A Crash Course on UI/UX Design

CS 88SA | Kevin Tan | Lecture 6

Product Design

UI

UX

UI/UX

- **UI** Design stands for User Interface Design and is mostly concerned with the aesthetics and feel of a product.
- **UX** Design stands for User Experience Design and is concerned with the development of quality interaction between a user and a product.
    - UI Design is a **subset** of UX Design.
- These are often collectively referred to as **UI/UX Design**.

Product Design

- Product Design is very similar to UI/UX Design, except it includes the interests of the business in its design process.

- The UI/UX Designer strongly advocates for the **user**, whereas the product designer advocates for both the **user and the company**.

UI Design Principles

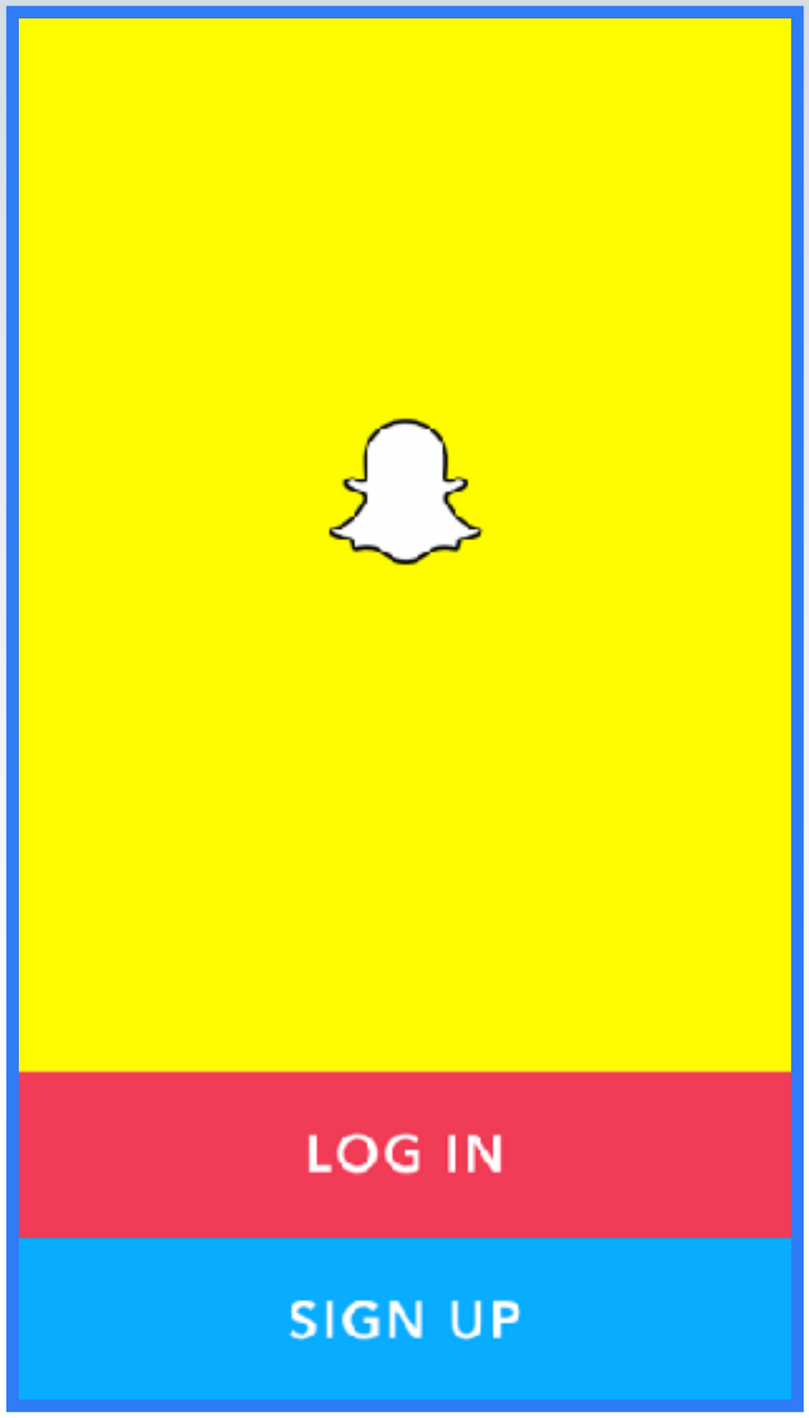
Clarity comes first

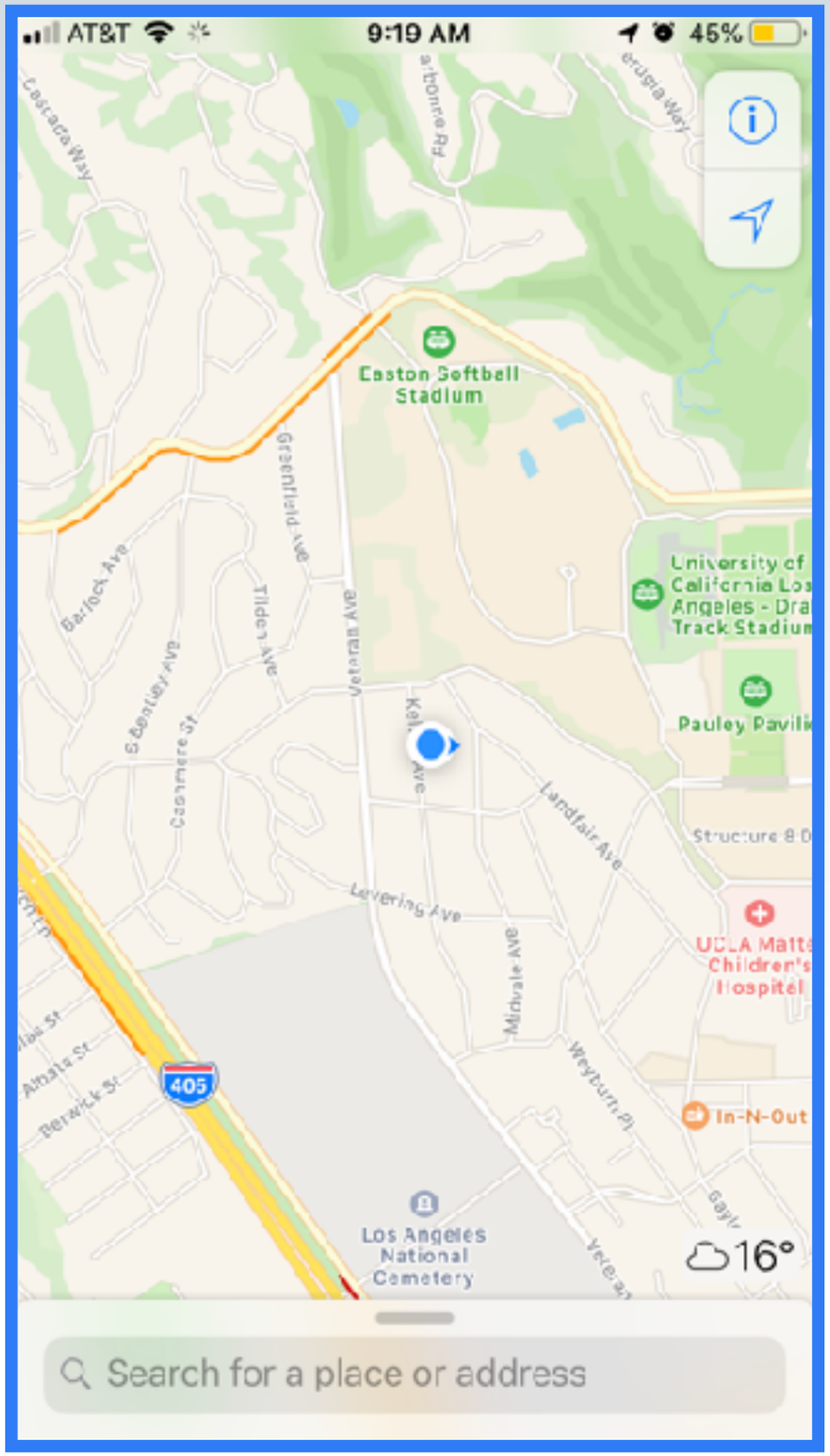
- Think about what the actual **function** of each screen in your app is, and design its form accordingly.
- Avoid cluttering the screen with too many UI elements (buttons, switches, etc.).
- Don’t try to do everything on one single screen!
- Make sure the user has a good conceptual model of how the app works.

