



# **Web & Mobile Design - DMA 331**

[dma331.rehanbutt.com](http://dma331.rehanbutt.com)

# **Web & Mobile Design**

DMA 331, Fall 2021

*Digital Media: Interactive Design and Media*

Duquesne University

**Thursdays 6:00 pm - 8:40 pm**

**College Hall - McAnulty & Grad 205**

Rehan Butt

Email: [buttr@duq.edu](mailto:buttr@duq.edu)

Course website: <https://dma331.rehanbutt.com>

Course Slack: <https://web--mobile-design.slack.com>

Office Hours: By appointment

## **Course Description**

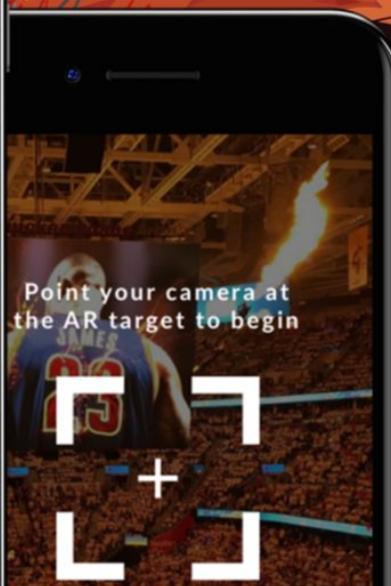
Students use principles of visual and interaction design to create high-fidelity web and mobile application prototypes. The course covers wireframing, layout, typography, responsive media and design, animation, mobile-first design, frameworks. Students practice skills and principles needed to create front-end web and application designs.

## **Course Objectives**

After completing this course, you should be able to:

- Critically evaluate design considerations of digital products
- Acquire additional skills & techniques in digital design
- Apply high-fidelity design concepts to other projects
- Understand industry processes for design and development

# A Little About Me









UPMC  
Enterprises



Carnegie  
Mellon  
University



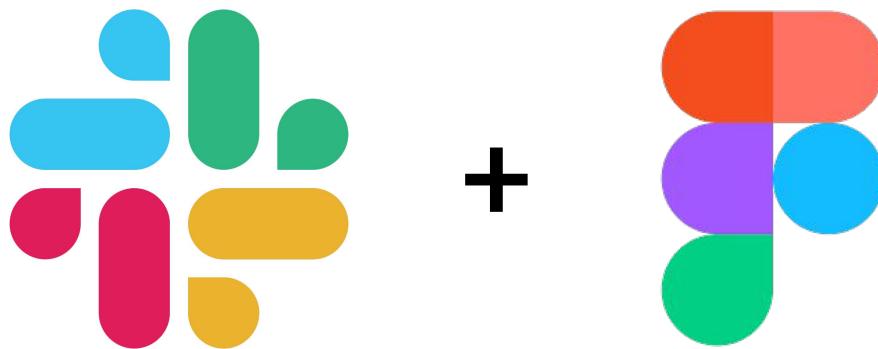
NUS  
National University  
of Singapore



UCLA

LIVE NATION

Budweiser



Slack and Figma invites

# **Class Format**

- Discussions
  - Things found in the world
  - Around the reading
- Open questions
- Review assignment due that day
- Main topic discussion
- Lab / Make stuff

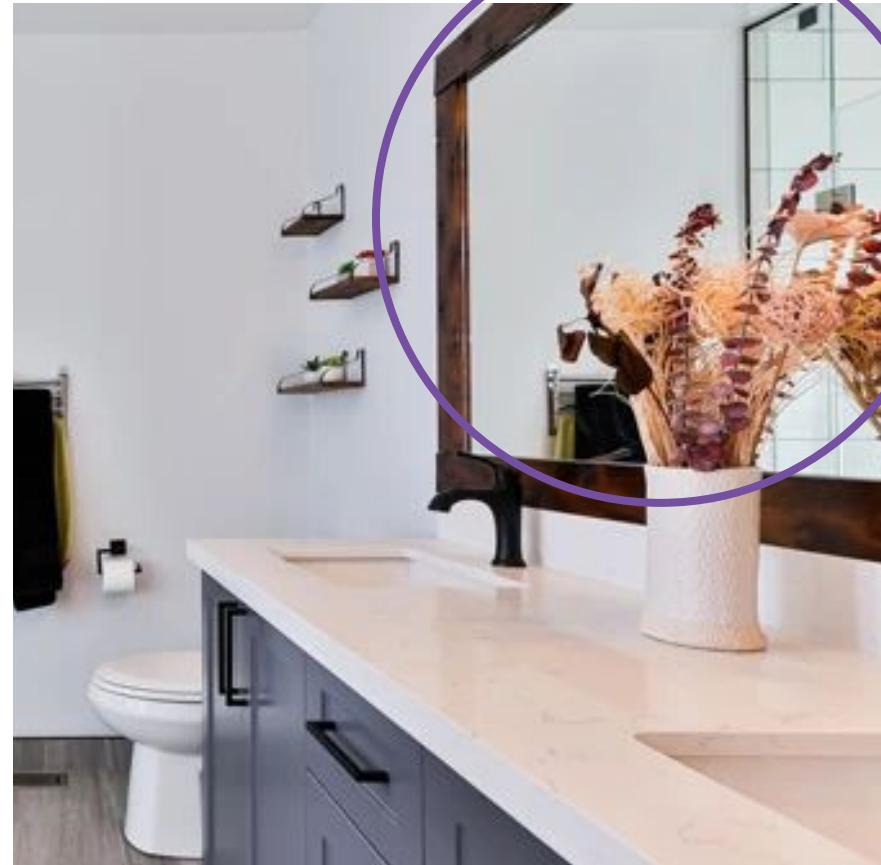


# What is Design?

Aug 26th 2021







**Disney was trying to  
solve a problem**

Bathroom traffic!

