# Wireframes and Low-Fidelity Prototypes

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#### **Goal Statements**



Our **DogWalker** app will show tips to select a dog walker which will affect non-tech-savvy users by helping users hire the right dog walkers. We will measure effectiveness by tracking the booking rate in the app.



Our **CoffeeShop** app will let users <u>place group</u> orders in advance which will affect <u>users who have to</u> make and pick up large orders by <u>letting users skip the</u> line and save time. We will measure effectiveness by tracking orders of 5+ items through the app.

Let's build a prototype for your solution!

# Outline: Low-fi Prototyping

- Storyboarding
  - Big picture storyboards
  - Close-up storyboards
- Wireframing
  - Information architecture
  - Psychology behind UI

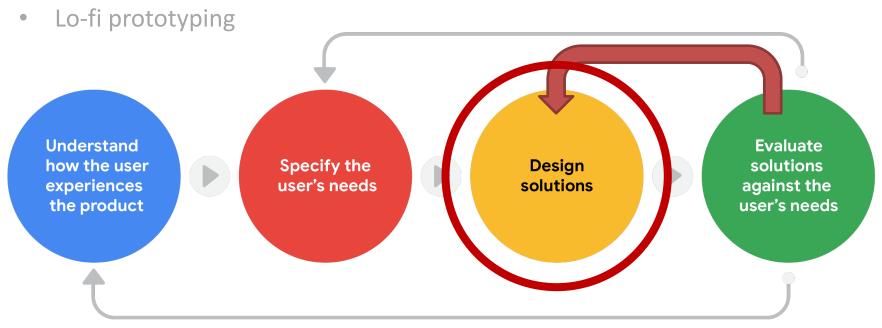
Understand how the user experiences the product

Specify the user's needs

Design solutions against the user's needs

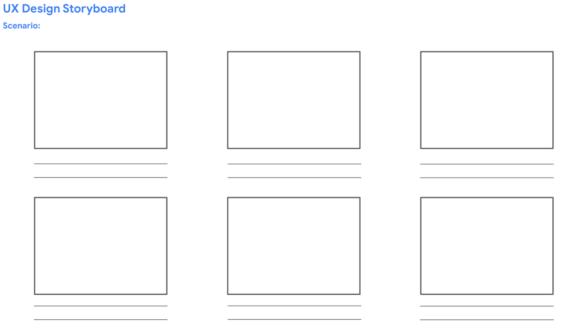
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#### Storyboards

 A series of panels or frames that visually describes and explores a user's experience with a product



 Telling a story through visuals is often more effective than using words

#### **Types**

- Big-picture storyboards
  - Focus on what the user needs, their context, and why the product will be useful to the user
- Close-up storyboards
  - Concentrate on the product and how it works
- Consider the example:



Our **CoffeeShop** app will let users <u>place group</u> orders in advance which will affect <u>users who have to make and pick up large orders</u> by <u>letting users skip the line and save time.</u> We will measure effectiveness by tracking orders of 5+ items through the app.

# Big-picture Storyboards



Scenario: An app to help users place large coffee orders quickly and easily - big picture



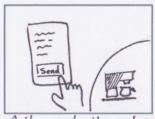
Anika wants to get coffee for the team. Anika is surrounded by people giving orders



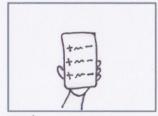
In the app, Anika can send the menu and take orders