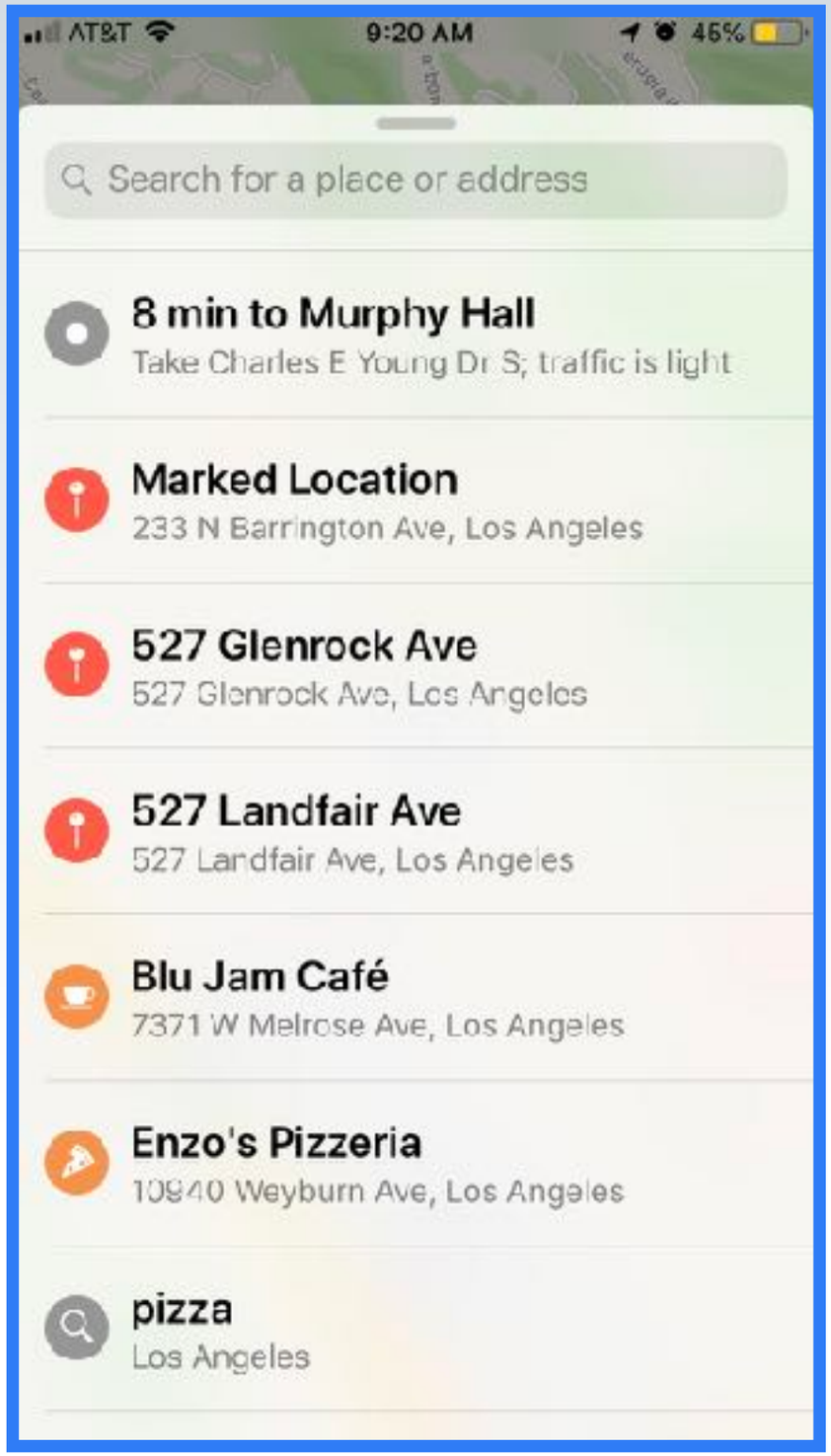
Notes on Clarity

- **Poor** clarity is similar to the example of the dishwasher/laundry machine with an overwhelming amount of options.

- “One screen, one task” (in general)


LOG IN
SIGN UP


AT&T
9:19 AM
45%
Easton Softball Stadium
University of California Los Angeles - Dra Track Stadium
Pauley Pavili
Structure 8 D
UCLA Matt Children's Hospital
In-N-Out
Los Angeles National Cemetery
405
16°
Search for a place or address


AT&T
9:20 AM
45%
Search for a place or address
8 min to Murphy Hall
Take Charles E Young Dr S; traffic is light
Marked Location
233 N Barrington Ave, Los Angeles
527 Glenrock Ave
527 Glenrock Ave, Los Angeles
527 Landfair Ave
527 Landfair Ave, Los Angeles
Blu Jam Café
7371 W Melrose Ave, Los Angeles
Enzo's Pizzeria
10940 Weyburn Ave, Los Angeles
pizza
Los Angeles

Notes on Apple Maps

- First screen focuses exclusively on the actual map/ geolocation function.

- There’s a pull up tab that covers the map so that now the focus is entirely on place/address search.

Provide clear, meaningful feedback

- Every action needs a **reaction**.

