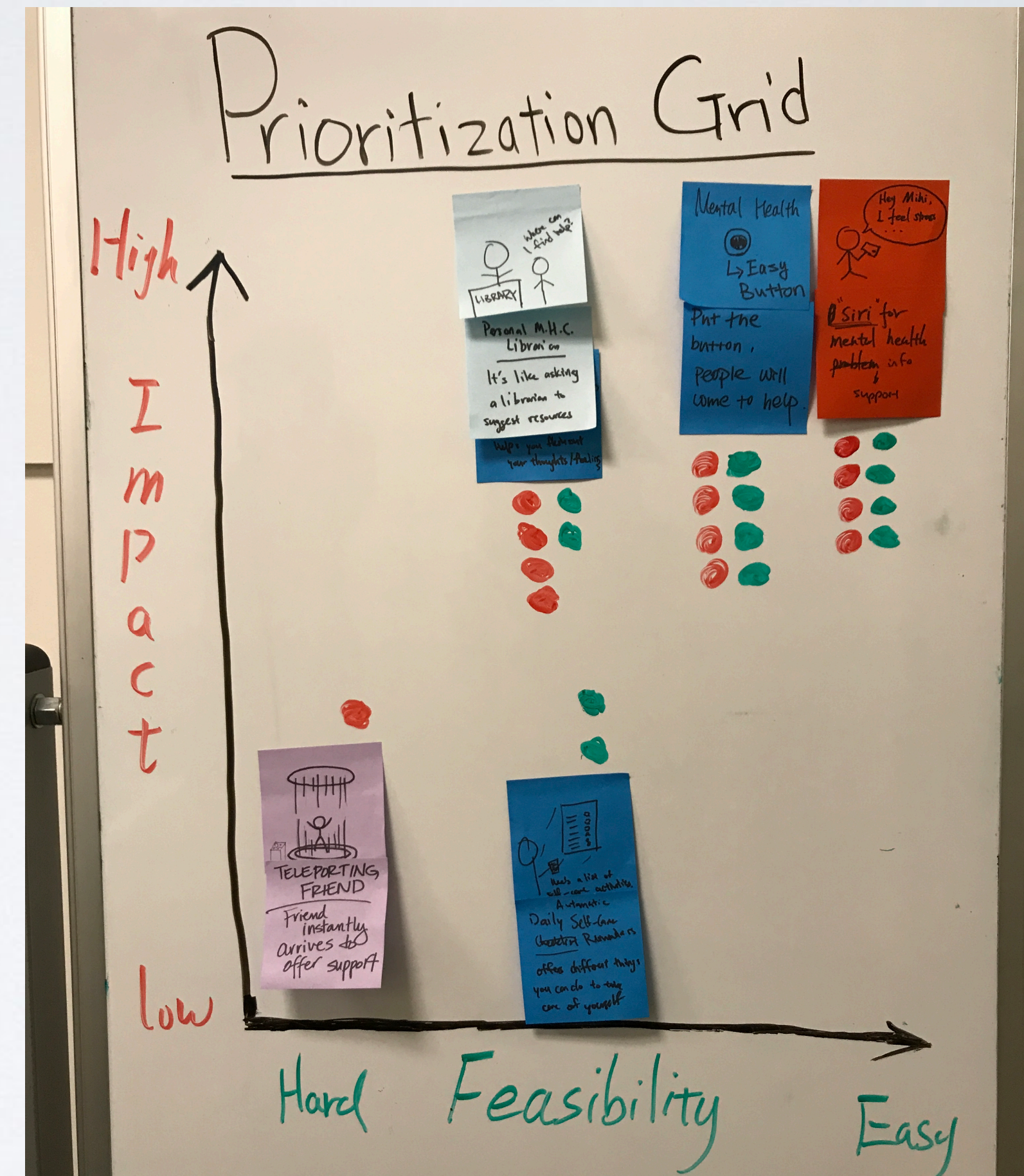
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# STEP 7: IDEATE

## Other selection methods

- Post-it Voting or Dot Voting
  - Feasibility & Impact
- Four Categories Method
  - Most rational? Most delightful?  
Darling? Long shot?
- Idea Affinity Maps
- How-Now-Wow Matrix
- Six Thinking Hats



