

Design Principles

for user interface design

Layout & Composition



「**WHITESPACE**」

- The negative space in your composition
- Keeps your design from feeling cluttered
- Draw the user's attention to certain elements

Mauris a enim cursus, mattis purus bibendum

Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut labore
et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud
exercitation ullamco laboris nisi ut
aliquip ex ea commodo consequat.



VS

Mauris a enim cursus, mattis purus bibendum

Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut labore
et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud



Whitespace makes your content easier to read and can help create visual balance



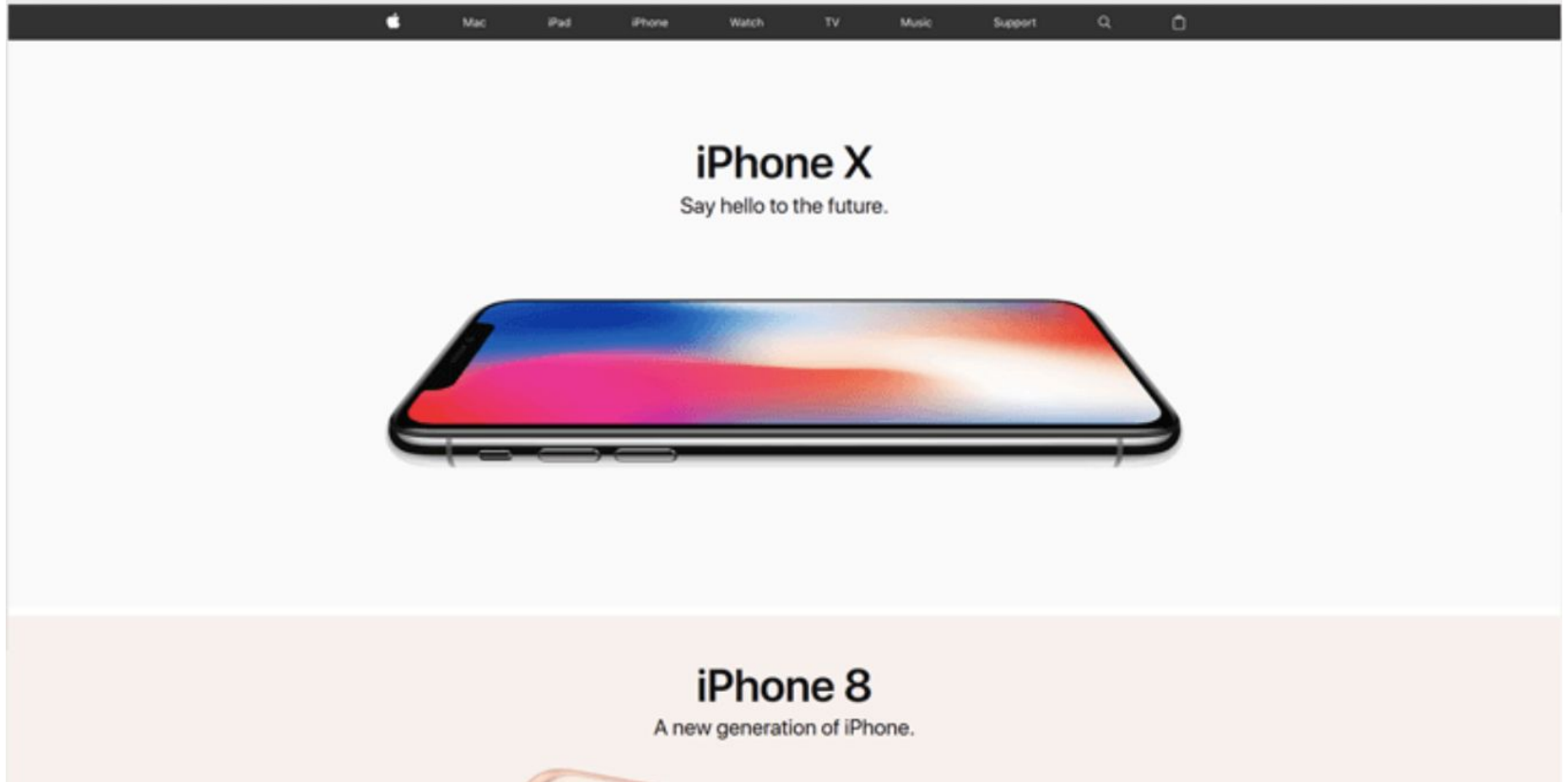
Make it beautiful.

