

CT318 LECTURE 8



Design Thinking 4: Prototype

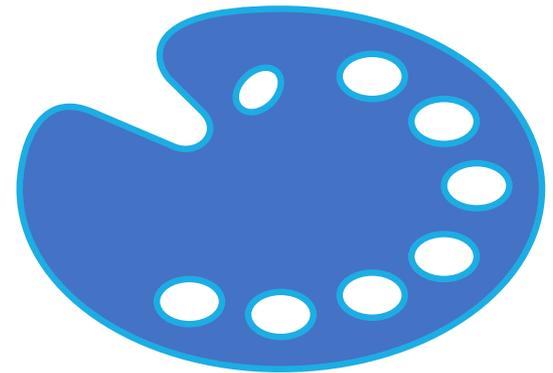
- Visual Design
- Icon Design
- **Group Project:**
 - User Research Feedback



WHY VISUAL DESIGN?

VISUAL DESIGN?

- **Visual design engages users by drawing the eye to the correct functionality and prioritizing tasks on a page (Uxbooth)**
- **“Strategic implementation of images, colors, fonts, and other elements to enhance a design or interaction and engage users” (Usability.gov)**
- **The aesthetics of a design and its related materials (IDF)**



5 Visual-Design Principles in UX

Visual-design principles inform us how design elements go together to create well-rounded and thoughtful visuals. Graphics that take advantage of the principles of good visual design can drive engagement and increase usability.

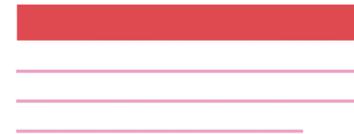
SCALE

The principle of scale refers to using relative size to signal importance and rank in a composition.



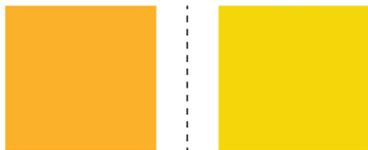
VISUAL HIERARCHY

The principle of visual hierarchy refers to guiding the eye on the page so that it attends to design elements in the order of their importance.



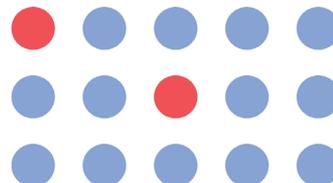
BALANCE

Balance occurs when there is an equally distributed amount of visual signal on both sides of an imaginary axis.



CONTRAST

The principle of contrast refers to the juxtaposition of visually dissimilar elements in order to convey the fact that these elements are different.



GESTALT PRINCIPLES

Gestalt principles capture our tendency to perceive the whole as opposed to the individual elements.



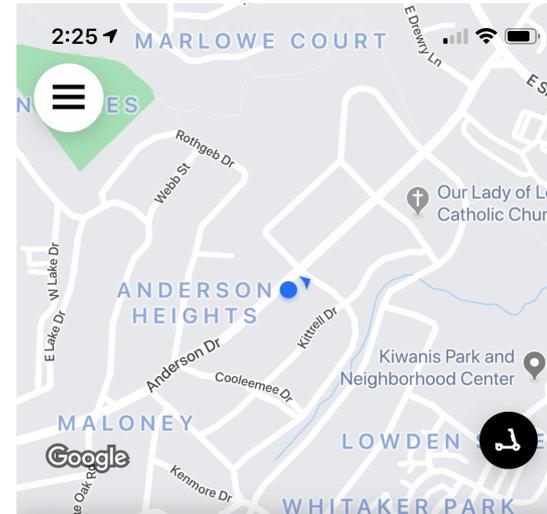
NNGROUP.COM **NN/g**



Nngroup.com

SCALE

VISUAL HIERARCHY



Good afternoon, Kelley

Where to?

Now ▾



Home



Raleigh-Durham International Air...

2400 John Brantley Blvd, Morrisville



Blue

Your next reward



Ride



Order food

Nngroup.com

1400+ Startup jobs

Find a job you love

Show all jobs

Product Manager - Mobile Apps Team

Copenhagen Full-time



5 days ago

Junior analytical person with social skills

Copenhagen Full-time



5 days ago

Marketing Intern for Exciting New Social App

Copenhagen Full-time



5 days ago

Quality Assurance Developer

Copenhagen Full-time



5 days ago

Influencer Agent

Copenhagen Full-time



5 days ago

Graphic Designer - Brand and Web Design

Copenhagen Full-time



5 days ago



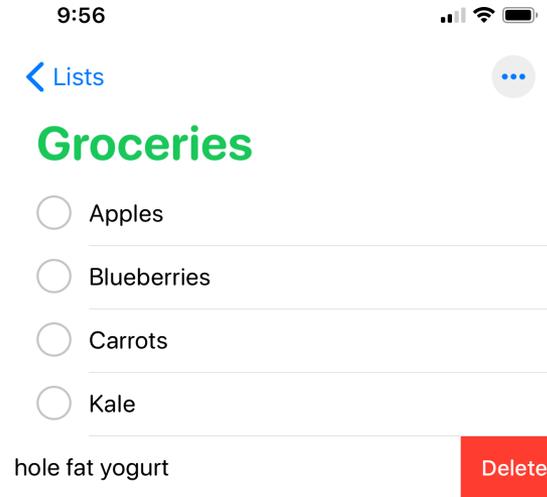
...lets remind to compare wet.
Upper helps keep your feet dry. Reflective elements along with an outsole surfaces let you run with confidence despite the weather.