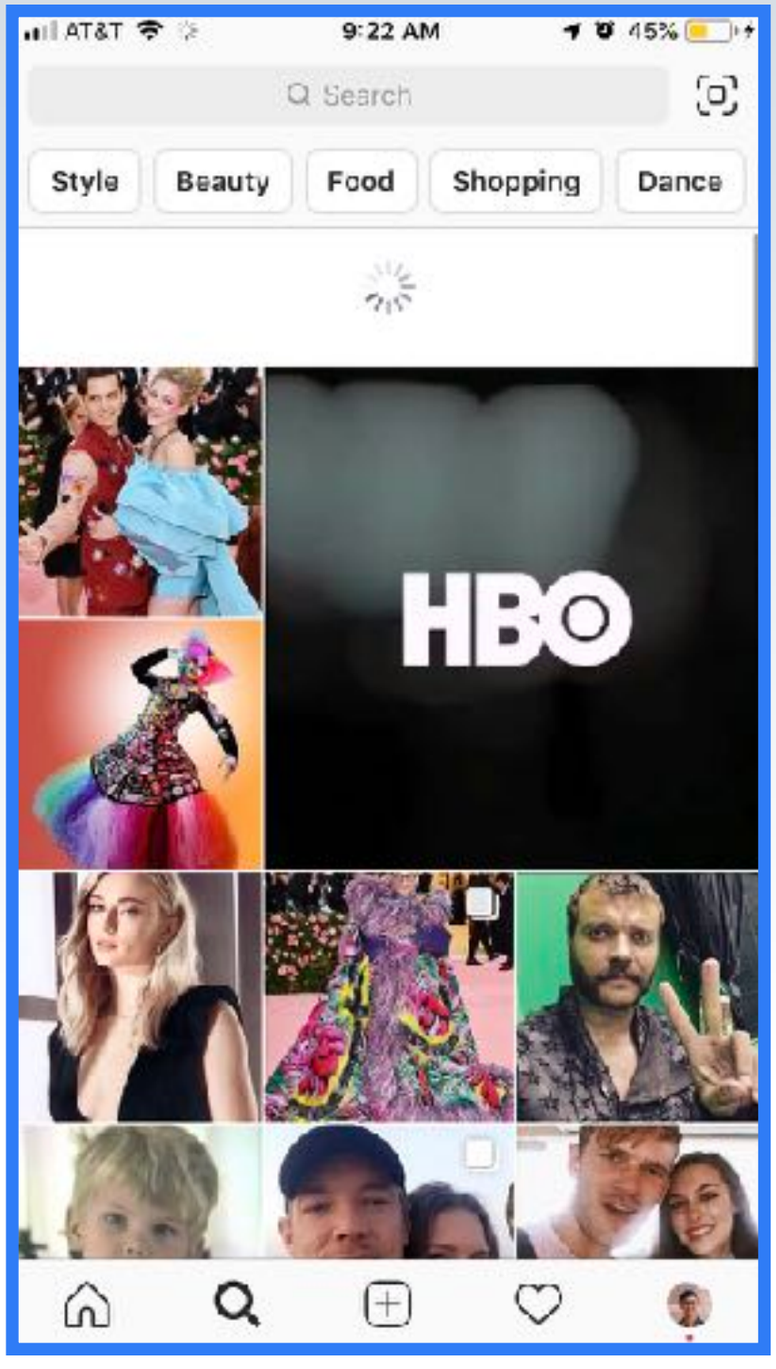
- There are many types of feedback available: visual, aural, even tactile (phone vibration).

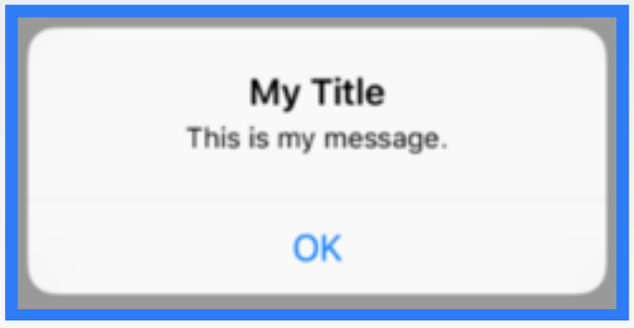
- The most common types of mobile app feedback are **alerts/popups** and **activity indicators**

Notes on Feedback

- Exactly the same kind of feedback we've been talking about in the course so far

- Another example is buttons that change color when pressed.


AT&T
9:22 AM
45%
Search
Style
Beauty
Food
Shopping
Dance
HBO


My Title
This is my message.
OK

Consistency Matters

- Use the same colors, fonts, and layout throughout your entire app.

- Many companies have **style guides** that maintain all of this info.

- Take a look at some companies’ style guides—just Google “_____ style guide”

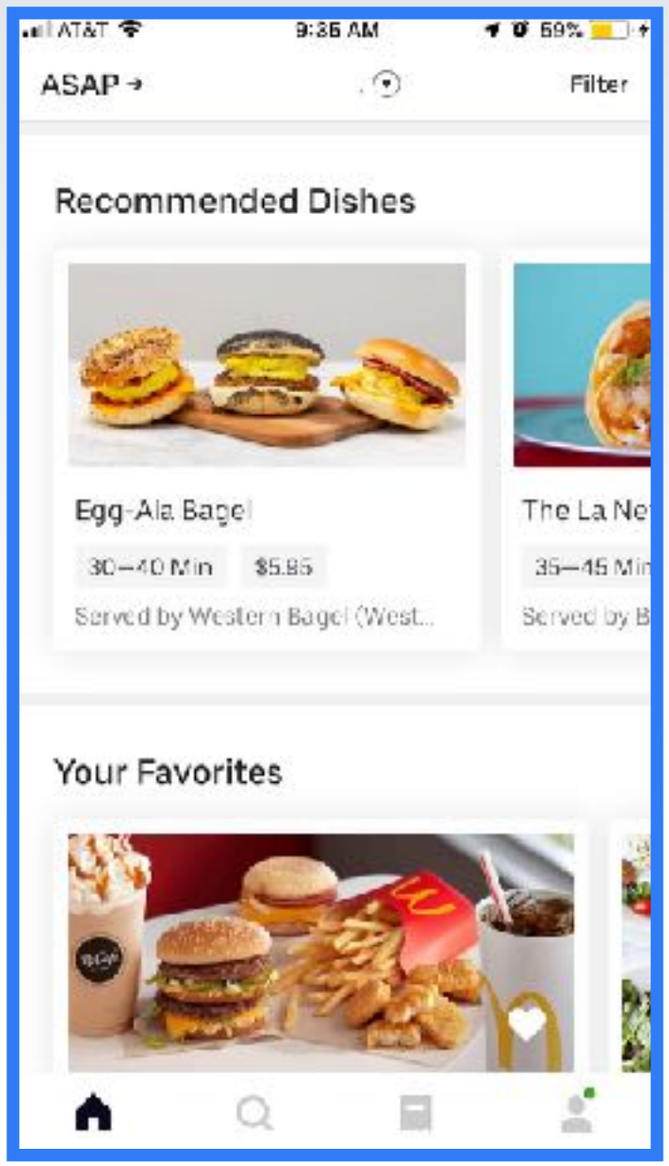
Use Established Design Patterns

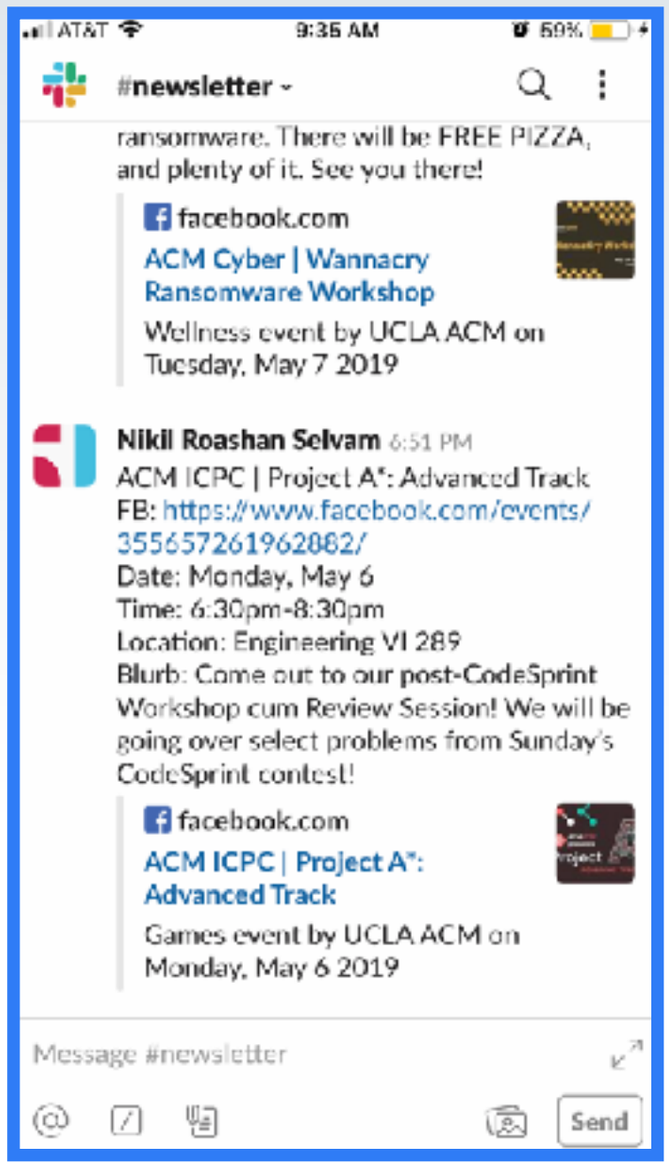
- Follow cultural/societal conventions (mapping); there's no need to reinvent the icon for the "Play" button.
- Stick with **Flat Design** (mostly!)
    - Use negative/empty space to draw attention to important content.