Make your own website.

START A FREE TRIAL

No credit card required.

Whitespace isn't always white;
it's the negative space between the elements in your composition



Whitespace helps the user focus on certain elements on the page

TINKER



\$150

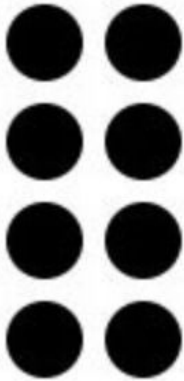


The Tinker watch comes in three sizes. The small is understated, the medium is classic, and the large is boss-like.

Whitespace is your friend 🥰

Proximity

- Placing related elements close to one another provides context and meaning
- Proximity overrides other principles like color in how we perceive groups



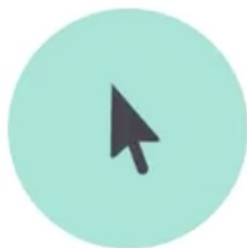
Kenya Reed

Web Designer

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kenya@reedweb.com

www.reedweb.com



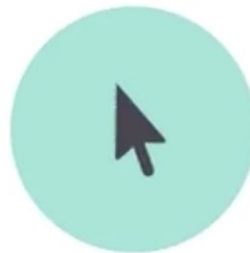
Kenya Reed

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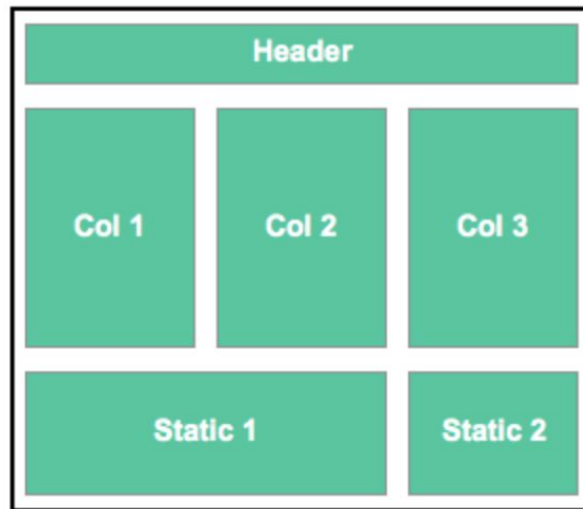
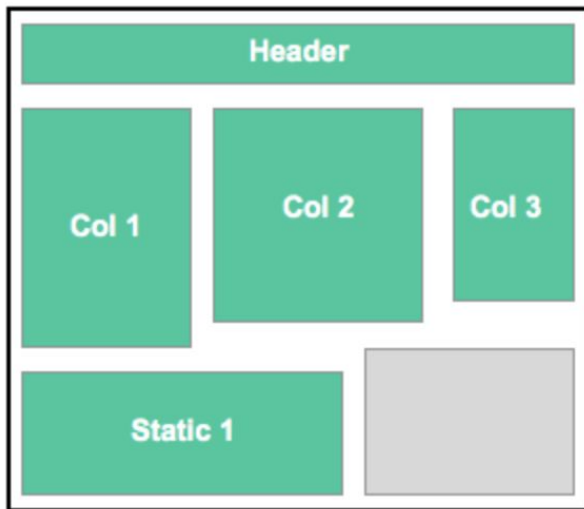
kenya@reedweb.com

www.reedweb.com



Alignment

- Makes it easier to find what you are looking for
- Creates a clean, crisp aesthetic





SEE

no evil



HEAR

no evil



SPEAK

no evil



SEE

no evil



HEAR

no evil



SPEAK

no evil

1400+ Startup jobs

Find a job you love

Show all jobs

Product Manager - Mobile Apps Team

📍 Copenhagen 🕒 Full-time



Kahoot

5 days ago

Junior analytical person with social skills

📍 Copenhagen 🕒 Full-time



Yepstr

5 days ago

Marketing Intern for Exciting New Social App

📍 Copenhagen 🕒 Full-time



Funlon

5 days ago

Quality Assurance Developer

📍 Copenhagen 🕒 Full-time



Ideanote

5 days ago

Influencer Agent

📍 Copenhagen 🕒 Full-time



Twinkl

5 days ago

Graphic Designer - Brand and Web Design

📍 Copenhagen 🕒 Full-time



Truecaller

5 days ago

[illegible]

UI Design Guidelines

A introduction

Credits: [Nick Babich](#) and Apple's Human Interface Guidelines

How big should my
buttons be?

