



Web & Mobile Design - DMA 331

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

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:

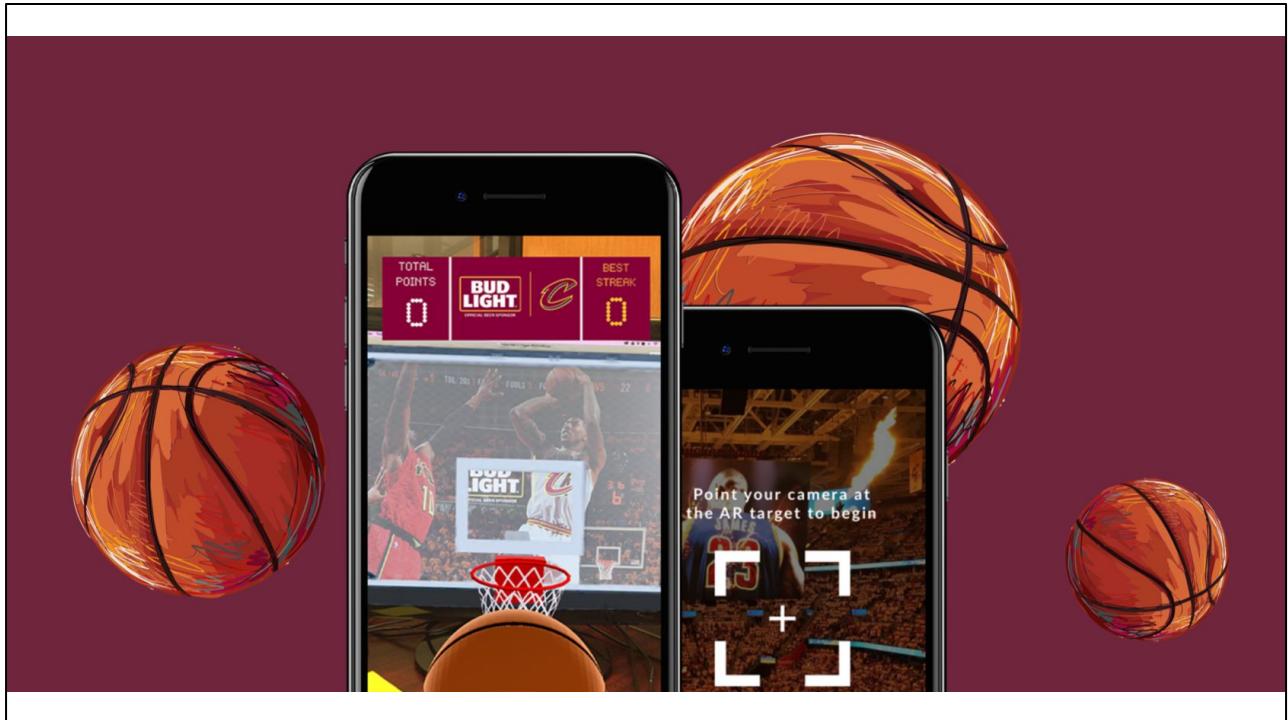
- Critically evaluate design considerations of digital products
- Acquire additional skills & techniques in digital design
- Apply high-fidelity design concepts to other projects
- Understand industry processes for design and development

Syllabus

<https://docs.google.com/document/d/1yGtK0s6OQhCwNSMEKHxKZsTIfMv644SX-wQbi8l1hz8/edit?usp=sharing>