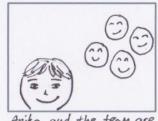
Anika remembers an app that can help



Anika sends the order and coffee starts brewing

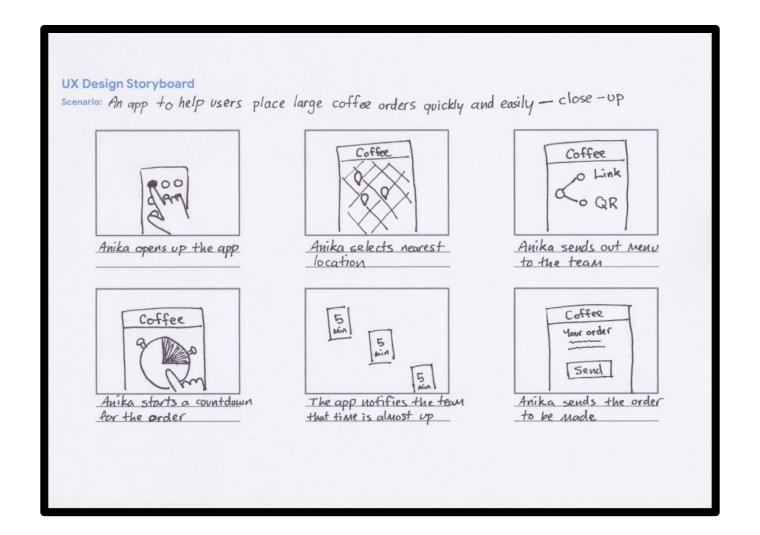


Anika uses our app to take orders



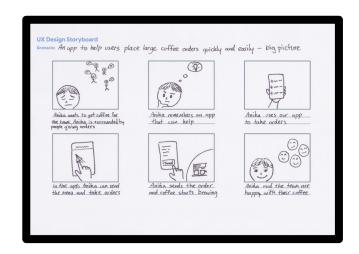
Anika and the team are happy with their coffee

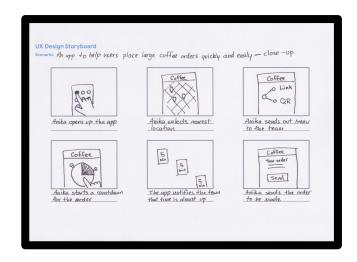
#### Close-up Storyboards



#### **Key Elements**

- Character
  - The target user (from your major persona)
- Scene
  - The user's environment
- Narrative
  - The problem the user is facing and how the design will solve this problem
- Plot
  - Solution offered by the design





# How to Create Big-picture Storyboards?

Based on the user journey map you already have



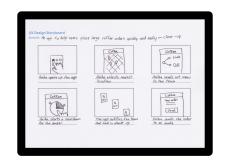
#### Persona: Anika

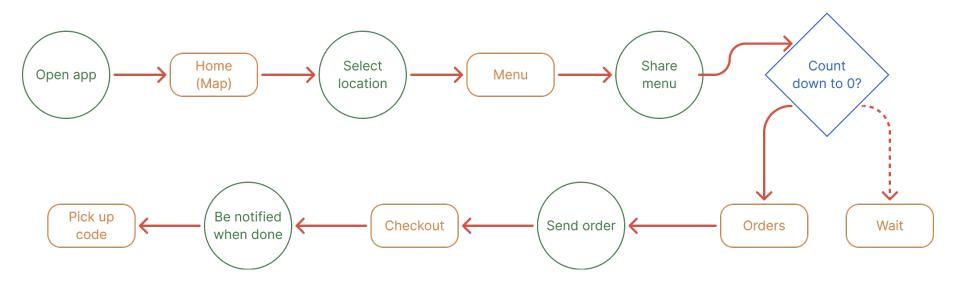
Goal: A fast and easy way to place and pick up group orders

ACTION	Collect orders	Go to Coffeehouse	Submit group order	Wait for order completion	Pick up order		
TASK LIST	Tasks  A. Collect orders from coworkers  B. Collect payment from coworkers	Tasks A. Go to Coffeehouse B. Wait in line	Tasks  A. Relay order to barista B. Double-check order for accuracy C. Initiate checkout	Tasks  A. Gather any extra items (napkins, coffee sleeves, etc.)	Tasks  A. Pick up order B. Check that order is correct		
FEELING ADJECTIVE	Excited to connect to coworkers Worried about making order errors	Anxious about getting back to work in time	Stressed about entering each order one by one	Anxious about time	Relieved that order is ready Hopeful that everyone's orders are correct		
IMPROVEMENT OPPORTUNITIES	Offer a way to easily collect multiple orders	Create an app for advance ordering	Offer a way to easily collect multiple orders	Create an app that offers order status updates	UX Design Storyboard  Someon the appropriate half overs place for	rige coffice orders quickly ave	of easily — long picture
					the dash, Antha, is secremeded by people given orders  Anthony  Land Markes, and send	This were also; an app find can help	Amika 1988. Our npp. to take orders

# How to Create Close-up Storyboards?

- Based on the user flows
  - Actions, screens, decisions
  - Happy path (solid) vs.edge cases (dotted)