1000 Forbes Ave  
Pittsburgh, Pennsylvania  
Google Street View



Seems like folks thought this was the entrance

So “do not enter” & 200m entrance sign was added

But is there a better way to solve this?

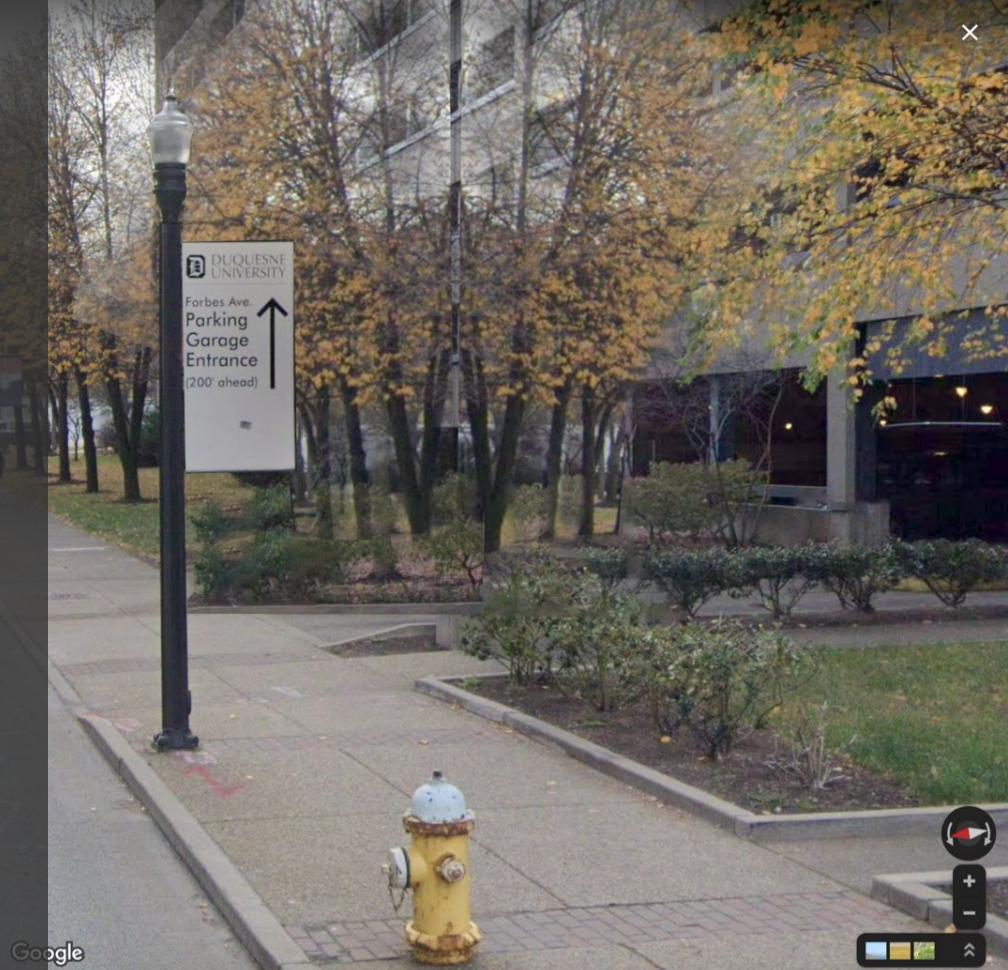


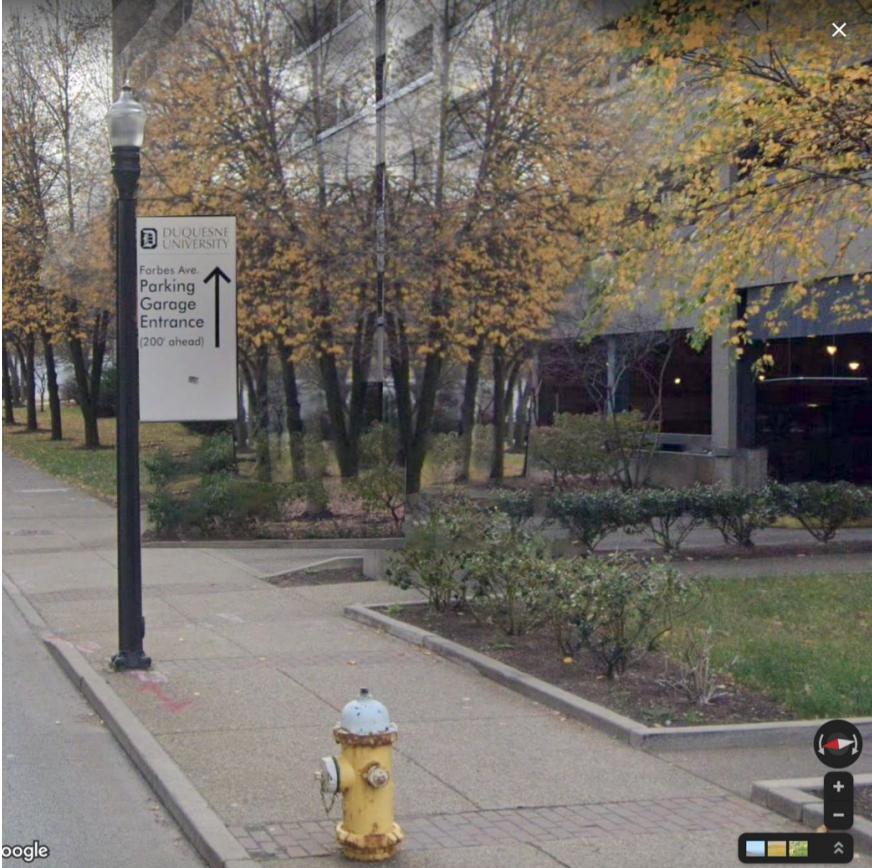
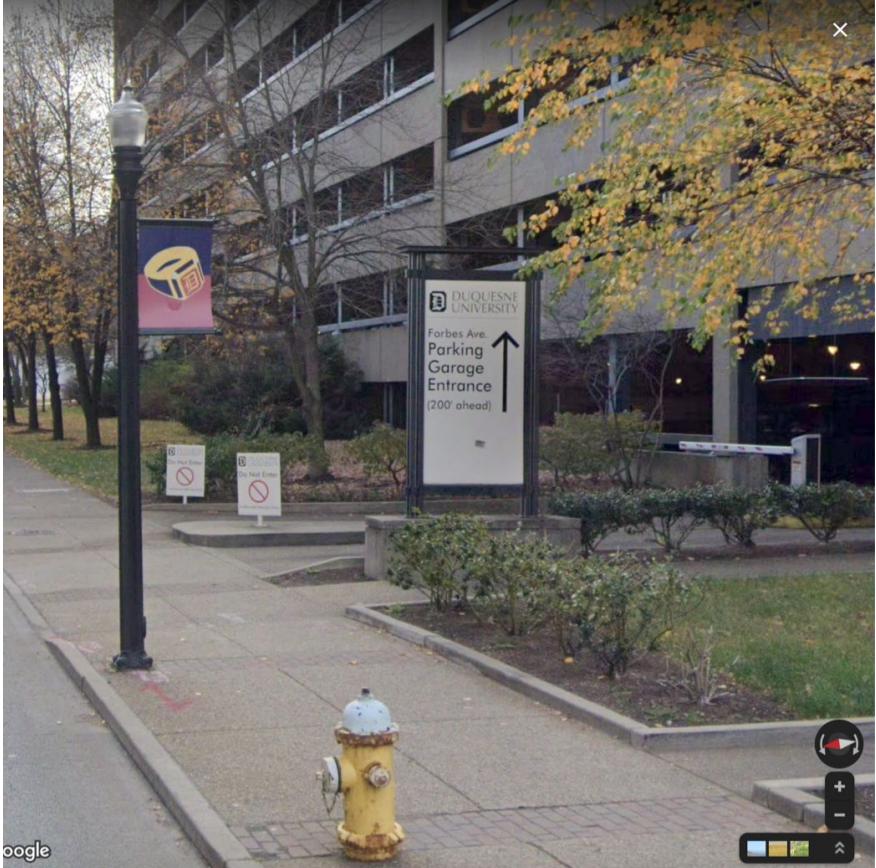
1000 Forbes Ave  
Pittsburgh, Pennsylvania  
 Google  
Street View



## - De-prioritize the car path

- Compress the entry/exit to 1 lane, due to limited cars
- move the parking sign to the roadway







**The content behind this annotation will not be deleted.**

If you are trying to permanently delete content, use the Redact selection tool in the Markup toolbar.

OK



Do not show this message again



Todd Vaziri: Director's Cut



@tvaziri

...

I was going to redact a PDF.

On my Mac in Preview, I hit Markup, then chose a black rectangle and this popup appeared, effectively saying "hey, you might not want to do this".

This is *\*exceptionally\** good behavior. (I also didn't know there was a Redact tool!)