A Little About Me

Something to ask students



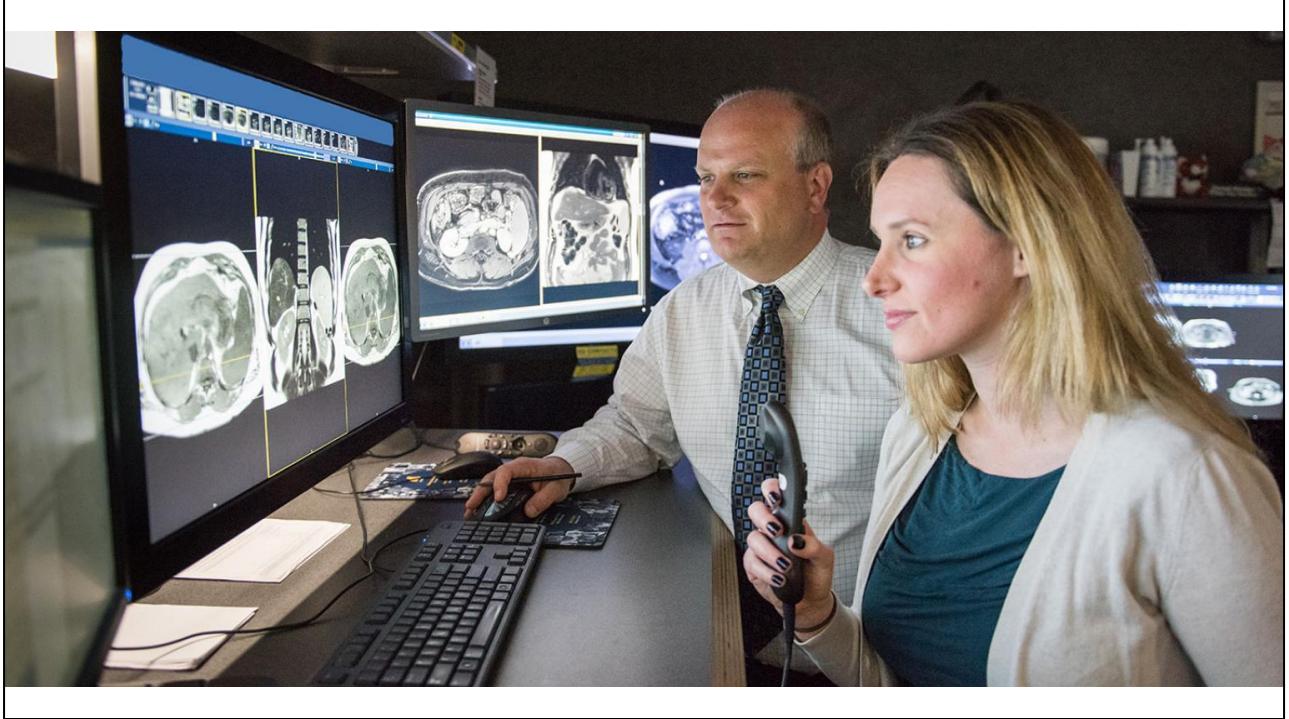
AR experience for the NBA

<https://rehanbutt.com/deepintheq>



Fashion design

<https://rehanbutt.com/fashion>



Radiology reading room



UPMC
Enterprises



Carnegie
Mellon
University

 NUS
National University
of Singapore

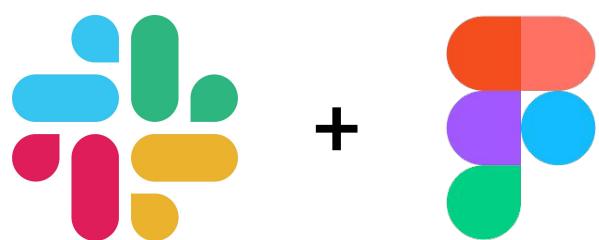


UCLA

LIVE NATION

Budweiser

I bunch of the brands I have worked with



Slack and Figma invites

Figma edu account verification

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

Web & Mobile Design - DMA 331

Something to ask students



So this is a bathroom photo from Disney World. Anyone notice anything unique about this?



How about now?