Notes on Established Design Patterns

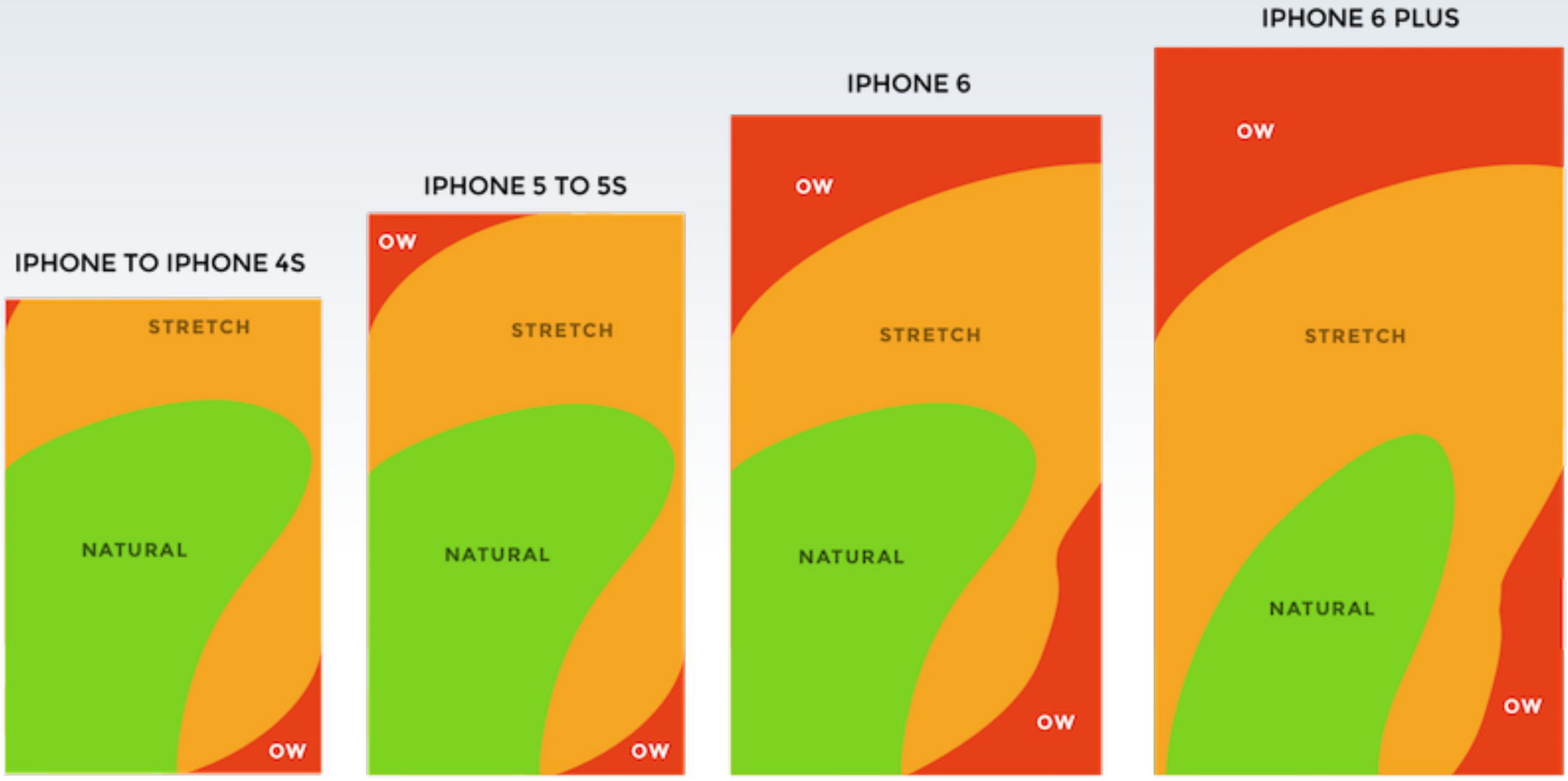
- This doesn’t mean you can’t innovate; however, when in doubt stick to conventions.

Tab/Navigation Bars





Tab/Navigation Bars



Notes on Tab/Navigation Bars

- Two of the most common features in every iOS app are the tab bar and navigation bar.

- The tab bar is always at the bottom of the screen, the navigation bar at the top.

- Think about how people hold their phones—place less frequently used buttons in the top corners and more important buttons near the bottom.

- Why is the “Back” button in the top left corner? There’s an alternative; swipe to go back solve this.

Use Visual Hierarchy

- Arrange and style content in a way that implies **importance**.

- Use the purpose of the app to guide decisions on which content should be emphasized **most**.

AT&T
9:45 AM
69%
Derek Yamashita ▶ subtle asian traits
Yesterday at 4:53 AM ·
To those who love sakura, Ill let you in on a little secret.
Get off the beaten path and come up to the Tohoku Region.
These photos are of sakura spots in Tsuruoka City and
... See More
+3
22.1K
6.4K Comments
4 Shares
2

Notes on Facebook Post

- First, notice the relative size of everything. The photos take up the most space; they're the most important part of the post.

- To further stress their importance:
    - Although the caption comes first, it is truncated.
    - There is a lack of excessive color.
- You scroll through your Facebook feed from top to bottom. That's why the likes/comments are at the bottom; you see the post then decide if you want to like it or comment on it.

Typography

- **Legibility** and **readability** are the two primary concerns for typography.

- Legibility is how easy it is to tell **different letters** in a font apart.

- Readability refers to how easy it is to read a given block of text.

