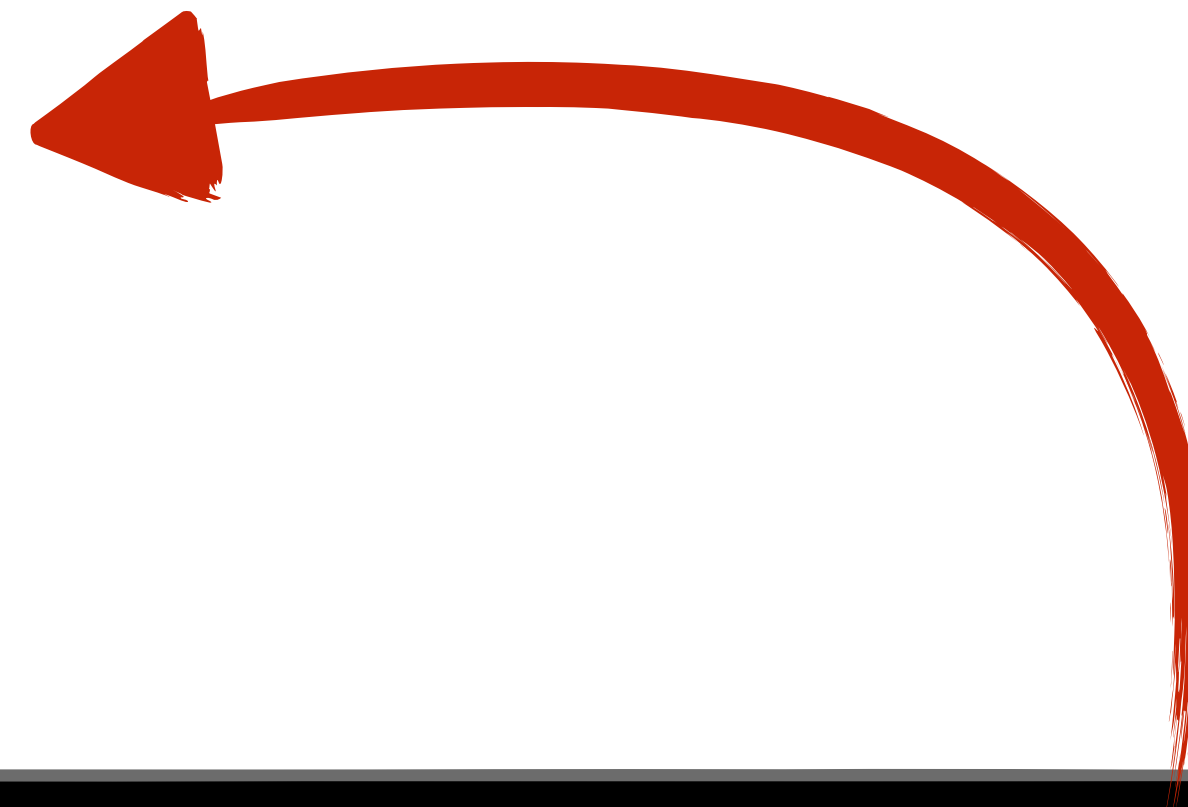


# Visual Design

SWE 632

Fall 2023



**With at least 30 new things you won't believe!**



© Thomas LaToza

# Administrivia

- HW6 due on 11/14

# Class Overview

1. Overview of Visual Design: What it is and Why it Matters
2. Guidelines for Visual Design: Simplicity and Regularization
3. Scale, Contrast, & Proportion: Formatting Matters
4. Organization & Structure: Information Conveyance
5. Images & Icons: Getting the Right Picture Across
6. Design Languages: Unifying your Design

# Overview of Visual Design



# Elements of Visual Design

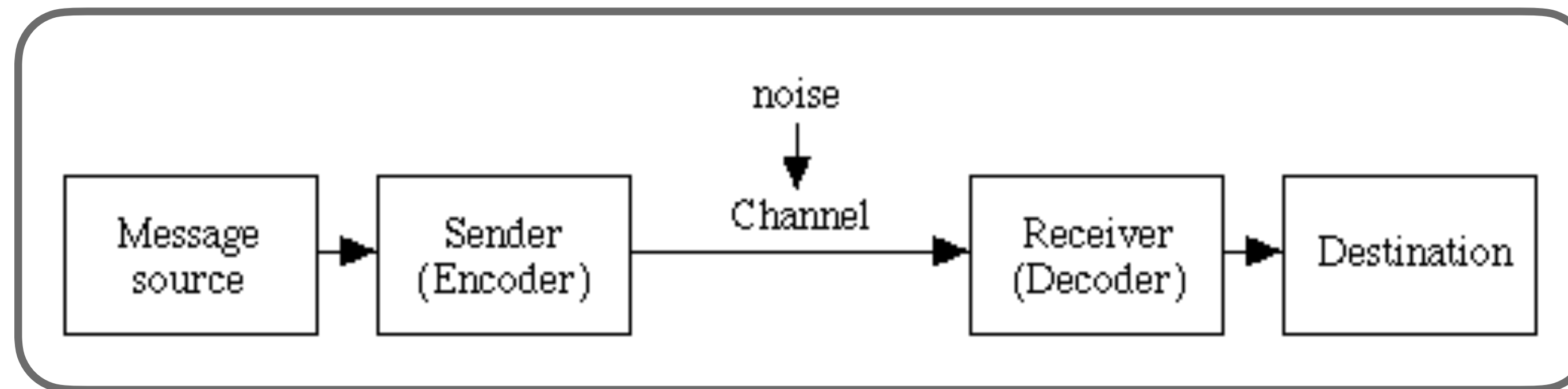


# Visual Design

- *Solving communications problems in ways that are both functionally effective and aesthetically pleasing.*
- Creating a visual language containing a vocabulary of design elements characterized by
  - Visual variables—shape, size, position, orientation, color, texture, ...
  - Organizational relations between elements—balance, structure, proportion, ...
  - Visual syntax—rules for assembling elements w/in design language

# Visual Design as Communication

- Goal: efficiently & accurately transmit information from system to user
- Visual variables & organization encode information



# Goals for Visual Design

- Successfully transmit information
- Present coherent & consistent design that reduces ambiguity and potential confusion
- Reduce visual search time through layout & organization
- Create desired emotional reactions through aesthetic choices

# General Guidelines for Visual Design

# Elegance & Simplicity

- *Elegance*—derives from Latin eligere, to “select carefully”
- *Judicious* selection of elements and economy of expression revealing an intimate understanding of problem
- Removing & combining superfluous elements until only the necessary remains



# Benefits of Simplicity

- Approachability - rapidly understood affordances, allowing glanceable understanding of possible interactions
- Immediacy - greater emotional impact because interactions can be quickly understood



Marc Berthier. Tykho Radio. 1997. Synthetic rubber and other materials, 5 1/2 x 5 1/2 x 1 5/8" (14 x 14 x 4.1 cm). Manufactured by Lexon, France. The Museum of Modern Art, New York. Gift of the manufacturer.



# Reducing a Design to its Essence

- Make design simple, bold, and direct by removing inessential details & elements
  - Even essential elements may be suggested

1. *Determine essential qualities & information to be conveyed*

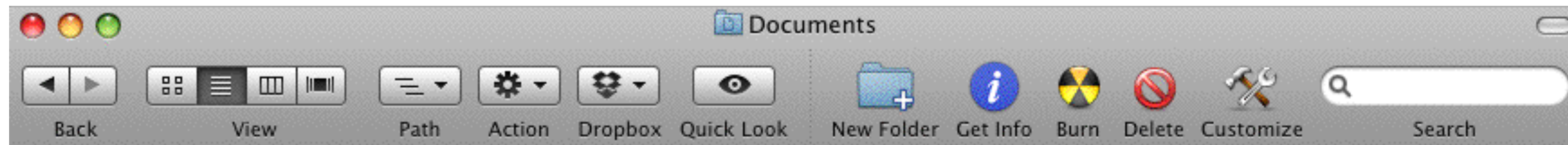
2. *Critically examine each element & ask how design would suffer without it.*

3. *Try removing elements. What happens?*

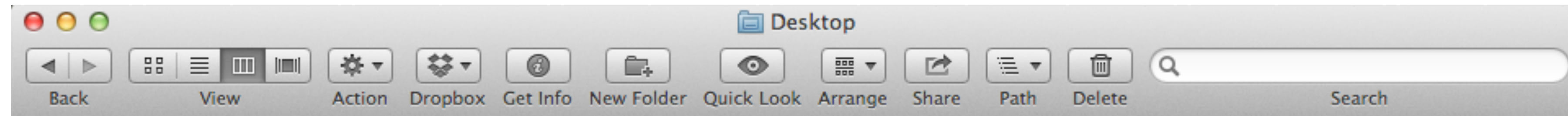




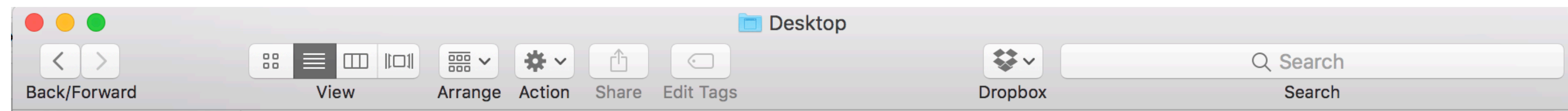
# Trade-offs in Simplicity



OSX c.2010



OSX c.2011



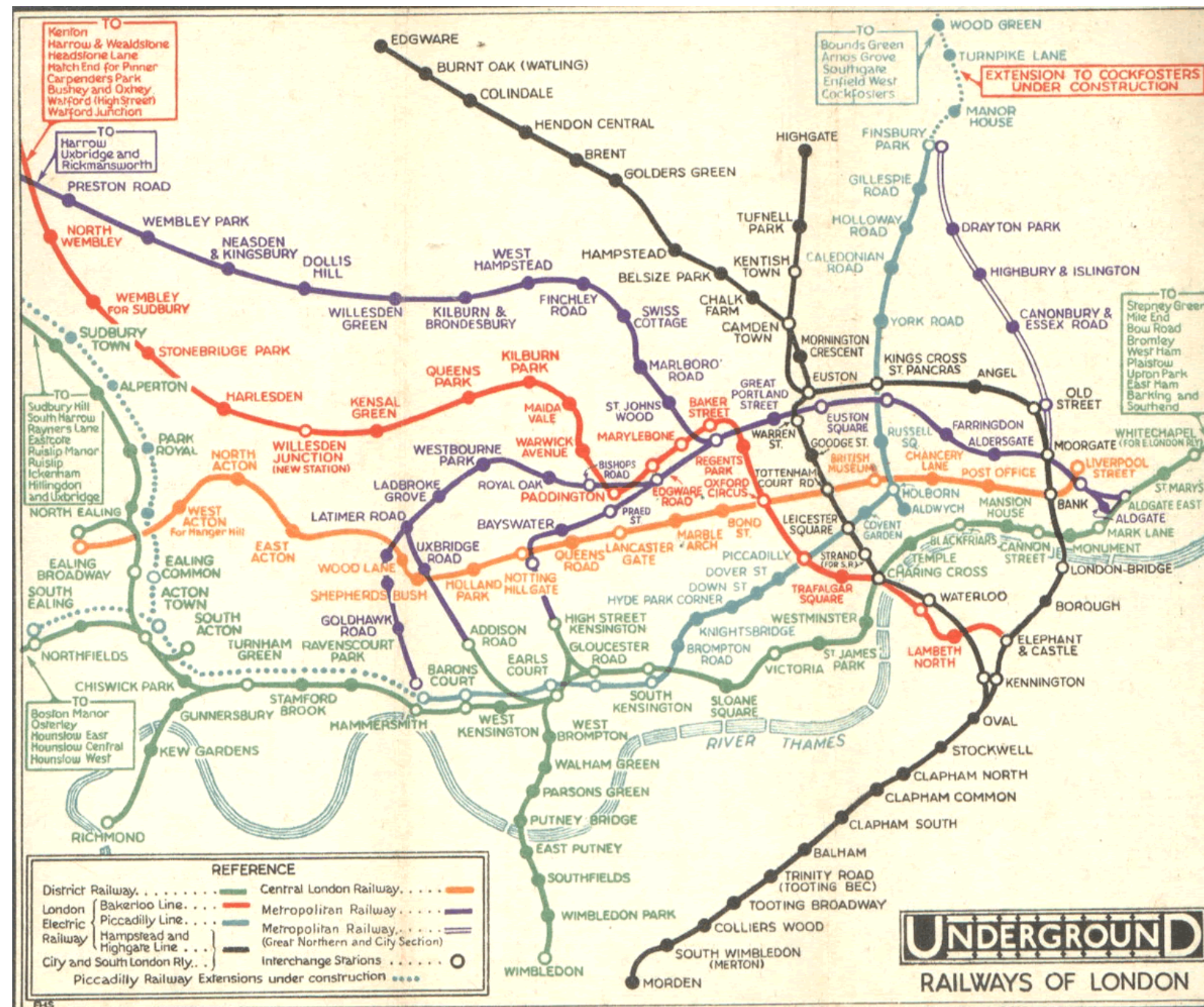
OSX c.2016



OSX c.2021



# Guidelines for Visual Design



Reduction in new map: relative distances don't matter

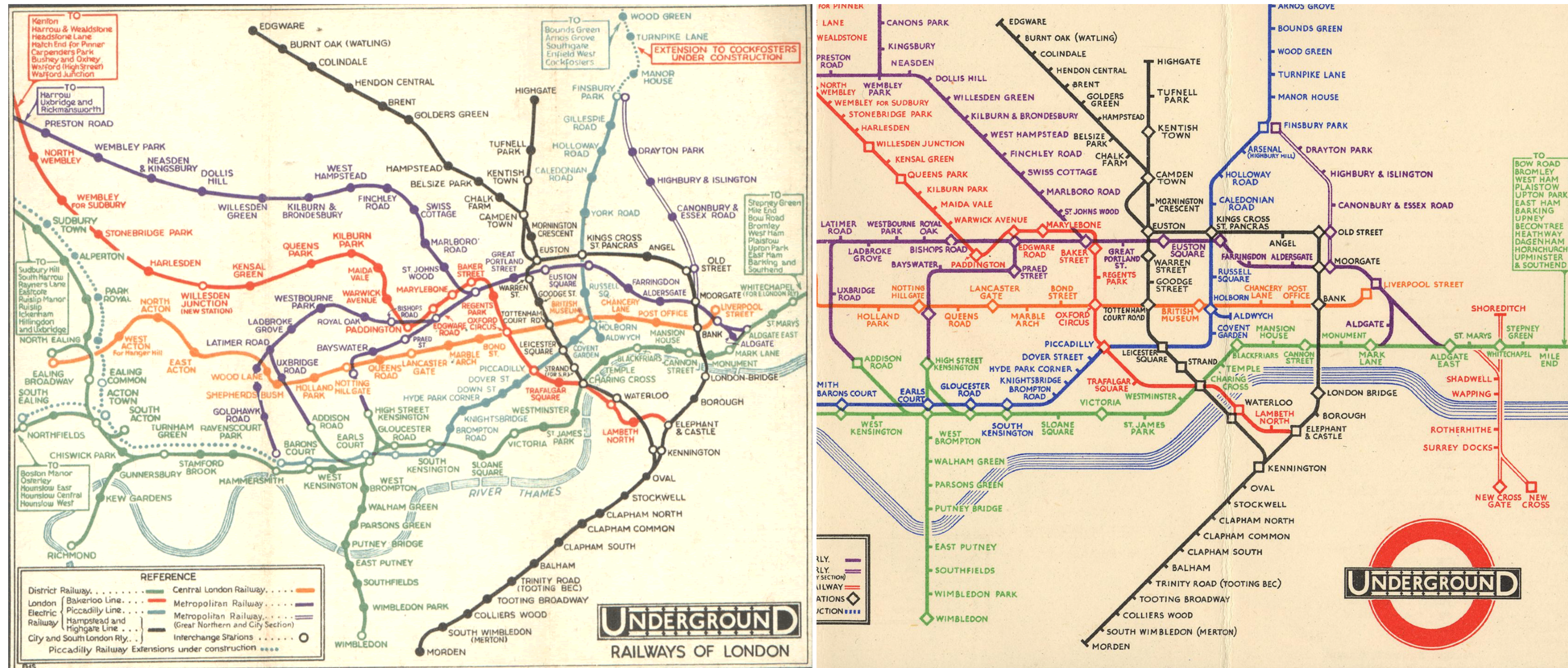


# Regularizing the Elements of a Design

- Reduce information by repeating elements according to a rule, principle or rhythm
- Enable user to scan ahead
- Use irregularity where needed to clarify that something is irregular!
  1. Use ***regular*** geometric forms, simplified controls, muted colors where possible
  2. If multiple similar forms required, make them ***identical*** as much as possible in size, shape, color, texture, spacing, alignment
  3. ***Limit variation*** in typography to a few sizes
  4. Make sure critical elements intended to stand out are ***not*** regularized



# Guidelines for Visual Design

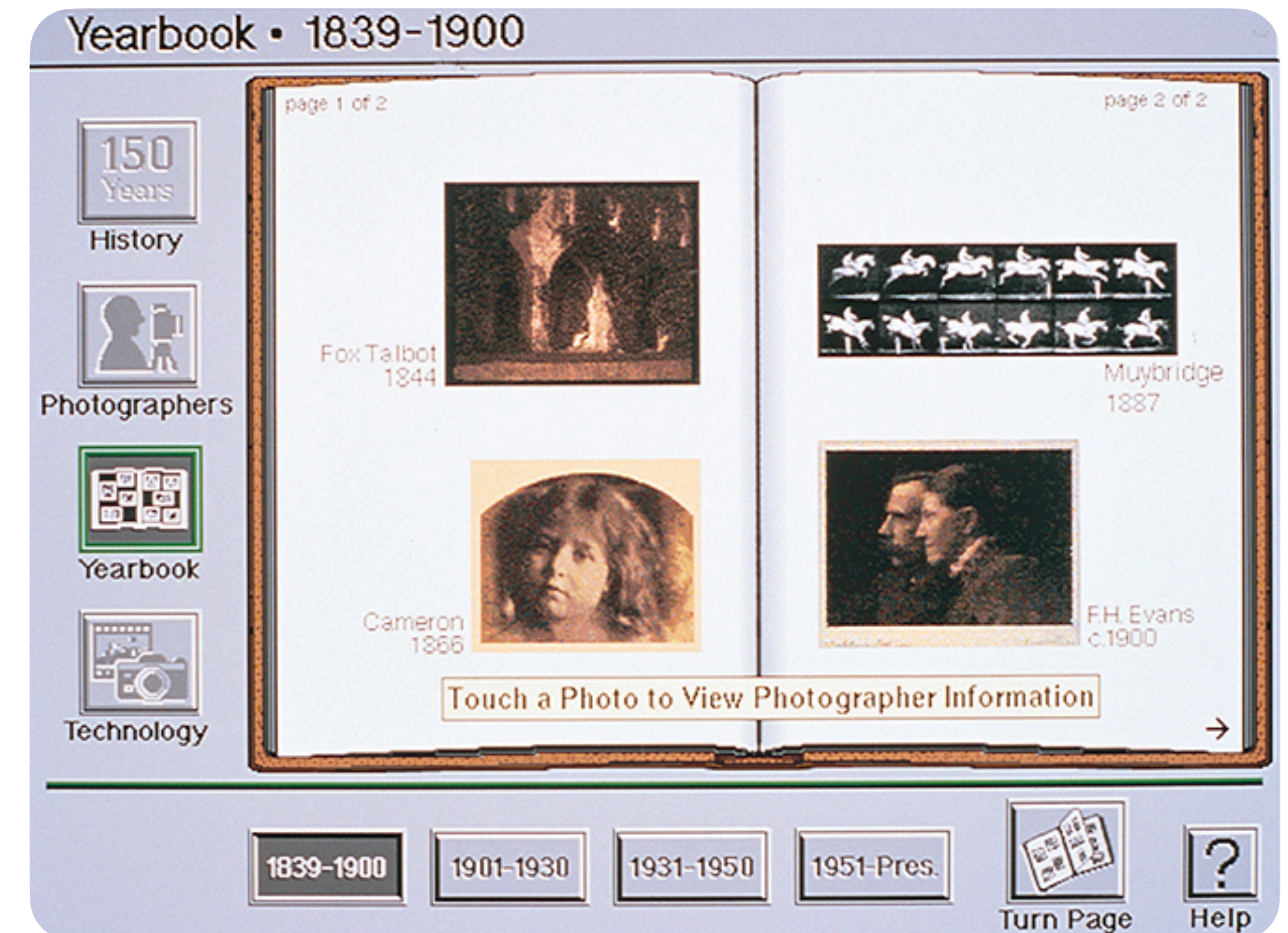


Regularization in new map: Straight lines result in station names laid out in a line, rather than bouncing around



# Error - Excessive Skeuomorphism

- Skeuomorphism - making visual design resemble reality (like metaphors)
- Excessive skeuomorphism is distracting and wastes potential visual bandwidth that could encode meaningful information
- Trend towards "flat" interfaces





Calendars

Invitations (0)

Day

Week

Month

Year

List

Search

# July 2013

Wednesday	July 3
Ted Faszter's Birthday	all-day
Mike Yutzy's Birthday	all-day
Thursday	July 4
Cherie Yvette's Birthday	all-day
Monday	July 15
Allie Johnson's Birthday	all-day
Dr Stoll	8:45 AM to 9:45 AM
Thursday	July 18
Richard Gintowt's Birthday	all-day
Jacks birthday	11 AM to Noon
Monday	July 22
Alisha Campbell's Birthday	all-day
Saturday	July 27

# Ted Faszter's Birthday

Details

Wednesday, July 3, 2013

	all-day events
	Mike Yutzy's Birthday
	Ted Faszter's Birthday
2 PM	
3 PM	
4 PM	
5 PM	
6 PM	
7 PM	
8 PM	
9 PM	