THE VORTEX

BALANCE

CONTRAST



 New Reminder

Nngroup.com

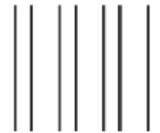
GESTALT



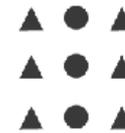
Nngroup.com

VISUAL PERCEPTION: GESTALT PRINCIPLES

- Law of Proximity
- Law of Similarity
- Law of Pragnanz: Figure (the element in focus) or Ground (background)
- Law of Symmetry
- Law of Closure



Proximity



Similarity



Figure-ground



Continuity



Closure



Connectedness

Gestalt Perception: Figure / Ground



CLOSURE



Visual Design

- Visual design aims to shape and improve the user experience through consideration of **images, typography, space, layouts, and colour** (visual design tools)
- Successful visual design:
 - communication not self expression
 - content remains central to the page or function and engages users



UI VISUAL DESIGN: TOOLS

- Images
- Typography
- Colour
- Space
- Layout





IMAGES

TYPOGRAPHY

- Letter forms: perceptual balance as opposed to actual
 - Typeface: point/font size; varies with typeface
 - Leading: spacing between lines
 - X-height: height of lowercase letters
 - Ascenders & Descenders
 - Weight: light / regular / bold
 - Serifs: serif for body text; sans serif for headers: heuristic
- Which typeface to use? It depends!

UI VISUAL DESIGN: TYPOGRAPHY

- These letters are in a **serif** font:

A E F G H L M N Z

- These letters are in a **non-serif** font:

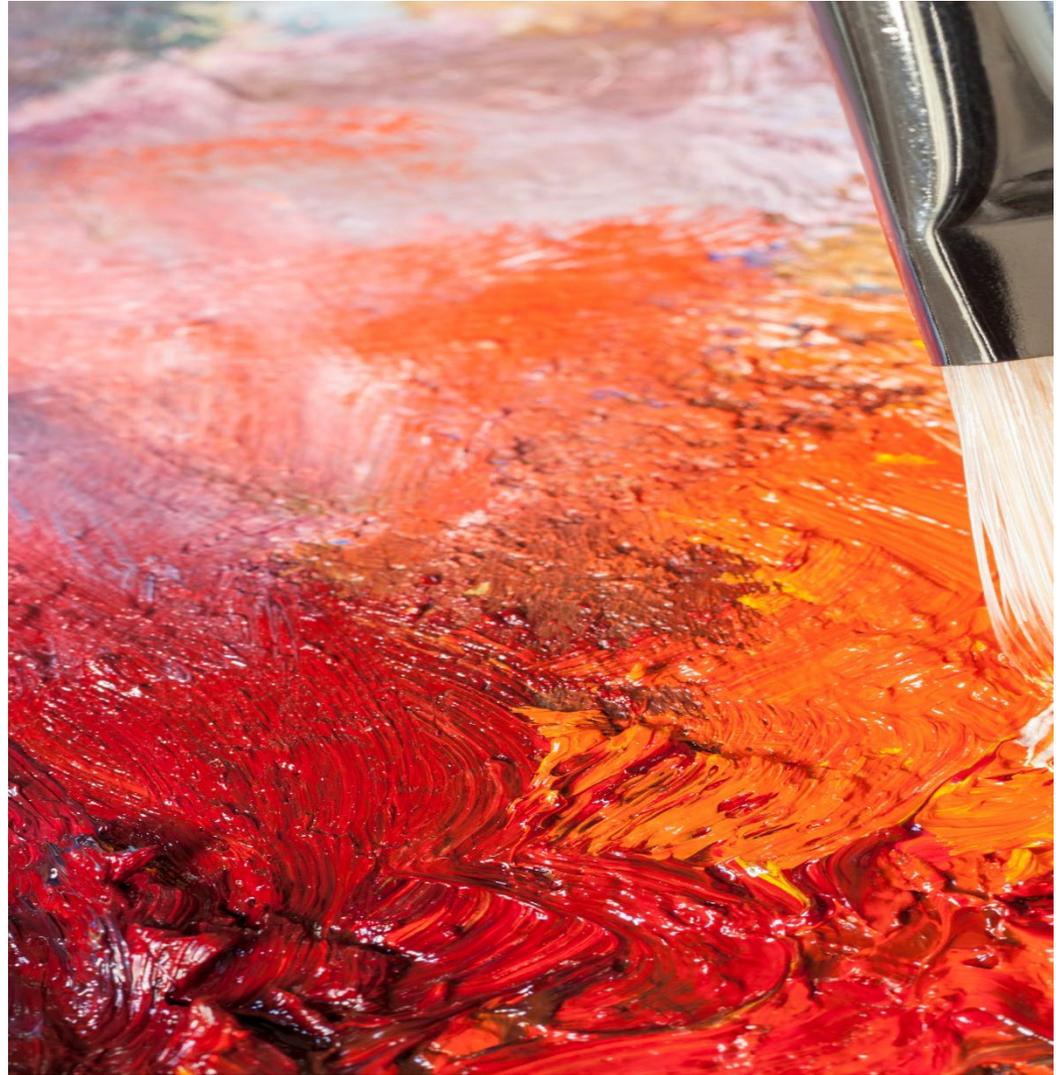
A E F G H L M N Z

- Times New Roman is a serif font
Arial is a non-serif font

TYPOGRAPHY

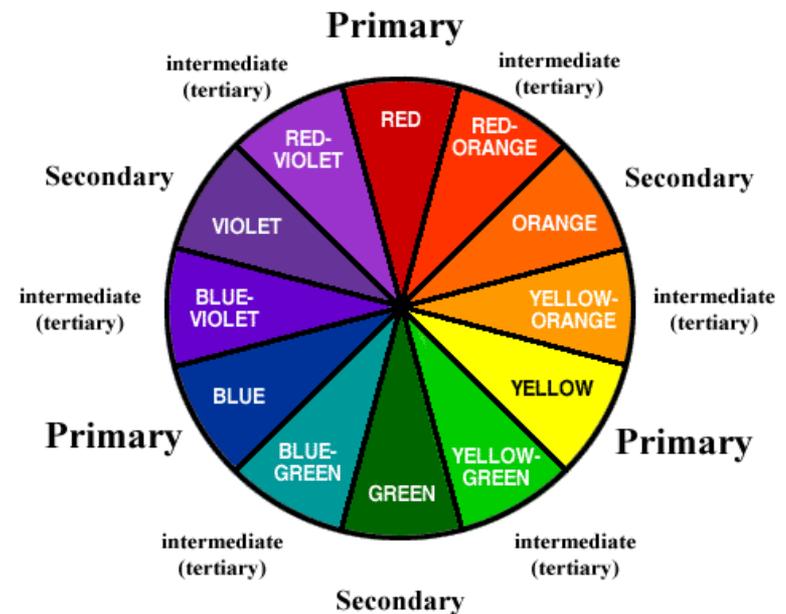
- **Typography Guidelines:**
 - Choose a typeface that works well in various sizes (e.g Avenir, Univers)
 - Choose a typeface with easily distinguishable letter forms (Clear Sans better than Lato)
 - Treat text as UI (e.g. Medium)
 - Consider the job to be done (Instapaper web and mobile apps)
- **Type plays a vital role in UI: enabling or impeding users**