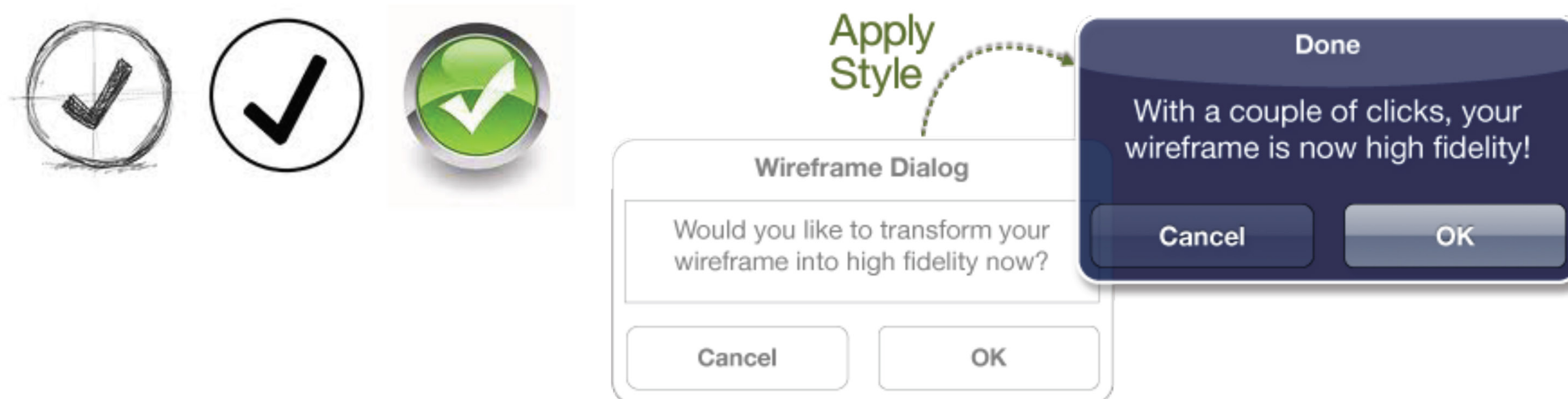
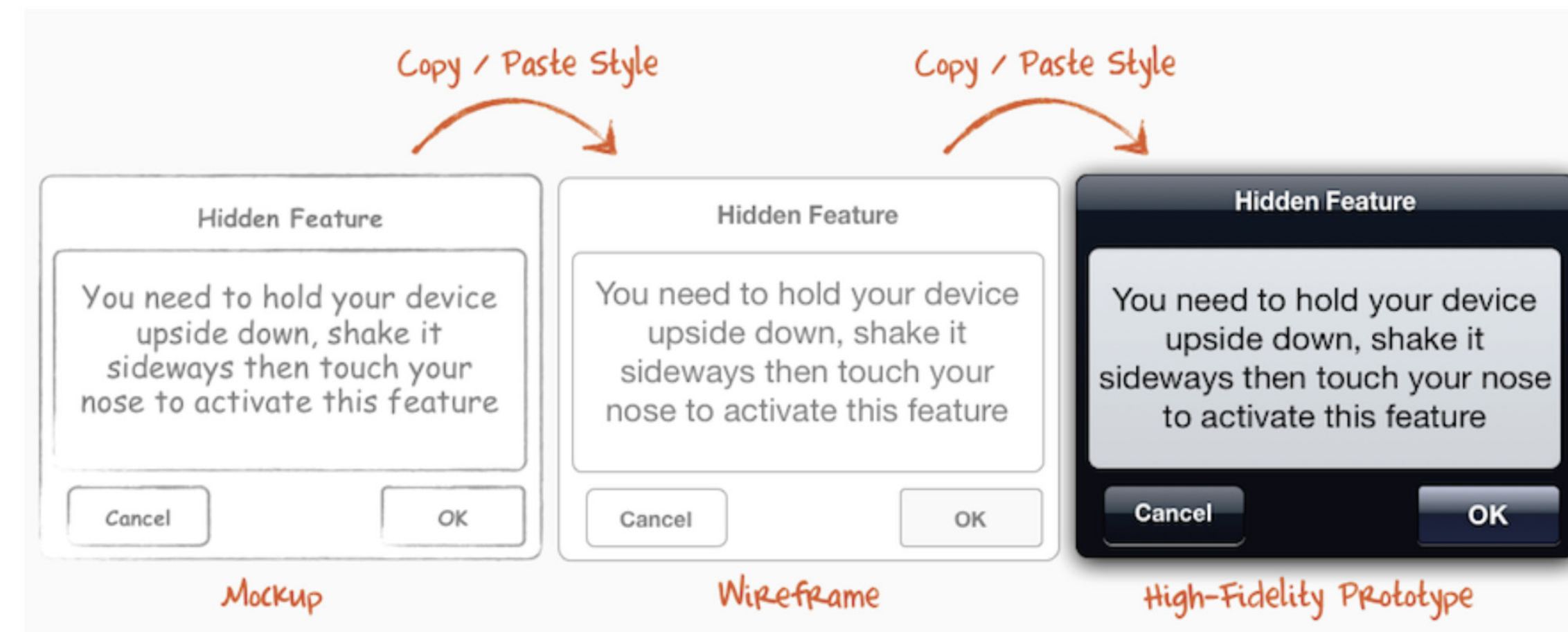