#### Exercise: DogWalker Storyboards

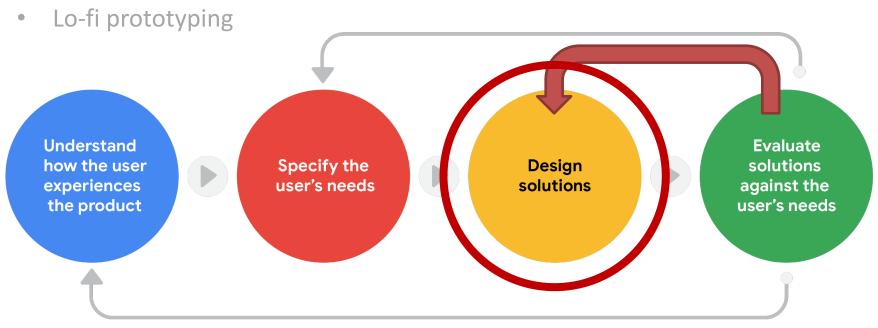




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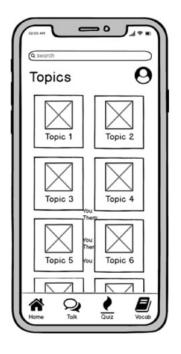
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#### Wireframe

 A basic outline of a digital experience, like an app or a website



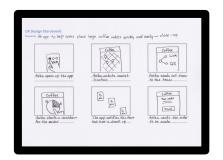




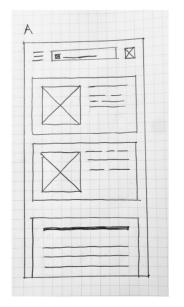


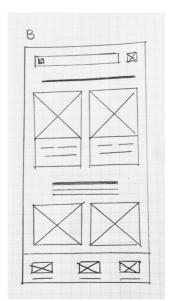
# Same Idea, Different UIs

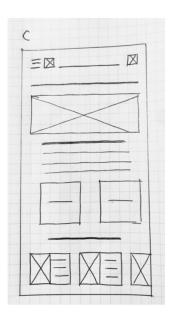


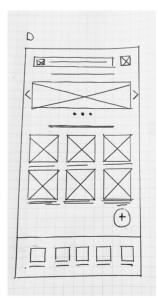


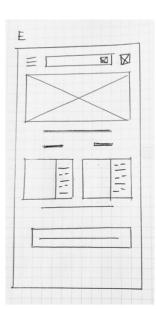
"Show menu..."







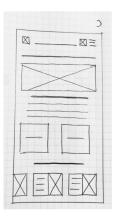




#### Refined

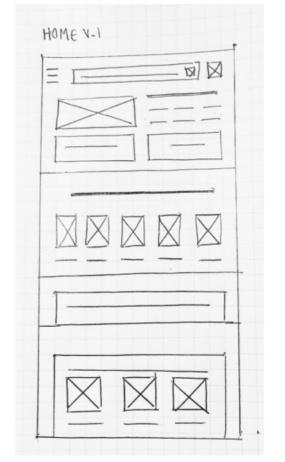










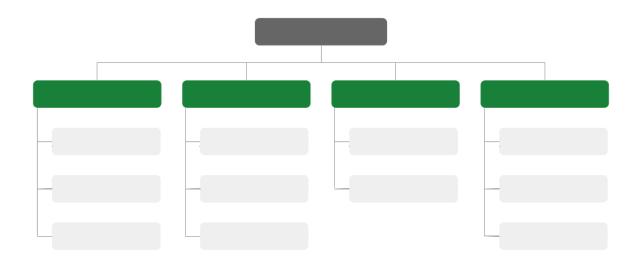


#### Benefits of Wireframes

- Inform the element to include in your design
- Catch problems early
- Get stakeholders to focus on structure rather than details
- Save time and effort
- Iterate quickly