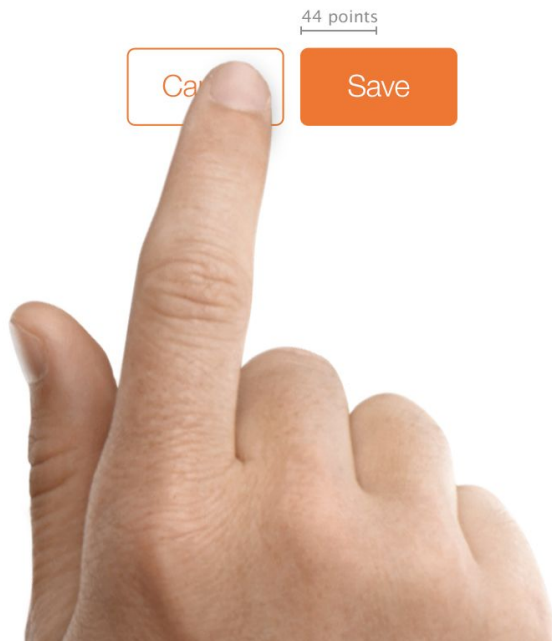
$$\text{MT} = a + b \cdot \text{ID} = a + b \cdot \log_2 \left(\frac{2D}{W} \right)$$

How big should my buttons be?

Hit Targets

Create controls that measure at least 44 points x 44 points so they can be accurately tapped with a finger.

[Learn more >](#)



Text Size

Text should be at least 11 points so it's legible at a typical viewing distance without zooming.

[Learn more >](#)

Heading

Sub-Headline

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend egestas nisl vehicula nec. Nullam varius est dui, nec accumsan lectus posuere ut. Nullam viverra purus laoreet euismod tempor.

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla eleifend.

Heading

Sub-Headline

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Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend egestas nisl vehicula nec. Nullam varius est dui, nec accumsan lectus posuere ut. Nullam viverra purus laoreet euismod tempor.

Spacing

Don't let text overlap. Improve legibility by increasing line height or letter spacing.

[Learn more >](#)



Heading

Sub-Headline

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Heading

Sub-Headline

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend egestas nisl vehicula nec. Nullam varius est dui, nec accumsan lectus posuere ut. Nullam viverra purus laoreet euismod tempor.

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Contrast

Make sure there is ample contrast between the font color and the background so text is legible.

[Learn more >](#)



Heading

Sub-Headline

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend egestas nisl vehicula nec. Nullam varius est dui, nec accumsan lectus posuere ut. Nullam viverra purus laoreet euismod tempor.

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend.

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Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus. Duis vehicula elit nulla, eleifend.





WCAG 2.0 - Contrast checker

Level: AA Refresh on DOM updates: on

visible elements

hidden elements

Contrast	Size	Elements
✗ 1	small	1 input
✗ 4.48	small	1 div
✓ 4.51	small	1 div
✓ 8.59	small	5 [input, div, span]
✓ 8.68	small	38 div
✓ 10.47	small	9 div
✓ 16.1	small	8 div
✓ 19.95	small	1 span
✓ 21	small	1 span

refresh results

Color tool

Foreground color (hex.)

Background color (hex.)

#777777

#FFFFFF

14pt

14pt bold

18pt

Size	Contrast	AA	AAA
small	4.48	✗	✗
Large	4.48	✓	✗



Lab 6: Paper Prototypes



File Edit View Insert Format Tools Add-ons Help last edit was 3 days ago



Lab 6: Paper Prototypes

*This is a group project to be completed before next lab
You may have to do some work outside of class to finish your prototype
Worth: 10 points for participation*

In the world of digital design, we have a lot of different tools that make the process of prototyping really simple. But still pen and paper remain the most useful tools for UX designers.