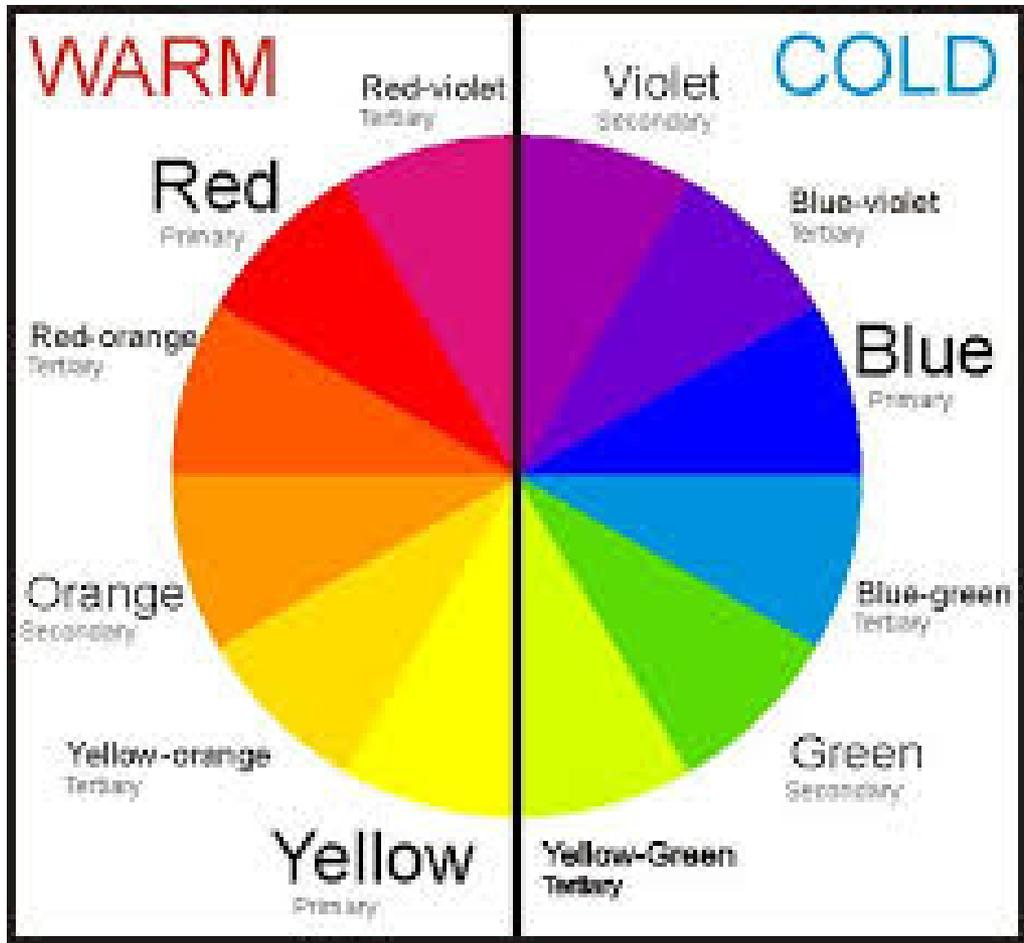
COLOUR



COLOUR WHEEL

- Colour Wheel: shows the relationship between colours
- Based on the RYB content of each colour; developed by Sir Isaac Newton 1666
- Bleicher (2011) colour wheel into three types of colors based on combination of base colors used to create the final colour:
 - **Primary:** red, yellow, blue
 - **Secondary:** orange, green and purple (mix 2 primary)
 - **Intermediate:** mix primary & secondary colours: a hybrid





COLOUR SCHEMES

Different colour schemes based on the colour circle. These are helpful when designing your visualisations and interfaces:

1. Complementary Scheme
2. Analogous Scheme
3. Triadic Scheme
4. Split-Complementary Scheme
5. Rectangle Scheme
6. Square Scheme



Color Schemes



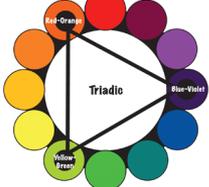
Complementary color scheme
Colors that are opposite each other on the color wheel are considered to be complementary colors.
(example: Orange and Blue)



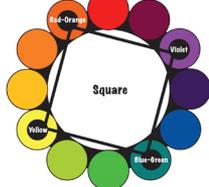
Rectangle (tetradic) color scheme
The rectangle or tetradic color scheme uses four colors arranged into two complementary pairs.
(example: Orange, Red, Blue and Green)



Analogous color scheme
Analogous color schemes use colors that are next to each other on the color wheel.
(example: Green, Blue-Green and Blue)



Triadic color scheme
A triadic color scheme uses colors that are evenly spaced around the color wheel.
(example: Yellow-Green, Red-Orange and Blue-Violet)



Square color scheme
The square color scheme is similar to the rectangle, but with all four colors spaced evenly around the color circle.
(example: Yellow, Red-Orange, Violet and Blue-Green)



Split-Complementary color scheme
The split-complementary color scheme is a variation of the complementary color scheme. In addition to the base color, it uses the two colors adjacent to its complement.
(example: Yellow, Red-Violet and Blue-Violet)