4:14 PM · Apr 25, 2021 · Twitter Web App



Please use the  
purpose made  
paved path  
provided



Diolch  
Thank you  
for shopping with us today

Discover more at  
**ASDA.com**

Industrial

Product

Strategy

Graphic

Research

UI/UX

# Design

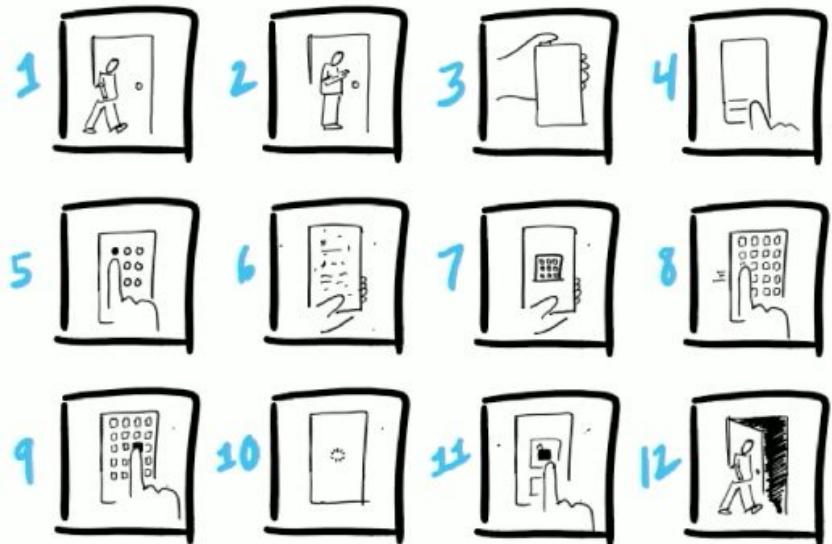
Copy

Data

Motion

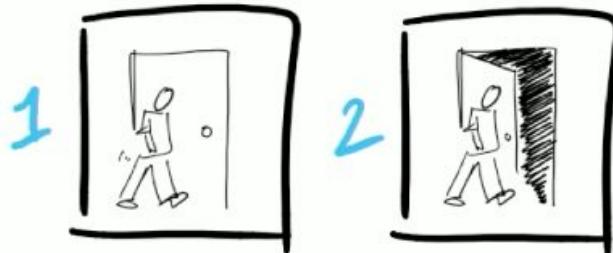
Architecture

## SCREEN BASED THINKING



VS.