Paper prototyping can be extremely helpful during the early-stage conceptualizing — when a team needs to explore a variety of different concepts and choose the one that will be used. The paper prototype is a type of low-fidelity prototype that allows your team to quickly visualize and test various ideas.

It's also a great team building activity that will allow your team to get honest, early feedback on your design idea. Because the prototypes don't look like you've spent a lot of time on them, people feel more comfortable criticizing sketches rather than polished designs.

[This video](#) will help give you an idea of what paper prototypes can look like.

Step 1: Set a clear goal for your prototype

What do you want to learn from your prototype. Since paper prototyping happens early in the design phase, this is a great time to prove your concept. Before digging into the painstaking work of pixel perfection, a paper prototype allows you to elicit honest feedback about whether people would even want to use your product, does it really solve their problem (is it useful)? You can also work out issues with the general workflow of your product or discover what areas a user may find

What is the time?

What is the time?

What is the time?

What is the time?

What is the time?

What is the time?

Which is the easiest to read and why?



Templates

Squarespace websites are created with modern browsers and mobile devices in mind. They employ the latest HTML, CSS and Javascript techniques.



Customization

Make any design your own using the Style Editor. Personalize fonts, colors, and layouts to create the custom look you want.



Domains

Squarespace makes adding your custom domain simple, and every annual account receives a free custom domain.



Social

Import. Sync. Publish. Make your website the center of your online identity on the web with our powerful social integrations.



SEO

Squarespace websites are loved by search engines. They include clean article links, proper tagging, XML sitemaps, and valid XHTML code.



Analytics

View the traffic and behavior of visitors in real-time. Learn where they're coming from, and what search keywords they're using to find you.

Organization

Create an easy-to-read layout that puts controls close to the content they modify.

[Learn more >](#)



	Edit
Coffee	28 g >
Grain Size	~113.3 μm >
Water	1241 ml >
Temperature	103°C >
Time	223 s >
Serving	310.25 ml >

Metric

English

coffee: 28 g. [Edit](#) grain size: ~113.1 μm [Edit](#) water: 1241 ml [Edit](#) temp: 103° [Edit](#) time: 223 s. [Edit](#) serving: 310.25 ml [Edit](#)

Metric

English

Celsius

Fahrenheit



Alignment

Align text, images, and buttons to show users how information is related.

[Learn more >](#)



Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat *ornare**

Curabitur. semper vitae urna ac adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus.

**Ornare imperdiet blandit lectus. Morbi tristique*

Continue

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus. Morbi tristique urna ut volutpat *ornare** Curabitur semper vitae urna ac tempus.



**ornare imperdiet blandit lectus.
Morbi tristique*

Continue

Adipiscing elit. Sed neque nisl, blandit vel ipsum eu, imperdiet blandit lectus.

Morbi tristique urna ut volutpat ornare. Curabitur semper vitae urna ac tempus.

SCHOOLS, COLLEGES, & DEPARTMENTS

ACADEMICS & RESEARCH

ADMINISTRATION

ATHLETICS & RECREATION

EMPLOYMENT

GIVING TO U-M

HEALTH & MEDICAL RESOURCES

INTERNATIONAL RESOURCES

LIBRARIES & ARCHIVES

MUSEUMS & CULTURAL ATTRACTIONS

NEWS & EVENTS

STATE & COMMUNITY PARTNERSHIPS

Schools, Colleges, & Departments

Academics & Research

Administration

Athletics & Recreation

Employment

Giving to U-M

Health & Medical Resources

International Resources

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Museums & Cultural Attractions

News & Events

State & Community Partnerships

Which is better and why?

We are IU
 Campuses ▶
 Medical Centers ▶
 Research ▶

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 Admissions ▶
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 Arts & Culture ▶
 Community Outreach ▶
 Emergency Preparedness ▶
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 Libraries ▶
 News & Information ▶
 Sports & Recreation ▶
 Technology ▶

Administration ▶
 President ▶
 Board of Trustees ▶

SCHOOLS, COLLEGES, & DEPARTMENTS

 ACADEMICS & RESEARCH
 ADMINISTRATION
 ATHLETICS & RECREATION
 EMPLOYMENT
 GIVING TO U-M
 HEALTH & MEDICAL RESOURCES
 INTERNATIONAL RESOURCES
 LIBRARIES & ARCHIVES
 MUSEUMS & CULTURAL ATTRACTIONS
 NEWS & EVENTS
 STATE & COMMUNITY PARTNERSHIPS