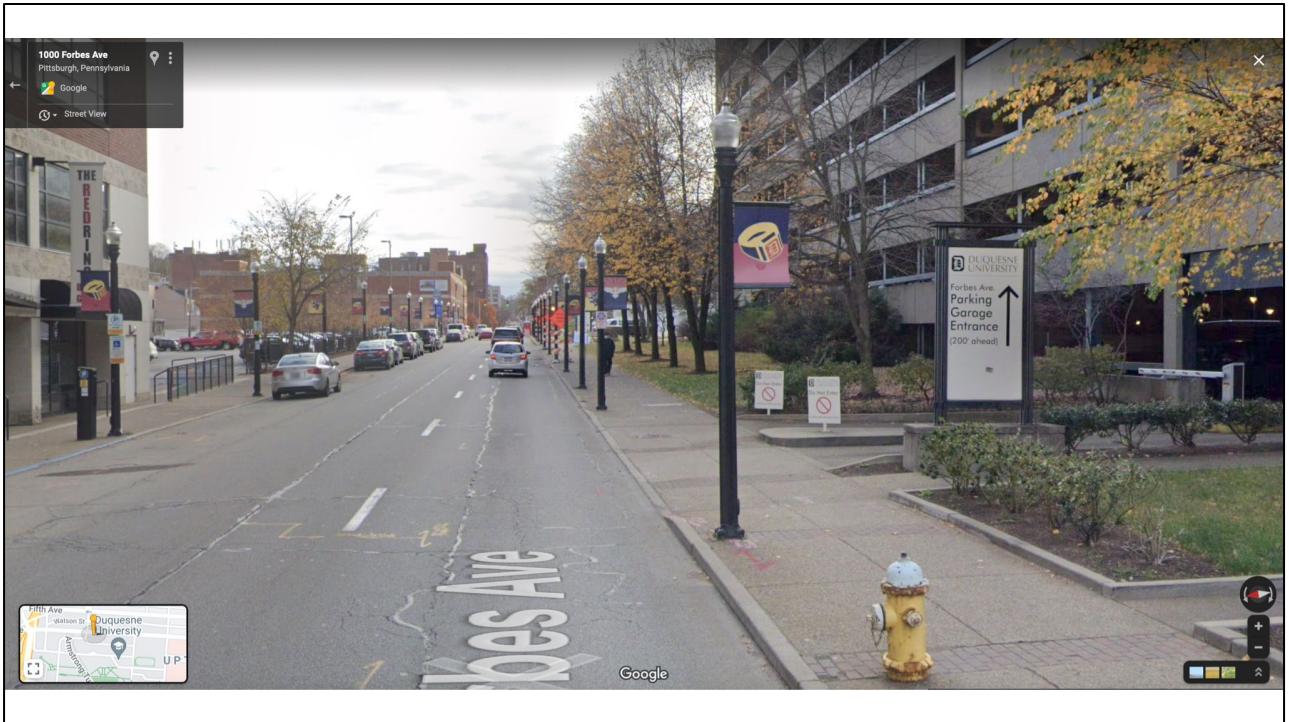


How about now? Any guesses why this is the case?

Disney was trying to solve a problem

Bathroom traffic!

<https://insidethemagic.net/2021/06/disney-bathroom-mirrors-kc1/>



Several of you probably recognize this

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?



Here is my guess why these signs are here... thoughts on better ways to solve this problem for drivers looking for parking??



- de-prioritize the car path
- Compress the entry exit to 1 lane, due to limited cars
- move the parking sign to the roadway

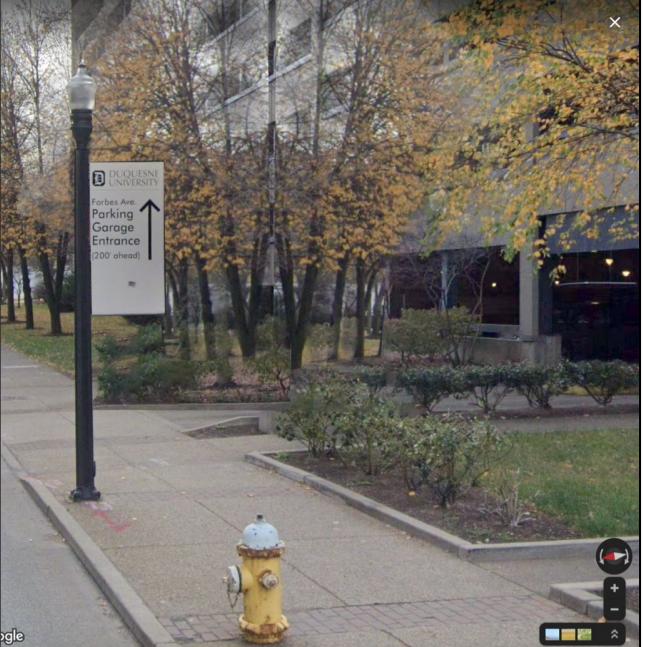
1000 Forbes Ave
Pittsburgh, Pennsylvania