## SCREENLESS THINKING



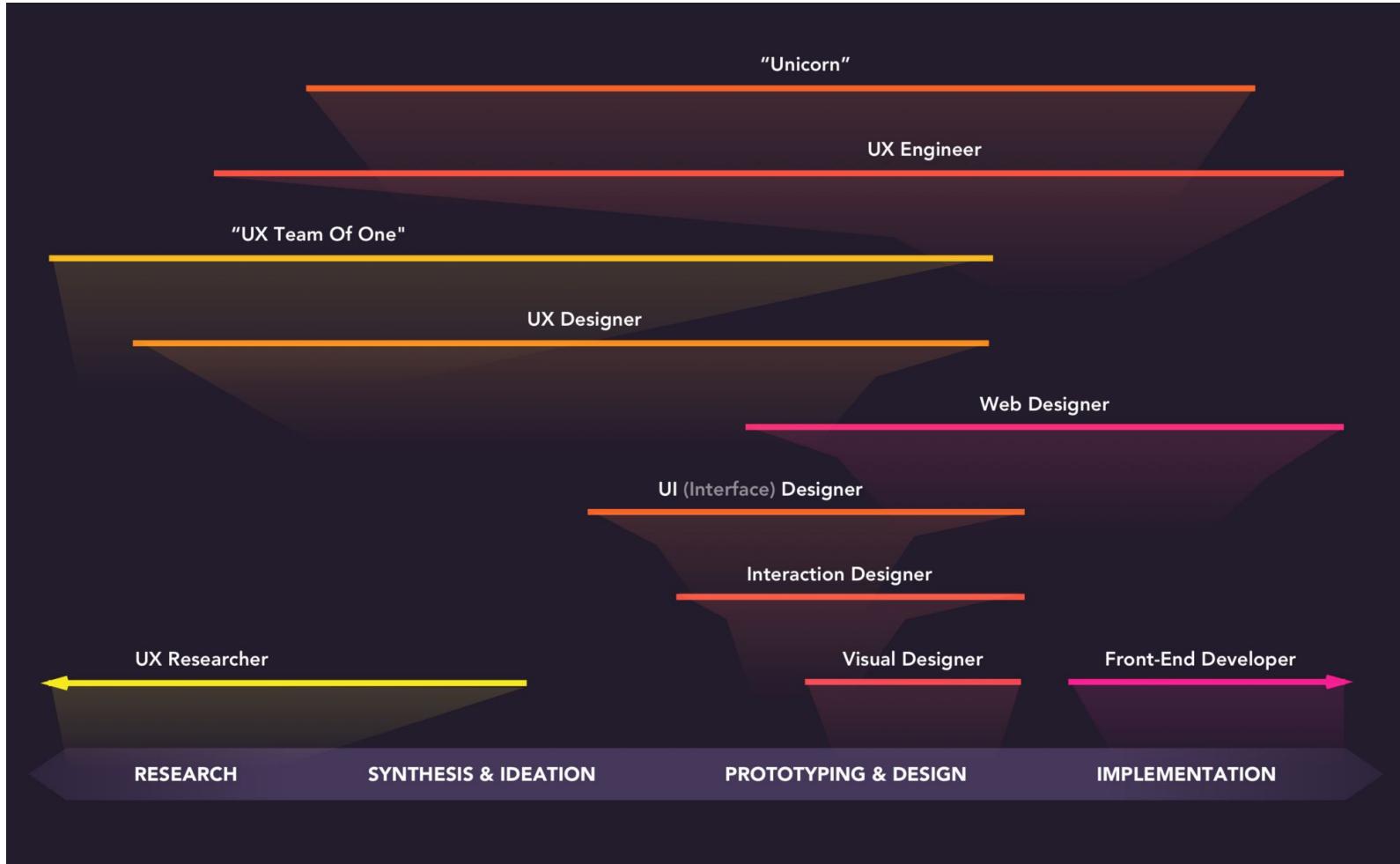
Elegance and efficiency

**Design is everywhere and  
goes far beyond the  
screen**

*Wikipedia says*

# **Design**

A design is a **plan or specification** for the construction of an **object or system** or for the implementation of an activity or **process**, or the result of that plan or specification in the form of a **prototype, product or process**.



# **So what is UI/UX?**

## **Design**

Interaction Design  
Information Architecture  
Visual Design  
Information Design  
Technical Communication  
Service Design

## **Research**

User Research  
Accessibility  
Human Factors  
Usability

## **Strategy**

Business Goals  
Content Strategy  
Customer Experience  
Customer Discovery

Content Strategy

Customer Experience

Interaction Design

Information Architecture

Human Factors

Business Goals

**UX**

Visual Design

User Research

Information Design

Accessibility

Technical Communication

# Context

**Is this good  
design?**

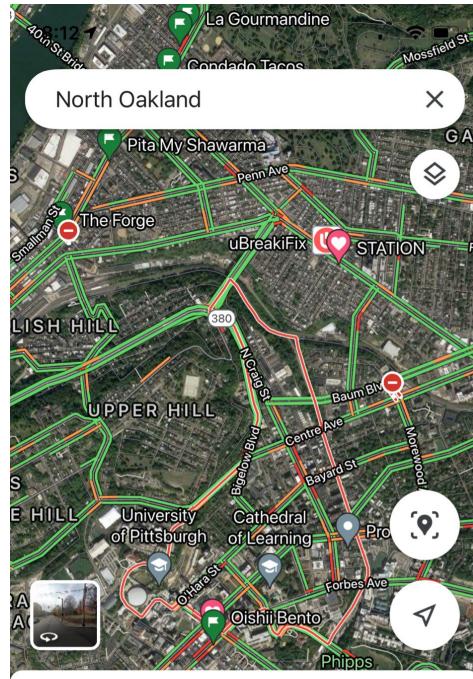


Is this good  
design?