Legibility

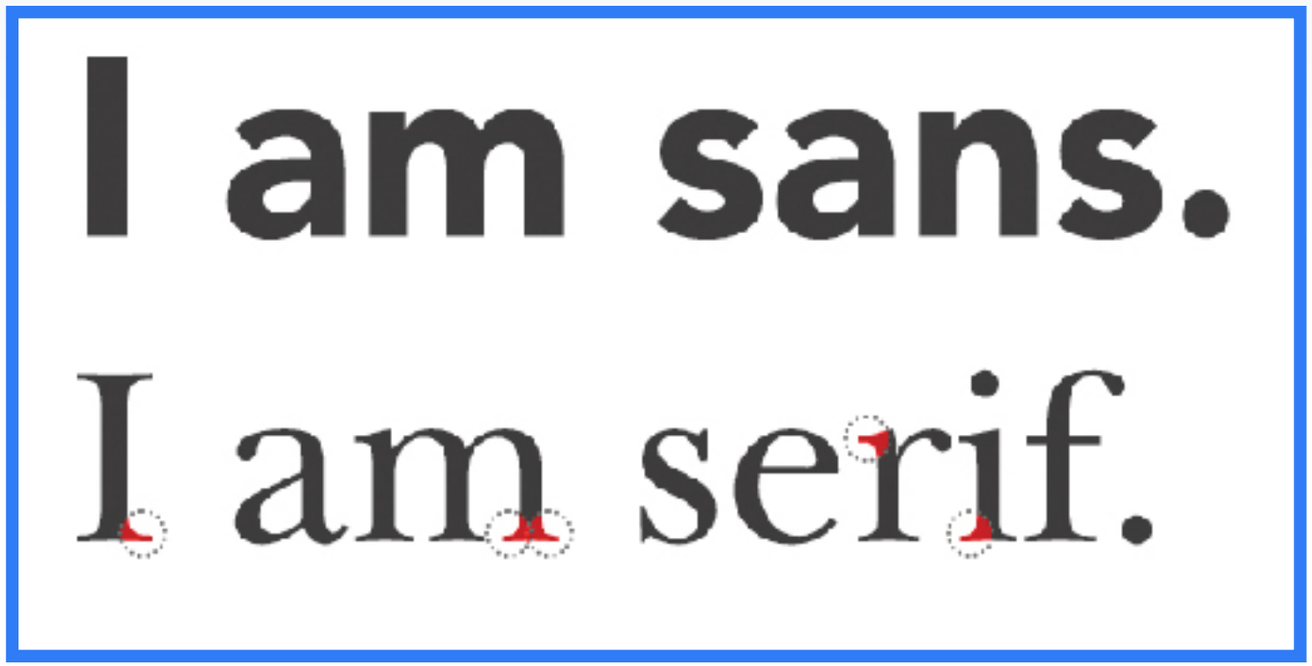
This is less legible.

This is more legible.

Serifs vs. Sans-Serifs

- **Sans-Serifs** are more legible, modern, and attention-grabbing than serifs

- **Serifs** are mostly used for online newspapers and articles



Readability

awkwardly short

Readability refers to the ability to easily read a line or block of text. Illegible text is difficult to read, but readability is also influenced by alignment and line length.

comfortable

Readability refers to the ability to easily read a line or block of text. Illegible text is difficult to read, but readability is also influenced by alignment and line length. Left alignment helps the reader quickly scan from the end of one line of text to the beginning of the next. Similarly, if lines are too long, it (theoretically) makes is more difficult for the reader to scan to the beginning of the next line. (I say "theoretically" because there is some evidence that this is less of an issue online than in printed form).

comfortable

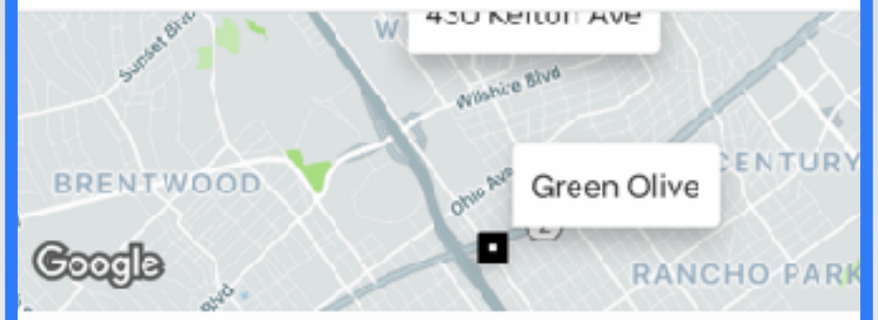
Readability refers to the ability to easily read a line or block of text. Illegible text is difficult to read, but readability is also influenced by alignment and line length. Left alignment helps the reader quickly scan from the end of one line of text to the beginning of the next. Similarly, if lines are too long, it (theoretically) makes is more difficult for the reader to scan to the beginning of the next line. (I say "theoretically" because there is some evidence that this is less of an issue online than in printed form).

awkwardly long

Readability refers to the ability easily read a line or block of text. Illegible text is difficult to read, but readability is also influenced by alignment and line length. Left alignment helps the reader quickly scan from the end of one line of text to the beginning of the next. Similarly, if lines are too long, it (theoretically) makes is more difficult for the reader to scan to the beginning of the next line. (I say "theoretically" because there is some evidence that this is less of an issue online than in printed form).