PROSPECTIVE STUDENTS
 STUDENTS
 FACULTY AND STAFF
 PARENTS
 ALUMNI
 VISITORS AND NEIGHBORS

ABOUT VANDERBILT
 COLLEGES AND SCHOOLS
 MEDICAL CENTER
 NEWS AND MEDIA
 RESEARCH
 LIBRARIES
 ARTS
 INTERNATIONAL
 JOBS
 TECHNOLOGY
 ATHLETICS

*Navigation menus from three university websites. Left to right:
 Indiana University, University of Michigan, and Vanderbilt University.*

Nooooooooo

BEFORE

The 'BEFORE' screenshot shows the Google News homepage as it appeared in 2017. The interface is cluttered with multiple columns of news stories. On the left, there is a sidebar with category filters like 'Top Stories', 'U.S. News', 'World', 'Business', 'Technology', 'Environment', 'Sports', 'Science', 'Health', 'Lifestyle', 'Entertainment', 'Opinion', 'Local', 'Weather', 'Travel', 'Food', 'Fashion', 'Arts', 'Books', 'Music', 'Video', 'Podcasts', 'Gaming', 'Homes', 'Automotive', 'Healthcare', 'Education', 'Law', 'Politics', 'Military', 'Religion', 'History', 'Culture', 'Science', 'Technology', 'Environment', 'Sports', 'Science', 'Health', 'Lifestyle', 'Entertainment', 'Opinion', 'Local', 'Weather', 'Travel', 'Food', 'Fashion', 'Arts', 'Books', 'Music', 'Video', 'Podcasts', 'Gaming', 'Homes', 'Automotive', 'Healthcare', 'Education', 'Law', 'Politics', 'Military', 'Religion', 'History', 'Culture'. The main content area is divided into several columns. The top section features a 'Top Stories' section with a large image of the Supreme Court and the headline 'Supreme Court Agrees To Hear Wisconsin Gerrymandering Case'. Below this, there are several other news stories, including 'Otis Warbler dies days after release from North Korean detention', 'The Blame Win Supreme Court Battle Over Band's Name in Trademark Dispute', 'Men Charged in Killing Of Muslim Teenager in Virginia', 'London Mosque Attack Suspect Named, According to Media Outlets', 'Democrats Gun Up Senate Business to Protest GOP Healthcare Bill', 'Russia Drives A Line Across Syria After US Blames Open Syrian Jet', and 'The Latest: Man train explosives failer car into French police'. The layout is dense and lacks a clear hierarchy, making it difficult to find specific news items.

AFTER

The 'AFTER' screenshot shows the Google News homepage as it appeared in 2018. The interface is cleaner and more organized. The top section features a 'Top Stories' section with a large image of the Supreme Court and the headline 'Supreme Court Agrees To Hear Wisconsin Gerrymandering Case'. Below this, there are several other news stories, including 'Otis Warbler dies days after release from North Korean detention', 'The Blame Win Supreme Court Battle Over Band's Name in Trademark Dispute', 'Men Charged in Killing Of Muslim Teenager in Virginia', 'London Mosque Attack Suspect Named, According to Media Outlets', 'Democrats Gun Up Senate Business to Protest GOP Healthcare Bill', 'Russia Drives A Line Across Syria After US Blames Open Syrian Jet', and 'The Latest: Man train explosives failer car into French police'. The layout is more focused, with a clear hierarchy of news items. On the right side, there is a 'In the News' section with a list of names and a 'Fact Check' section with a list of false claims. The overall design is more modern and user-friendly.

What's better about the “after” version?