# November 2016

- Day
- Week
- Month
- Year



Sun	Mon	Tue	Wed	Thu	Fri	Sat
		• SWE 432 Noon				
20 • SWE meeting	21 11 AM • Office Hours • SWE 432	22 10:30 AM Noon	23 • SWE 432	24 Noon	25	26
27	28 • Office Hours • SWE 432	29 10:30 AM Noon	30			
			• SWE 432	Dec 1 Noon	2	3
4	5 • Office Hours • SWE 432	6 10:30 AM Noon	7 • SWE 432	8 Noon	9	10
11	12 • Office Hours	13 10:30 AM	14	15	16	17

# Scale, Contrast, & Proportion



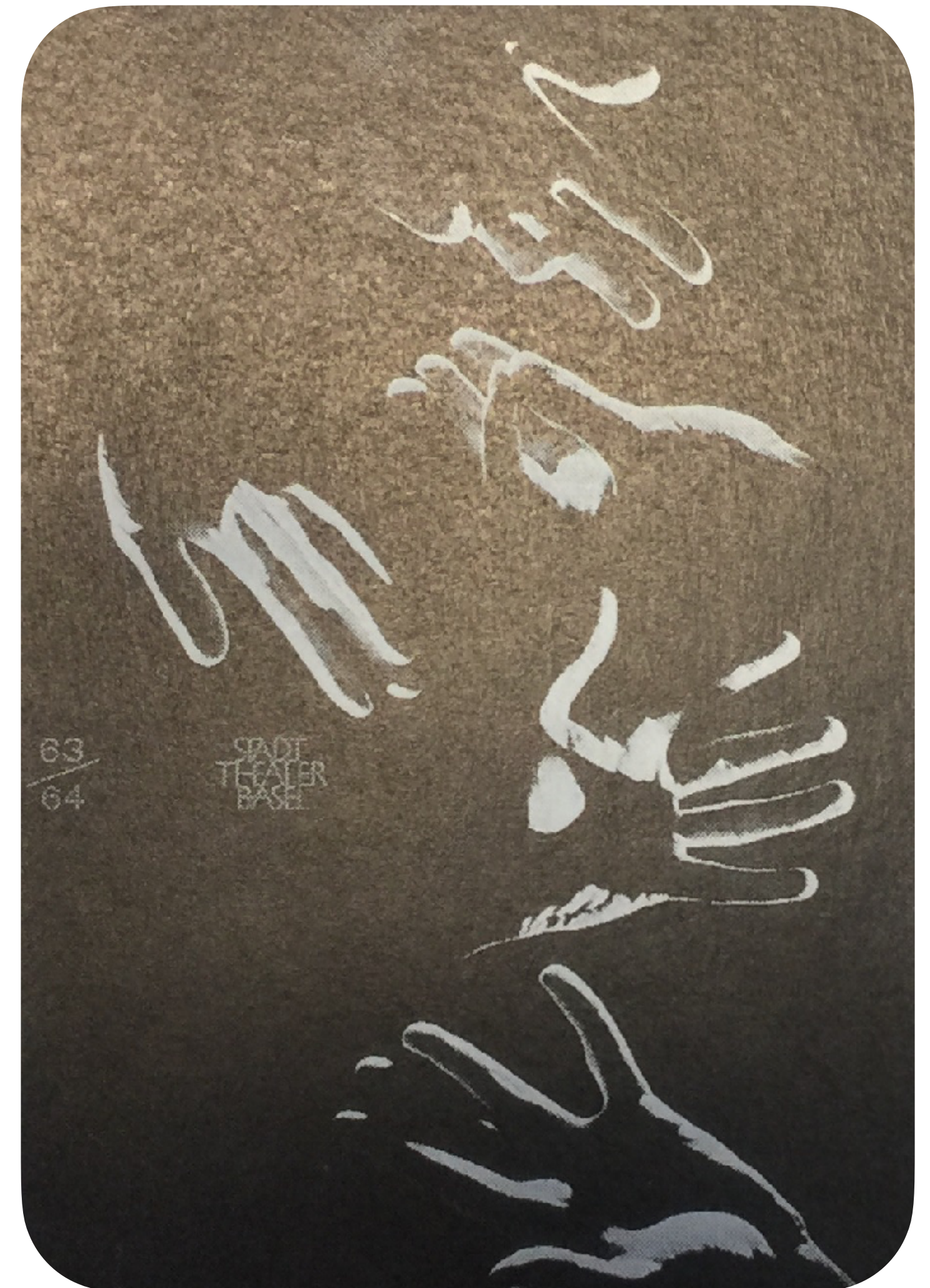
# Scale, Contrast, & Proportion

*Information consists of differences that make a difference.* (Edward Tufte, *Envisioning Information*)

Individual visual variables of design that encode information

# Terminology

- Scale - relative size or magnitude of element in comparison to related elements
- Contrast - visually noticeable distinctions along a common visual dimension
- Proportion - ratio and balance between elements
- Emphasis - contrasts can emphasize important elements or areas & add visual interest by creating tension & drama

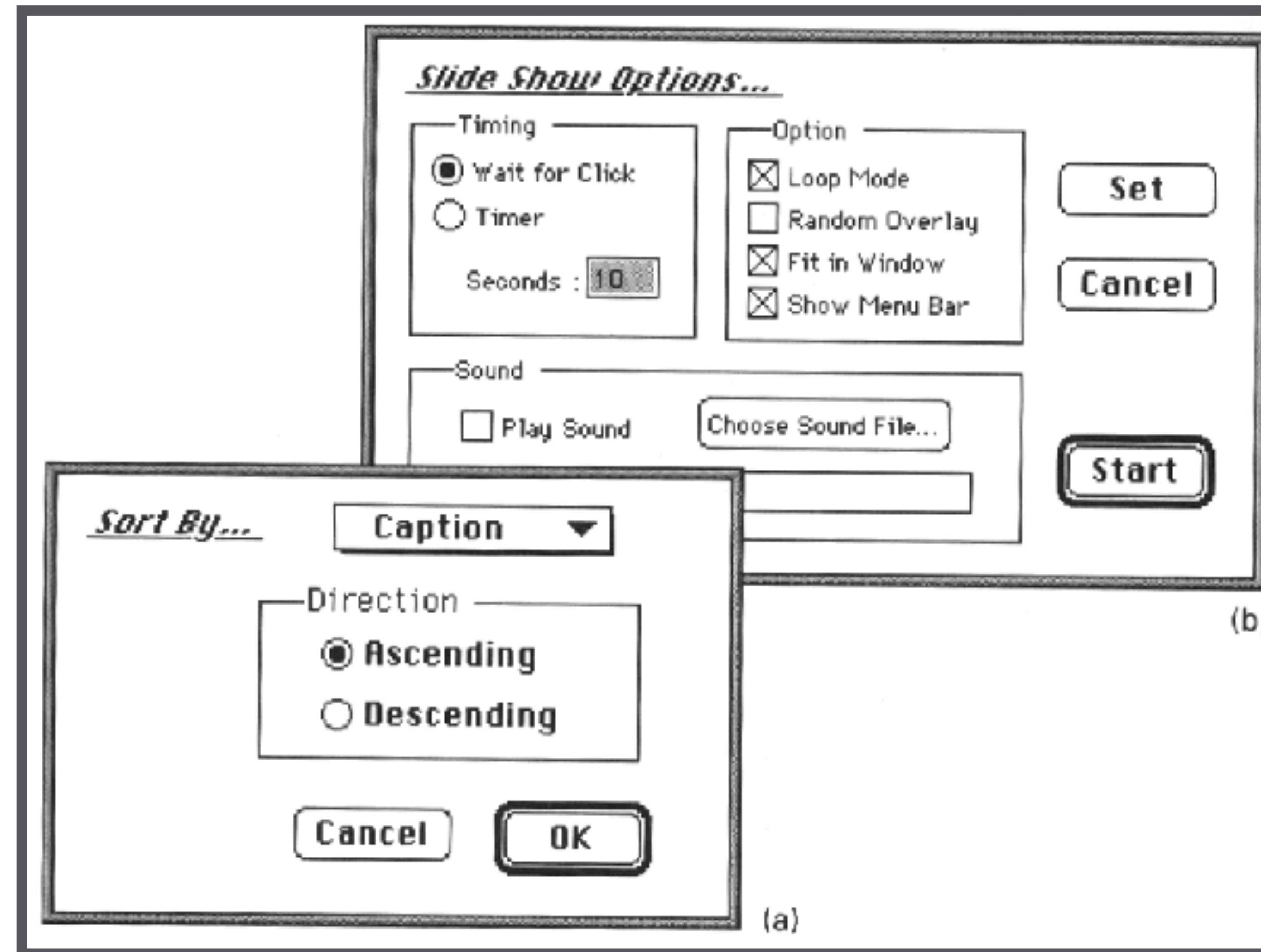


# Principles

- *Clarity* - contrasts should be clear and easily differentiated, not slight and subtle
- *Harmony* - proportions and ratios should be harmonious
- *Activity* - use contrasts to maintain orientation & context within design
- *Restraint* - contrasts should be conscious, strong, few in number, and never overwhelming



# Error - Excessive Typographic Contrasts



5 different types sizes in 3 different fonts (!!)



# Layers

- Contrasting color, value, texture can segregate information into separate layers
- Supports *overlapping* information in displays, allowing selective processing of specific sets of elements
- Allows different layers to be read and interpreted *separately*

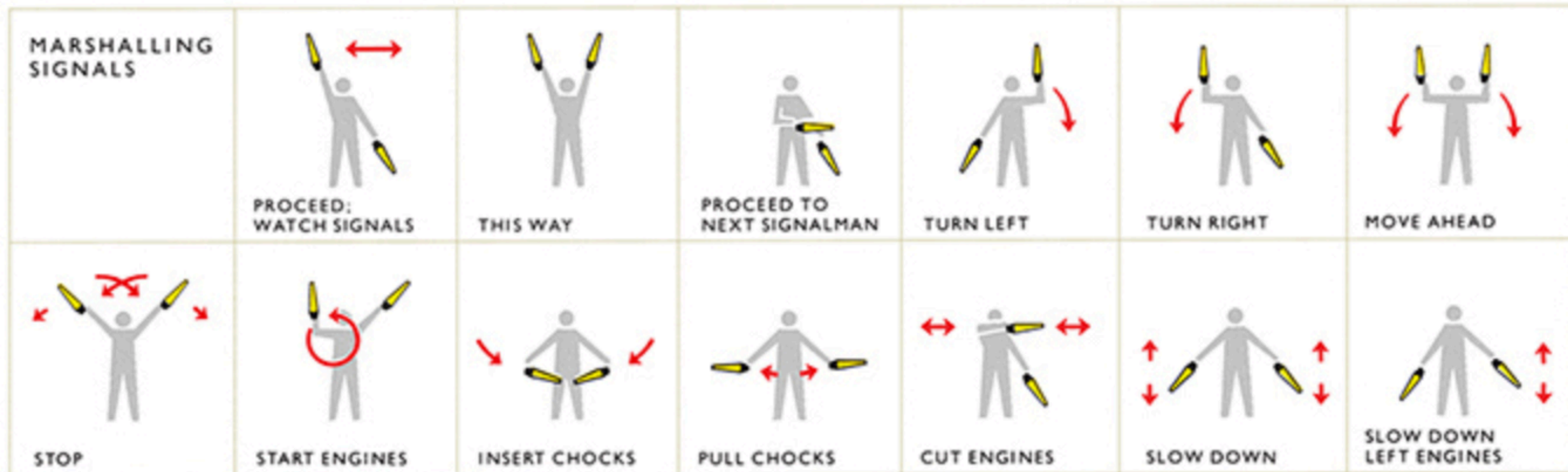




# Creating Layers

1. Group items into categories based on intended use
2. Determine rank & importance of groups
3. Use perceptual variables (size, value, hue, etc.) to establish layering effect
4. Maximize differences between groups while minimizing differences within groups
5. Use squint test to ensure elements in group retain together but visually separated

# Layers



# Organization & Structure



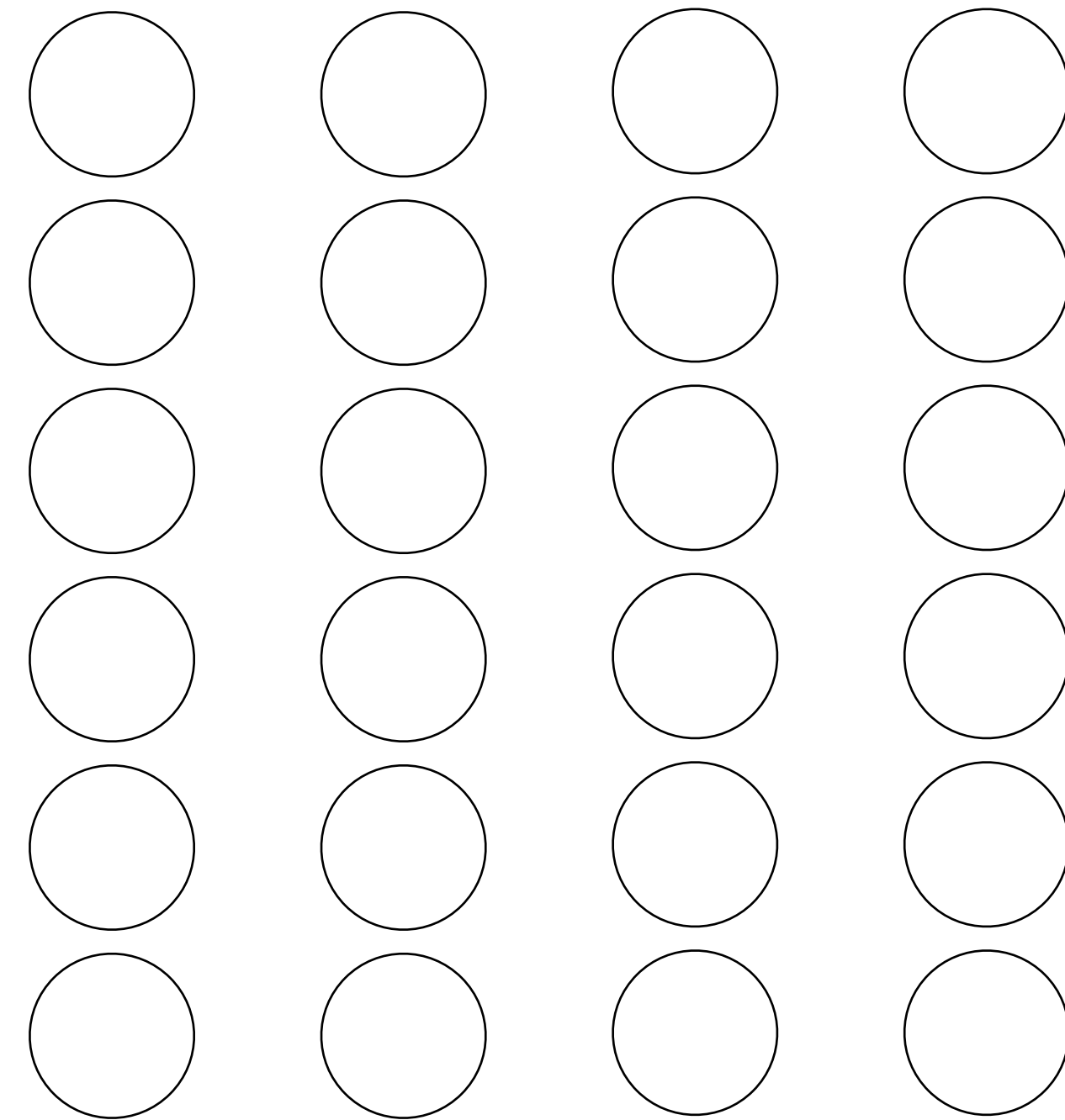
# Organization & Structure

- Organization needs to be *designed*
- Benefits
  - Unity - ties together related elements so that they work **together**
  - Integrity & readability - offers structure that helps user to easily scan & make comparisons
  - Control - determines where user will focus **attention** in the design
- Gestalt -> psychology of perception

# Gestalt Principle - Proximity

- Elements associated most strongly w/ nearby elements

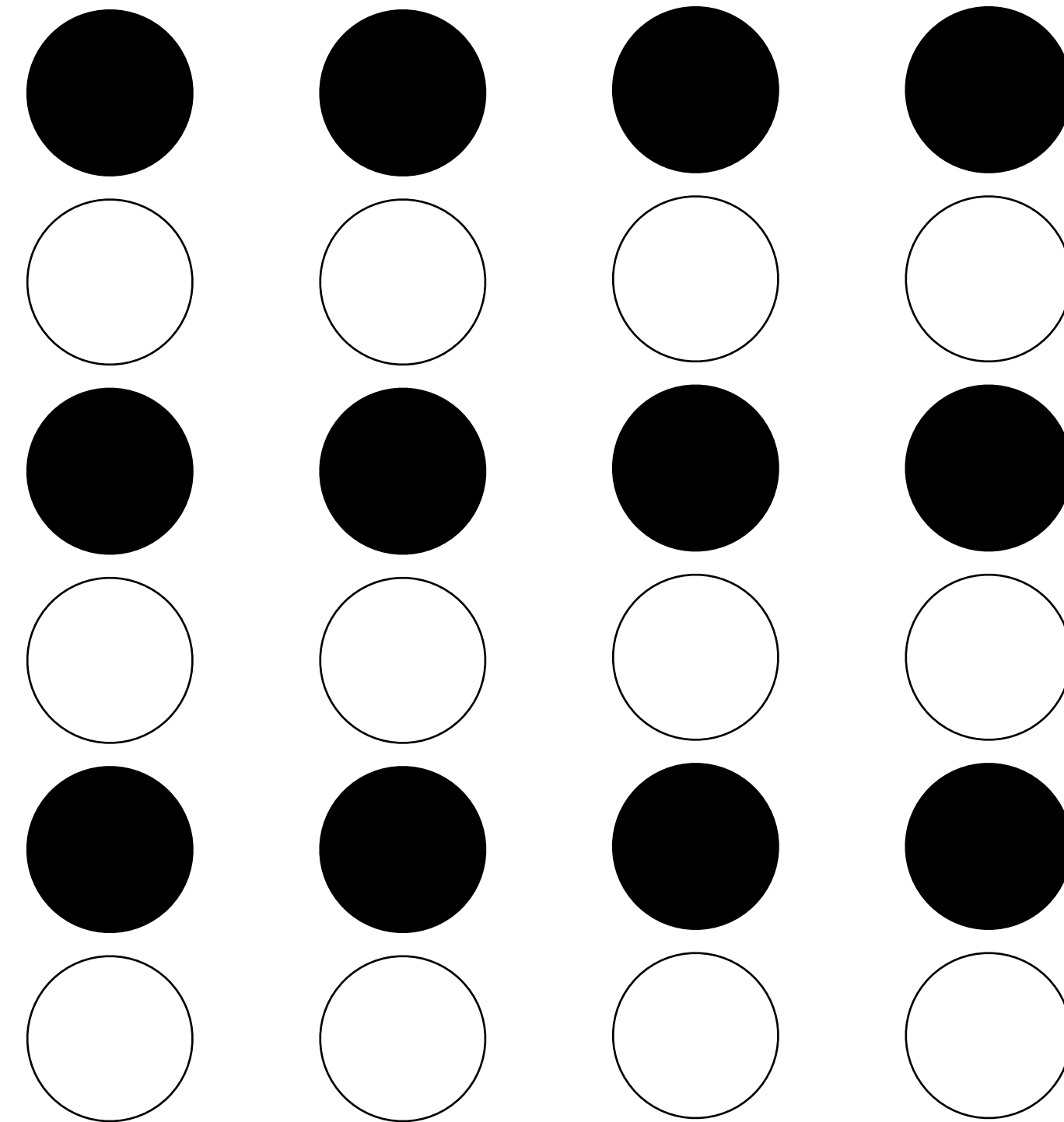
parsed as 4 columns based on close vertical  
spacing  
then parsed as two sets of two columns  
based on spacing



# Gestalt Principle - Similarity

- Elements associated more strongly when share common visual attributes than when they differ

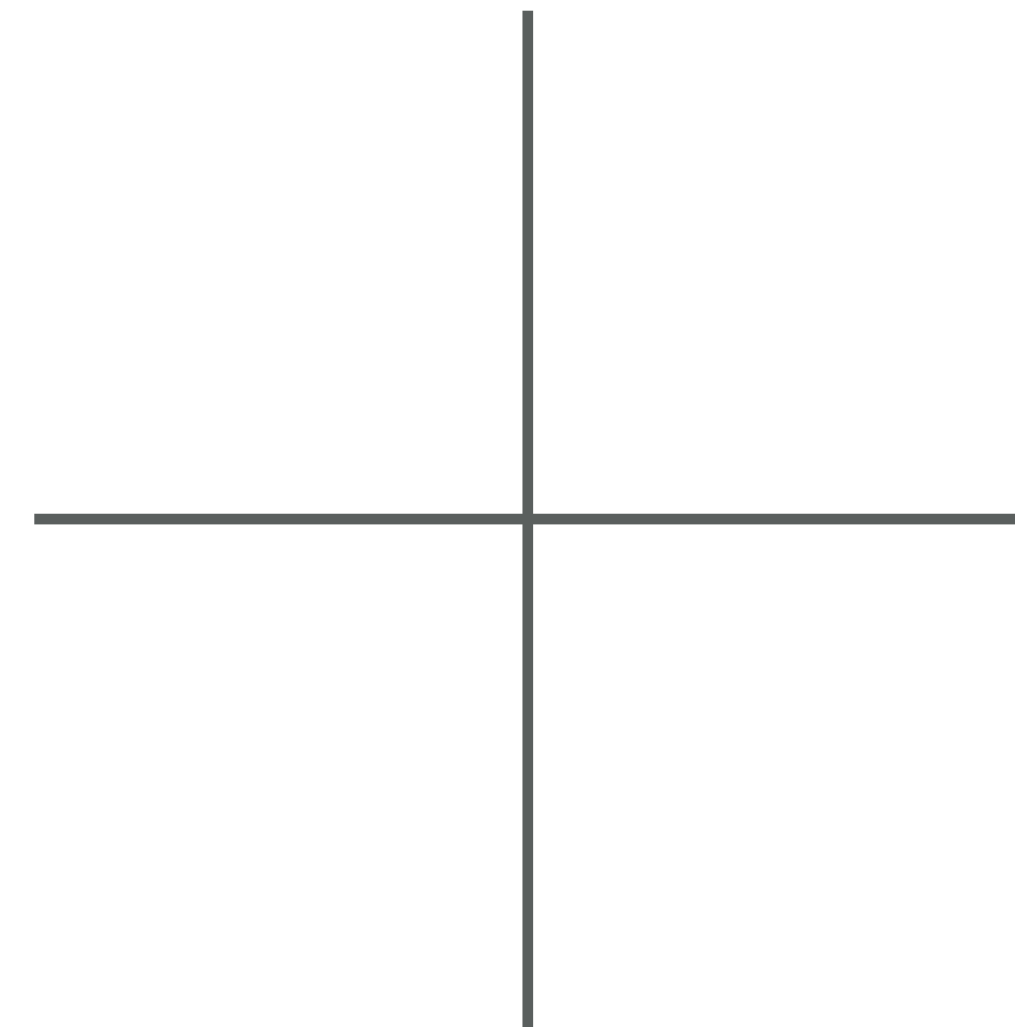
parsed as rows based on fill similarity,  
despite closer column spacing