**If you are right  
handed**



# Is this good design?



North Oakland

Pittsburgh, PA

45 min

Directions

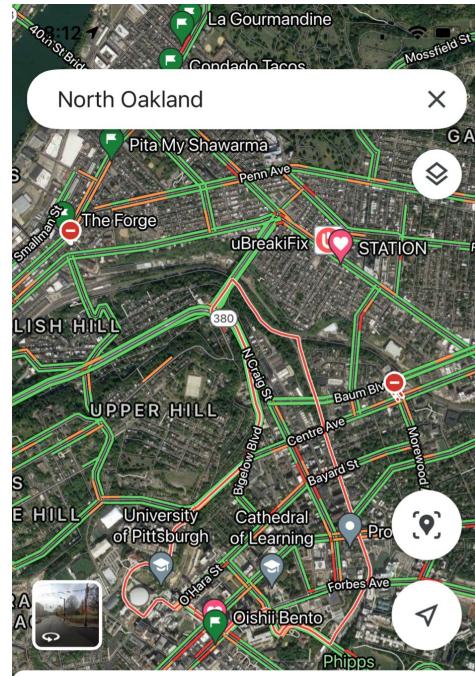
Start

Save



# Is this good design?

## As long as you are not driving



North Oakland

Pittsburgh, PA

45 min

Directions

Start

Save



**Which is why Google designed a separate interface for car use**

**Context is Key** 🔑

# **Who is your user?**

Might be a **person**

- Friends / Family

- Hiring Manager

Might be **software**

- Google web crawler

- Spotify software service

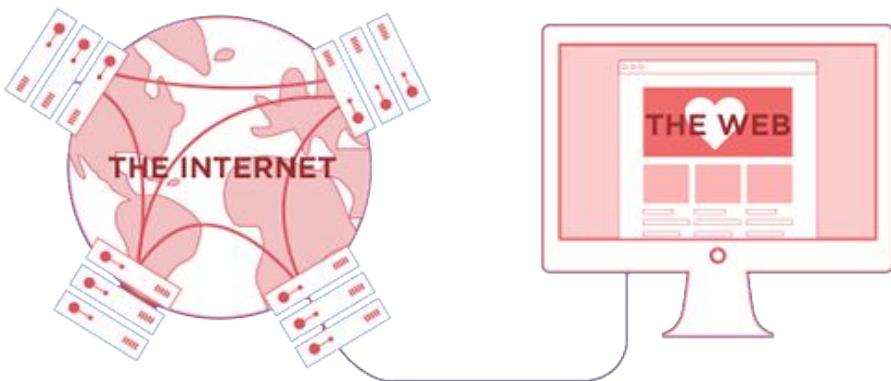
might be a your **dog!**

# **Your user may not be your buyer**

The idea of B2B or enterprise software

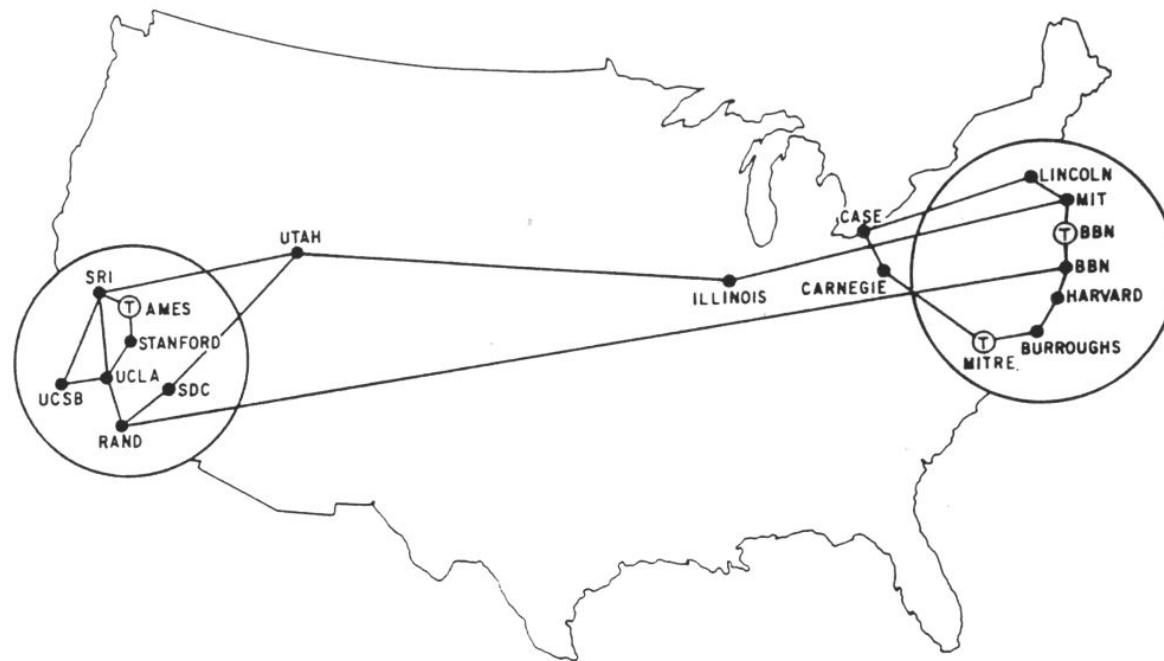
**Web**

# Web Design & Development: Why should you care?



- The world is run on the web
- 2.5 Exabytes of data is created each day, much of it rich multimedia
  - Knowing how to create data is one thing
  - knowing how to effectively share it in a manner that others can understand it sets you apart from the competition
- You can use these skills to market yourself

# Landscape of Web Design & Development



MAP 4 September 1971

# Web 1.0



## DR. TOM CORTINA THE HOME PAGE

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[Carnegie Mellon University](#)  
5000 Forbes Avenue  
[Pittsburgh, PA 15213](#)

### ADVISING

For an advising appointment, sign up here:  
<https://sailfish.ugrad.cs.cmu.edu>

Appointment slots are typically open for one week at a time. If you can't make any of the available slots, please email

### CARNEGIE MELLON

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### PRESENTATIONS

[Teaching the Principles of Computation \(AP National Conference 2008\) - PDF](#)  
[Expanding CS4HS \(SIGCSE 2008\) - PPT](#)  
[Principles of Computation \(SIGCSE 2007\) - PDF - Course material \(Spring 2009\)](#)  
[Computational Thinking \(SIGCSE 2007\) - PDF - CMU Computational Thinking website](#)  
[CS4HS \(SIGCSE 2007\) - PDF - CMU CS4HS website](#)

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JULY 14

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Register today for a free CD-ROM.

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Qualify to win a [PowerBook 3400/200](#) by [entering](#) this month's Apple Registration Sweepstakes.

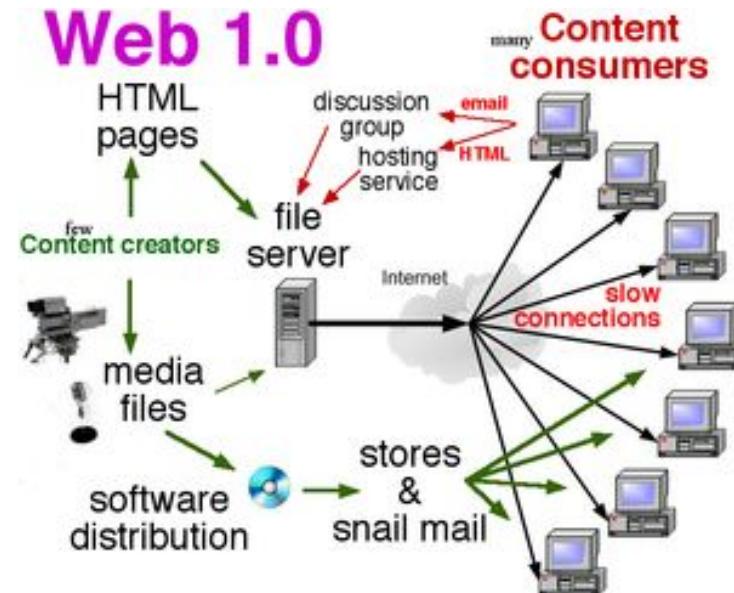
**Be the First to Know**  
Learn about new Macintosh software releases the moment they become available. Check [Hot Mac Products](#) to hear about programs like Speed Demon, ReBirth RB-338 and QuickCRC.