# HIGH-FIDELITY PROTOTYPES

- Looks and feels like the final product
- Can be developed using existing hardware and software components
- Users may think they are testing a completed system
- May be reluctant to offer genuine feedback



# HiFi Prototypes





# Low versus High Fidelity

Type	Advantages	Disadvantages
Low-fidelity prototype	Lower development cost Evaluates multiple design concepts Useful communication device Addresses screen layout issues Useful for identifying market requirements Proof of concept	Limited error checking Poor detailed specification to code to Facilitator-driven Limited utility after requirements established Limited usefulness for usability tests Navigational and flow limitations
High-fidelity prototype	Complete functionality Fully interactive User-driven Clearly defines navigational scheme Use for exploration and test Look and feel of final product Serves as a living specification Marketing and sales tool	More resource-intensive to develop Time-consuming to create Inefficient for proof-of-concept designs Not effective for requirements gathering

**Table 11.3** Advantages and disadvantages of low- and high-fidelity prototypes



# PROTOTYPE FIDELITY

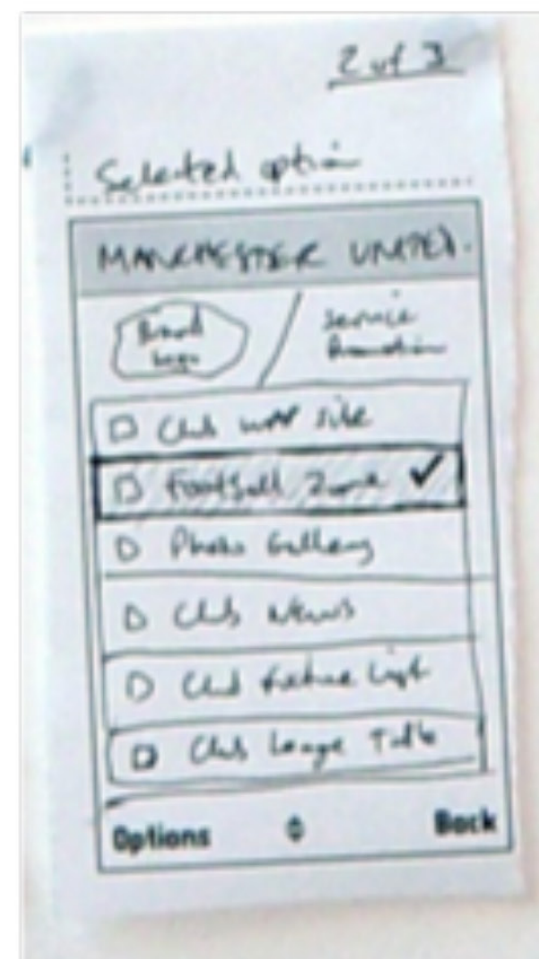
	Low-Fidelity	Medium-Fidelity	High-Fidelity
Content	Grey-boxing or scribbles	Lorem ipsum	Actual content
Visualization	Sketches	Wireframes	Styled
Interaction	Paper Prototype (Static)	Clickable Prototype (Interactive)	Working Code Demo
Specification	Flow	Detailed Flow	Detailed Specification