AT&T 10:05 AM 82%

Green Olive



Info

11086 Santa Monica Blvd, Los Angeles, CA 90025

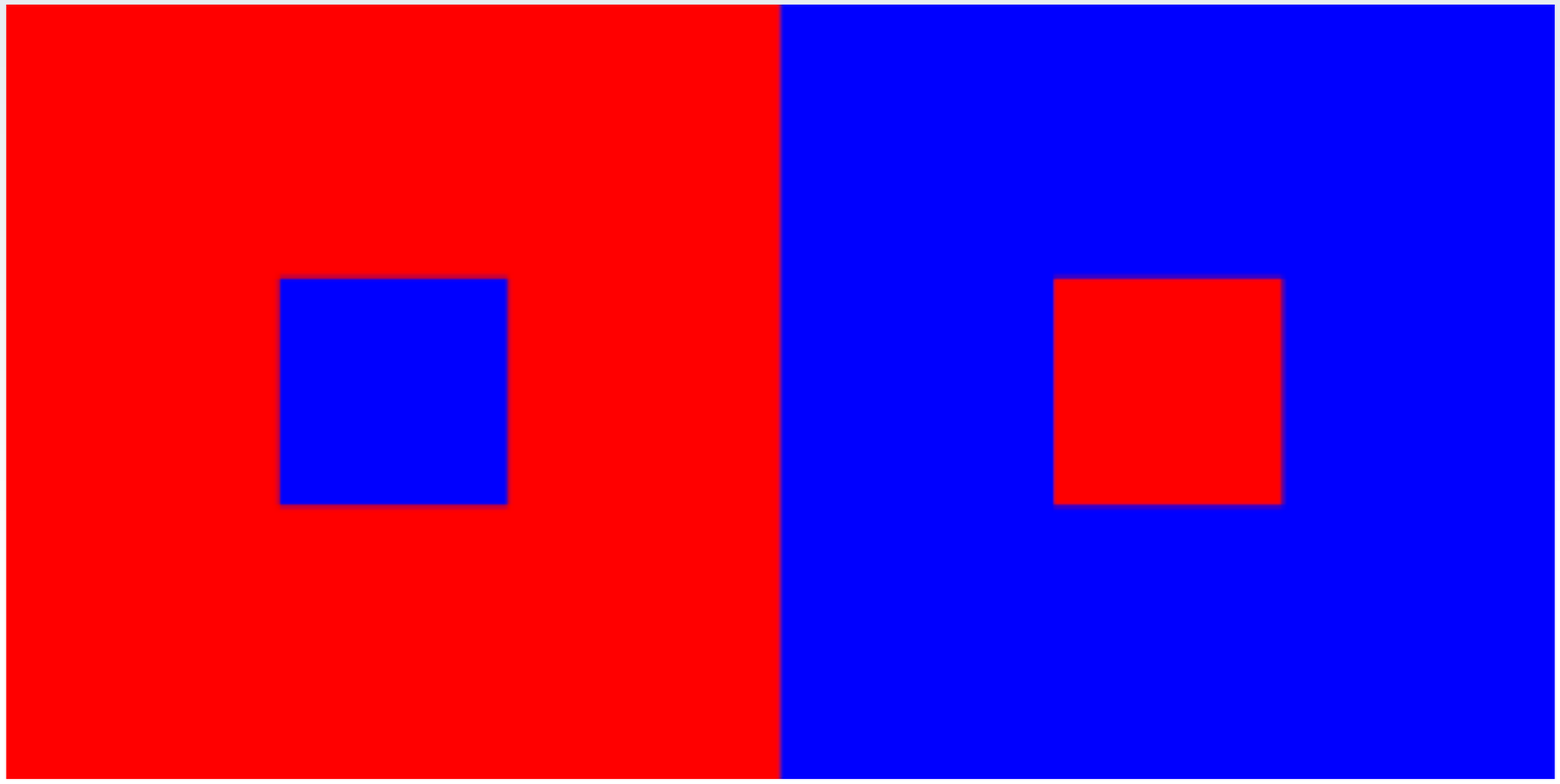
Sunday
7:00 am – 9:00 pm Menu

Monday
8:00 am – 11:59 pm Menu

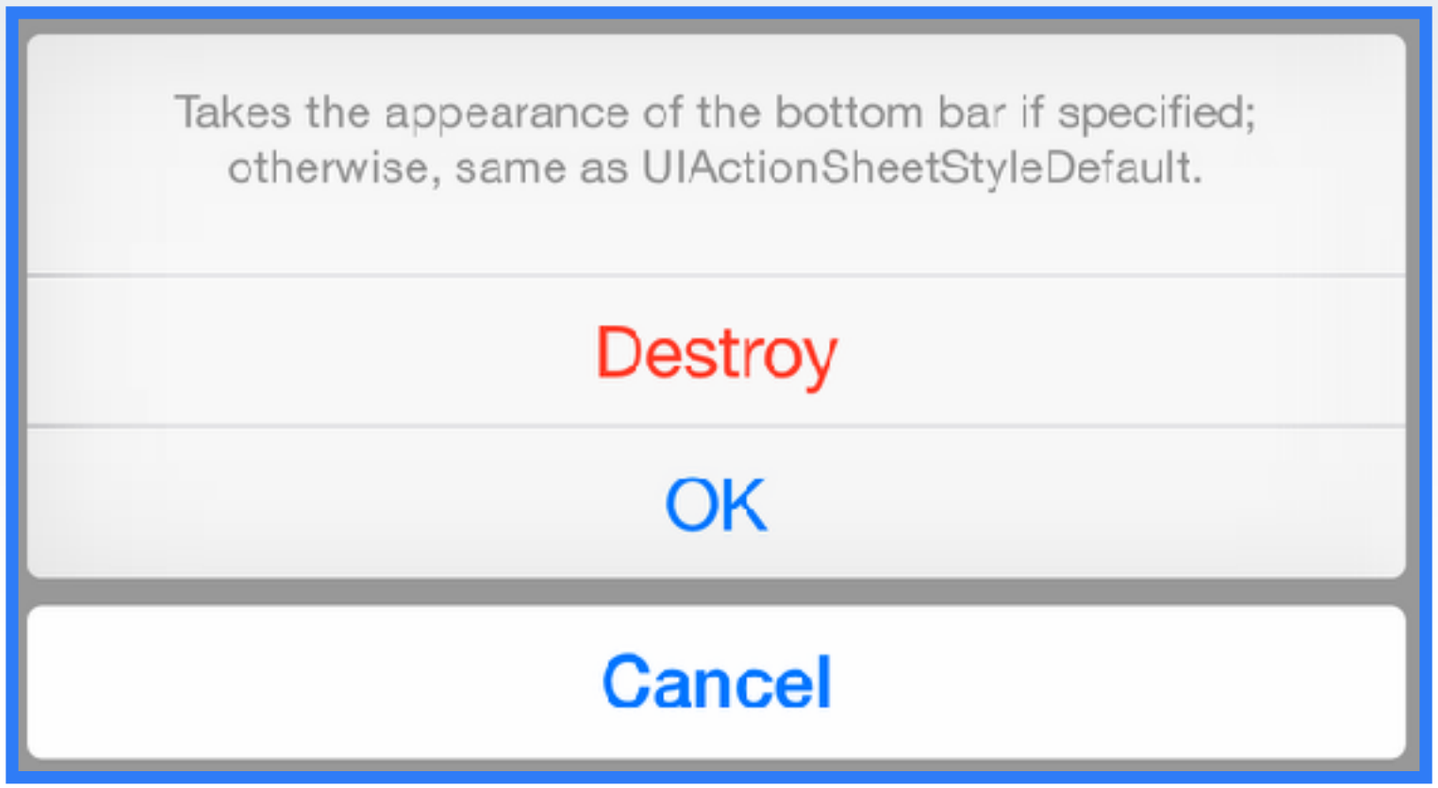
Tuesday - Friday
12:00 am – 1:00 am Menu
8:00 am – 11:59 pm Menu