# Gestalt Principle - Continuity

- Preference for *simplest* physical explanation of complex figure

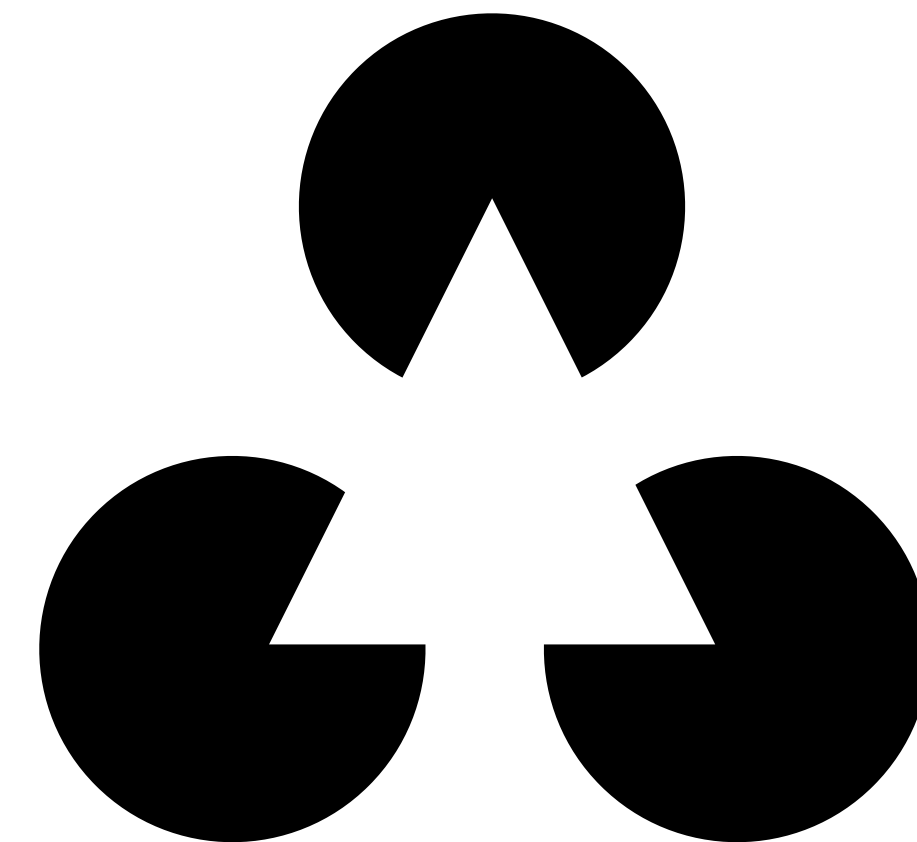
parsed as two lines, rather than 4 separate lines or 4 opposing angles



# Gestalt Principle - Closure

- Preference to interpret figures as complete, even when missing information

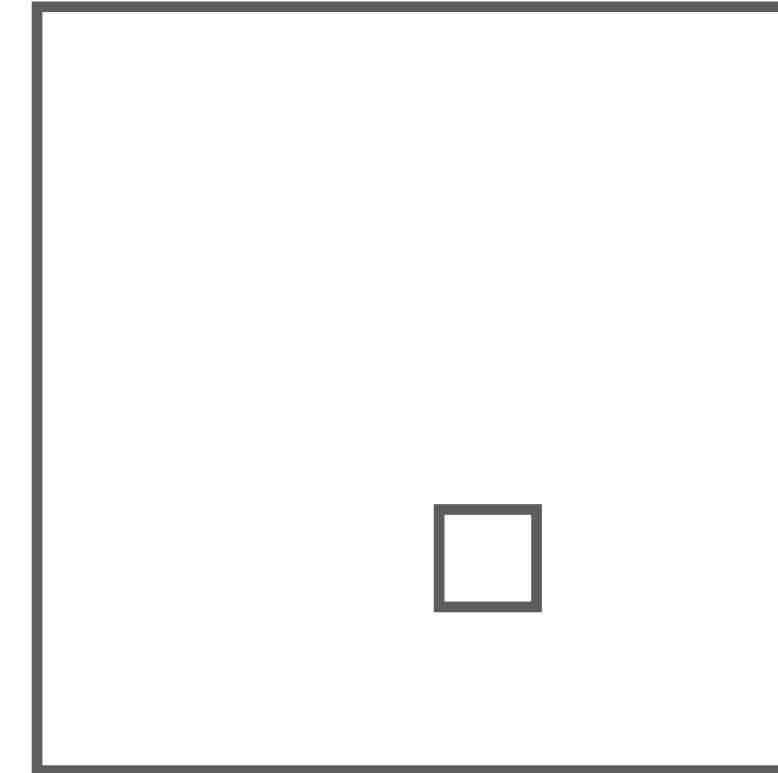
Parsed as triangle superimposed on 3 complete circles, even though none of these is actually present



# Gestalt Principle - Area

- Preference to interpret smaller overlapping elements as figure, larger as ground

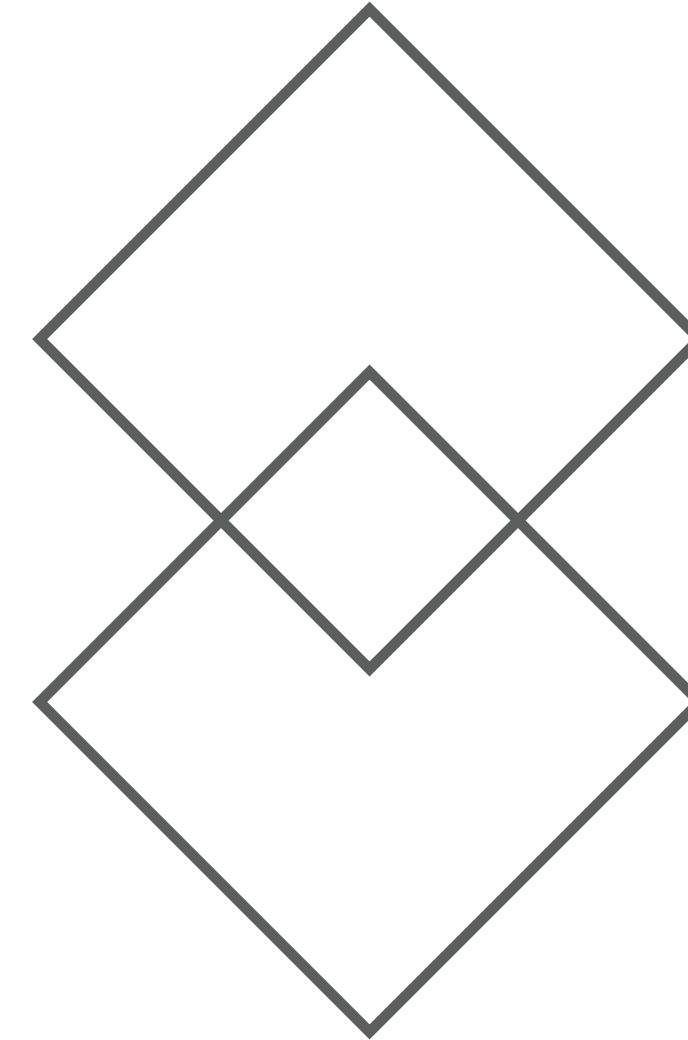
Small rectangle parsed as small rectangle  
on top of larger, rather than hole



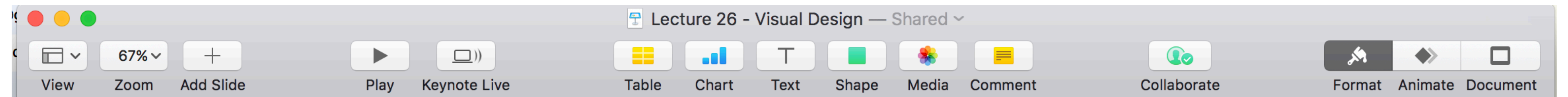
# Gestalt Principle - Symmetry

- Preference to interpret ambiguous form as multiple symmetric elements

Parsed as two overlapping objects rather than  
3 separate shapes



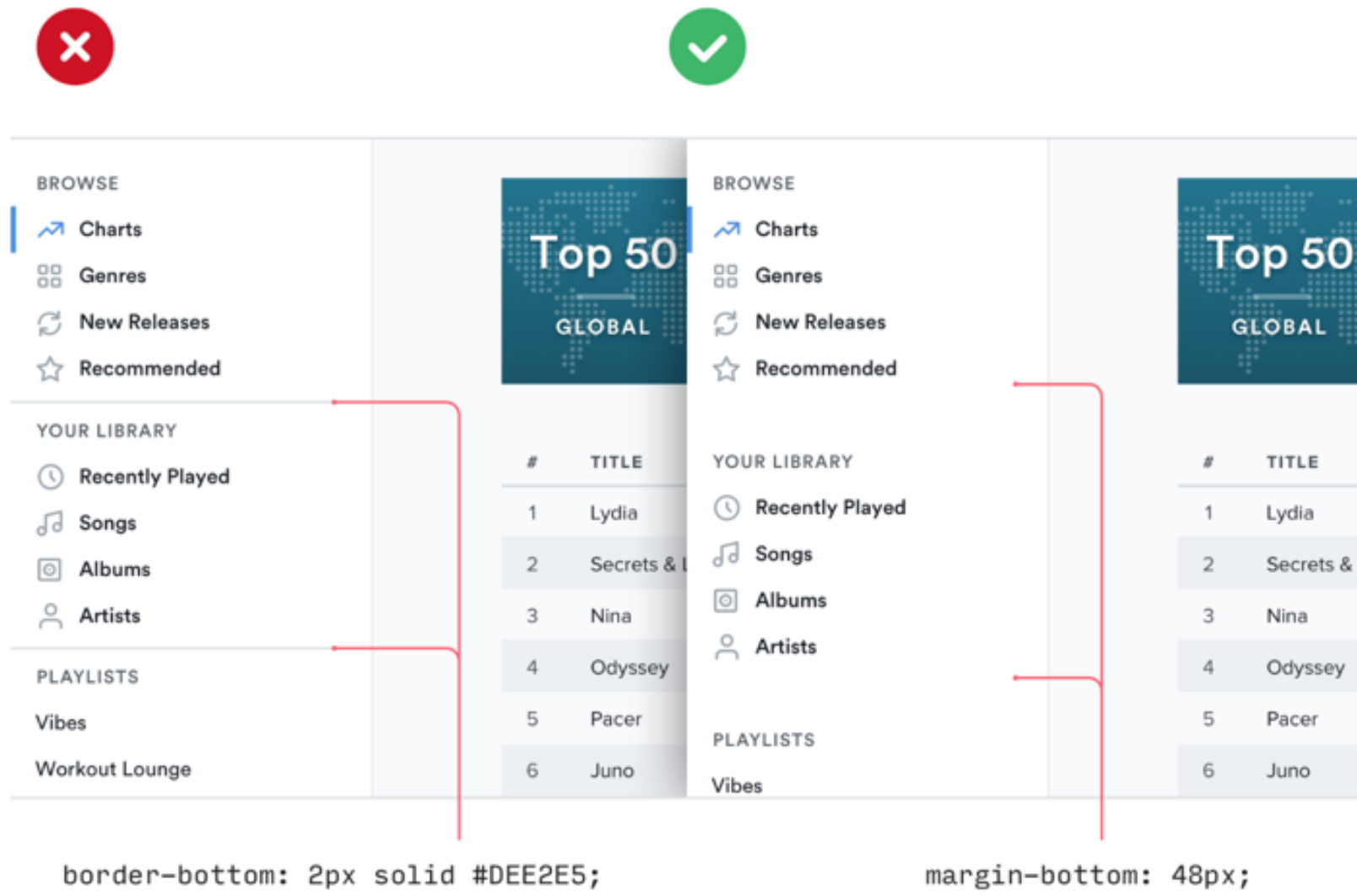
# Grouping



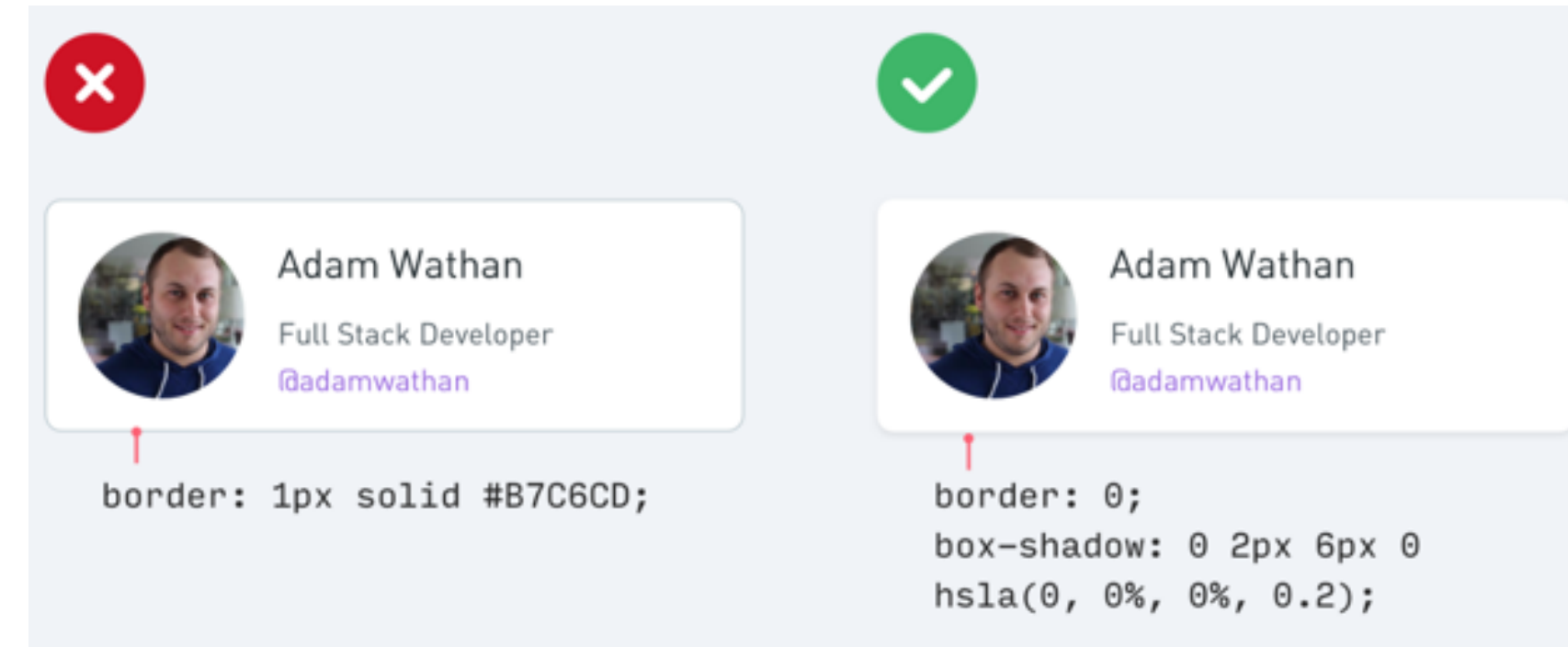
- Binding UI elements tightly together while distinguishing them from surrounding controls
- “Showing” not “telling”
- Can be achieved through
  - Bounding boxes (not recommended)
  - Negative space & contrasts
  - Arrangement & alignment



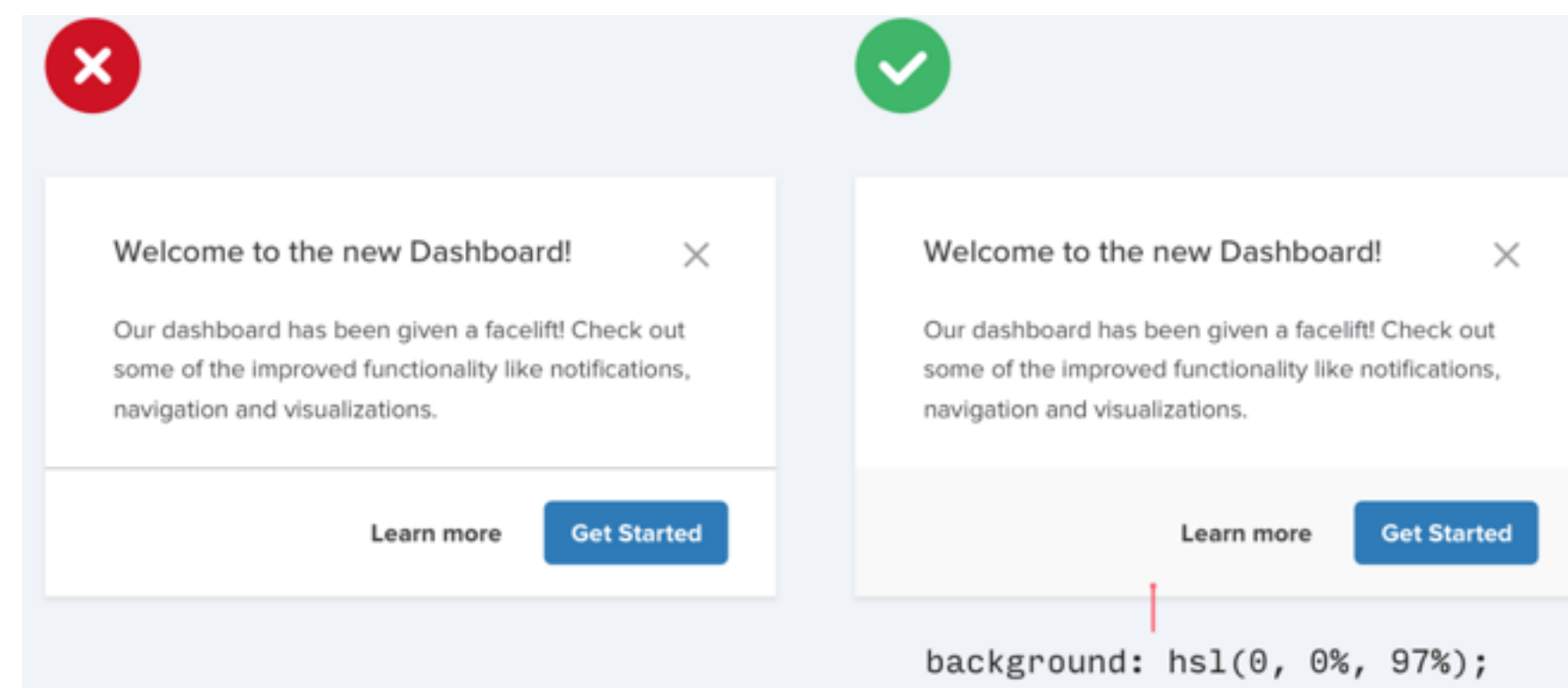
# Use Fewer Borders



negative space



box shadows



different backgrounds

# Hierarchy

Order groups based on perceptual prominence corresponding to intended reading sequence