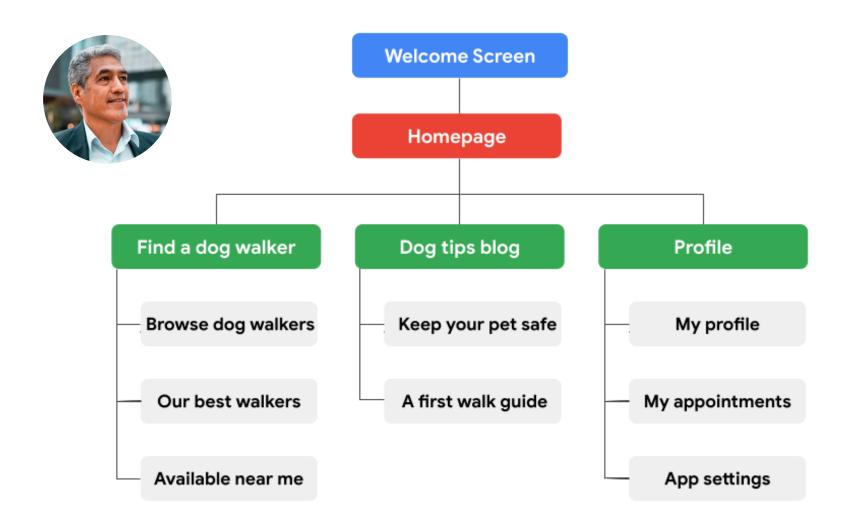
#### Information Architecture (IA)

 Organization of content that help users understand where they are in a product and where the information they want is



 When users can find what they're looking for, quickly and intuitively, you have a good IA

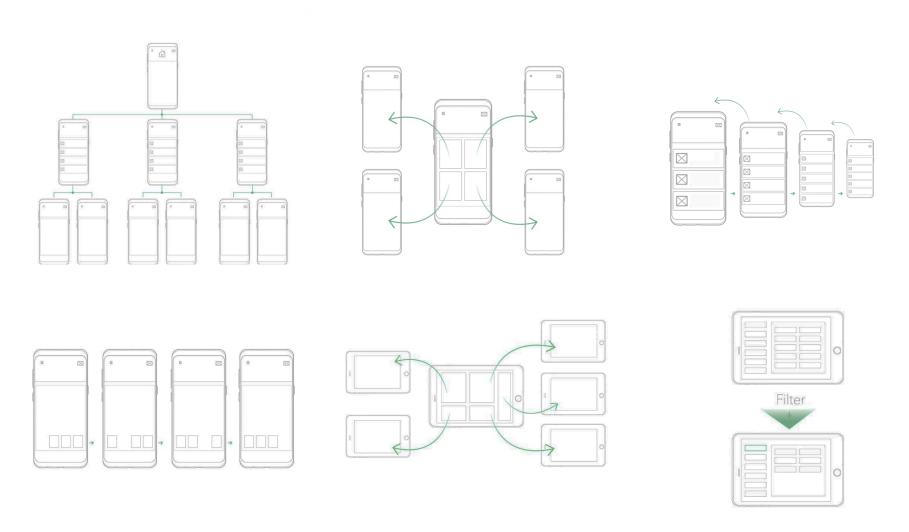
# Example: DogWalker



#### 8 Principles of IA

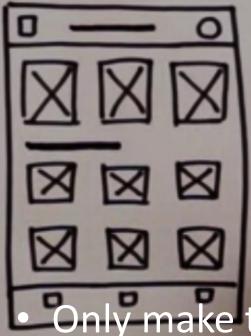
- 1. Object principle: You should view your content as "living" and as something that changes and grows over time
- 2. Choice principle: People think they want to have many choices, but they actually need fewer choices that are well-organized
- **3. Disclosure principl**e: Information should not be unexpected or unnecessary
- **4. Exemplar principle**: Humans put things into categories and group different concepts together
- **5. Front door principle**: People will usually arrive at a homepage from another website
- **6. Multiple classification principle**: People have different ways of searching for information
- 7. Focused navigation principle: There must be a strategy and logic behind the way navigation menus are designed
- 8. Growth principle: The amount of content in a design will grow over time

#### 6 Common Patterns of IA

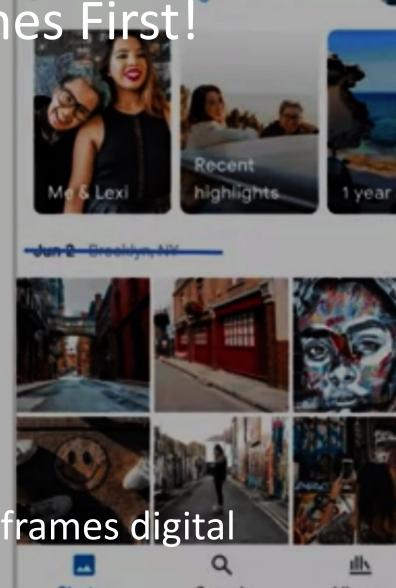


Paper Wireframes First!