Google

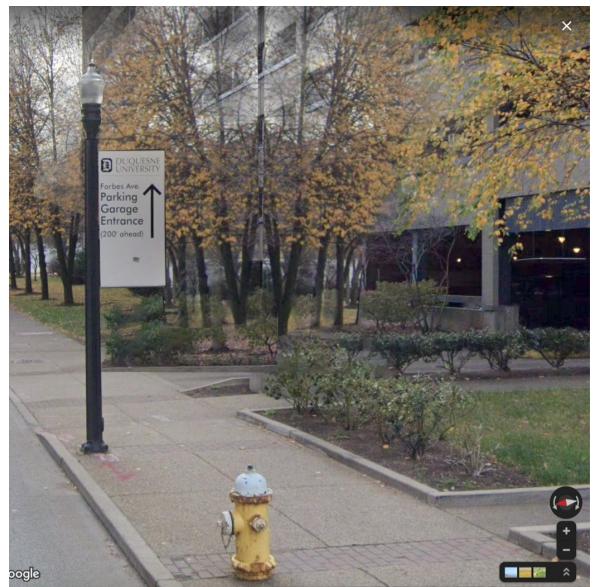
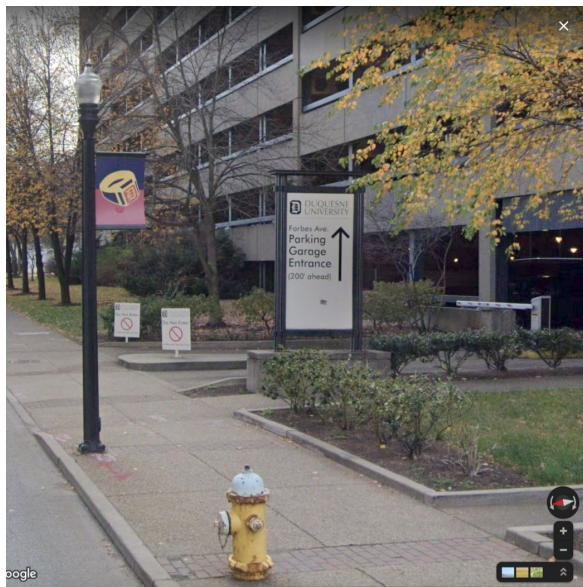
- De-prioritize the car path

- Compress the entry/exit to 1 lane, due to limited cars

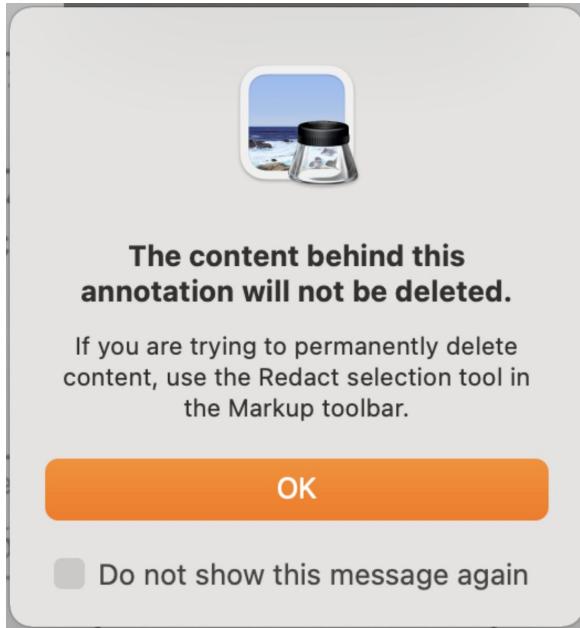
- move the parking sign to the roadway



Other thoughts?