Color Harmonies



Analogous



Complementary



Triadic



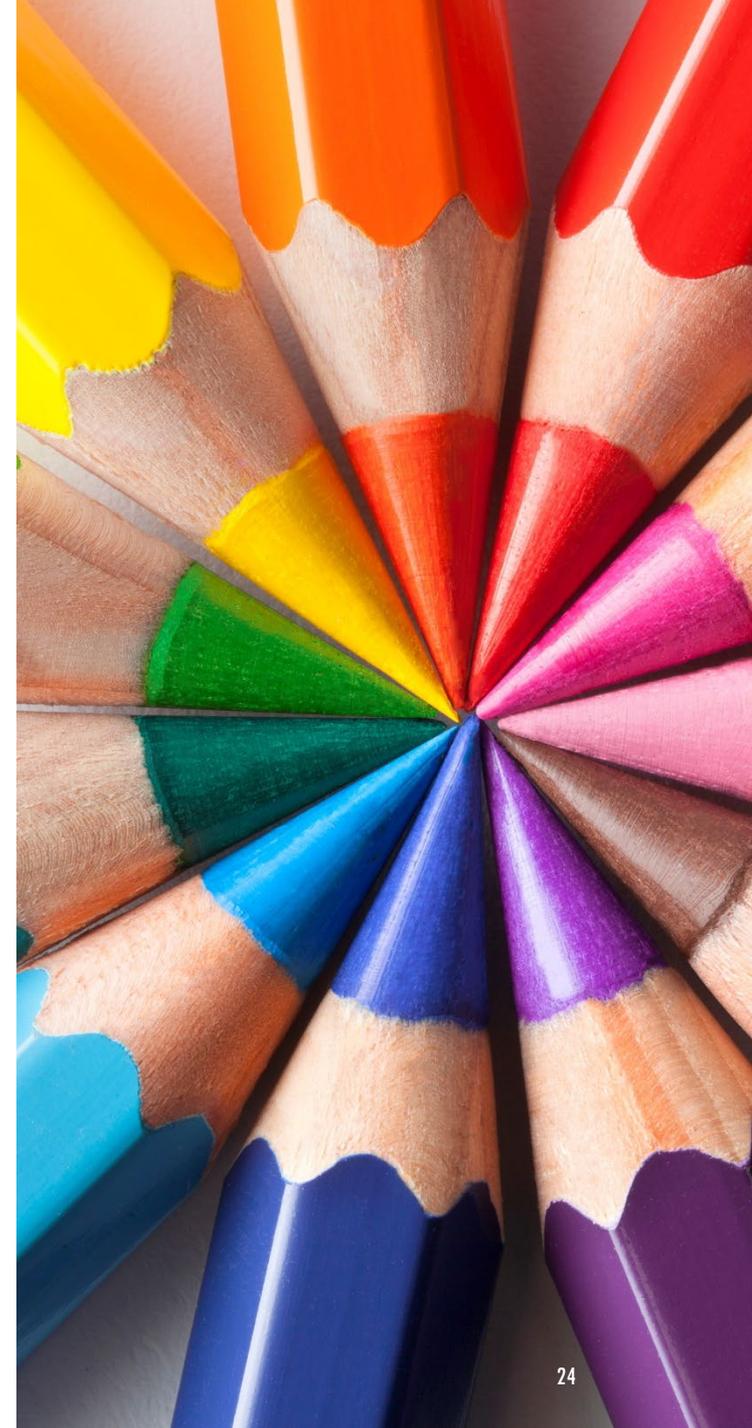
Split Complementary



Monochromatic

DESIGNING WITH COLOUR

- Choose a colour scheme and iterate on individual colours: Soft / Harsh? Warm / Cool?
- Limit your palette to three colours
- Follow any branding colour guidelines
- Use the 60/30/10 rule
- Apply, then iterate: user testing
- Be consistent throughout