Can help solve “skimming” problems

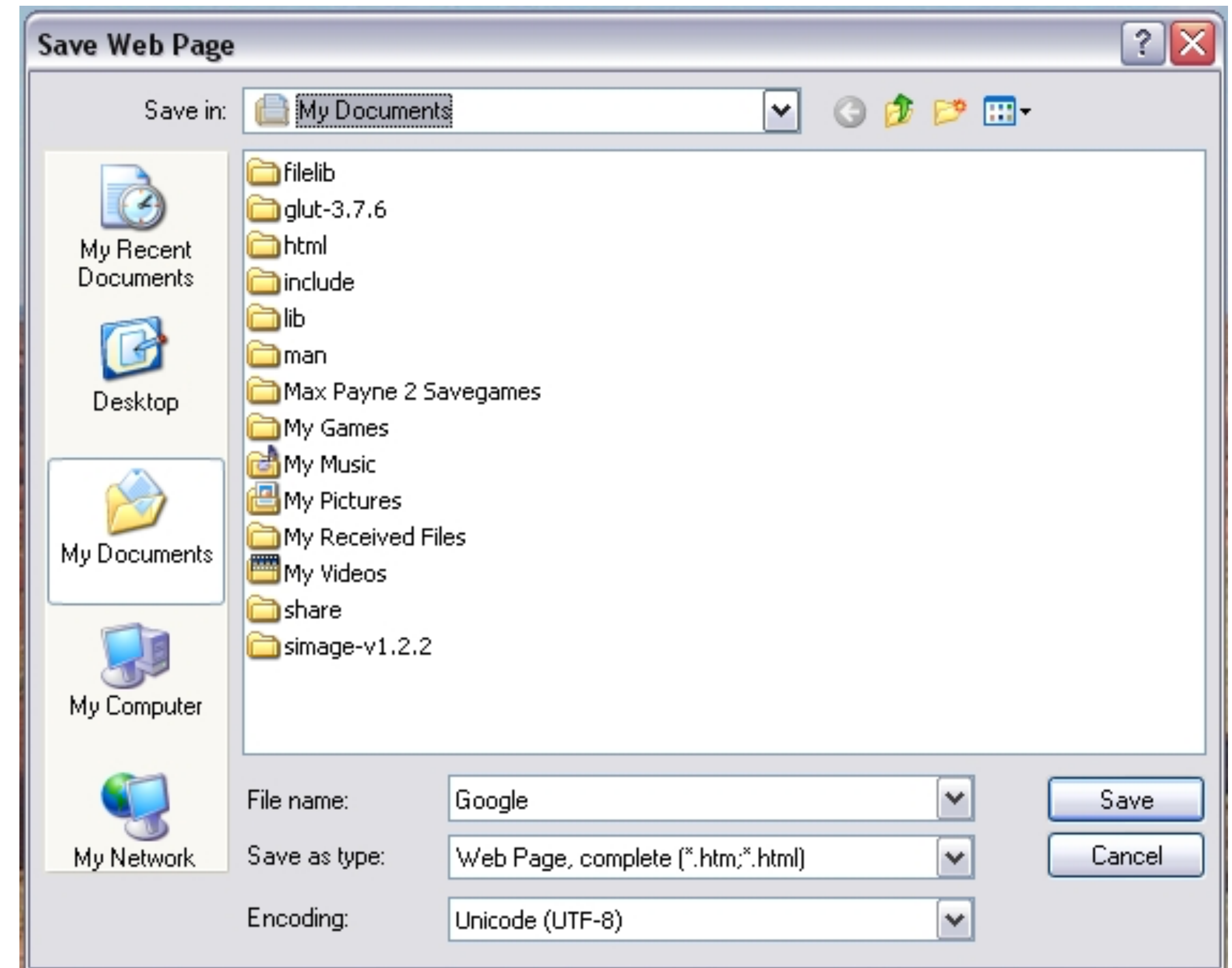
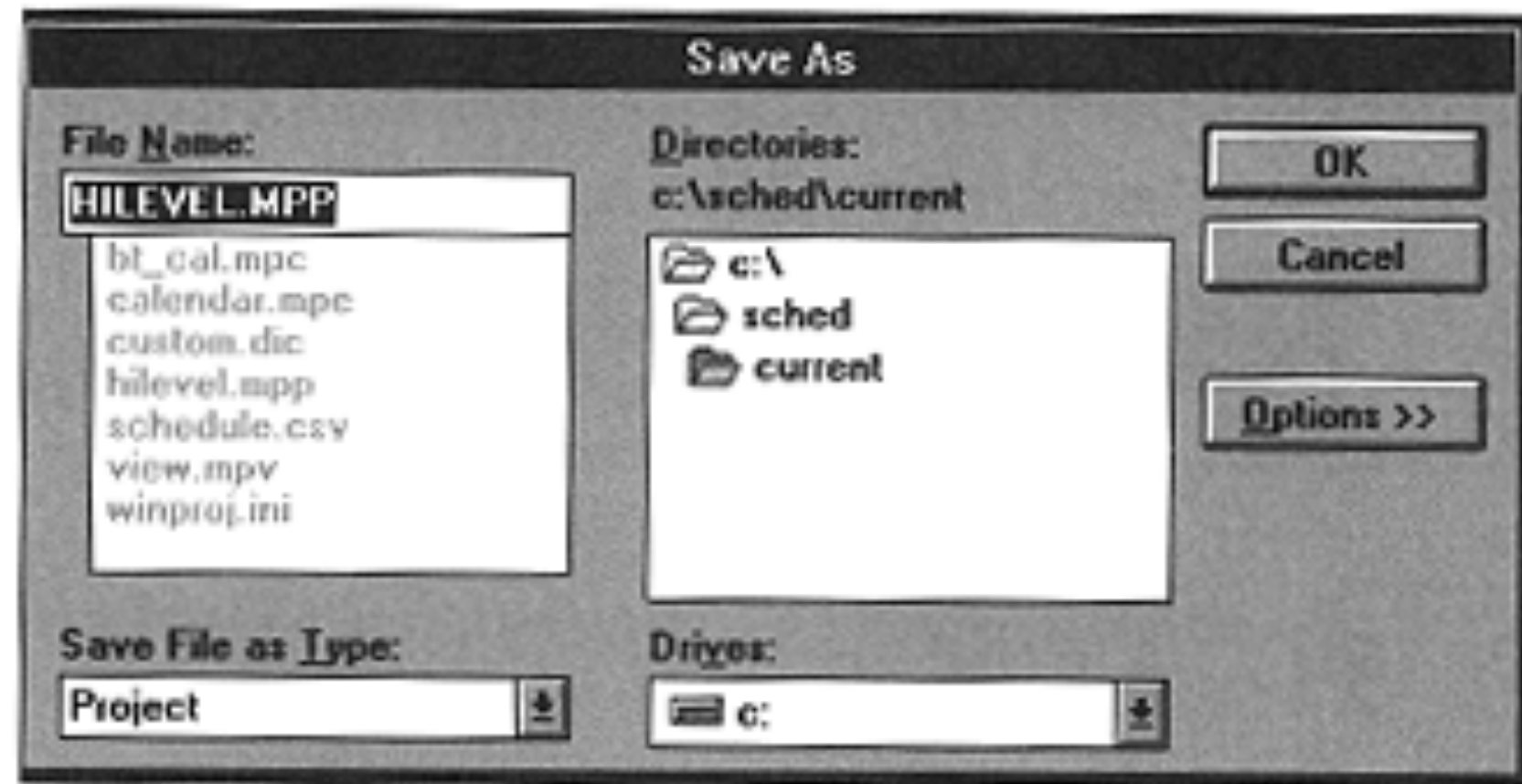
Structure can help people focus attention on key parts

Key points might **get lost though.**

**But bolding helps! Plus this obnoxious red arrow and text in a totally different font!**



# Hierarchy in UIs



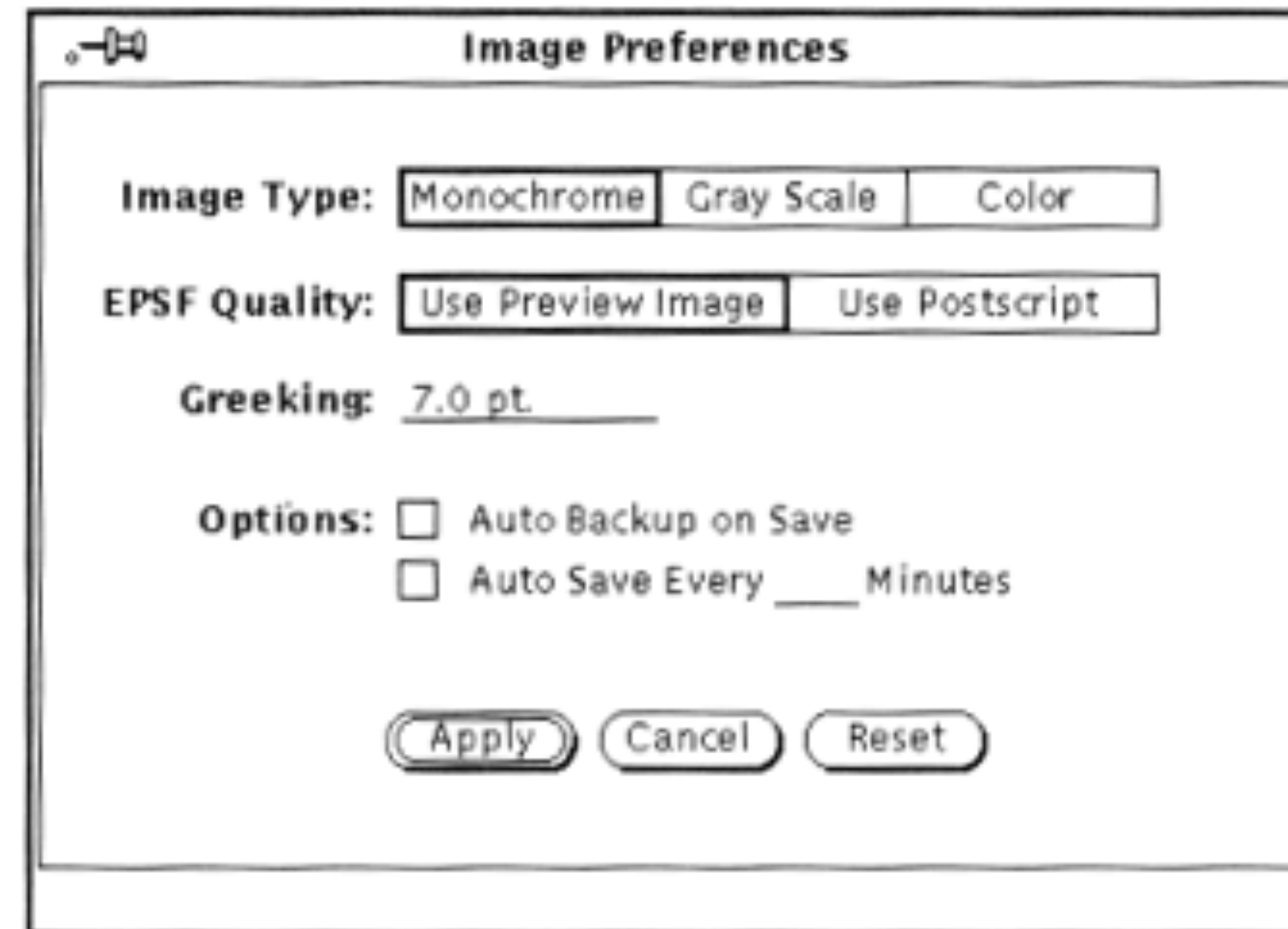
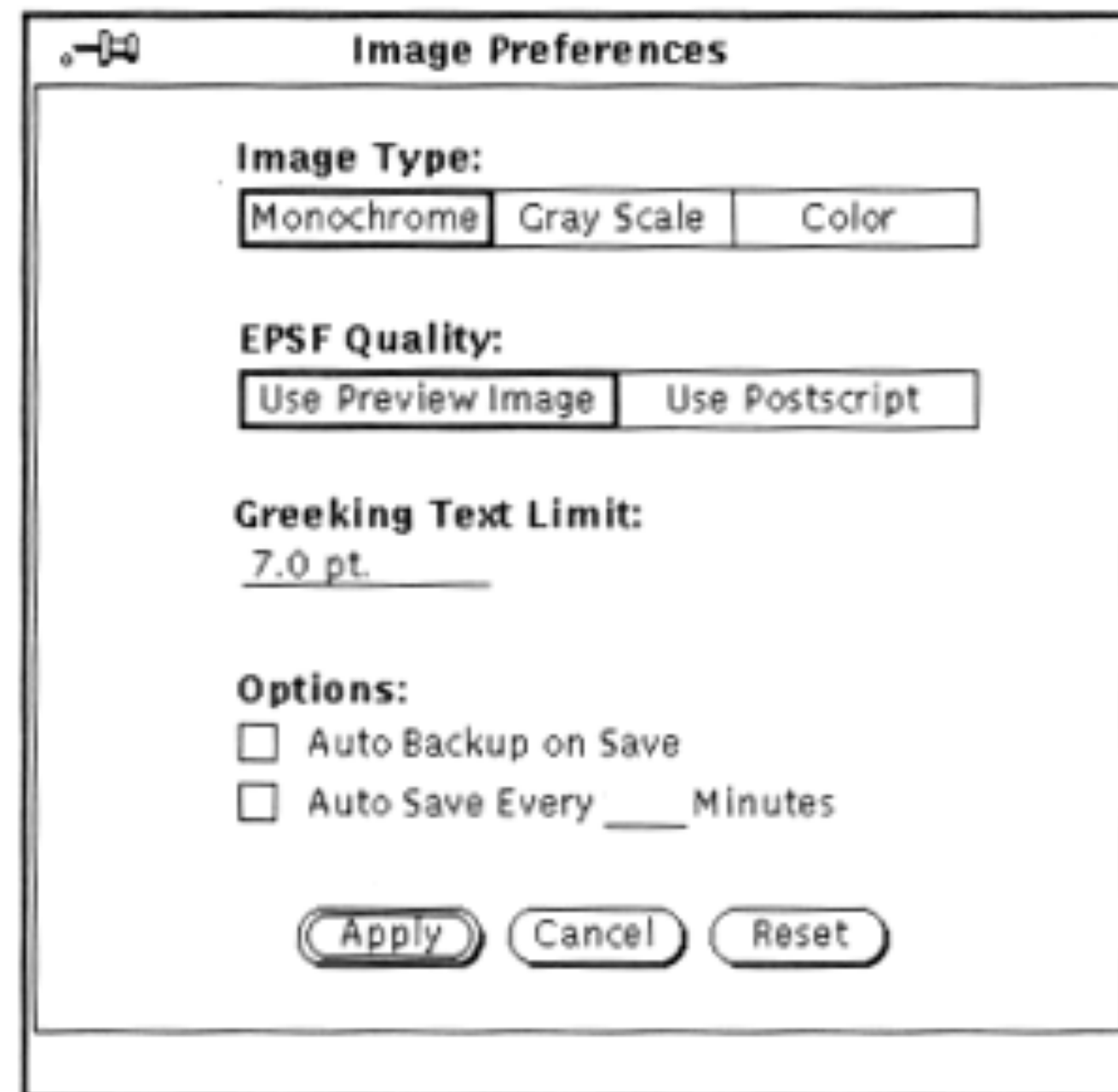


# Use Negative Space

- Directs attention to critical regions of display

1. Review design, prioritizing groups

2. Add extra space to ensure spatial separation & emphasis, particularly for important elements



# Creating Hierarchy: Color and Weight Instead of Size

The image shows two versions of a travel card for an "Amsterdam Walking Tour".

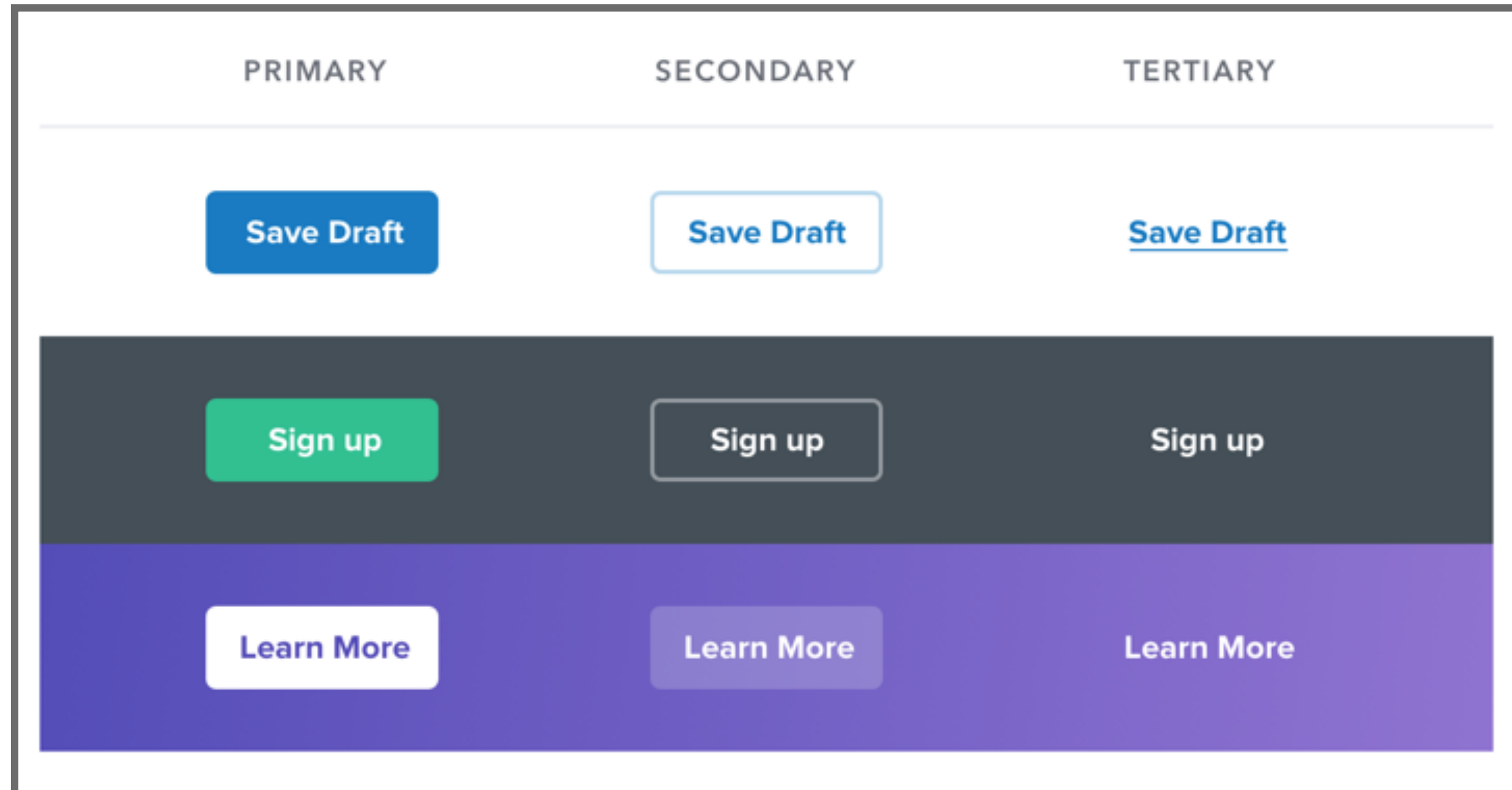
**Left Version (Incorrect):** Marked with a red 'X'. The title "Amsterdam Walking Tour" is in a standard weight. The price "\$17 per person\*" is in a larger font size than the description. The "Book now" button is a solid blue rectangle.

**Right Version (Correct):** Marked with a green checkmark. The title "Amsterdam Walking Tour" is in a bold font. The price "\$17 per person\*" is in a lighter weight and smaller font size than the description. The "Book now" button is a solid blue rectangle. Red lines and text annotations highlight these changes:

- "Bolder not bigger" points to the bolded title.
- "Lighter not smaller" points to the lighter price text.

Both versions include a night street scene image, a 5-star rating with "28 reviews", and a disclaimer: "\*Prices may vary depending on selected date.".

# Signal Importance of Action



<https://medium.com/refactoring-ui/7-practical-tips-for-cheating-at-design-40c736799886>



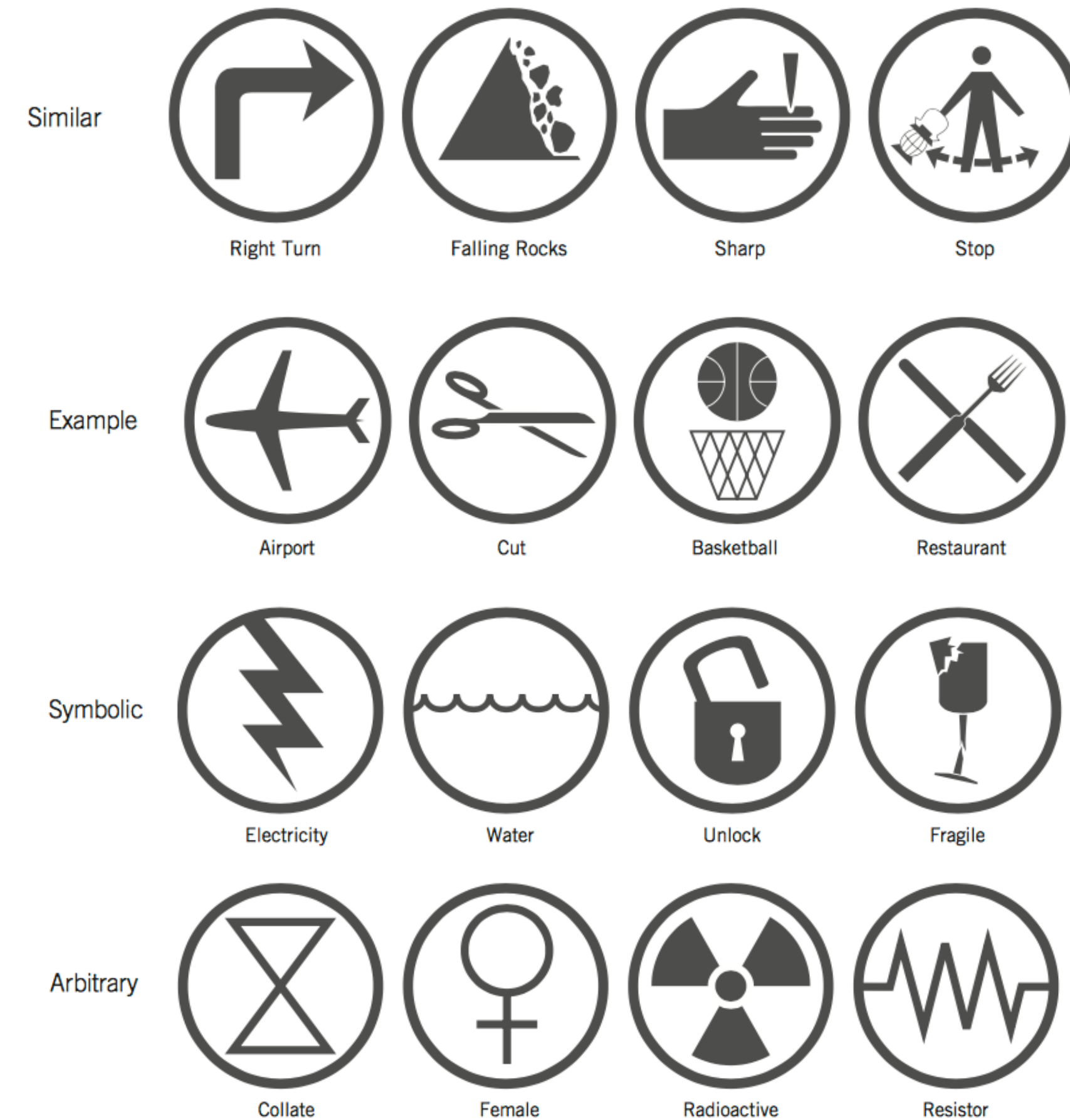
# Images & Icons

# Images & Icons

- Benefits
  - Identification - images are easy to recognize
  - Expression - breadth of artistic expression that can make design more engaging & enjoyable