Text, images, buttons



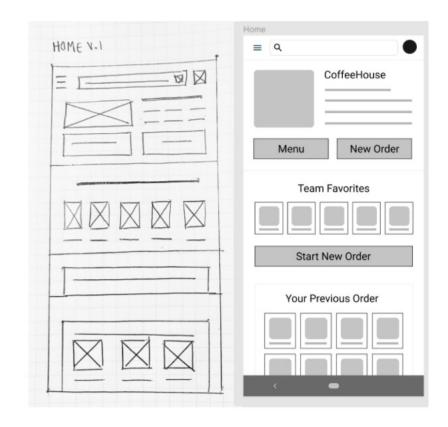
Only make the refined wireframes digital



#### Digital Wireframes

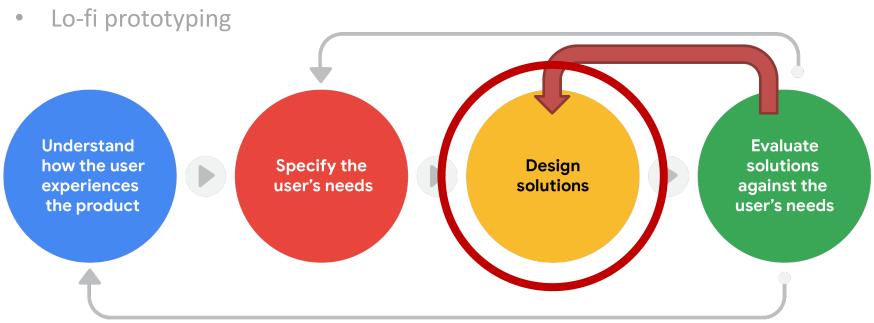
- Takes times to make
- Easy to share
- Necessary for digital prototyping

Wireframing using
 Figma



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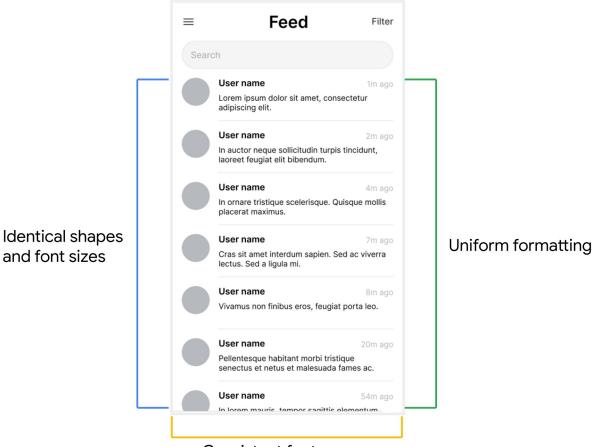


#### **Gestalt Principles**

 Principles describing how humans group similar elements, recognize patterns, and simplify complex images when we perceive objects

#### Gestalt Principles 1: Similarity

 Elements that look alike (in shape, size, or color, for instance) are perceived to have the same function

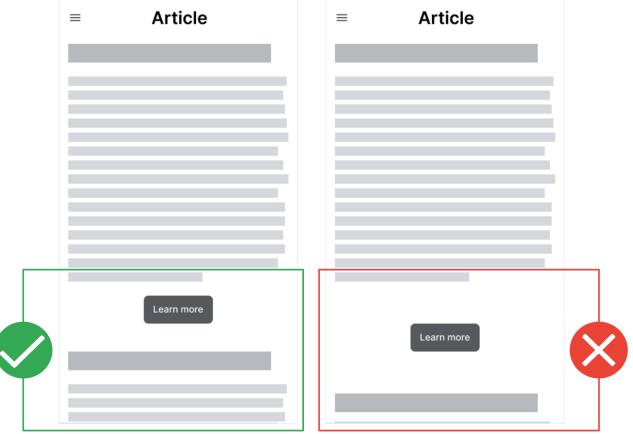


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#### Gestalt Principles 2: Proximity