VISUAL DESIGN: WHITE SPACE

*My
Problem
With*

WHITE
SPACE
a confession

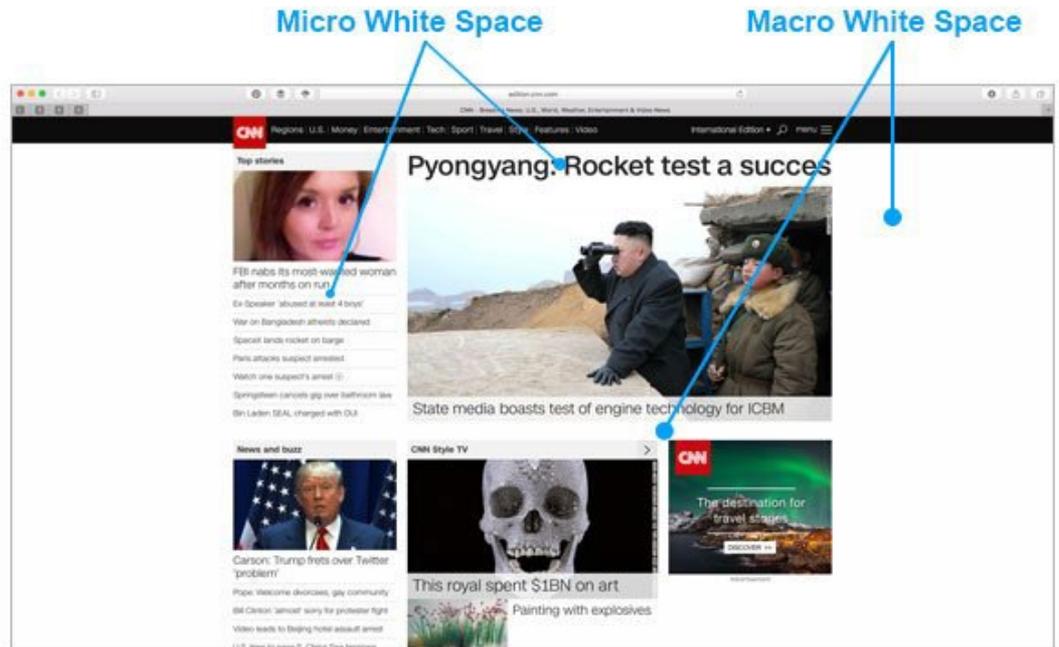
*This
IS*

a
DESIGN

VISUAL DESIGN: WHITE SPACE

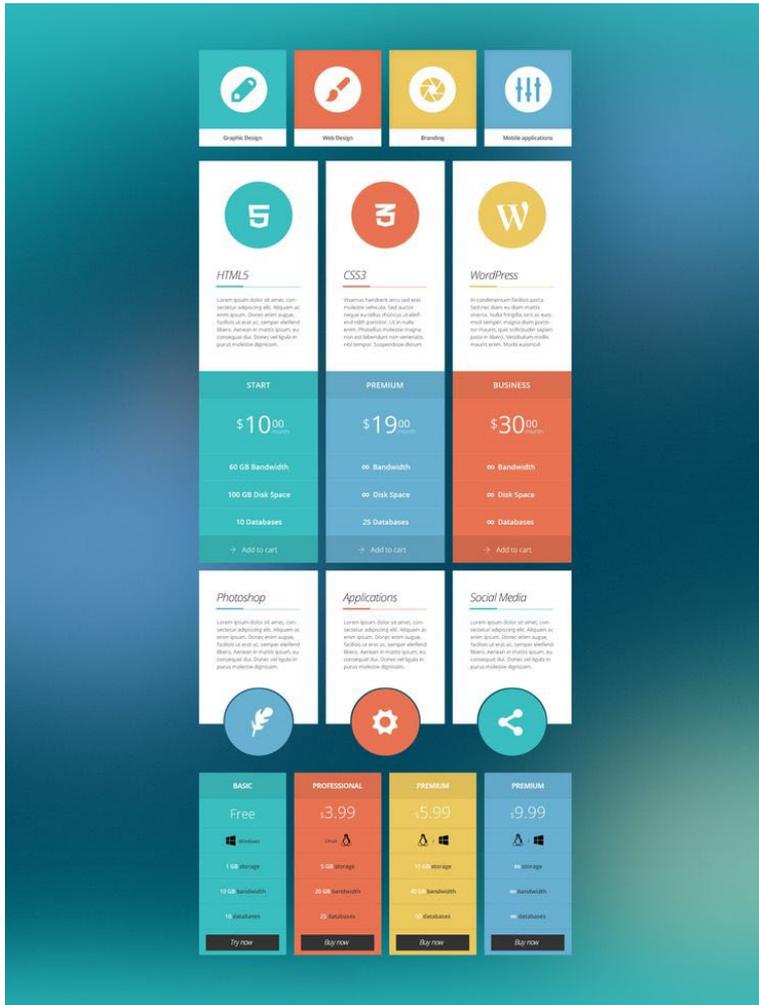
- White space between typography glyphs, content blocks, or other UI elements enhances user experience
- Classification of White Space:
 - Function: Active / Passive
 - Size: Micro / Macro
- Purpose of White Space:
 - Branding
 - Content
 - Focus
 - Readability

VISUAL DESIGN: WHITE SPACE



LAYOUT

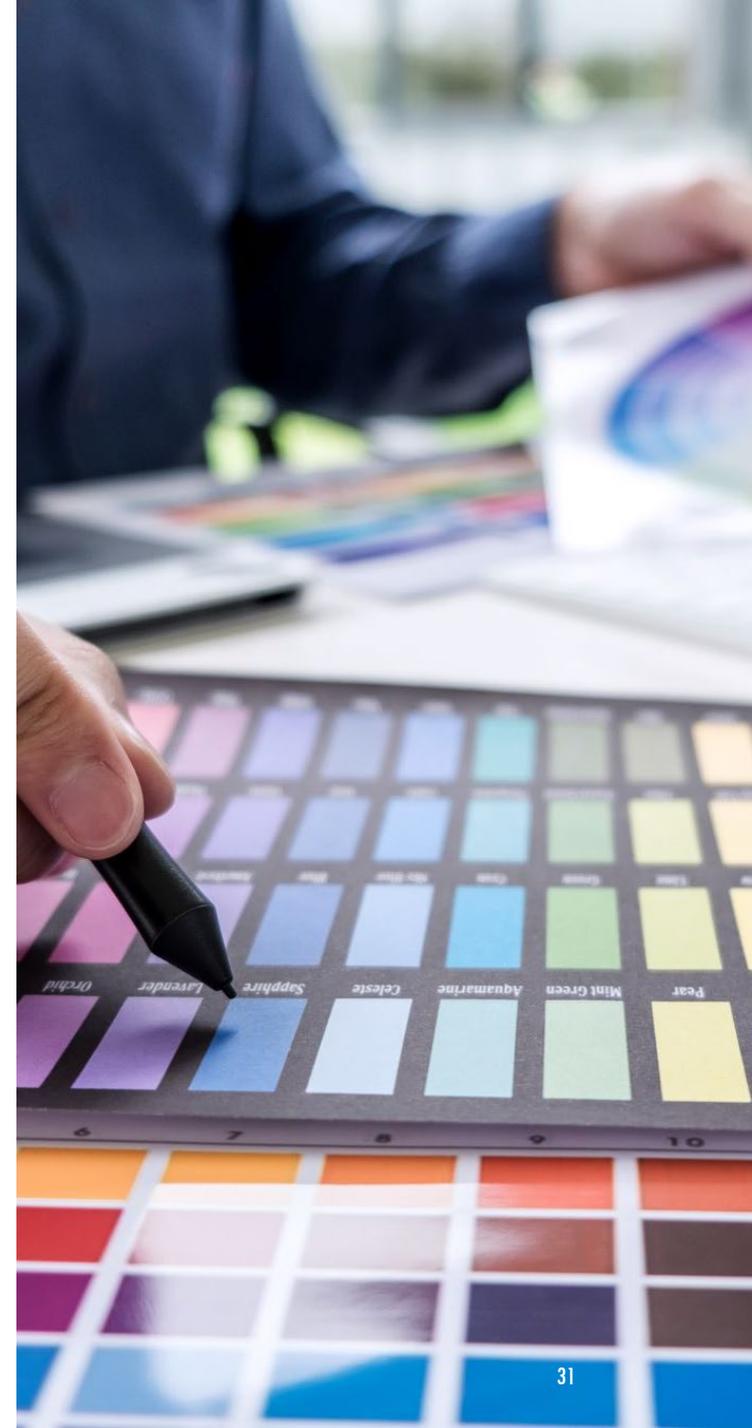
- The arrangement of items on the screen
- Like items are grouped into areas
 - Each area is self-contained
 - Areas should have a natural intuitive flow: West / East
- All areas should be well defined, logically grouped together and easily discernible visually
- Include titles on all interfaces
- Menus should show where the user is and how the user got there