# Types of Iconic Representation

- Similar - visually *analogous* to action, object, concept
- Example - things that exemplify or are commonly associated
- Symbolic - represent concept at higher level of *abstraction*
- Arbitrary - little or no relationship to concept, must be learned through *standard*





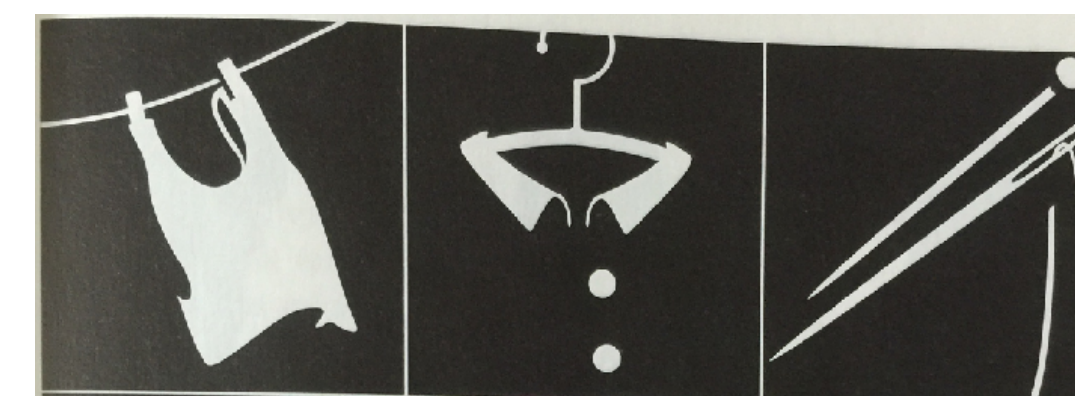
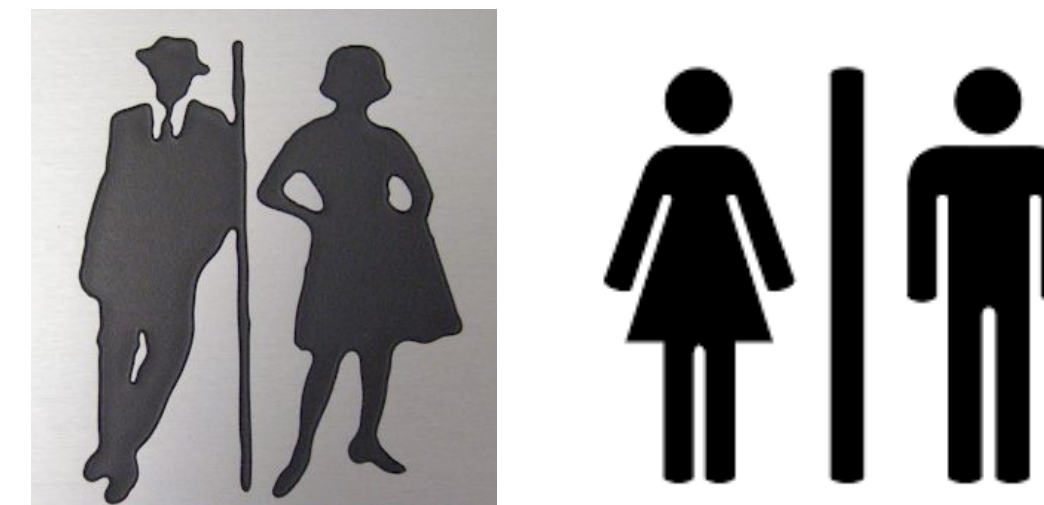
# Use of Abstraction

- Simplifying highly concrete, realistic representations makes them easier to interpret up to the point at which further abstraction obscures icon's semantics
- Makes icon more generic, more canonical, less complex



# Principles of Icon Design

- Immediacy - can be perceived effortlessly & involuntarily by being ***bold***, clear, balanced
- Generality - represents a ***class*** of items, rather than an individual element, by removing details that may vary
- Cohesiveness - set of icons that function ***together*** by sharing visual variables
- Characterization - call to mind one or more ***distinctive*** features



# Selecting the Right Type of Icon

- If concept is concrete, familiar, tangible, use similar or example icon
- If concept will be used repeatedly, consider using more symbolic or arbitrary icon based on convention
- If concept is abstract process or subtle, use textual label



# Activity: OS 10.2 Preferences Icons



Best 3, worst 3 and why? Then: How to make worst 3 better?

# Activity: OS 10.15 Preferences Icons

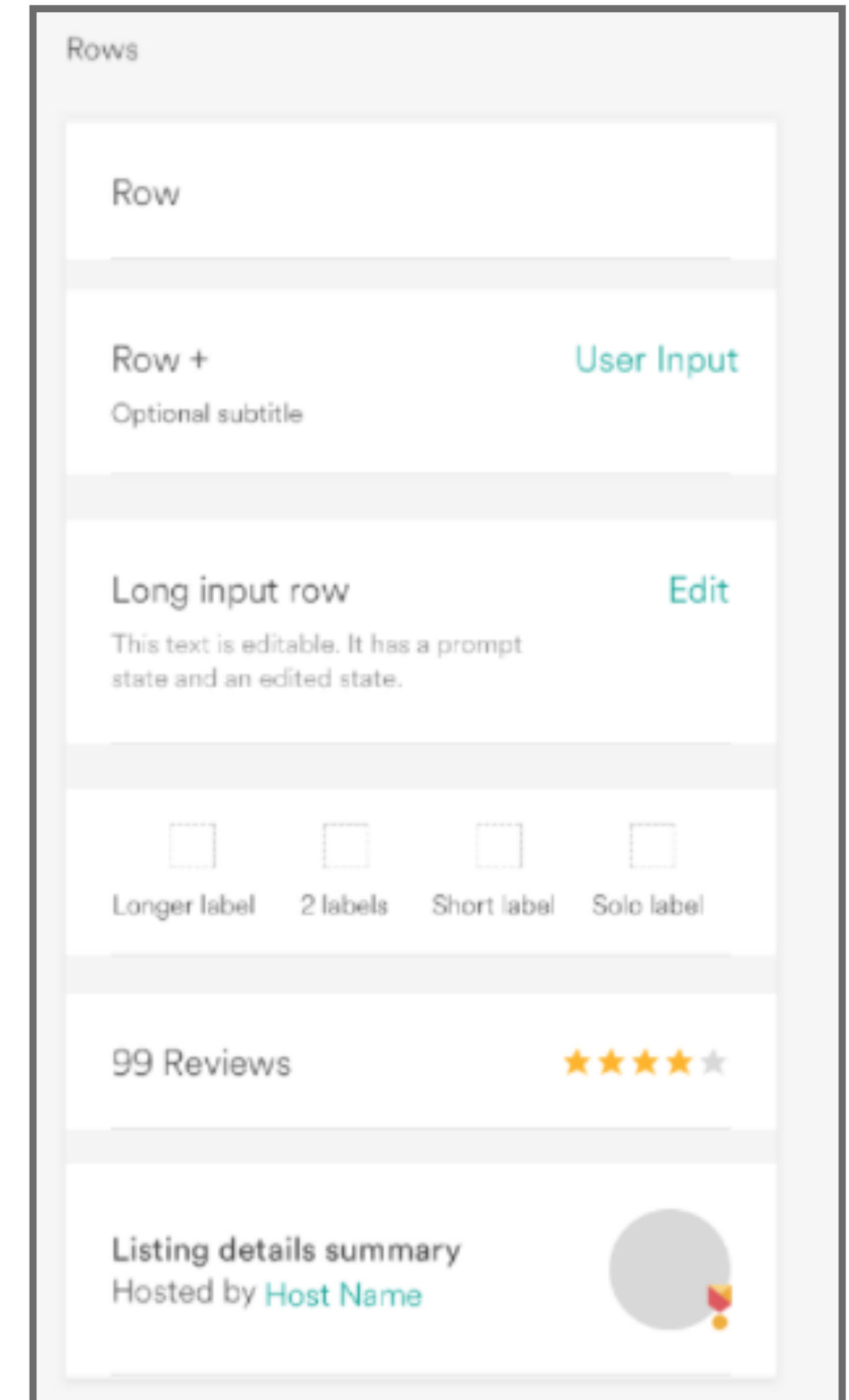


# Design Languages



# Design Languages

- Many, *many* choices about visual variables and syntax of composition
  - How do you ensure choices are made consistently across web app?
- Solution: design language
  - Describes how to express ideas and concepts in the interface
  - May be communicated through Human Interface Guideline documentation
  - (Example of consistency and standards)



# Example: Elements, Google 2004

[Images](#) [Groups](#) [News](#) [Froogle](#)   [All sizes - Large - Medium - Small](#) **view**

1 2 3 4 5 6 7 8 9 10 [Sorted by relevance](#) [Sort by date](#)

[World »](#)  **Groups**   **where**

[>Top Stories](#)  
[World](#)

[New York Times - all 633 related »](#) [www.cmu.edu/](#) [Oct 1, 1996 by Andy Harper](#) **source**

**cmu** [\[definition\]](#) **(0.48 seconds)** **1 - 37 of 37** **details**

4,285,199,774 web pages found **16 minutes ago**

Reuters ©2004 Google Sponsored Links **fluff**  
(Note: Setting preferences will)

[Graduating? Cor](#) [more »](#) [at CMU](#) [Inbox \(2\)](#) [Compose Mail](#)

**action**

[Invite 7 frie](#) [New Featu](#) **New!** Never lose at **act now**

# Example: Syntax, Google 2004

task

Find results

with all of the words  
with the exact phra  
with at least one of  
without the words

To:

Subject:

[Add Cc](#) | [Add Bcc](#)

[Attach a file](#)

[Tips](#) | [Dissati](#)

Results Window

Loading...

placeholder

toolbar

latoza@

**Gmail** by Google BETA    [Show search options](#) [Create a filter](#)

**Google** Web Images Groups News Froogle [more »](#)

computer  [Advanced](#) [Prefe](#)

**Google** News BETA

Search and browse 4,500 news sources updated continuously.

list

- (unknown sender) (no subject) - Received: from ima
- (unknown sender) (no subject) - Received: from ima
- (unknown sender) (no subject) - Received: from ima
- (unknown sender) (no subject) - Received: from ima
- (unknown sender) (no subject) - Received: from ima
- Thomas LaToza > FW: Bb F04-17651: My apologies
- (unknown sender) (no subject) - Received: from ima

 bugs.gif 299 x 525 pixels - 75k <a href="#">www.cs.cmu.edu/daf/csluser/mwm/images/bugs.gif</a>	 CMU-AstronClub-1stMinutes... 607 x 610 pixels - 413k <a href="#">www.cs.cmu.edu/daf/cs.cmu.edu/user/famon/www/C...</a> <a href="#">[ More results from www.cs.cmu.edu ]</a>	 Uranus obstacle 970227 2.jpg 640 x 480 pixels - 52k <a href="#">www.ft.it.cmu.edu/~hpm/project.archive/image...</a>
 cmu charters.jpg 360 x 254 pixels - 47k <a href="#">www.andrew.cmu.edu/org/KPL/history.htm</a>	 cmu colony.jpg 250 x 191 pixels - 60k <a href="#">www.andrew.cmu.edu/org/KPL/testing.htm</a> <a href="#">[ More results from www.andrew.cmu.edu ]</a>	 cmu800r.gif 474 x 255 pixels - 54k <a href="#">machines.hyperreal.org/~images/cmu800r.gif</a>

[Carnegie Mellon University](#)  
Prospective Students Faculty Visitors Researchers General Visitors Corporate Visitors Alumni Current Students Faculty & Staff Site Index Contact Us google...  
[www.cmu.edu/~19k - Oct 18, 2004 - Cached - Similar pages](#)

[Central Michigan University](#)  
... For a more interactive version of the CMU home page, please enable JavaScript in your browser window and reload this page. Otherwise ...  
[www.cmich.edu/~90k - Oct 18, 2004 - Cached - Similar pages](#)

[Software Engineering Institute \(SEI\) Home Page](#)  
... services, courses, and events, contact Software Engineering Institute Carnegie Mellon University Pittsburgh, PA 15213-3800 412-260-5900 [http://www.sei.cmu.edu](#) ...  
[www.sei.cmu.edu/~20k - Cached - Similar pages](#)

[RhymeZone rhyming dictionary and thesaurus](#)  
RhymeZone ...  
[www.rhymezone.com/~10k - Oct 18, 2004 - Cached - Similar pages](#)

[SCHOOL OF COMPUTER SCIENCE/Carnegie Mellon University](#)  
... Fall Full SCS Calendar Submit an event! Seminar Series CMU Calendar Academic Calendar Home SCS Home webteam@cs.cmu.edu ARCHIVES.  
[www.cs.cmu.edu/~35k - Oct 18, 2004 - Cached - Similar pages](#)

[Welcome to Lycos!](#)  
Search: The Web Shopping News Pictures: People Search, Yellow Pages, Search Advertising, Advanced Search, Fun Search, Cast Instant Love ...  
[lycos.cs.cmu.edu/~19k - Oct 18, 2004 - Cached - Similar pages](#)

[The Robotics Institute](#)  
... RI Seminar NaviLab Core Technologies Jay Gowdy & Rob MacLachlan, SAIC & CMU, Oct 15 2004, 3:30 PM, NSH 1305 ... This page maintained by robotwebmaster@ri.cmu.edu.  
[www.ri.cmu.edu/~45k - Oct 18, 2004 - Cached - Similar pages](#)

[Collegiate Readership Program initiated at CMU](#)  
The Tartan, PA - Oct 18, 2004  
by Louisa Kinosh, by Louisa Kinosh. Carnegie Mellon is currently sponsoring a free one-month trial of the USA Today Collegiate Readership ...  
[john.derry.com/collegiate/ricc-to-appear-on-campus/The-Tartan-From-the-desk-Student-government-always-seeks-to-respond-to-you/The-Tartan-all-2-related-2](#)

[Huskie talkback Wolfe starts to second MAC Player of the Week title](#)  
Derek Daily Chronicle, 11 hours ago  
... Central Michigan. "The offensive line and our tight ends did a great job (blocking)," Wolfe said after the CMU game. "They make my life easier!" ...  
[Wolfe runs away with MAC DOW award Northern Star Online](#)  
[An all-access pass to the NFL locker room Northern Star Online](#)  
[Northern Illinois sports 1, CMU 42-10 Northern Star Online](#)  
[Northern Star Online - Northern Star Online - all 31 related-2](#)

[CMU students prepare for Solar Decathlon](#)  
The Tartan, PA - Oct 18, 2004  
by Ane Wootton, by Ane Wootton. Carnegie Mellon students are leading the Pittsburgh Synergy team designing and building a solar house ...  
[Fudge turns on the heat at the Chili Cook-off! The Carnegie Pulse](#)  
[all 2 related-2](#)

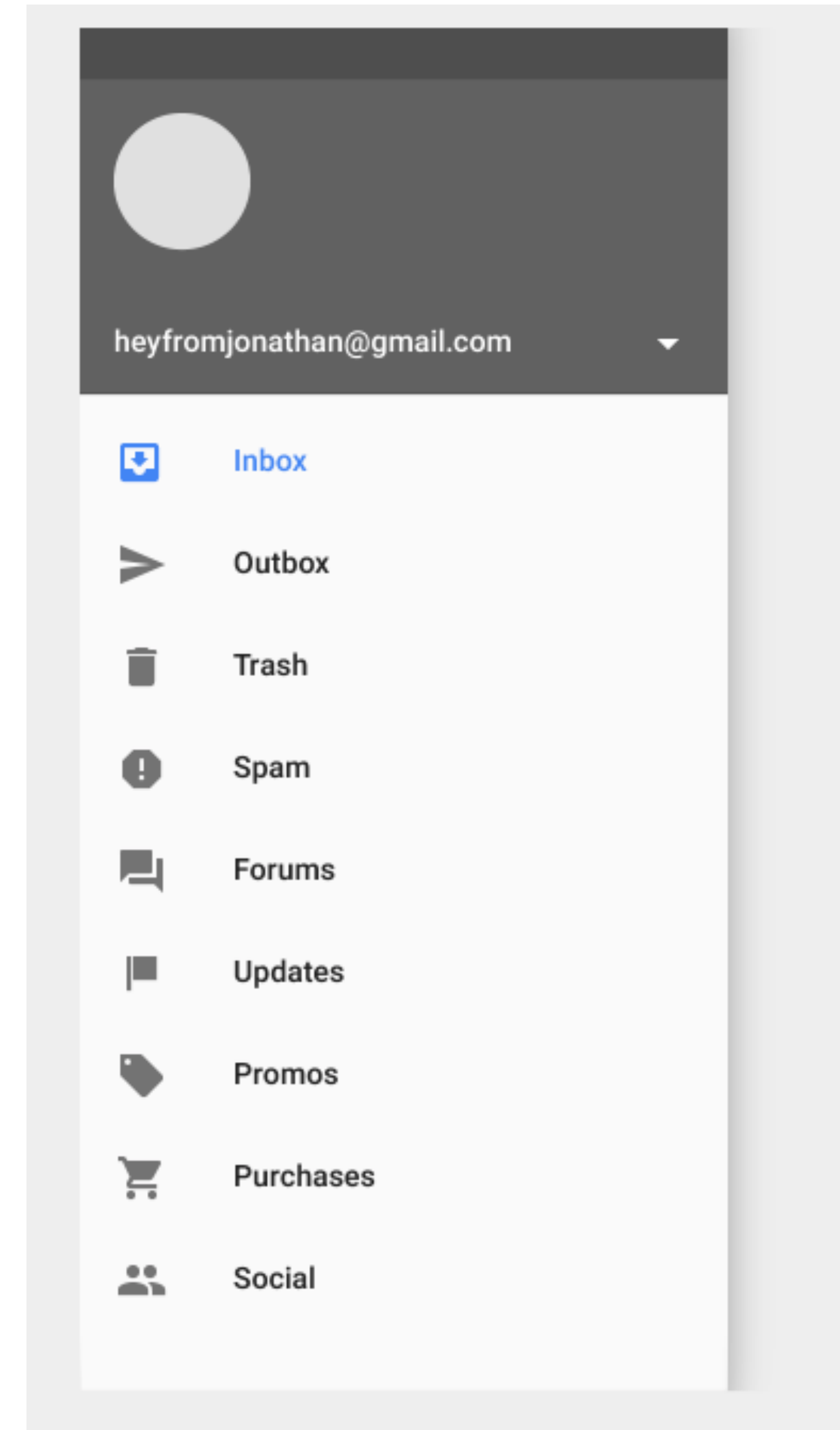
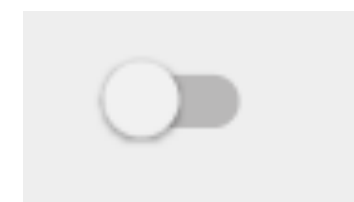
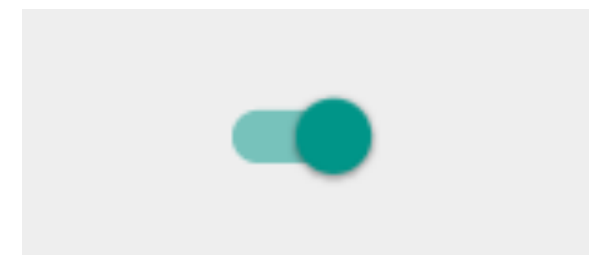
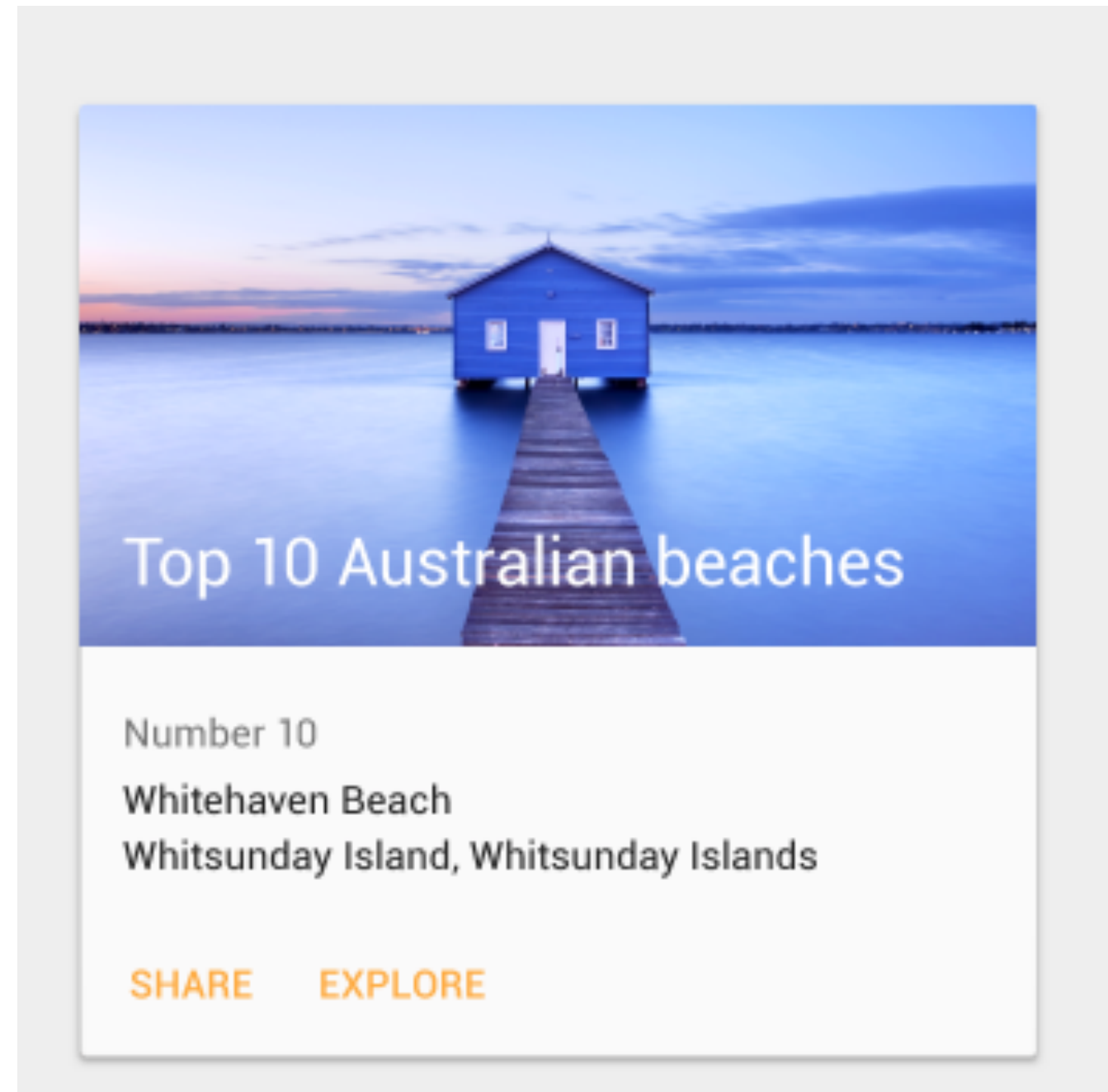
[Rocker to Rally for Kerry at CMU](#)  
KDKA, PA - Oct 18, 2004  
Pittsburgh (KDKA) For the second time in six months, singer Jon Bon Jovi will perform in Pittsburgh for a political cause. The New ...