Several of you probably recognize this



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

<https://twitter.com/tvaziri/status/1386413221398016000?s=21>



Industrial

Product

Strategy

Graphic

Research

Design

UI/UX

Copy

Data

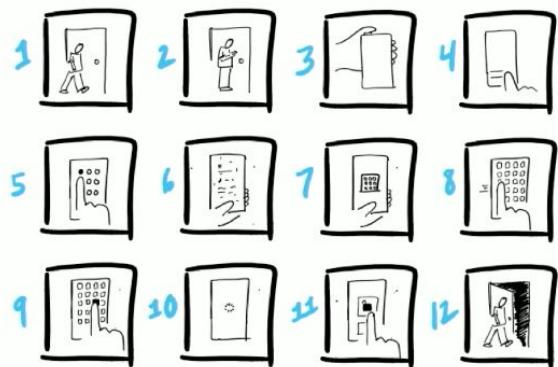
Motion

Architecture

Basically Design is a lot of things.....

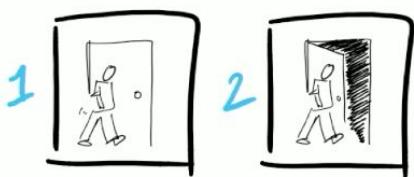
Even if at first it might be seen as just stuff that looks pretty

SCREEN BASED THINKING



VS.

SCREENLESS THINKING



Elegance and efficiency

Think about the problem you are trying to solve... it might not be just another app

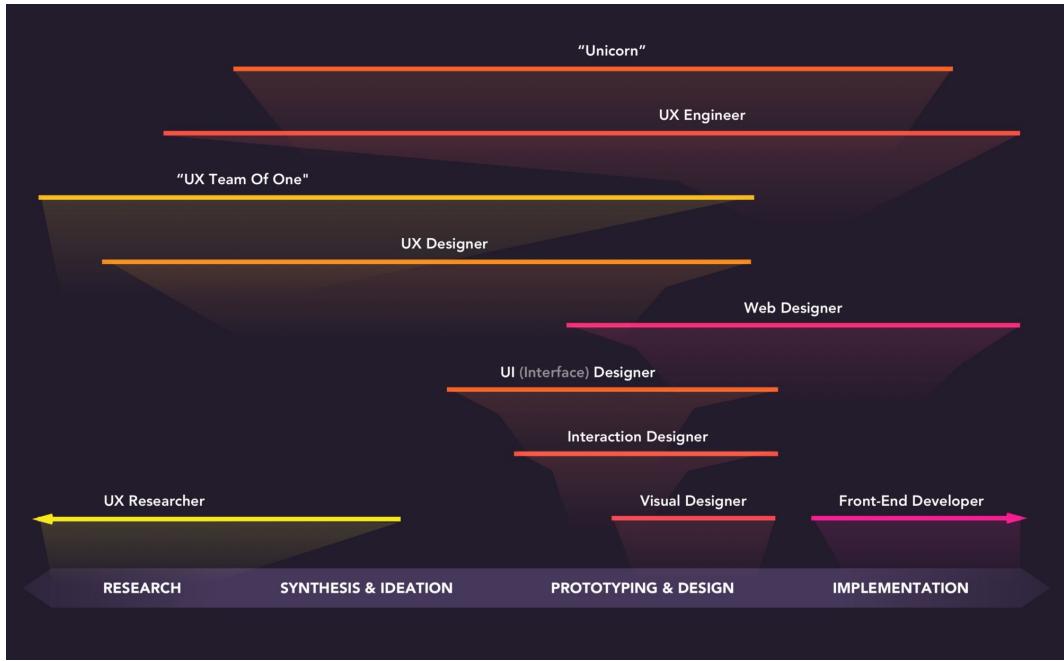
**Design is everywhere and
goes far beyond the
screen**

It's everywhere!!