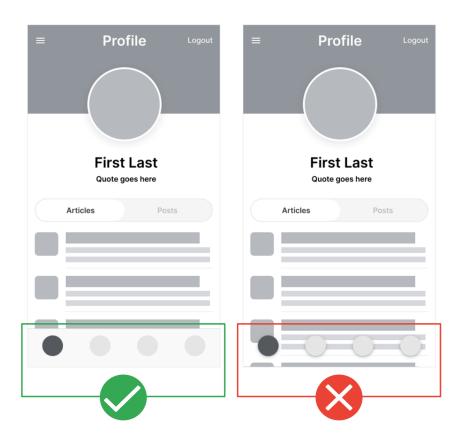
 Elements that are close together appear to be more related than things that are spaced farther

apart



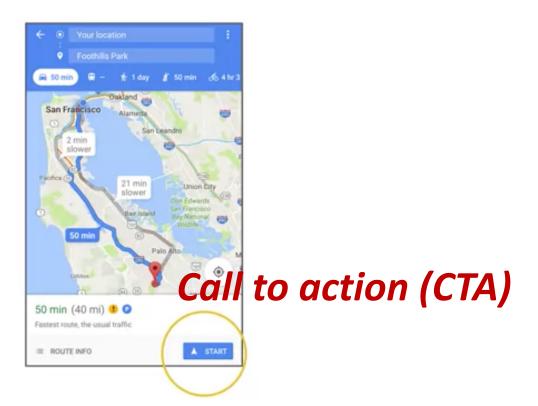
#### Gestalt Principles 3: Common Region

 Elements located within the same closed area are perceived to be grouped together



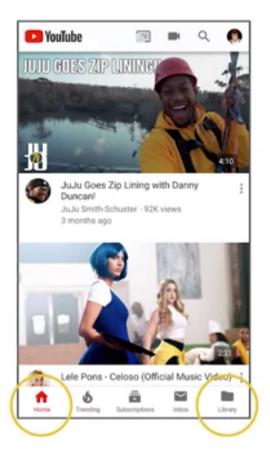
#### Von Restorff Effect

 When multiple similar objects are present, the one that differs from the rest is most likely to be remembered



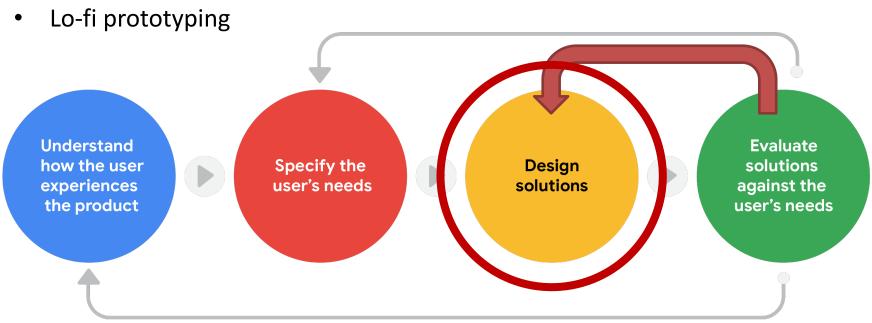
#### Serial Position Effect

 When given a list of items, users are more likely to remember the first and the last few, while the items in the middle tend to blur



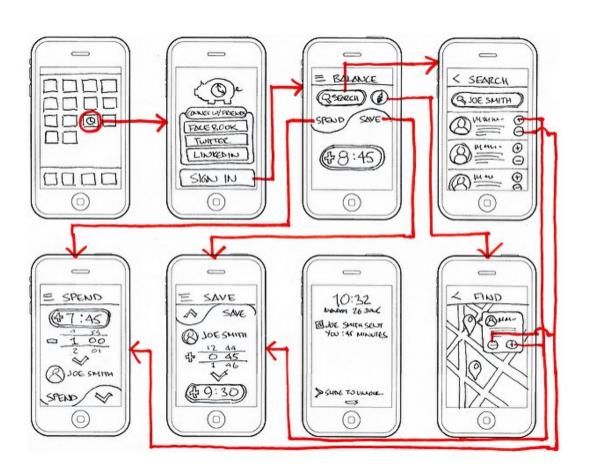
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#### Prototype

 Wireframes + interactions



#### **Fidelity**

 How closely a design matches the look-and-feel of the final product

- Low-fi
  - Less refined & polished
  - Shorter time to make
  - For fast iterations

- Hi-fi
  - Closely matches the final product
  - More time-consuming to make
  - For design handoff (to developers)

#### **Prototyping using Figma**