[Video From The CMU Robotics Institute Showcases](#)  
Saskatoon - Oct 18, 2004  
mposst writes "This last week the CMU Robotics Institute showed off some of the stuff they were doing. They were showing the new stuff they were working on ..."

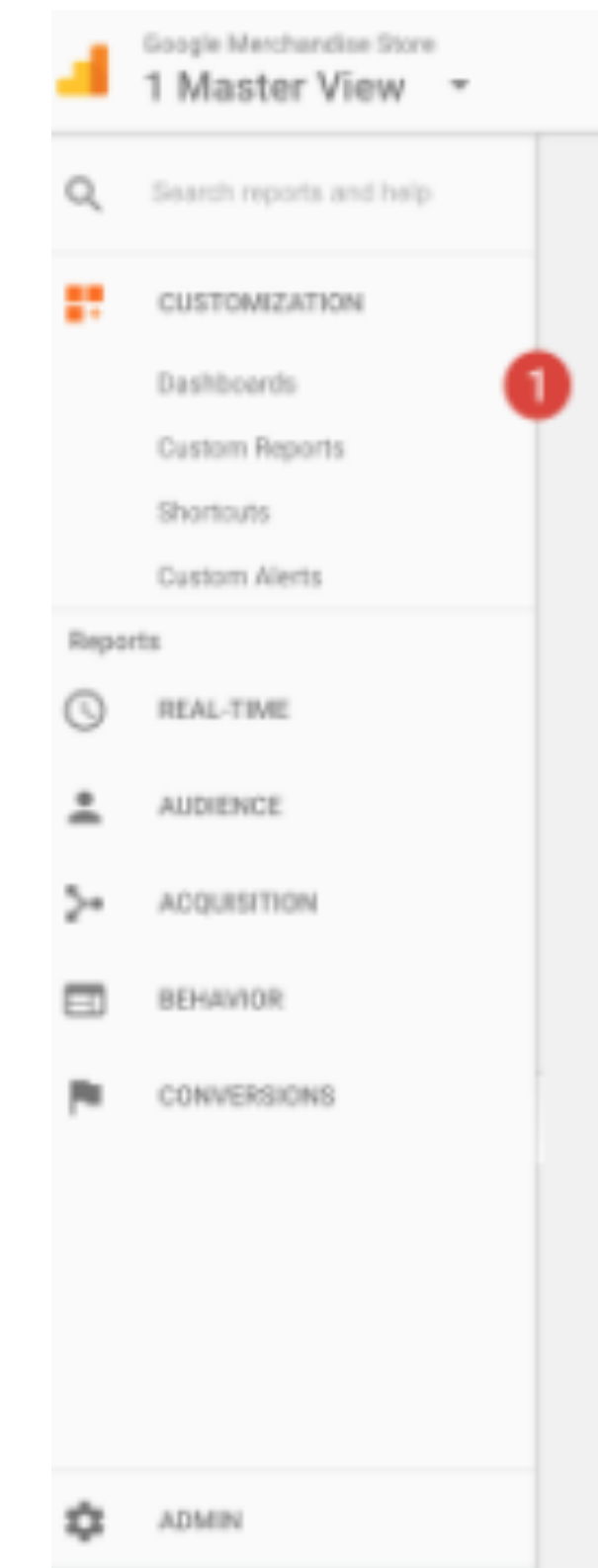
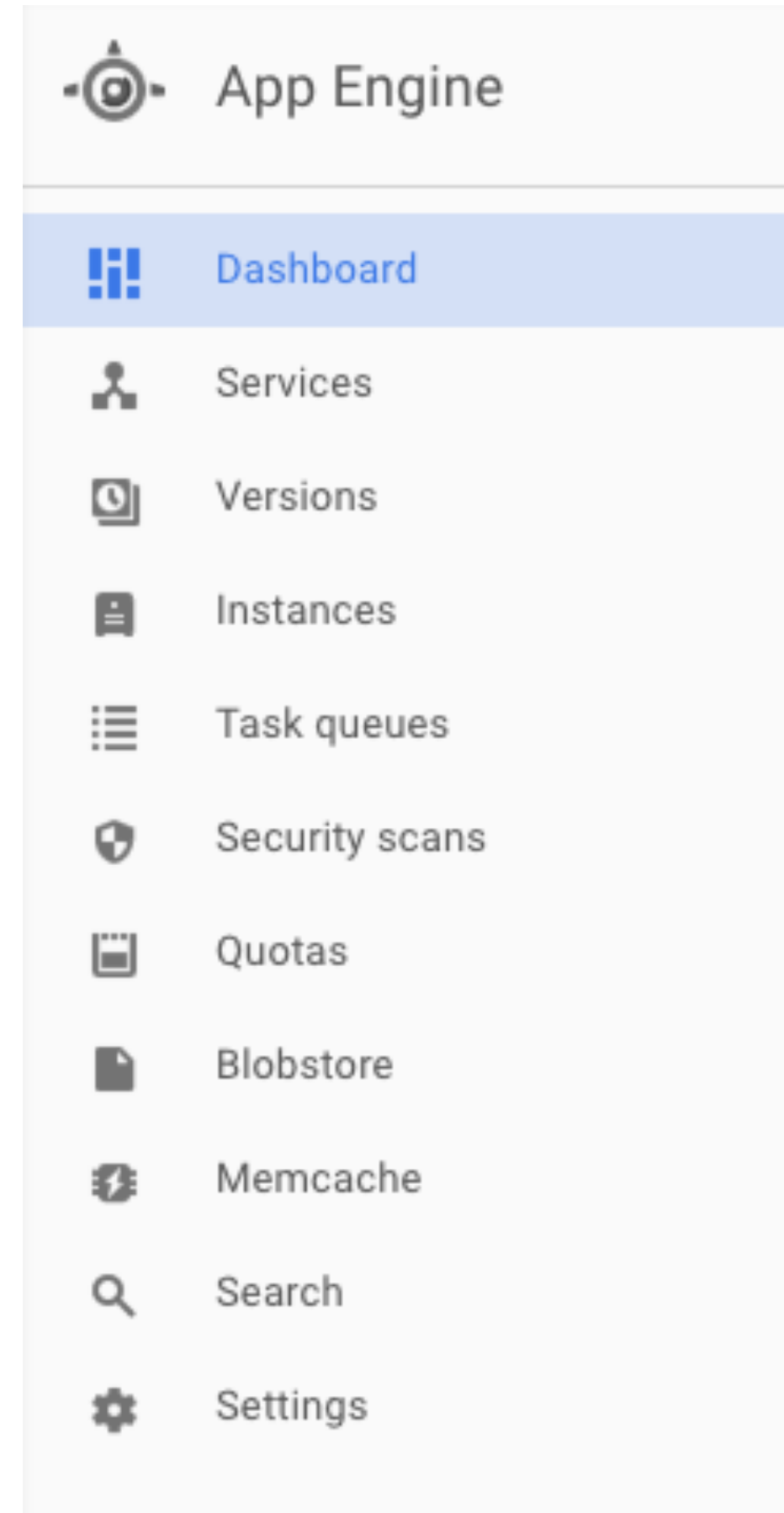
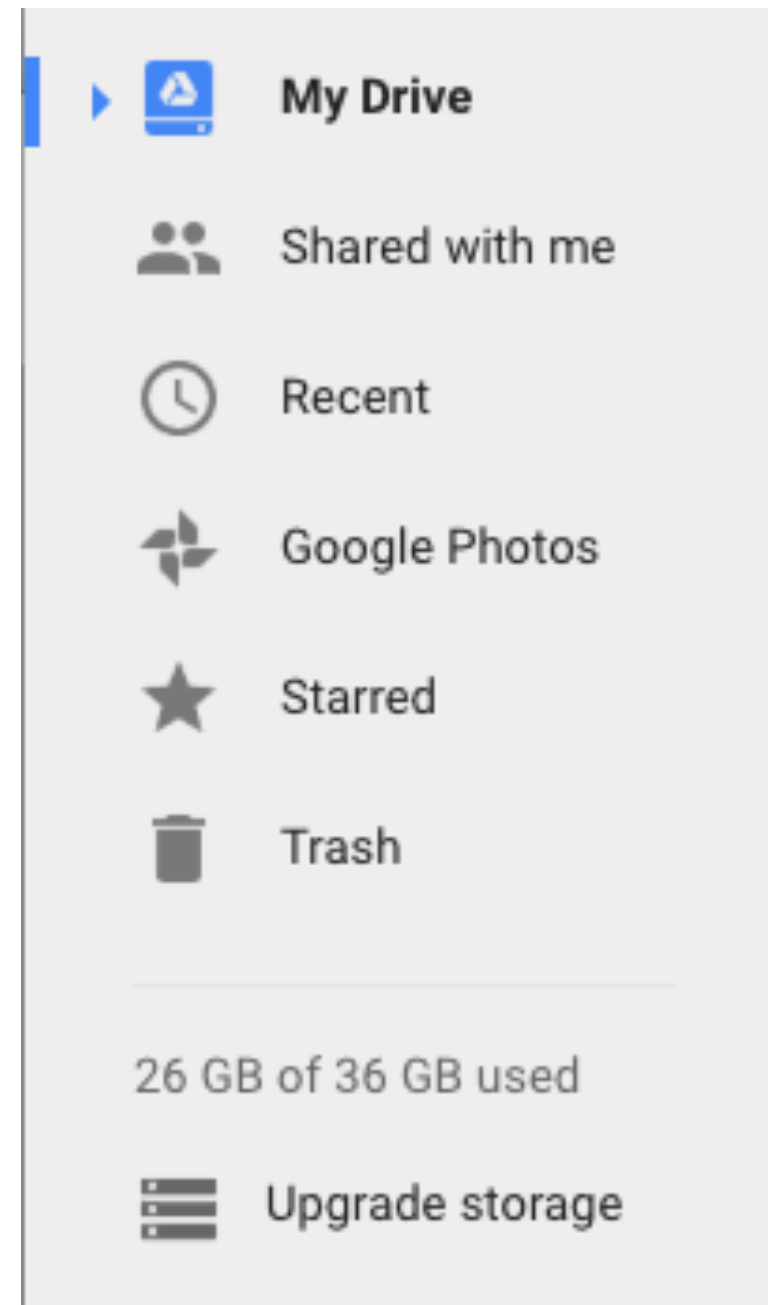
[Northern Illinois Rolls by CMU 42-10](#)  
Saskatoon - Oct 18, 2004  
... The win dropped CMU's record to 2-4 for the season and 1-2 in MAC action. NU is now 4-0 in the league and



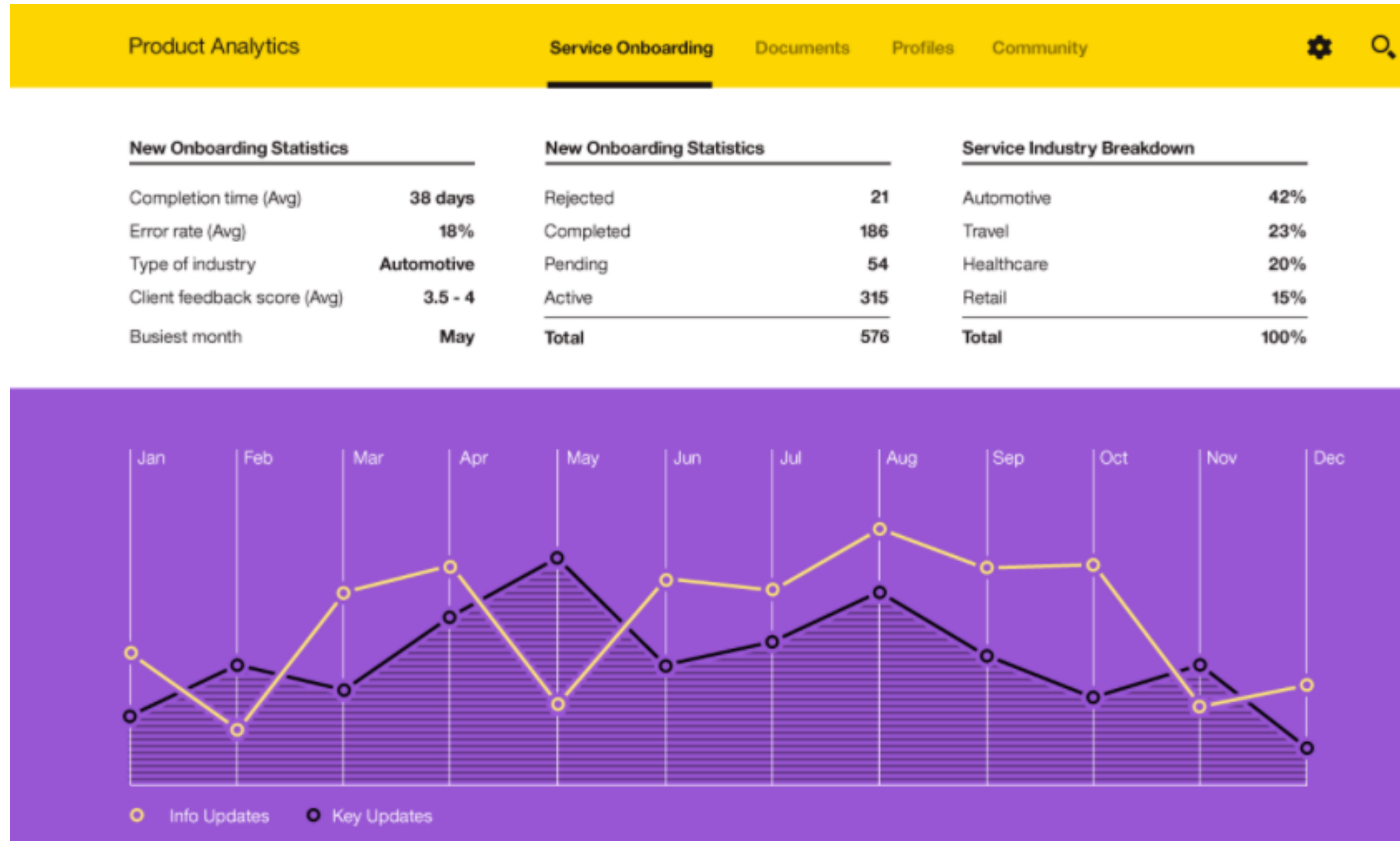
# Examples: Google 2016



# Examples: Google 2016



# Examples: IBM





# Examples: IBM



# Examples: IBM

Configure

People

Save

Chat

## Application data

Title	Title	Value	Date	Value
Imperial	true	9 456 234	21. Feb 2014	9 456 234
Hard	false	987 345	21. Feb 2014	987 345
Cider	false	43 567	21. Feb 2014	43 567
Anaerobic	true	324 543	21. Feb 2014	324 543
Cold filter	false	432 456	20. Feb 2014	432 456
Barrel hand	true	32 432	20. Feb 2014	32 432
Pump wort	true	4 567	20. Feb 2014	4 567
Dry hopping	false	34 567	20. Feb 2014	34 567
Carbonation	true	434 567	20. Feb 2014	434 567
Mash tun	false	9 456 234	20. Feb 2014	9 456 234
Bittering hops	true	987 345	20. Feb 2014	987 345
Heat exchanger	false	43 567	19. Feb 2014	43 567
Lauter aerobic	false	324 543	19. Feb 2014	324 543
Abbey seidel	true	432 456	19. Feb 2014	432 456
Brewhouse	false	32 432	19. Feb 2014	32 432
Brewpub adjunct	true	4 567	19. Feb 2014	4 567
Dextrin seidel	true	34 567	19. Feb 2014	34 567
Aau beer	false	434 567	19. Feb 2014	434 567
Krug abv	true	434	19. Feb 2014	434