# Low versus High Fidelity

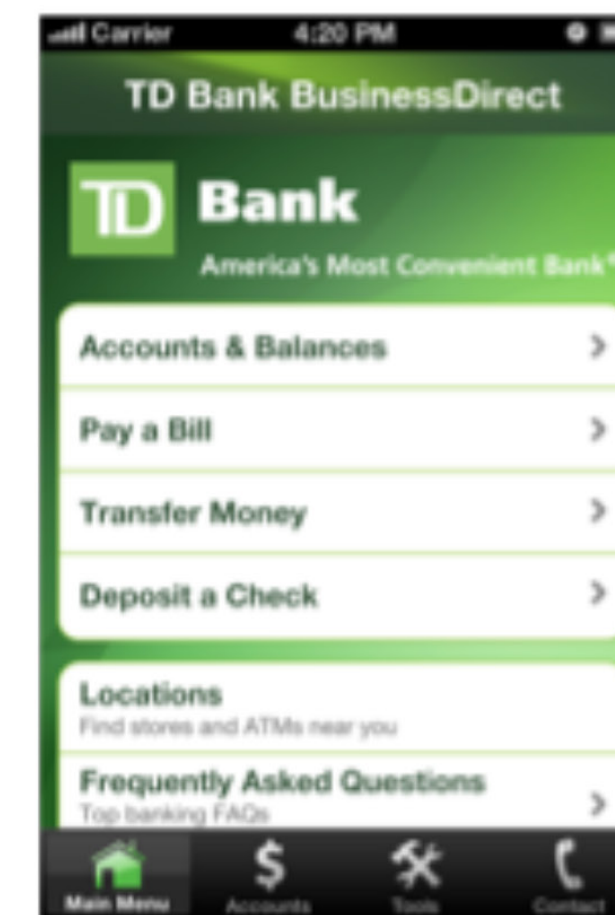
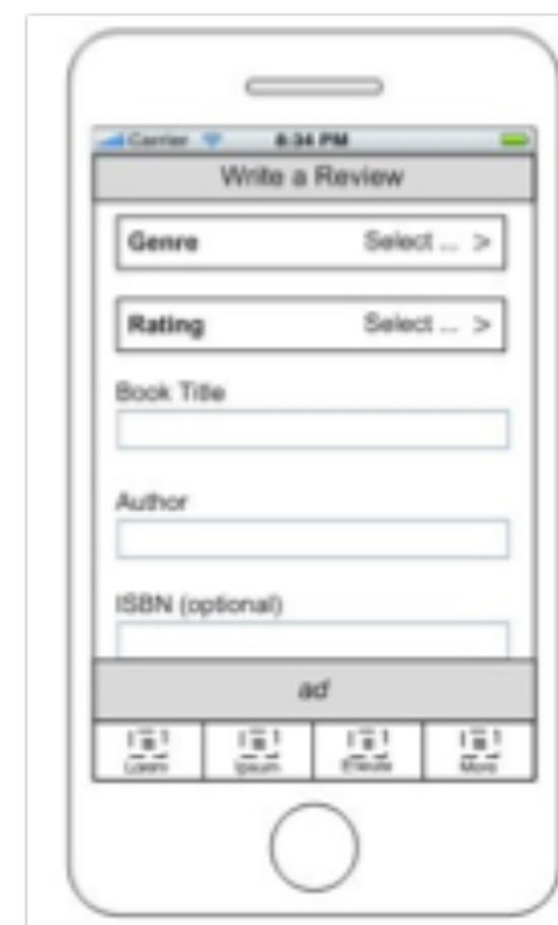
## Low fidelity:

- Quicker to produce
- Good for testing initial concepts
- Users understand **in progress**
- Users focus on usability



## High fidelity:

- Take longer to produce
- Good for testing refined concepts or design studies
- Users pay more attention to design