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**.



Some folks are generalists some are specialists

Source:

<https://uxdesign.cc/the-spectrum-of-digital-design-roles-in-2018-3286390a9966>

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

Traditionally this is the separation

Content Strategy

Customer Experience

Interaction Design

Information Architecture

Human Factors

Business Goals

UX

Visual Design

User Research

Information Design

Accessibility

Technical Communication

But it's actually like this

Context

**Is this good
design?**



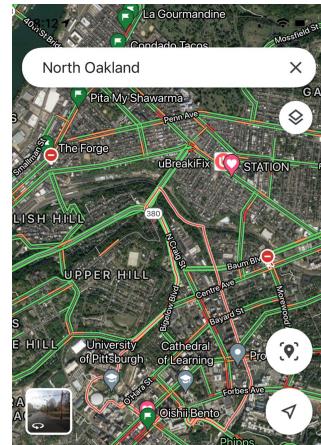
Is this good
design?

**If you are right
handed**



Context is key

Is this good design?



North Oakland

Pittsburgh, PA

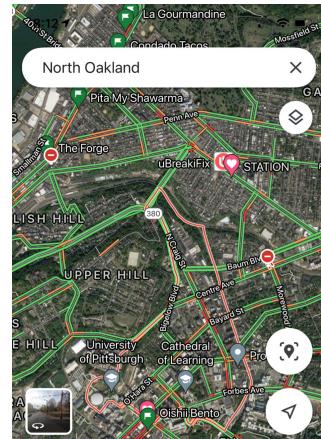
45 min

Directions Start Save



Is this good
design?

**As long as you
are not driving**



North Oakland

Pittsburgh, PA

45 min



Context is key



Which is why Google designed a separate interface for car use

Context is key

Context is Key 🔑

Context is key, consider things like will this app be used at night or in the car? That will inform what you need to worry about and how to prioritize

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!**

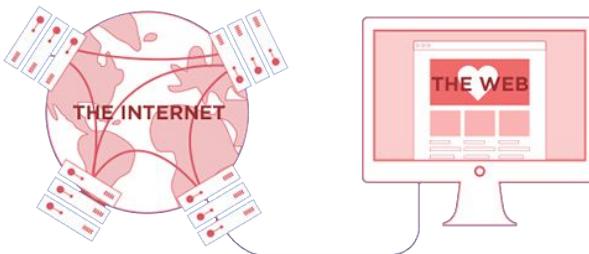
Your user may not be your buyer

The idea of B2B or enterprise software

Consumer vs Enterprise design – consumer = user has the choice in product,
enterprise = the user is not the buyer

Web

Web Design & Development: Why should you care?



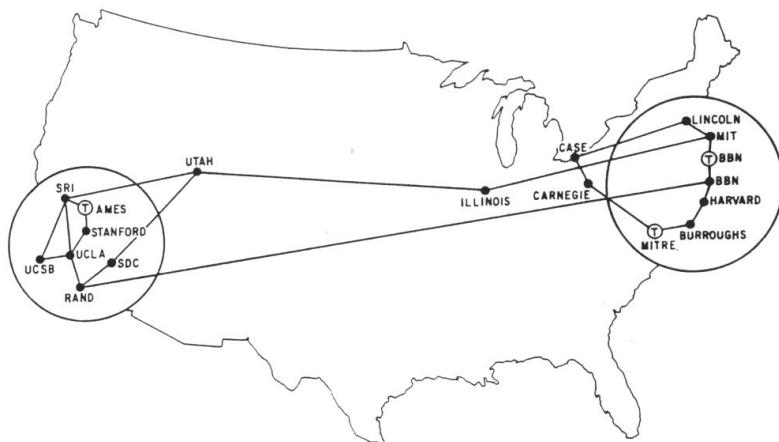
- The world is run on the web
- 2.5 Exabytes of data is created each day, much of it rich multimedia
 - Knowing how to create data is one thing
 - knowing how to effectively share it in a manner that others can understand it sets you apart from the competition
- You can use these skills to market yourself