Saturday
12:00 am – 1:00 am Menu
7:00 am – 11:00 pm Menu

Color



Color

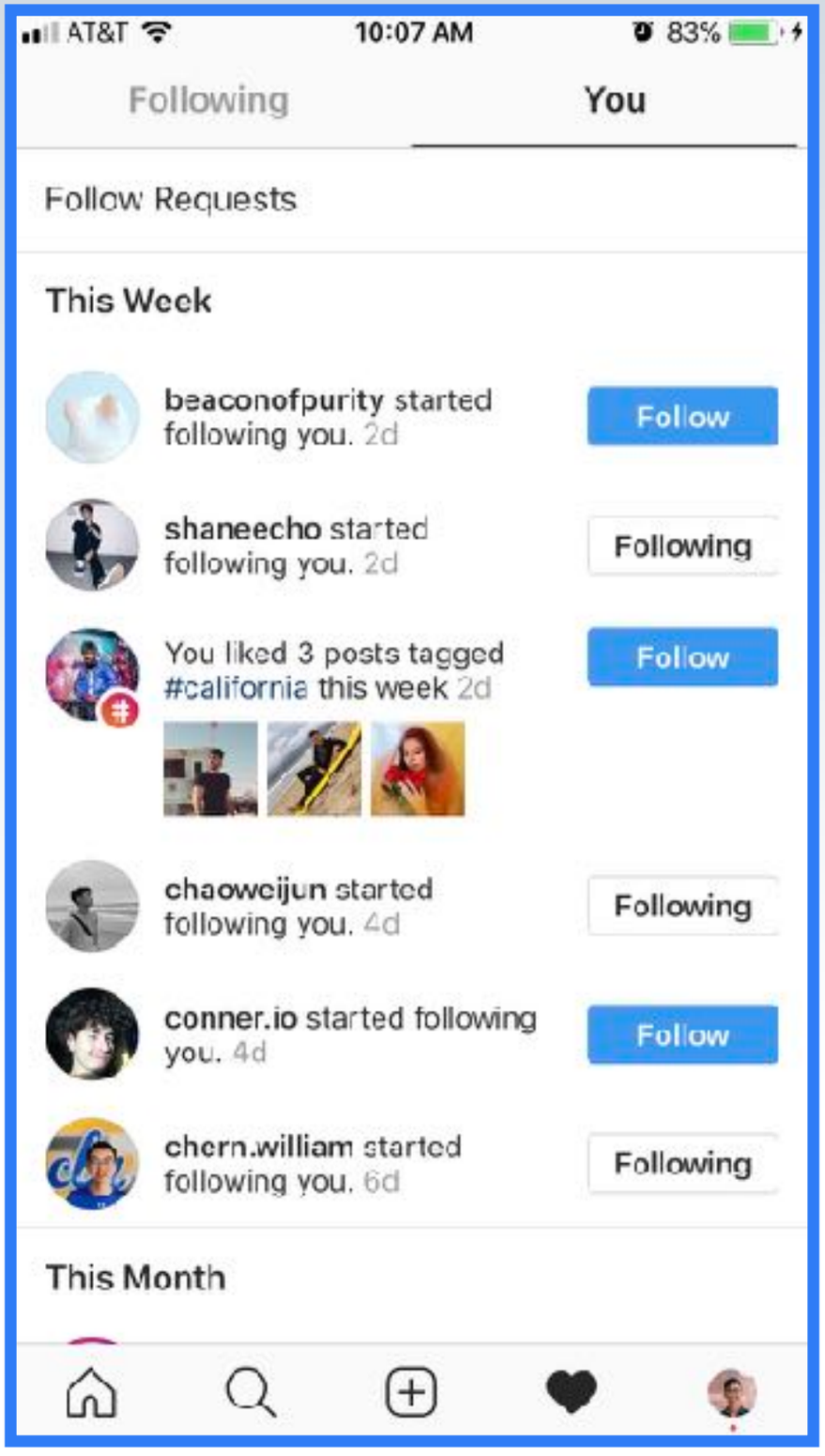

Takes the appearance of the bottom bar if specified;
otherwise, same as UIActionSheetStyleDefault.
Destroy
OK
Cancel

Notes on Color

- Color theory is very complex, but one argument is that there are less blue receptors in the **fovea**, the part of the eye that does the most detail-oriented work.

- As a result, blue tends to fade into the background whereas red and green stand out.

- In the share sheet, our eyes are immediately drawn to the “Destroy” action in red, which is good because it’s a destructive action that we want to user to think about.


AT&T
10:07 AM
83%
Following
You
Follow Requests
This Week
beaconofpurity started following you. 2d
Follow
shaneecho started following you. 2d
Following
You liked 3 posts tagged #california this week 2d
Follow
chaoweijun started following you. 4d
Following
conner.io started following you. 4d
Follow
chern.william started following you. 6d
Following
This Month

Notes on Color

- Color can also be used to group elements—the people that have already been followed are grouped differently than the people who can still be followed.

RGB Color Encoding

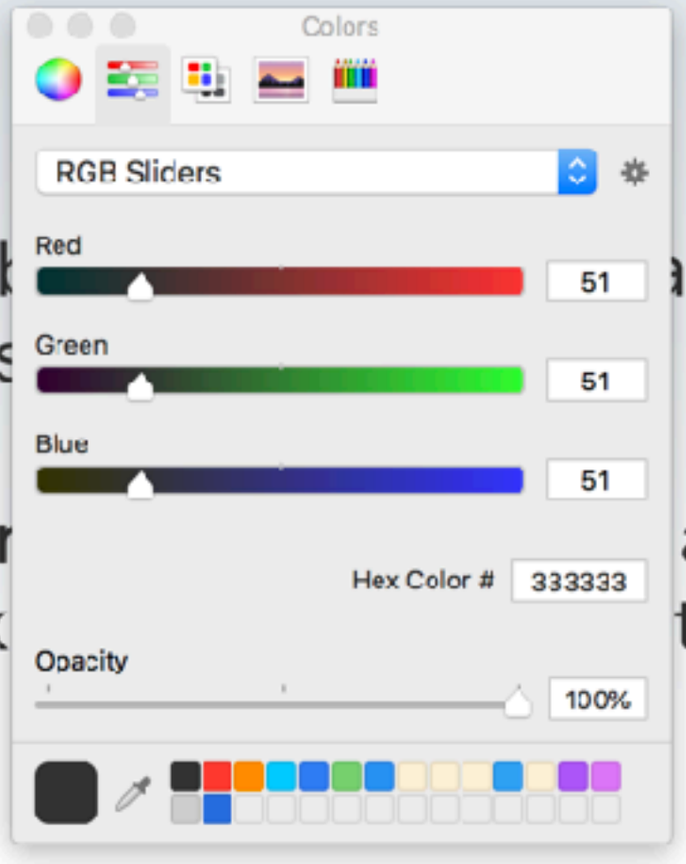
- In the digital world, color is mainly encoded as a combination of **red, green, and blue**.
- Each “component” has a value between 0 and 255.

Off-Black

- **Pure black text** on white/light backgrounds can cause discomfort for the eye and cause eye strain.
- This is because the **large contrast** between white and black causes your eyes to work harder to adapt to the brightness

- **Pure black text** on white/light b ause discomfort for the eye and caus

- This is because the **large contr** and black causes your eyes to work the brightness



HCD Process

HCD Process

Wireframing

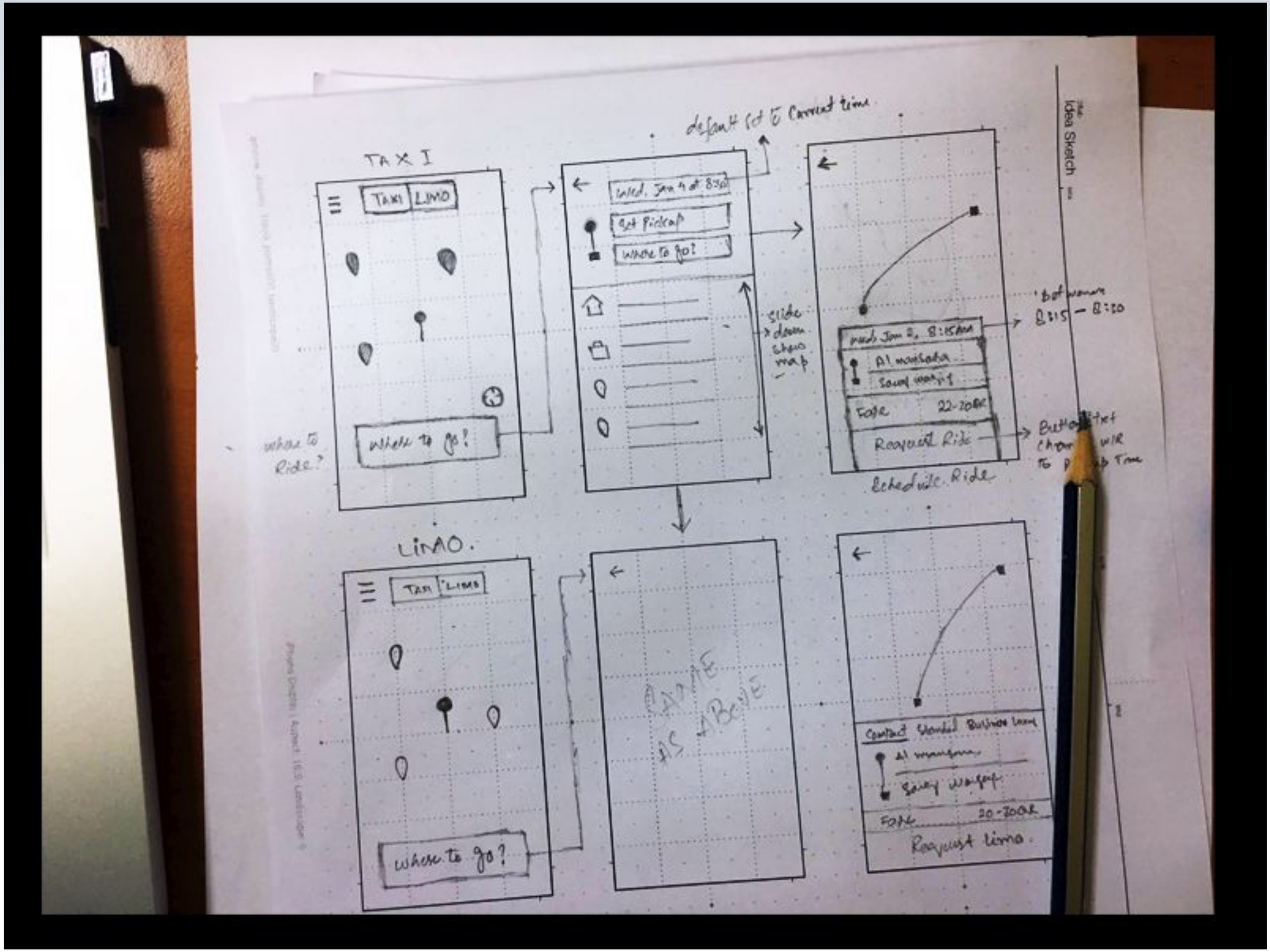
- Wireframes are used **early** in the development process as a proof of concept.