# USABILITY TESTING

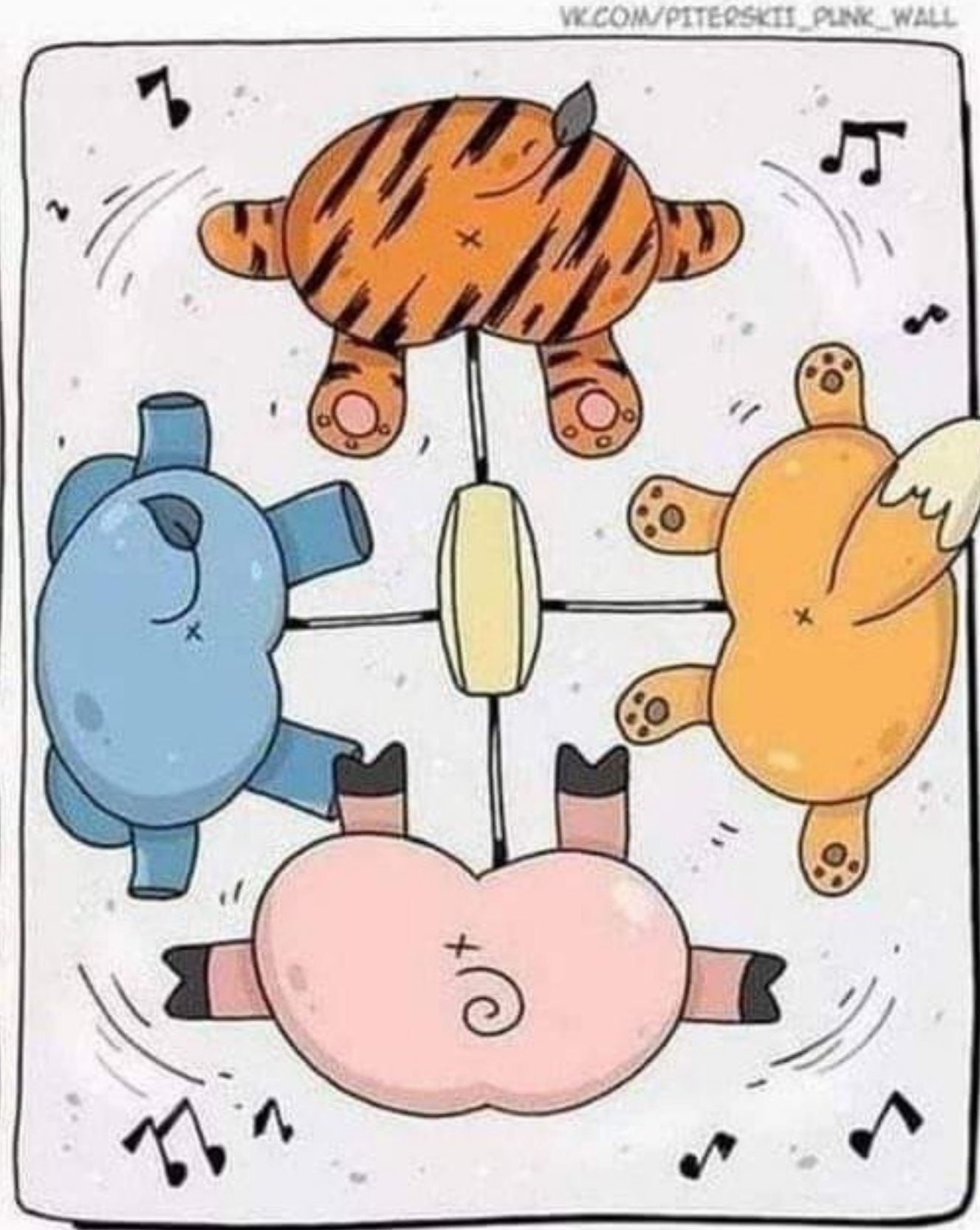
- Usability testing is a way to see how users interact with your services and products. Test participants are your real users. They are asked to complete tasks, typically while they are being observed by a researcher.
- Evolution, not revolution!



# UI



# UX

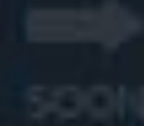






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## Why UX research is important