VISUAL DESIGN STRATEGY

Visme Visual Design Principles:
(video)

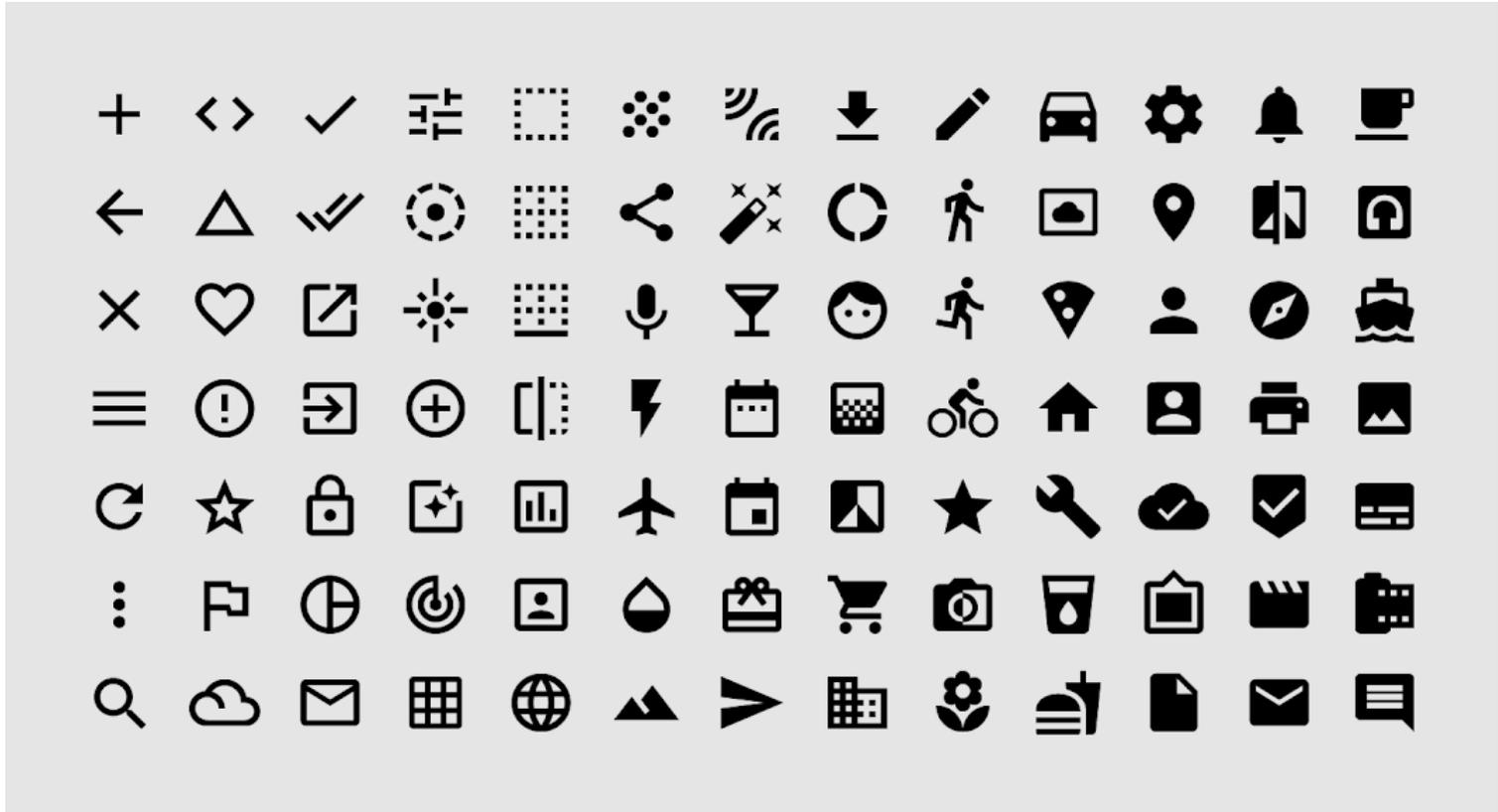
- Establish focal point
- Use Contrast
- Use Patterns
- Simplify to improve focus
- Create Interactivity