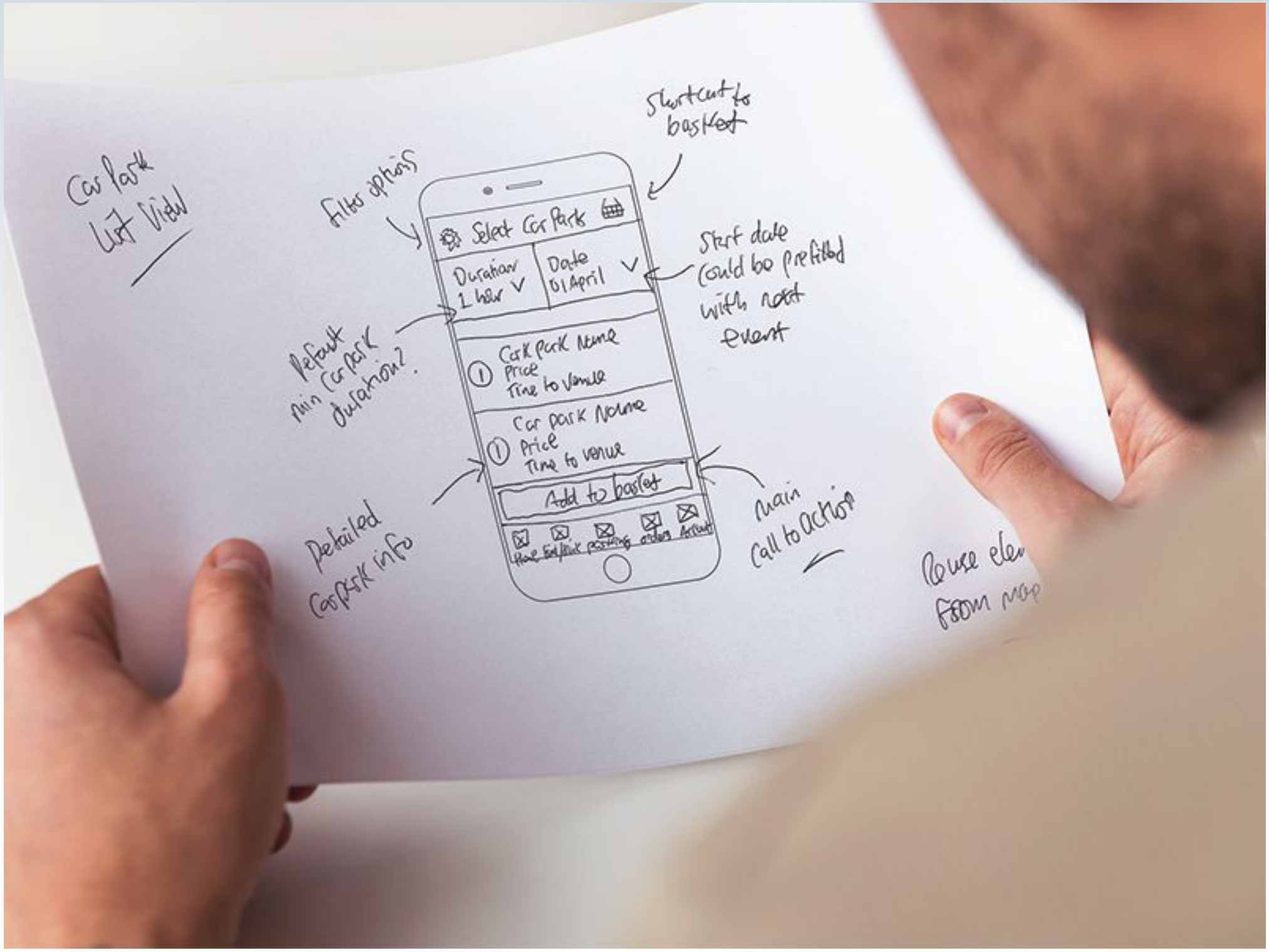
- They establish the basic structure of a screen before visual design and content is added.

- Places higher emphasis on **layout and navigation** rather than aesthetics (color, font, etc.)

Notes on Wireframing

- Wireframing is also great because it can catch design flaws early, before significant resources and/or time have been spent creating high-fidelity mockups or even actual prototypes.


TAXI
TAXI
LIMO
where to go?
where to Ride?
default set to Current time
Set Pickup
where to go?
slide down show map
Fare
Request Ride
Schedule Ride
LIMO.
TAXI
LIMO
where to go?
SAME AS ABOVE
Fare
Request limo.
Idea Sketch


Car park List View
Filter options
Shortcut to basket
Select Car Park
Duration 1 hour
Date 01 April
Start date could be prefilled with next event
Default min Car park duration?
Car Park Name
Price
Time to venue
Car park Name
Price
Time to venue
Add to basket
Detailed CarPark info
Main Call to Action

Activity: Wireframing

Wireframe Activity

- Draw wireframes for **two screens** in an app of your choosing. One must be the **home screen**.
    - App ideas: Fitness, social media, cooking, ride-sharing, messaging, banking, dating, productivity…
- You must have at least **six** interactive elements (tab bar and navigation bar count as one each).
- Think of **three questions** you would ask a user to verify your design choices.
    - e.g. “Does it feel like there are too many buttons here?”

Wireframe Assignment

As we just did in class, draw wireframes for **two screens** in an app of your choosing. One must be the **home screen**.

- You are being evaluated on the quality of your design choices, not the app idea itself!
- You must have at least **six** interactive elements (tab bar and navigation bar count as one each).
- You must also submit a **half-page** (two or three short paragraphs) report explaining your design choices.

Reading for Next Week

- Jesse Weaver - *Design Won’t Save the World* (~3 pages)