**Newton Connects**  
Newton, Inc., will enhance network connectivity for Newton-based devices this fall via [Newton Internet Enabler 2.0](#). Ethernet capability can connect devices to Local Area Networks.



# Web 1.0

- Focused on efficient delivery of static content
  - The sharing of information, not rich multimedia
- User experience was not in focus
  - Web use required more technical skills
- Web pages were written in basic HTML with little to no styling
- Companies were sole content creators



# Web 2.0

The screenshot shows the official Apple website's homepage. At the top is a dark navigation bar with the Apple logo and links for Mac, iPad, iPhone, Watch, TV, Music, Support, a search icon, and a shopping bag icon. The main content area features the Apple Watch Series 2 with several straps (pink, red, blue, and silver) floating in water. The text "WATCH SERIES 2" is above the watch, and "Live a better day." is written below it. At the bottom, there are four promotional cards: "iPhone This is 7.", "MacBook Pro A touch of genius.", "The elements of style. Accessories made by Apple.", and "Introducing Clips. Say it with video."

WATCH  
SERIES 2

Live a better day.

iPhone  
This is 7.

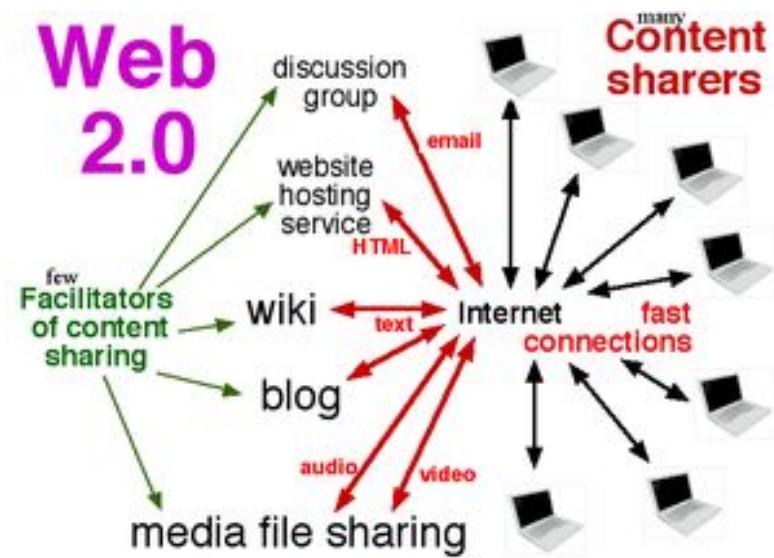
MacBook Pro  
A touch of genius.

The elements of style.  
Accessories made by Apple.

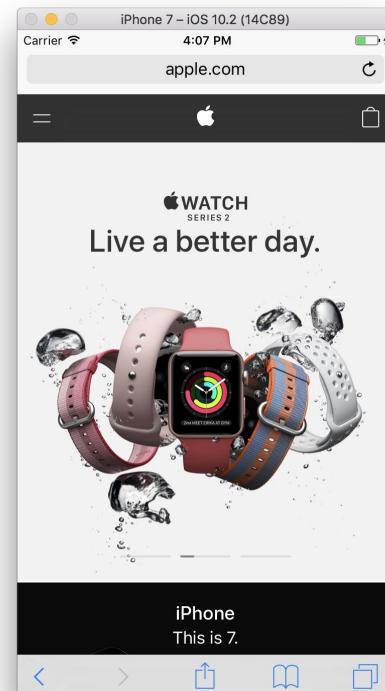
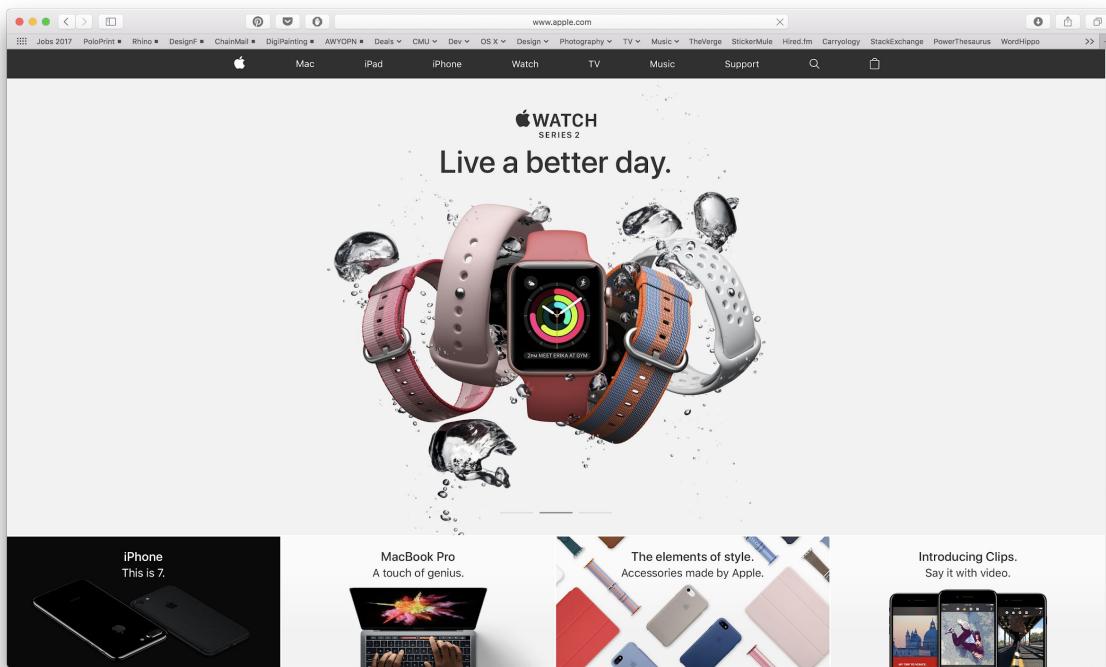
Introducing Clips.  
Say it with video.