Configure

User

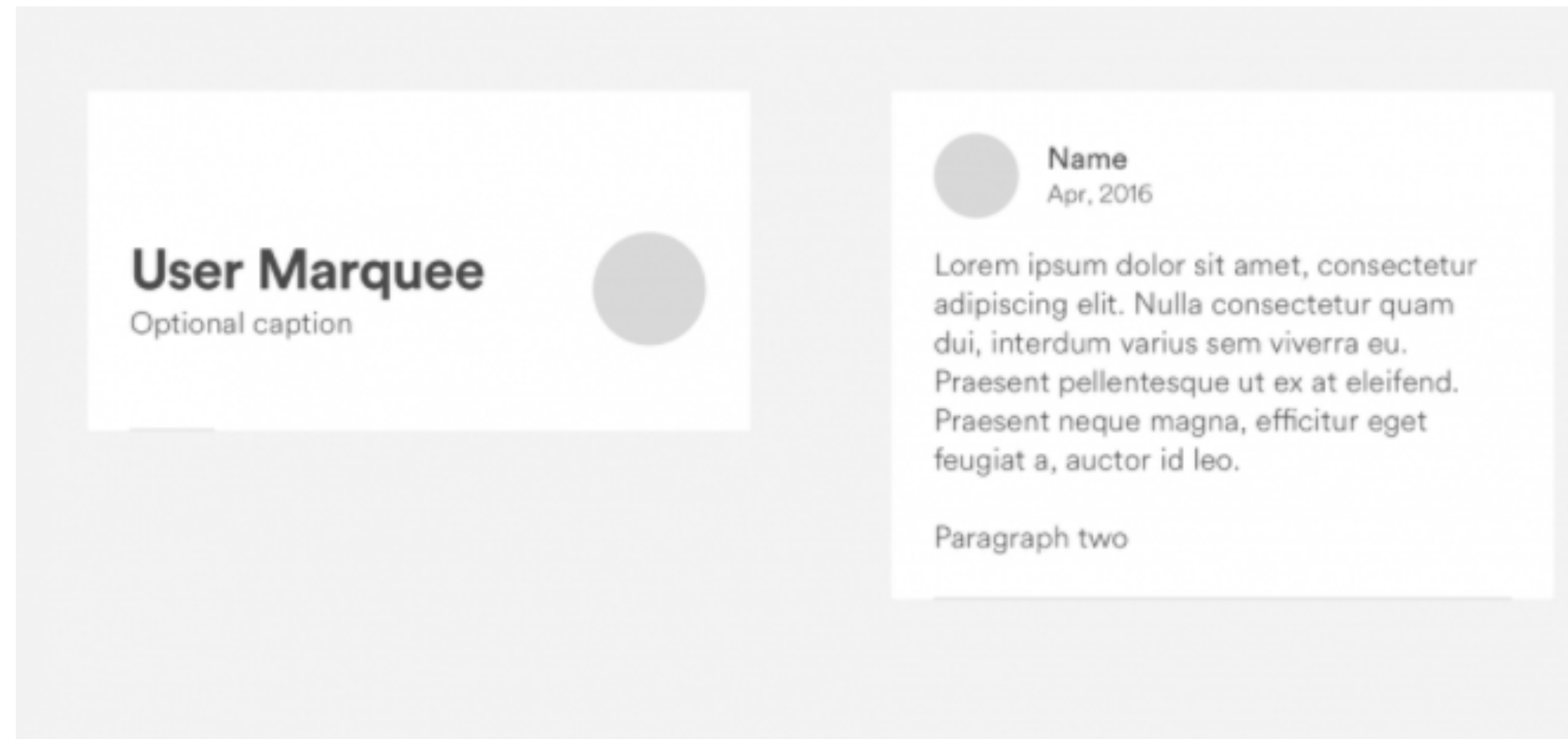
Save

Catalog

Chat

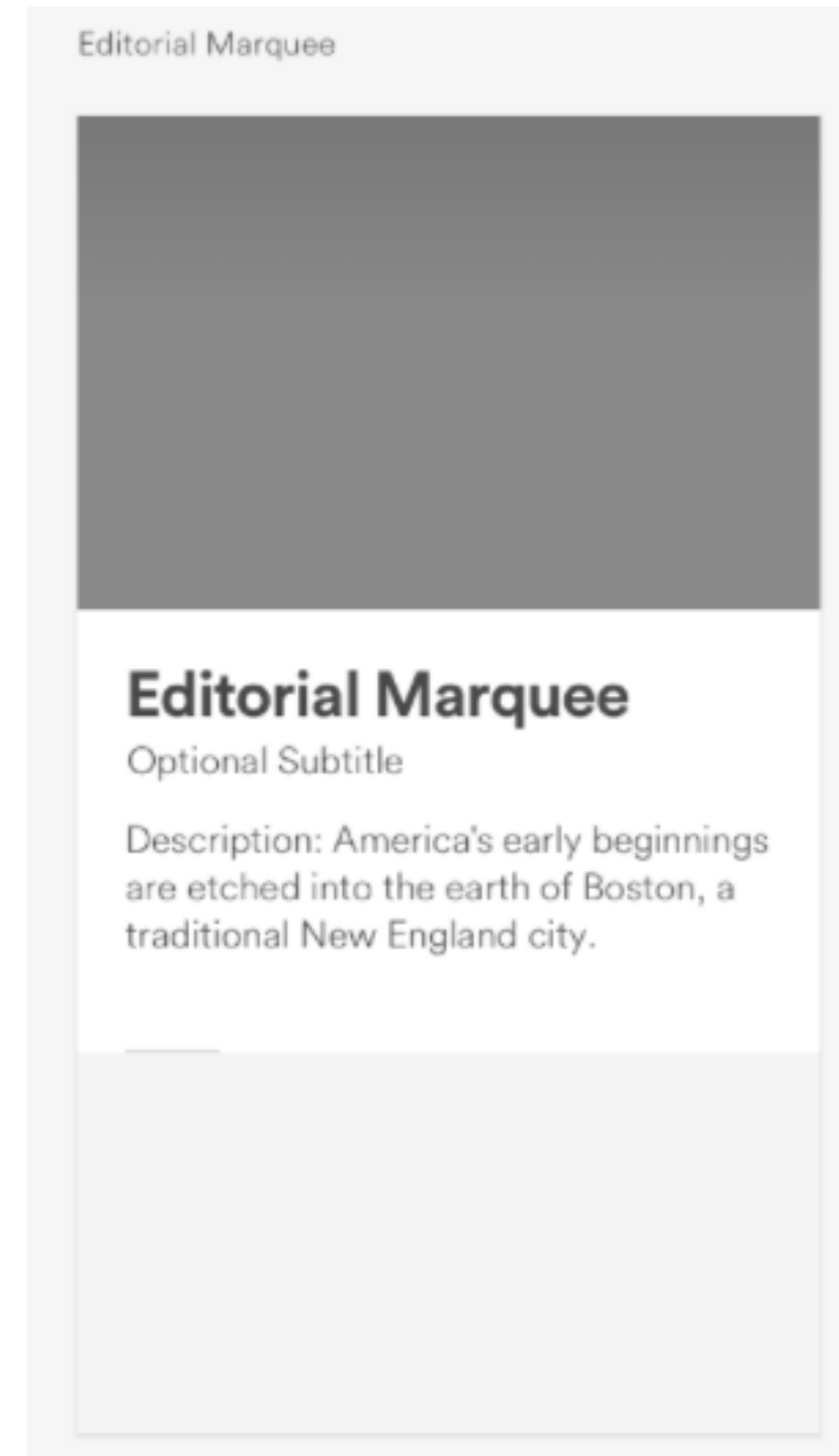
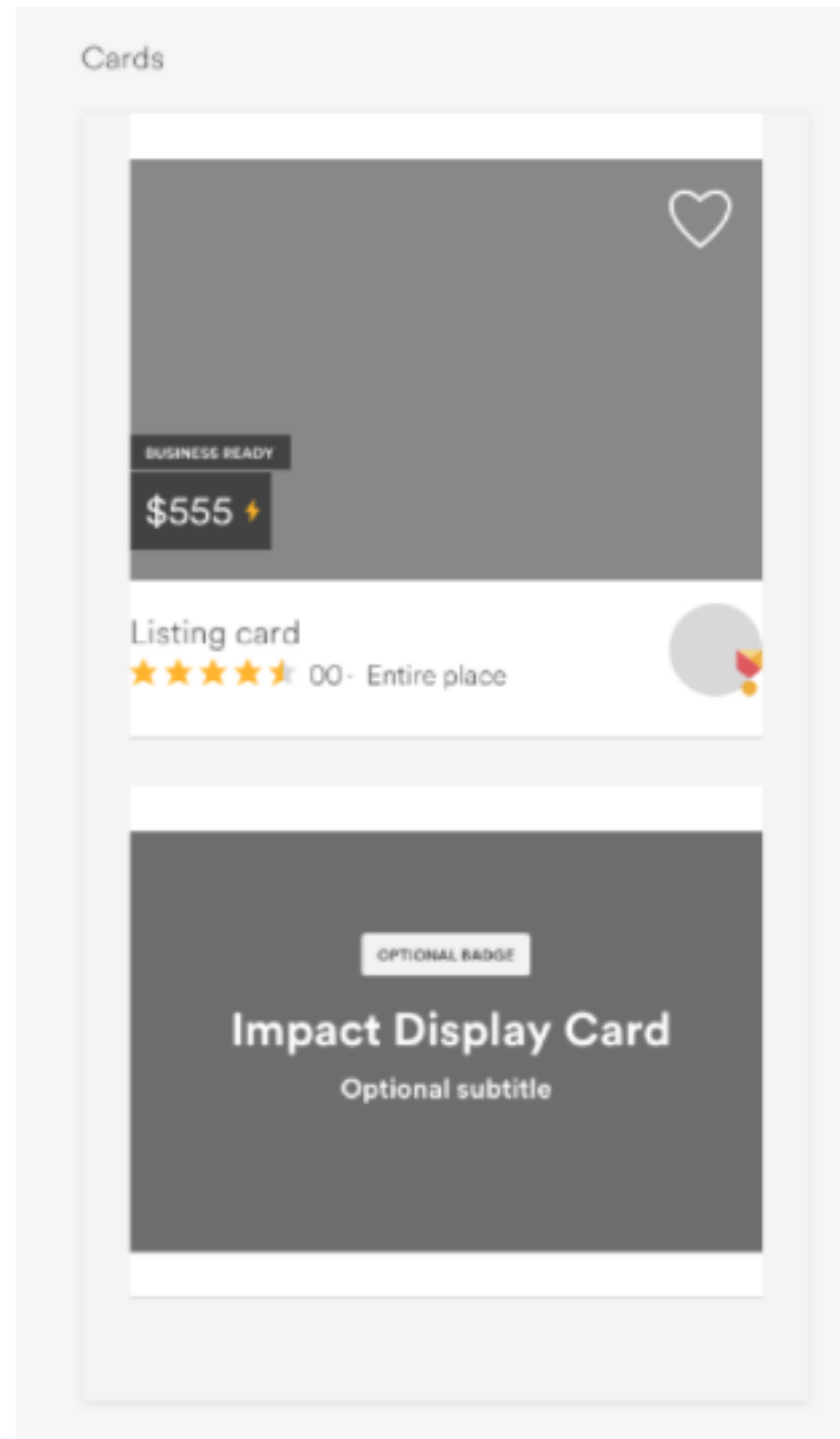
Repository

# Examples: AirBnb

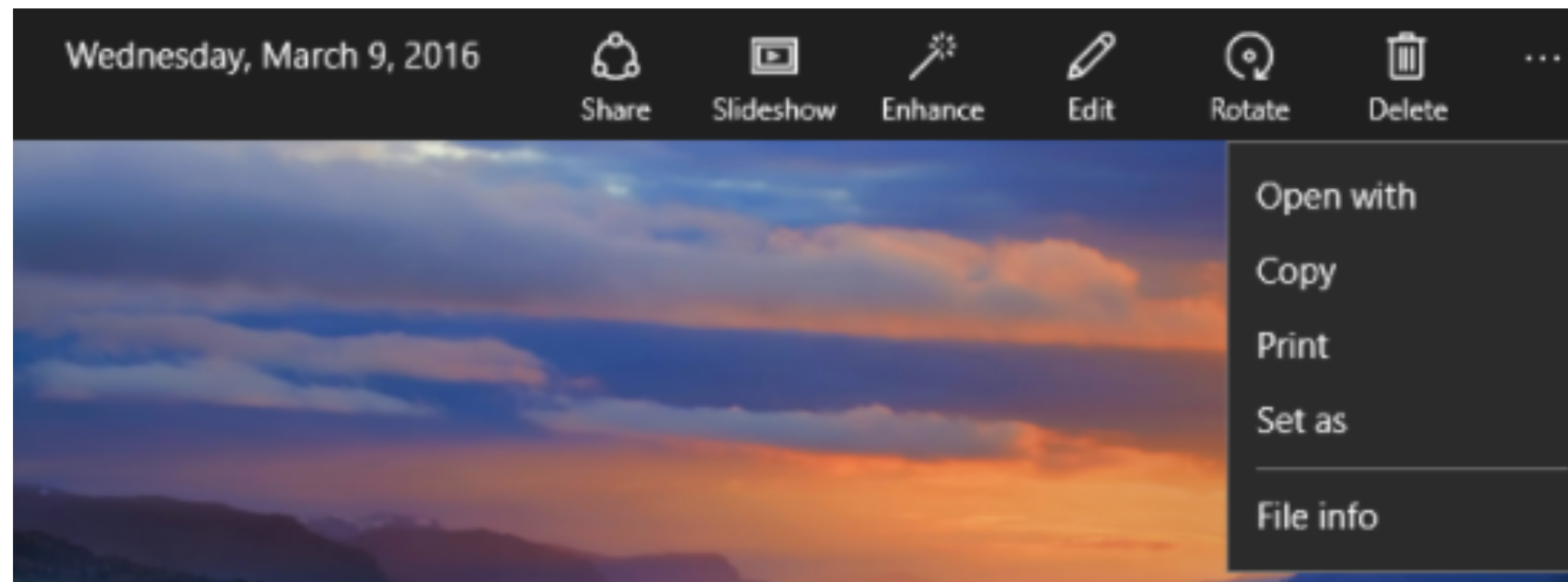




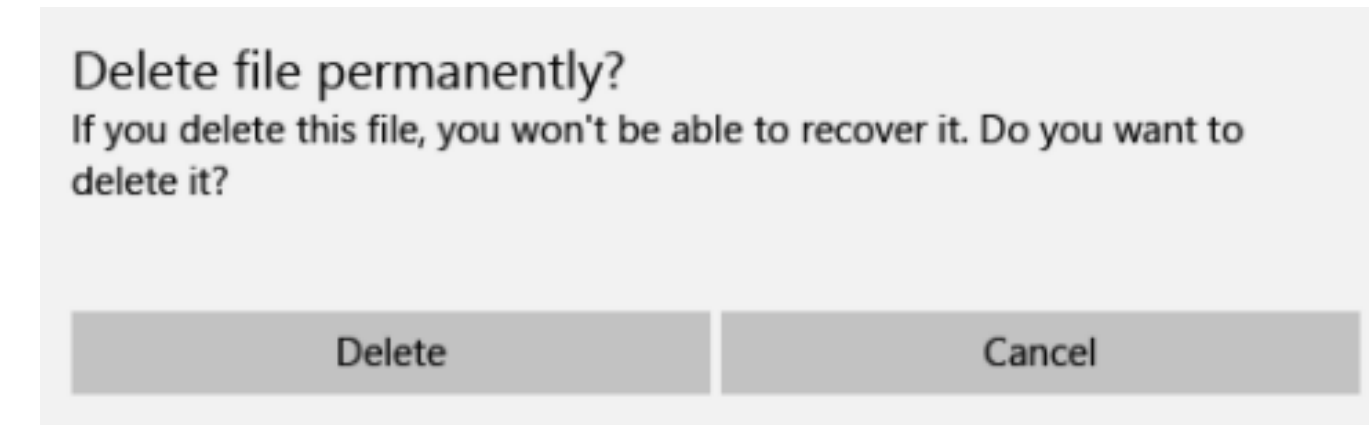
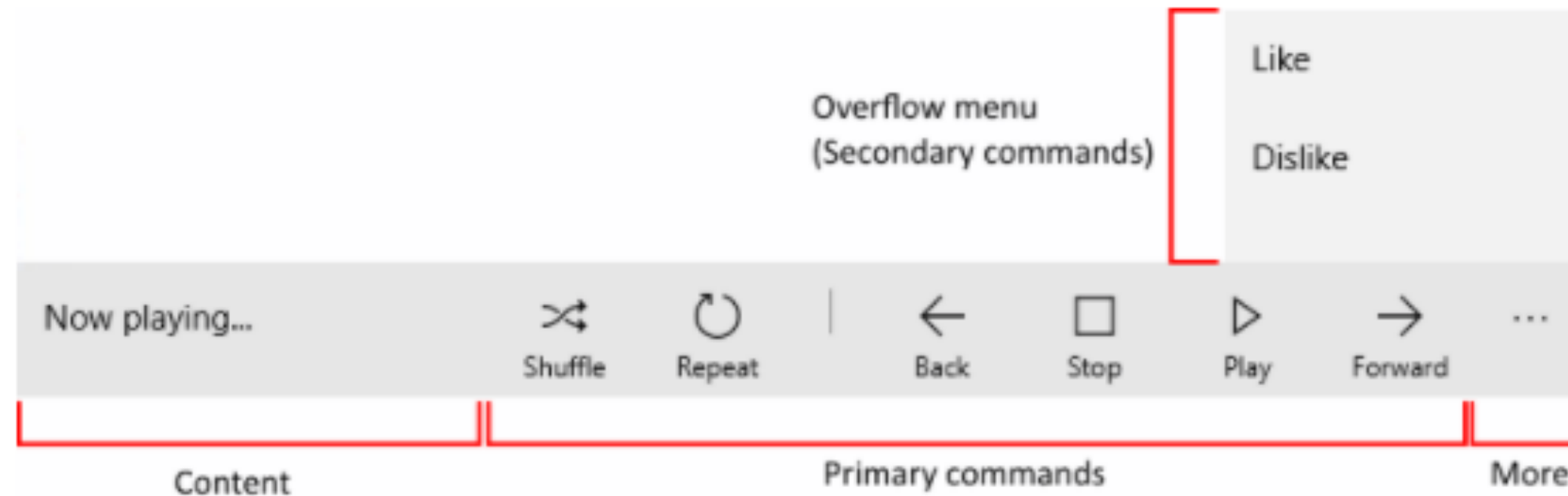
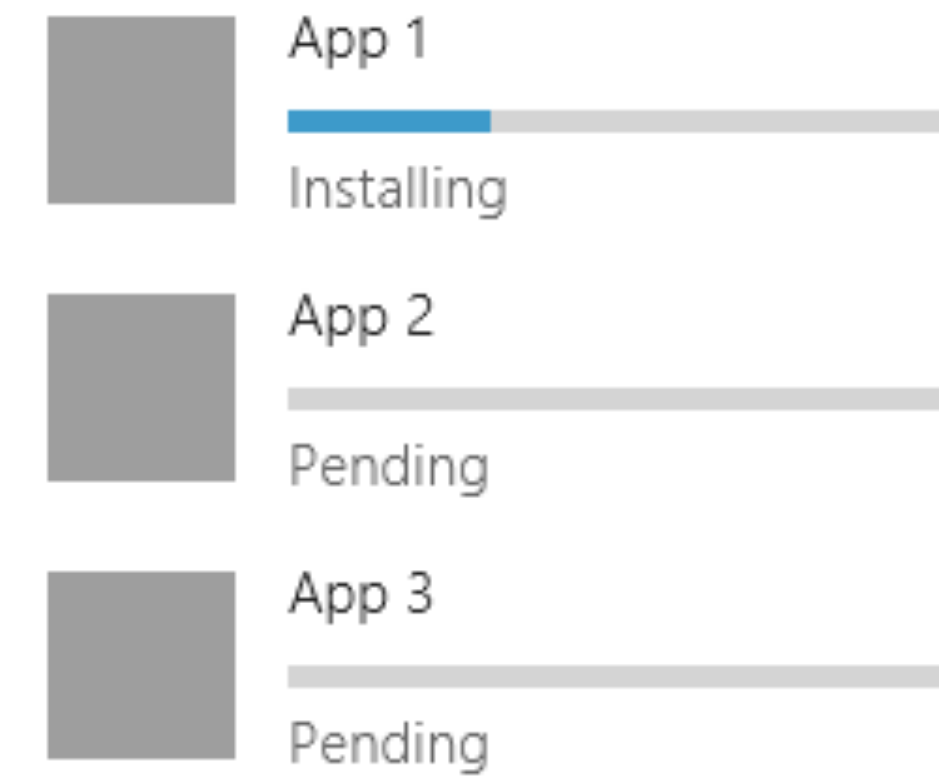
# Examples: AirBnb



# Examples: Microsoft

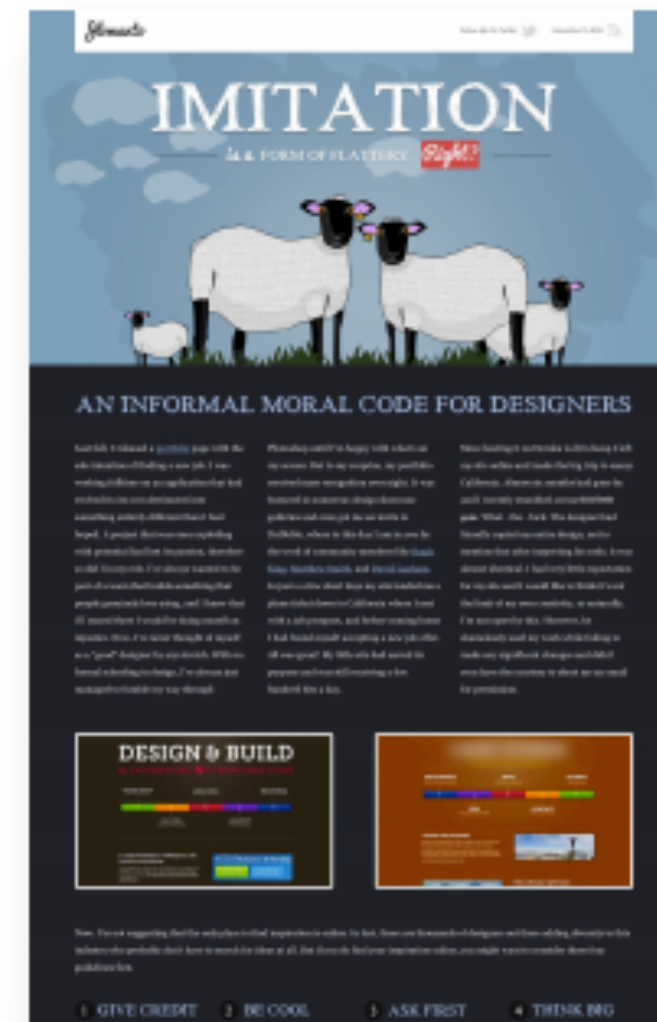
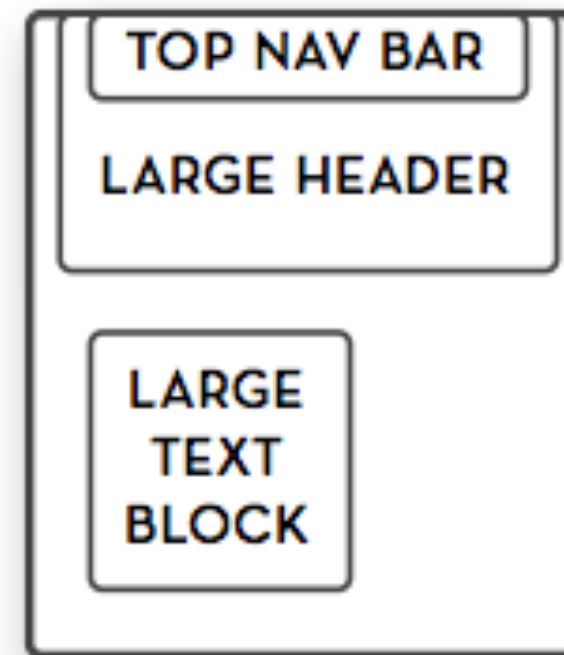


# Examples: Microsoft





# Example: Header with text blocks layout

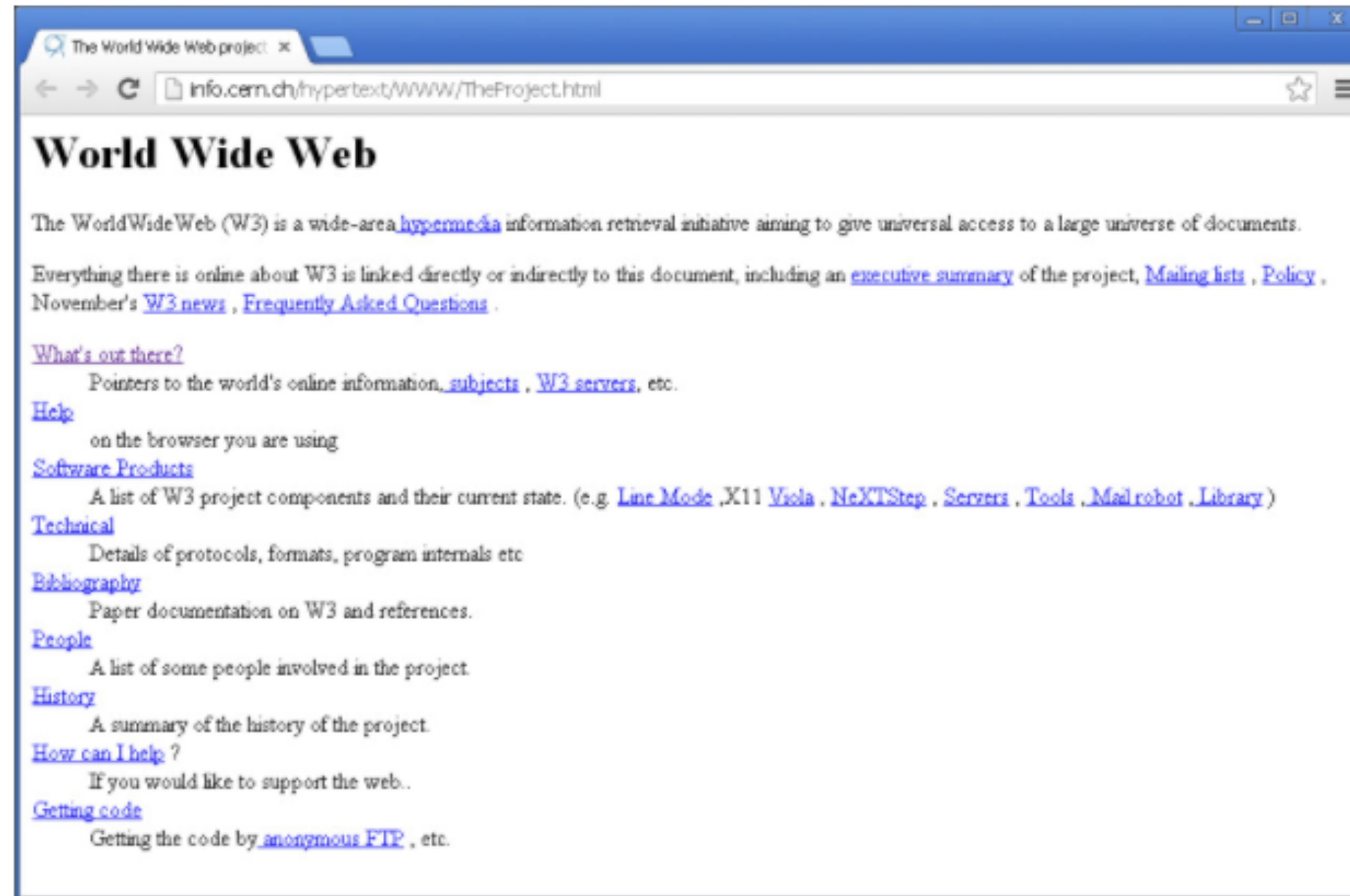


<http://ranjithakumar.net/resources/webzeitgeist.pdf>

# Position Encodes Meaning and Function



# Web Design Languages Over Time



<https://blog.hubspot.com/marketing/look-back-20-years-website-design#sm.00000ip14jejk1d51u53crk6cwrns>



# Web Design Languages Over Time

The screenshot shows the Apple website interface from July 14, 1997. On the left is a red vertical navigation menu with the following links: Find It, Product Information, Customer Support, Technology & Research, Developer World, Groups & Interests, Resources Online, and About Apple. Below the menu is a section for 'Apple Sites Worldwide' with a scrollable list of countries: Switzerland, Taiwan, Turkey, UK & Ireland, and United States (highlighted). The main content area features a 'Welcome to Apple' header with the date 'JULY 14' and the year '1997'. A large blue banner for 'Introducing CyberDrive' includes the BMW logo and the text 'Register today for a free CD-ROM.' To the right, there are two smaller promotional boxes: 'EMATE 300' with the tagline 'Mobile, Affordable, & Smart' and an image of a laptop, and 'MOVIES FROM MARS' with the tagline 'QuickTime VR Takes You Out of this World' and an image of a QuickTime VR icon. At the bottom, a 'What's Hot' section contains two columns of text: 'Preorder Mac OS 8' and 'Be the First to Know'.