<https://webdesign.tutsplus.com/articles/a-brief-history-of-the-world-wide-web--webdesign-8710>

<http://www.evolutionoftheweb.com>

- Pedagogical Motivations
 - Not just about creating cool websites
 - This may be your edge to be more versatile
 - Many lessons architects can learn
 - Versioning (Github)
 - Process (AGILE)
 - Marketing (SEO)
- A Brief History of the World Wide Web (www)
- Technology (Frontend vs. Backend)
- Roles (More Unicorns needed)
 - <http://venturebeat.com/2017/03/11/the-tech-industry-needs-more-designers-are-hybrid-designer-developers-the-answer/>

Landscape of Web Design & Development



MAP 4 September 1971

A map of the internet from 1971

Web 1.0



DR. TOM CORTINA

THE HOME PAGE

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ADVISING

For an advising appointment, sign up here:

<https://saifish.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

TEACHING | SCHOLARSHIP | WORKSHOPS | SERVICE | PROFESSIONAL

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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Now you can [preorder Mac OS 8](#), described by Macworld as "the most comprehensive update to the Mac OS in years, sporting a bold new look, a speedier Finder, more shortcuts and integrated Internet functions."

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EMATE 300

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& Smart

MOVIES FROM MARS

QuickTime VR Takes You Out of This World

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.

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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

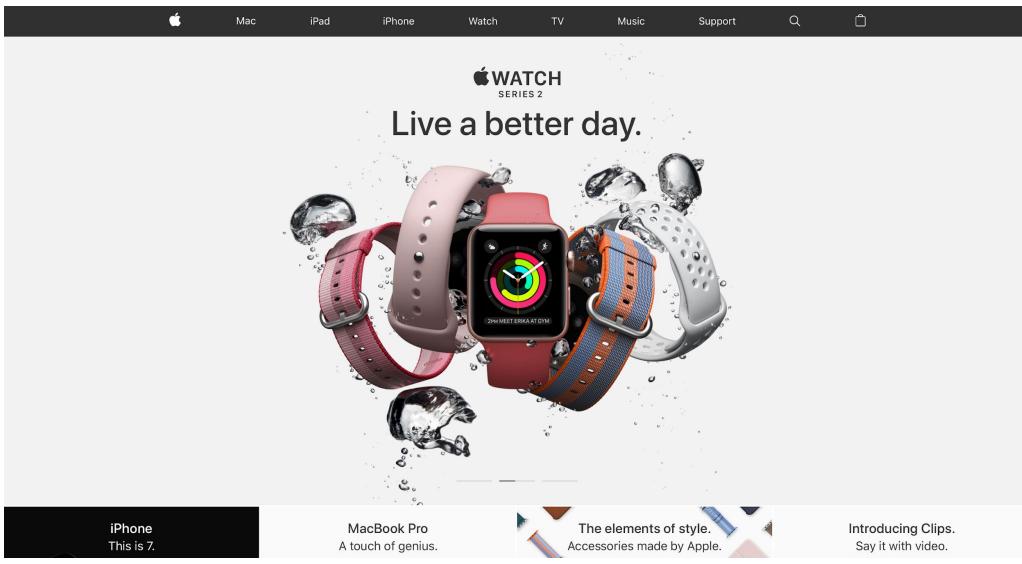


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Web 2.0



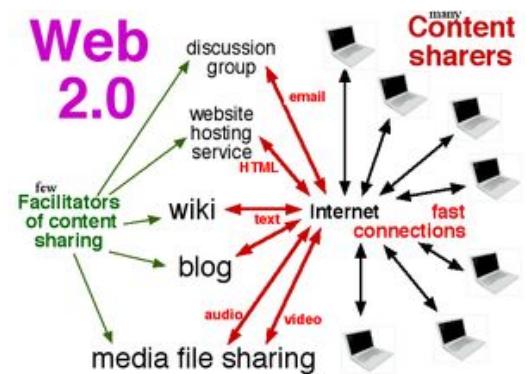
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<http://www.evolutionoftheweb.com>