Pennsylvania

Bedford Motel/Hotel: Crinaline Courts

(814) 623-9511 S: \$118 D: \$120

Bedford Motel/Hotel: Holiday Inn

(814) 623-9006 S: \$129 D: \$136

Bedford Motel/Hotel: Midway

(814) 623-8107 S: \$121 D: \$126

Bedford Motel/Hotel: Penn Manor

(814) 623-8177 S: \$119 D: \$125

Bedford Motel/Hotel: Quality Inn

(814) 623-5189 S: \$123 D: \$128

Bedford Motel/Hotel: Terrace

(814) 623-5111 S: \$122 D: \$124

Bradley Motel/Hotel: De Soto

(814) 362-3567 S: \$120 D: \$124

Bradley Motel/Hotel: Holiday House

(814) 362-4511 S: \$122 D: \$125

Bradley Motel/Hotel: Holiday Inn

(814) 362-4501 S: \$132 D: \$140

Breezewood Motel/Hotel: Best Western Plaza

(814) 735-4352 S: \$120 D: \$127

Breezewood Motel/Hotel: Motel 70

(814) 735-4385 S: \$116 D: \$118

What is the price of a double room at the Quality Inn in Pennsylvania?

South Carolina

City	Motel/Hotel	Area code	Phone	Rates	
				Single	Double
Charleston	Best Western	803	747-0961	\$126	\$130
Charleston	Days Inn	803	881-1000	\$118	\$124
Charleston	Holiday Inn N	803	744-1621	\$136	\$146
Charleston	Holiday Inn SW	803	556-7100	\$133	\$147
Charleston	Howard Johnsons	803	524-4148	\$131	\$136
Charleston	Ramada Inn	803	774-8281	\$133	\$140
Charleston	Sheraton Inn	803	744-2401	\$134	\$142
Columbia	Best Western	803	796-9400	\$129	\$134
Columbia	Carolina Inn	803	799-8200	\$142	\$148
Columbia	Days Inn	803	736-0000	\$123	\$127
Columbia	Holiday Inn NW	803	794-9440	\$132	\$139
Columbia	Howard Johnsons	803	772-7200	\$125	\$127
Columbia	Quality Inn	803	772-0270	\$134	\$141
Columbia	Ramada Inn	803	796-2700	\$136	\$144
Columbia	Vagabond Inn	803	796-6240	\$127	\$130

How much for a single room at the Quality Inn in Columbia?

Do not expose to excessive heat or direct sunlight.

STAPLE
HERE

PASSENGER TICKET AND BAGGAGE CHECK
AMERICAN AIRLINES



AMERICAN AIRLINES
BOARDING PASS

STATUS

26 JUN 09

ISSUING OFFICE CODE

US

03M and 670

SAN FRANCISCO

CHRISTENSEN/CHRIS NE

CHRISTENSEN/CHRIS NEAL

TIME BASE

YEAR CODE

70

TO DALLAS FT WORTH

AA 367

CLASS D 26 JUN 12 20P

STATUS NOT VALID BEFORE - NOT VALID AFTER

TO DALLAS FT WORTH

TO COZUMEL

TO COZUMEL

AMERICAN AIRLINES

ORIGINAL DATE

BOARDING PASS

TIME CALCULATION

FAVORITE

16CBMD/AA

BUSINESS

AA 367 D 26 JUN 12 20P

REGULATION

DATE 1136A

NO 6A

DOCS OK

US 091

PRIORITY ACCESS

STICK CONTROL NUMBER

00113650014372

CARRIER

AIRLINE

FLIGHT NUMBER

CLASS

2 001 6027808715 1

CONTINENTAL SEAT INFORMATION

POS. DL. WT. INCH. WT. HGT. POS. DL. WT. INCH. WT.

BAGGAGE CODE

GROUP ONLINE

FOR STOWING

12K 150

Where's my seat?



SMITHERSON, JOHN D.