# Web 2.0

- More interactive
  - Highlight, hover, other visual effects
- Focus on user experience
  - Animations, transitions
- Focus on sharing of multimedia
  - Facebook, Twitter, YouTube
- Far greater number of content creators
  - everyone with a computer can be a content creator

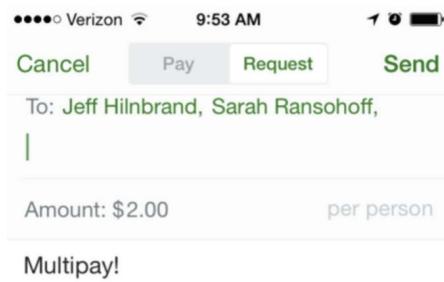


# Responsive Design

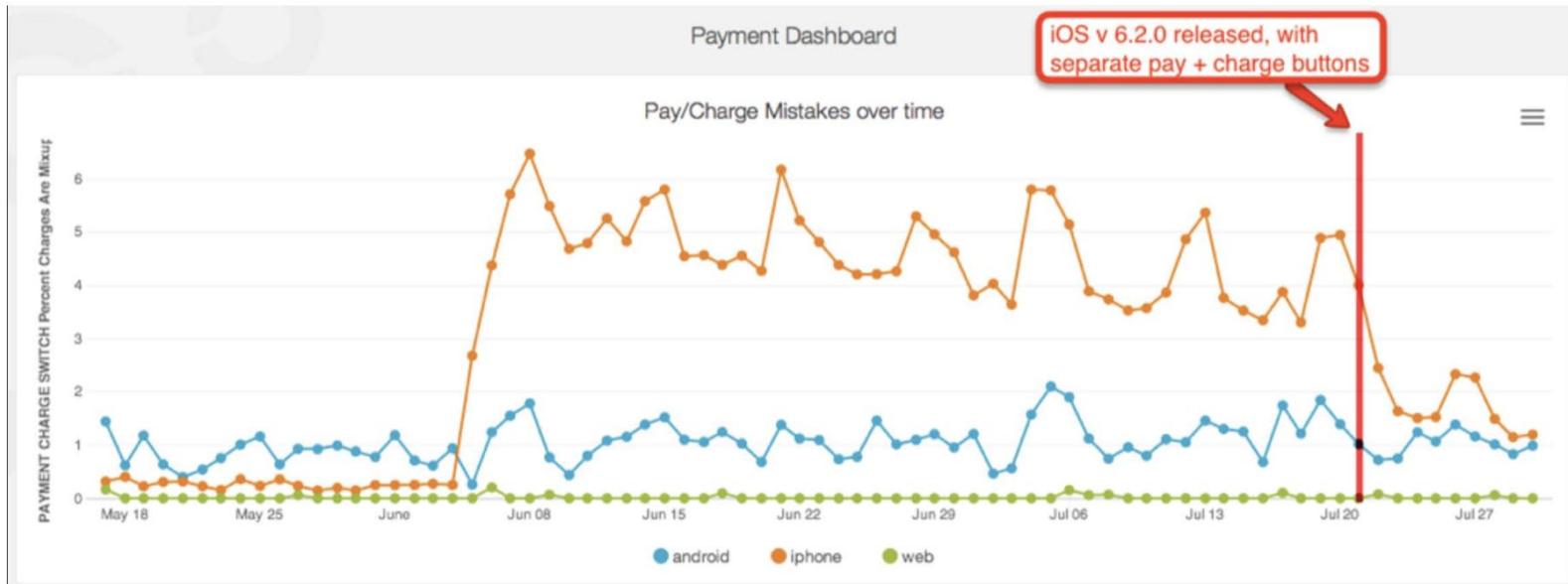


# **Design Details**

# Clarity



# Clarity



# Constraints



# Hierarchy



# Hierarchy





# Figma Intro Cards

# Readings

For next week read the articles listed for today and next class