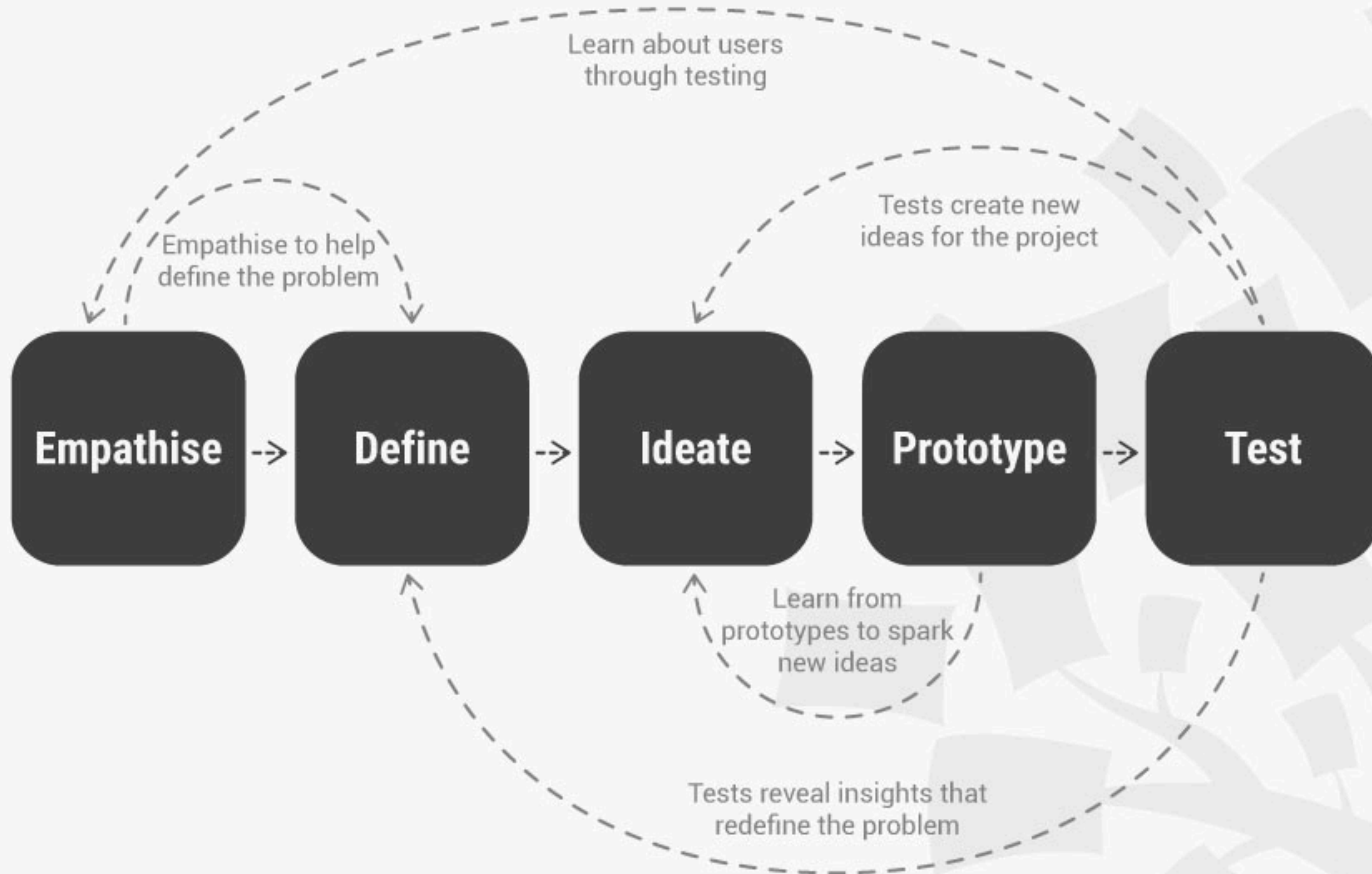
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# DESIGN THINKING: A NON-LINEAR PROCESS





# ADDITIONAL RESOURCES

## User Experience (UX) Design

- [Don't Make Me Think \(UTL\)](#)
- [Lean UX: Designing Great Products with Agile Teams \(e-book, UTL\)](#)
- [Lean UX: Designing Great Products with Agile Teams \(Video Series, TPL\)](#)
- [Interaction Design: Beyond Human-Computer Interaction \(Amazon\)](#)
- [Understanding Your Users: A Practical Guide to User Research Methods \(e-resource, UTL\)](#)

## UX & Entrepreneurship

- [A Clueless Entrepreneur's Guide to User Experience \(Webpage\)](#)
- [How All Entrepreneurs Can Think Like UX Designers \(Webpage\)](#)
- [User Experience is the Most Important Metric You Aren't Measuring \(Webpage\)](#)
- [Why Understanding UX Design Will Make You a Better Entrepreneur \(Webpage\)](#)

## Prototyping

- [Balsamiq \(Software + Webpage\) + Tutorials \(Webpage\)](#)
- [Prototyping User Experience \(Webpage\)](#)
- [Rapid Prototyping \(Webpage\)](#)
- [What is a Prototype: A Guide to Functional UX \(Webpage\)](#)



<http://bit.ly/UTSCUXWorkshop>



# ADDITIONAL RESOURCES

## LinkedIn Learning Courses (Accessible via your UTORid credentials on LinkedIn)

- UX Foundations: Research (1 hr 9m)
- UX Courses by Chris Nodder:
  - User Experience for Web Design (1 hr 49m)
  - UX Design 1: Overview (13m)
  - UX Design 2: Analyzing User Data (30m)
- Empathy in UX Design (1 hr 10m)
- Figma for UX Design (1 hr 51m)
- Design Thinking: Customer Experience (34m)
- User Experience Design for Wearables (52m)



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# QUESTIONS / FEEDBACK

- **Please take a moment to fill out the workshop feedback form.**
- **What are your questions?**