SFO  LGA

SFO  LGA

FLIGHT

GATE

ZONE

DL1234

26A

4

FLIGHT

SEAT

DL1234 12B

BOARDING

JUN 17, 2010 @ 12:15 PM

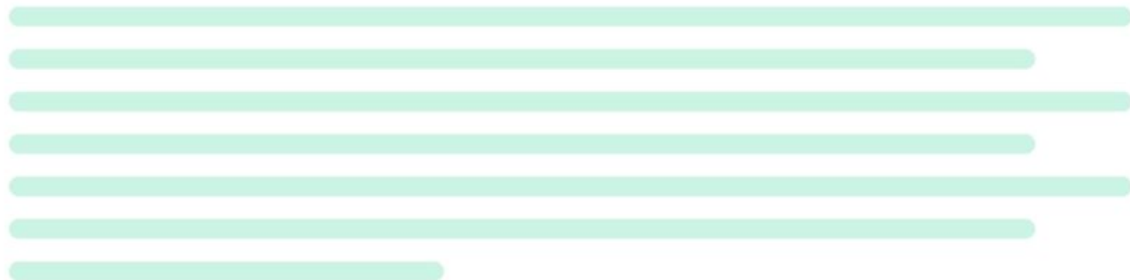
DEPARTING

12:45 PM

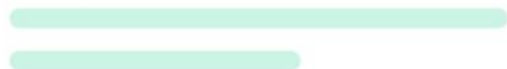
SMITHERSON, JOHN D.

Where's my seat?

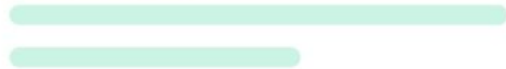
Visual Hierarchy



Heading 2



Heading 2



How to Train Your Brain to Remember Almost Anything

Four techniques for storing knowledge you might otherwise forget



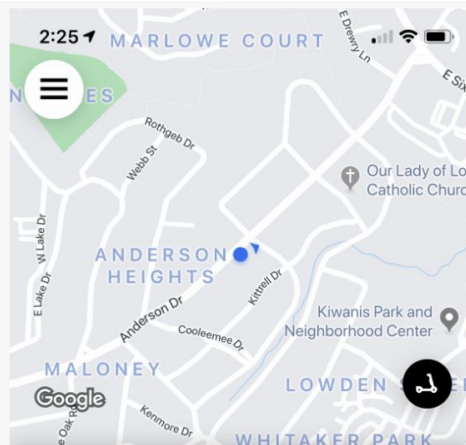
Thomas Oppong · October 16 · 5 min read ★



Photo: tunart/Getty

Success is largely based on what you know — everything you know informs the choices you make. And those choices are either getting you closer to what you want or increasing the distance between you and





Good afternoon, Kelley

Where to?