Find It

Product Information

Customer Support

Technology & Research

Developer World

Groups & Interests

Resources Online

About Apple

Apple Sites Worldwide

Switzerland

Taiwan

Turkey

UK & Ireland

United States

JULY 14 1997

Apple

Introducing CyberDrive

Register today for a free CD-ROM.

EMATE 300

Mobile, Affordable, & Smart

MOVIES FROM MARS

QuickTime VR Takes You Out of this World

What's Hot

**Preorder Mac OS 8**  
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

**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



# Web Design Languages Over Time



# Web Design Languages Over Time

**Polaroid** Home Site Map Search

Company Info Product Catalog Contact Us Customer Support Dealer Locator

**News and Events** ♦

- [What's New](#) ▶
- [Instant Digital Printing Technology](#) ▶
- [Other Events & Promotions](#) ▶

---

**Consumer** ♦



- [View TV Ads](#) +
- [Instant](#) +
- [Digital](#) +
- [Teens](#) +

---

**Commercial** ♦



- [Polaroid Education Program](#) +
- [Promotional Products](#) +
- [OEM](#) +
- [Artist's Studio](#) +
- [Polaroidwork.com](#) +
- [Eyewear](#) +

**CHECK THIS OUT**



**600 Silver Express**

What would you do with a FREE pack of film? Check out our new commercial!

[Full Product Catalog](#)

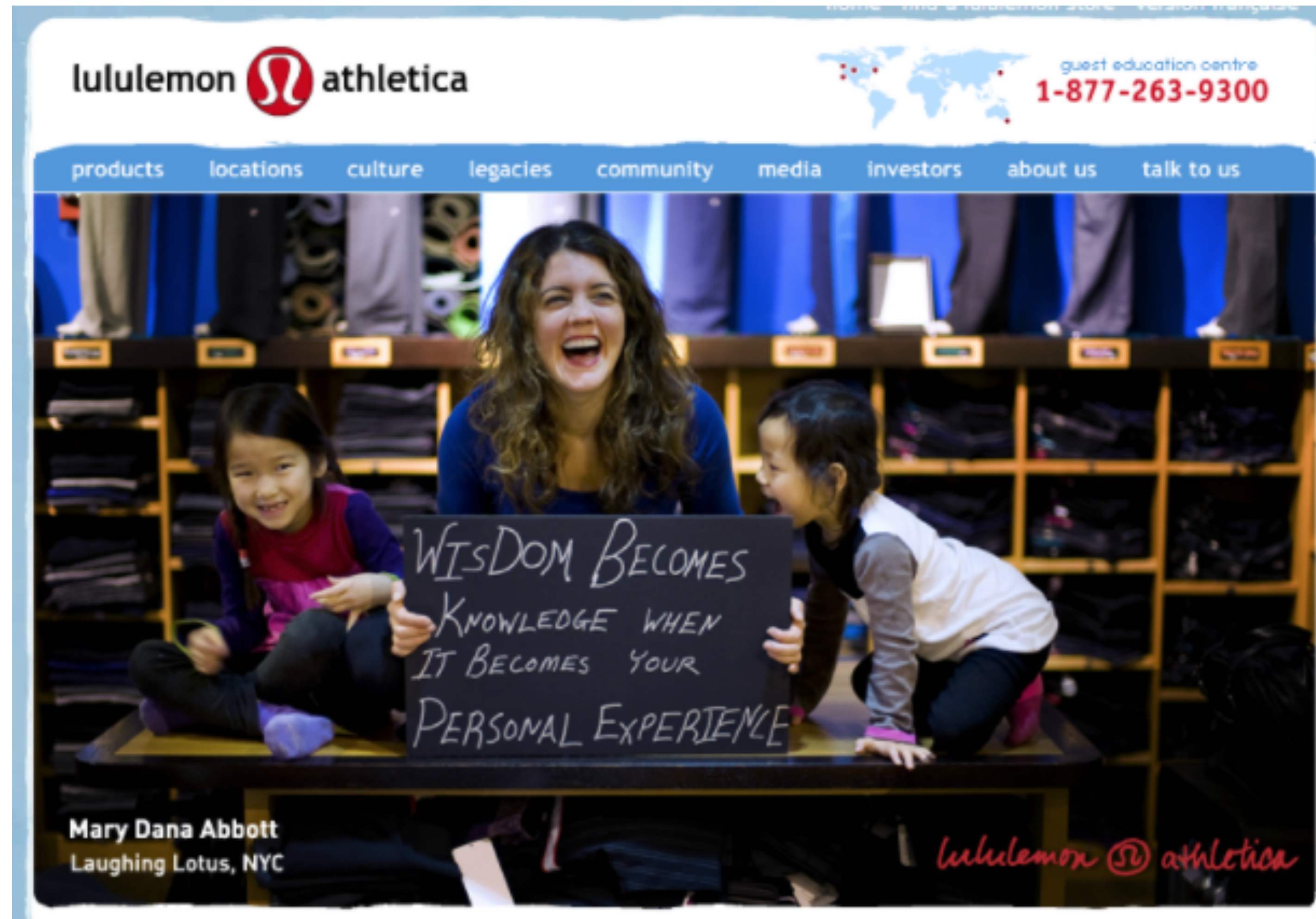
**OTHER POLAROID SITES:**

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- [Digital](#)
- [Work](#)
- [Worldwide](#)

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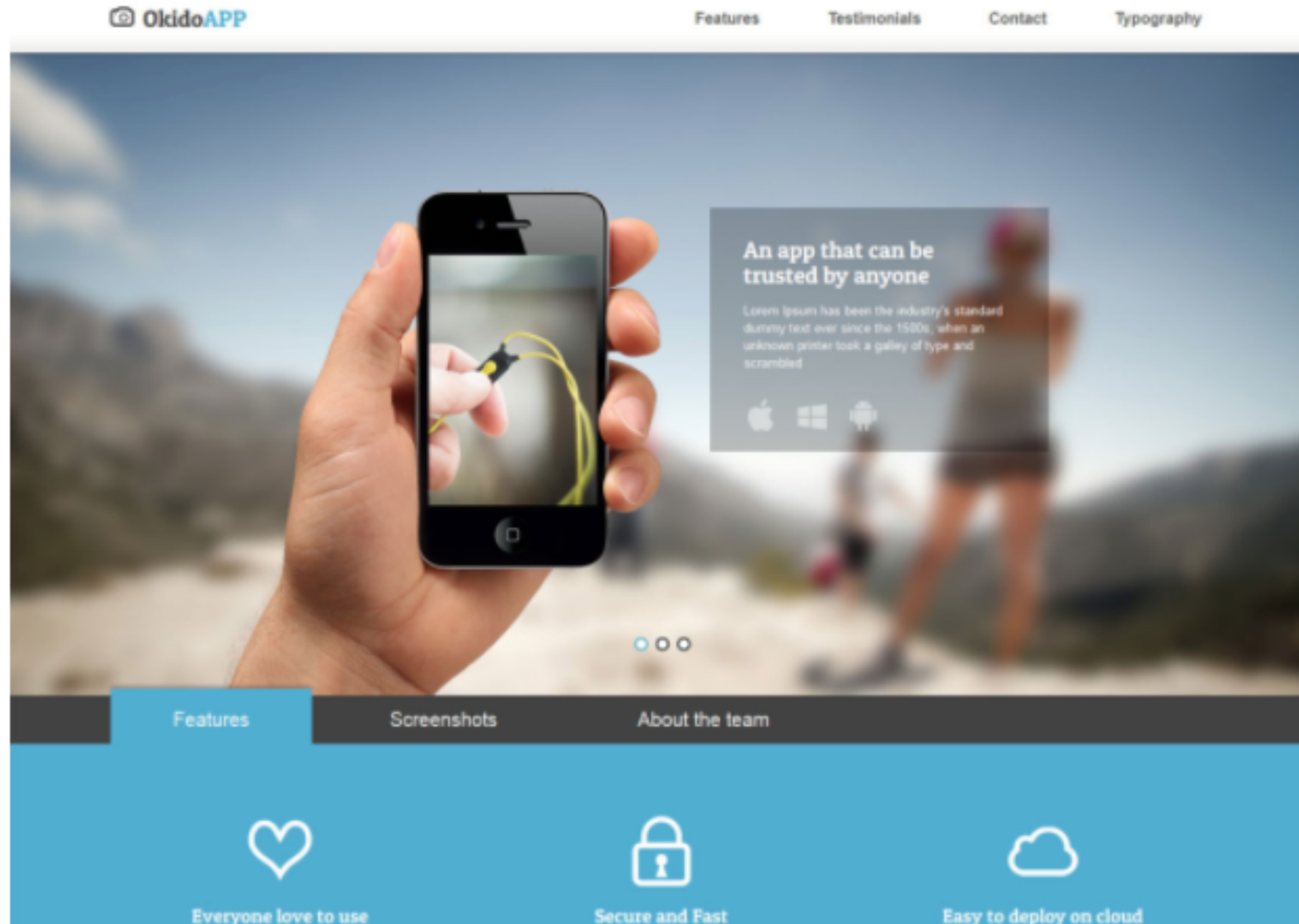


# Web Design Languages Over Time



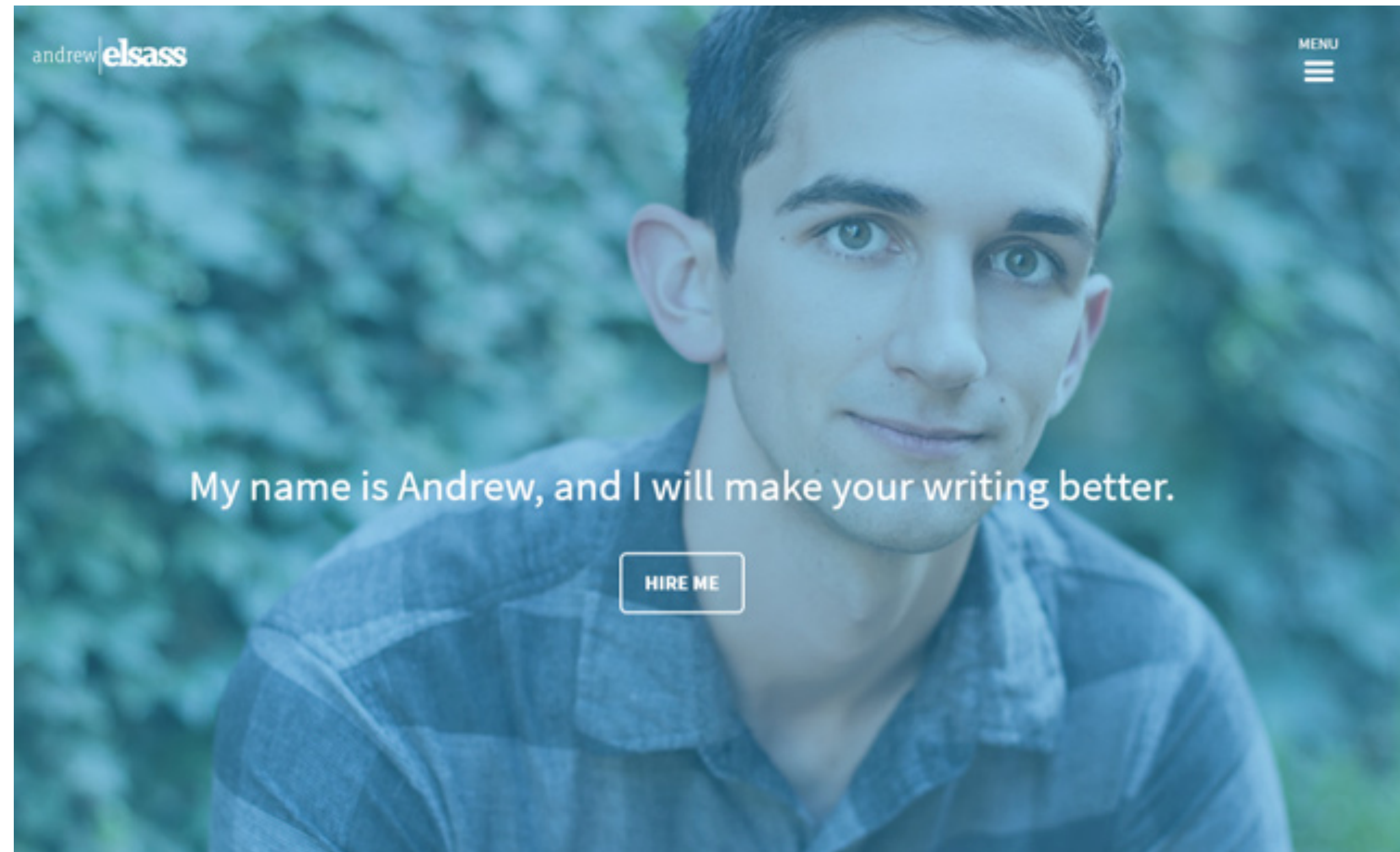


# Web Design Languages Over Time



# Common Visual Idioms, Circa 2016

- Hero images: large attractive header image

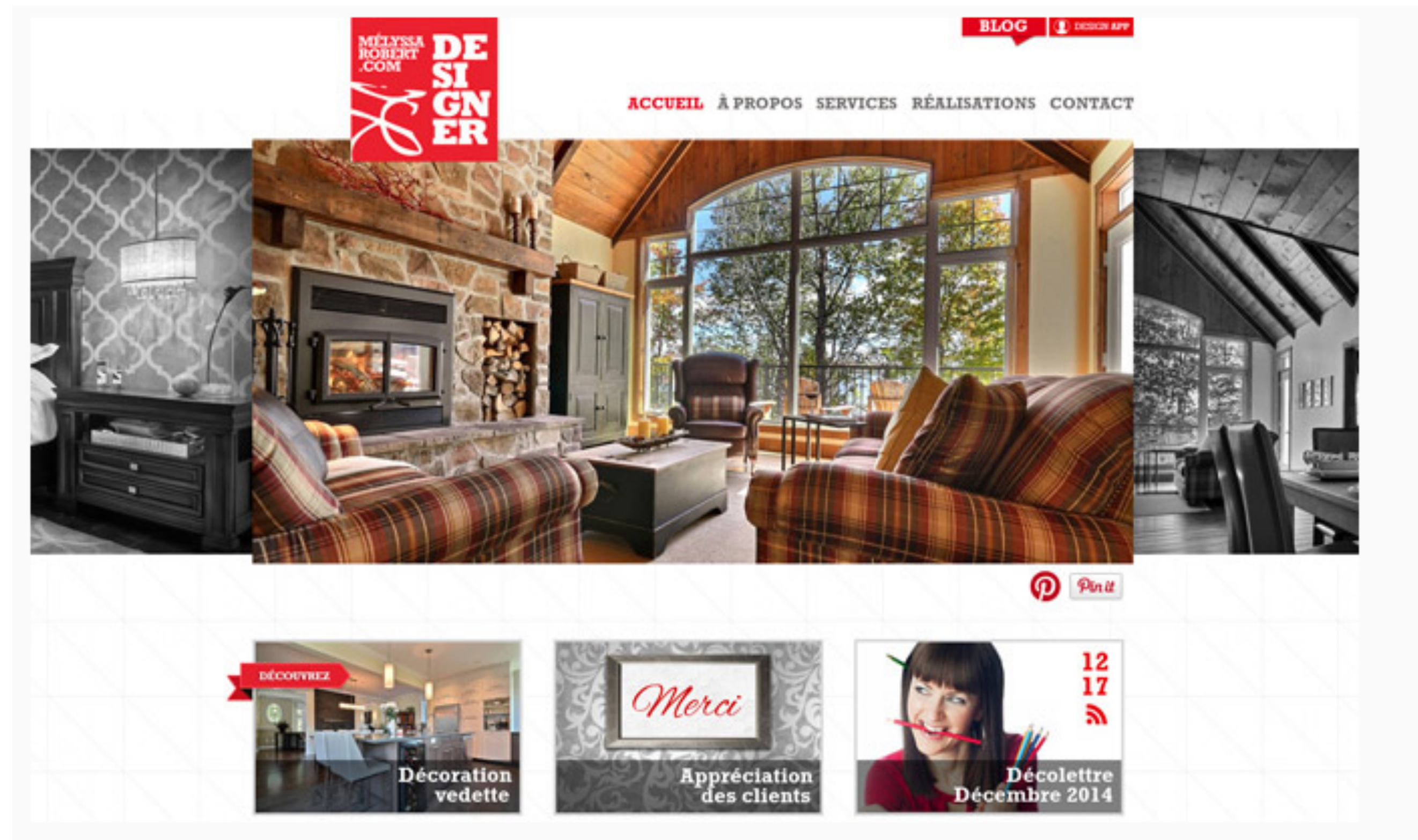


<https://envato.com/blog/exploring-hero-image-trend-web-design/>



# Common visual idioms, circa 2016

- Rotating image galleries (carousels)

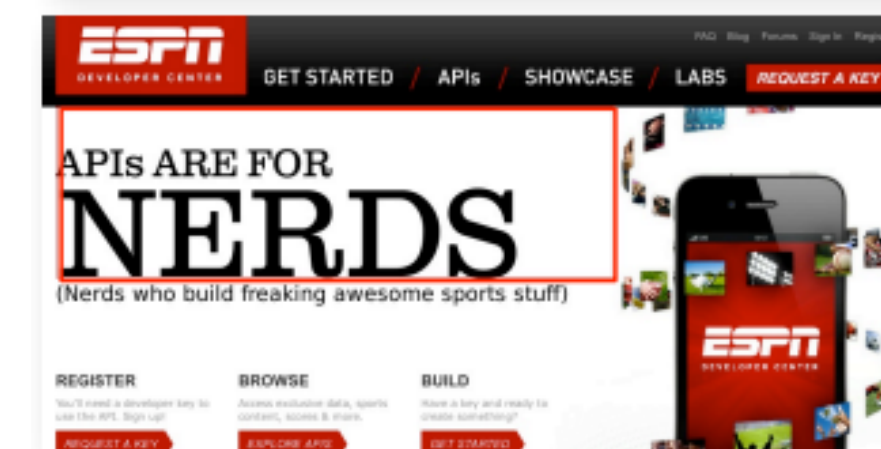


<https://envato.com/blog/exploring-hero-image-trend-web-design/>



# Why it Matters

- Users will have idioms they expect to see, particularly if suggested by other related elements
- Branding: Users will see your website and have particular associations based on what it exemplifies



# Goals in Designing a Design Language

- Offer guidance and options on
  - Colors: examples of color palettes
  - Typography: justification, sizes, fonts, different heading levels
  - Organization
- Support different resolutions, devices
- Support universal design
  - Visually impaired, color blind users

# **In-Class Activity**



# Activity: Design a Design Language

- In groups of 2 or 3, brainstorm an idea for a new company, and then design a Design Language for the new company.
- Your design language should include at least 10 types of elements. For each type of element you should:
  - (1) To identify each category of element, describe (1.1) what is its purpose (e.g., marque image caption, detail text, footer detail text), (1.2) in what situations might it be used
  - (2) Define a style, describing its visual characteristics.
- Deliverables
  - Brief description of company
  - Description of design language with at least 10 types of elements
  - Brief description of how design language helps establish and communicate the brand of the company
  - Due at 7:10pm

# Activity: Design a Design Language

- Some example visual design guidelines from well-known companies:
  - <https://developer.apple.com/design/human-interface-guidelines>
  - <https://m3.material.io>
  - <https://docs.microsoft.com/en-us/windows/uwp/design/>