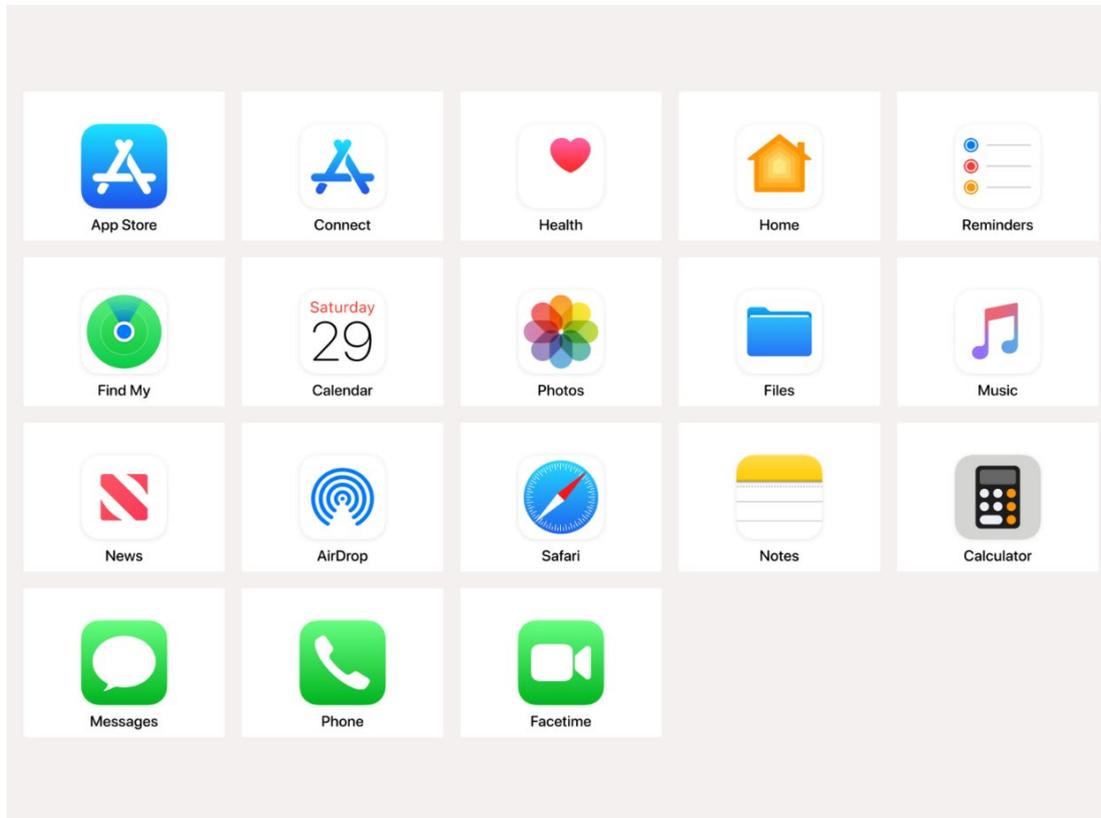
ICON DESIGN:

- Challenges of Icon Design:
 - Identifiability
 - Consistency
 - Distinguishability: colour
 - Sizing
- Universal / Accessible Icon Design





GOOGLE ICONS



APPLE ICONS



Interaction Design: Posture

PHYSICAL DESIGN: POSTURE

- Behavioural stance: the way it presents to users
- Appearance and behaviour consistent with system purpose: Conflict of *posture* and *purpose*?
- People: soldier, car park attendant, actor, service representative, funeral director
- Programme *posture*: e.g. bold / timid; colourful / drab; automatic / interactive
- Choice of *posture*?
- Consistency of posture: blackberry use during train commute vs. use when late for meeting

POSTURE

- “Desktop”: OS, DBs and UI technologies
- Three desktop postures:
 - **Sovereign**: monopolise users’ attention for long periods of time; intermediate users
 - **Transient**: come and go; single function with constrained set of controls
 - **Daemonic**: don’t normally interact with user – background applications



Sovereign



Transient



Daemonic

POSTURE: SOVEREIGN

- ***Sovereign* Design Rules:**
 - Optimise for intermediates: speed and power over initial ease of use
 - Be generous with screen estate: default to maximised
 - Use minimal visual style: long visual exposure
 - Feedback can be visually rich (without clutter)
 - Can exploit rich input

POSTURE: TRANSIENT, DAEMONIC

- **Transient** Design Rules:
 - Simple, clear and to the point
 - Bright and clear: orient user quickly
 - Direct, explicit feedback
 - Limit to a single window and view
 - Movable: title bar
 - Give application a memory: size & placement from last time likely to work again
- **Daemonic** Design Rules:
 - As above and
 - How to access UI? Given it's normally invisible; Control Panel: consistent place to go and configure daemons
 - Status reports and user interruptions

CT318 LECTURE 8: REVIEW

Design Thinking 4: Prototype

- Visual Design
- Icon Design
- Group Project
Feedback: User
Research