Now ▾



Home



Raleigh-Durham International Air...
2400 John Brantley Blvd, Morrisville



Blue

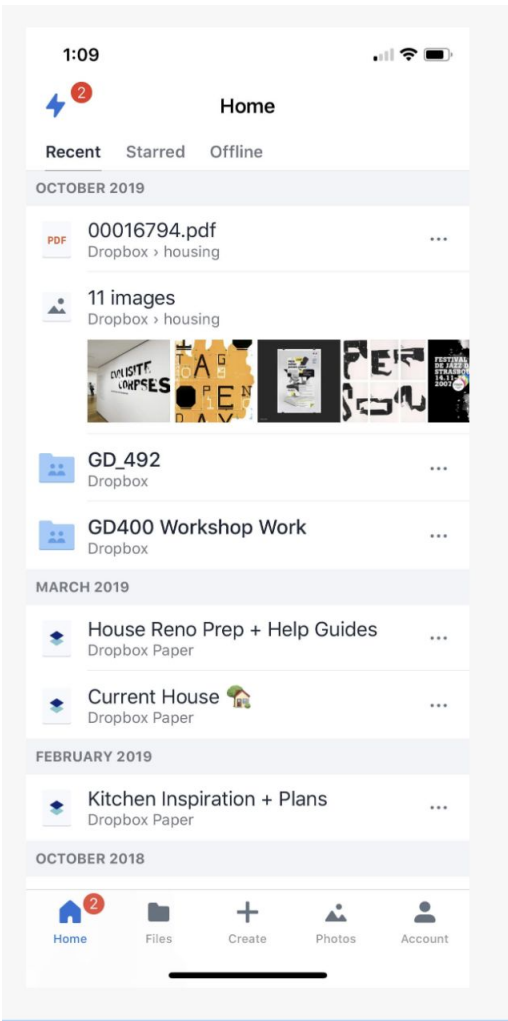
Your next reward

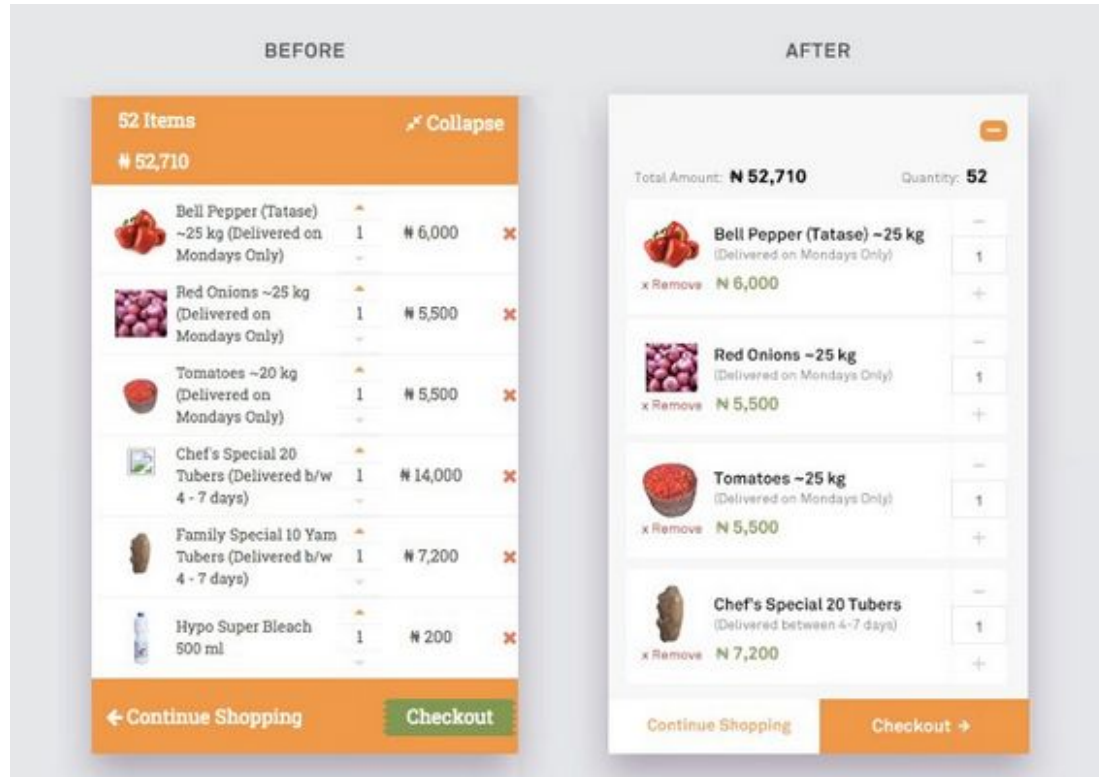


Ride



Order food





Color also creates visual hierarchy. Use color wisely!



Label your icons!

Barbeque party



Type a new item here



- Hamburger buns 3 packs
- Hot dogs 4
- Grapes
- Paper cups
- Potato chips

Paper plates

Paper towels



METHODS



TEMPLATES &
DOCUMENTS



GUIDELINES

[Home](#) > [What & Why of Usability](#) > [Visual Design Basics](#)



Share

Visual Design Basics

Visual design focuses on the aesthetics of a site and its related materials by strategically implementing images, colors, fonts, and other elements. A successful visual design does not take away from the content on the page or function. Instead, it enhances it by engaging users and helping to build trust and interest in

Search



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Share

Visual Design Basics

Visual design focuses on the aesthetics of a site and its related materials by strategically implementing images, colors, fonts, and other elements. A successful visual design does not take away from the content on the page or function. Instead, it enhances it by engaging users and helping to build trust and interest in the brand.

Basic Elements of Visual Design

The basic elements that combine to create visual designs include the following:

- **Lines** connect two points and can be used to help define shapes, make divisions, and create textures. All lines, if they're straight, have a length, width, and direction.
- **Shapes** are self-contained areas. To define the area, the graphic artist uses lines, differences in value, color, and/or texture. Every object is composed of shapes.
- **Color palette** choices and combinations are used to differentiate items, create depth, add emphasis, and/or help organize information. Color theory examines how various

Related Content

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[Creating a User-Centered Approach in Government](#)

[One Site Fits All: A Responsive Solution](#)

[Getting the Guidelines Up-to-Date](#)

[A New Purpose, A New Design: Welcome to the Usability.gov Reboot](#)

Related Resources

[Creating Wireframes](#)

[Universal Principles of Design, Revised and Updated: 125 Ways](#)