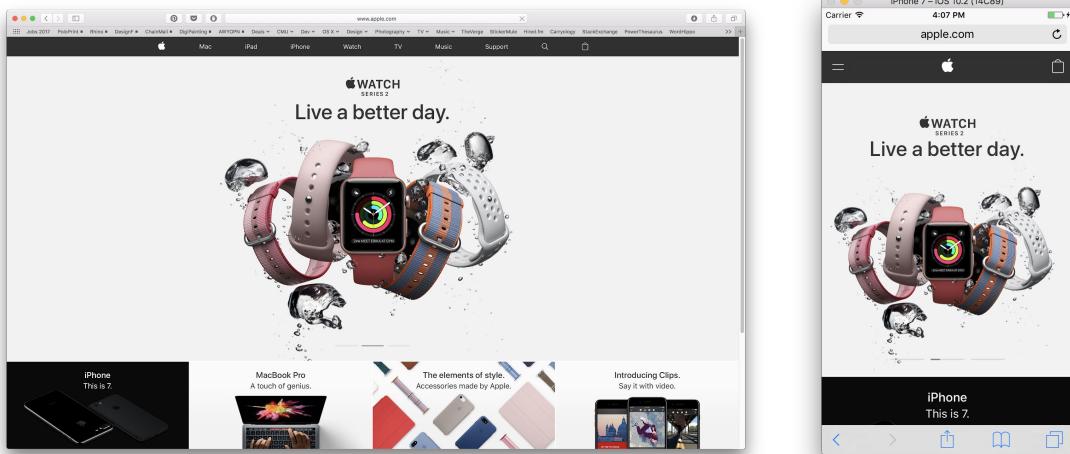
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 -

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



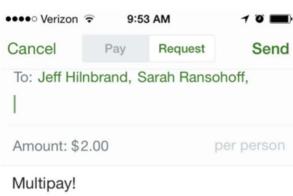
Responsive Design



Show the Apple site and resize it

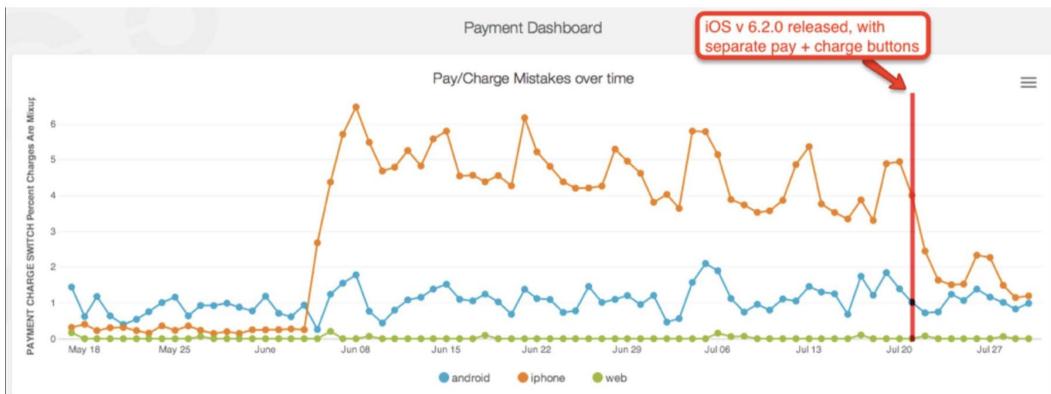
Design Details

Clarity



Anyone happen to know what app this is?
Or what one of the issues with this page might be?
Users Legibility

Clarity



Constraints



KNOW THE USERS

ALSO CONSTRAINTS BE POWERFUL #such creative

QRs are used a lot in japan and they wanted a branded way to showcase them

Hierarchy



Which of these is the most important?

Hierarchy



Now which?

Which of these is the most important?



Figma Intro Cards

Anything specific you want to get out of the class?

Readings

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

Reading for this week and next... show web page reference