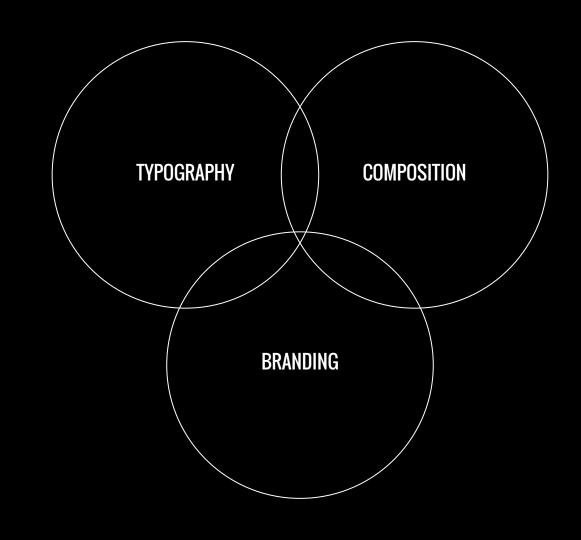
DESIGNING FOR THE DIGITAL ECOSYSTEM

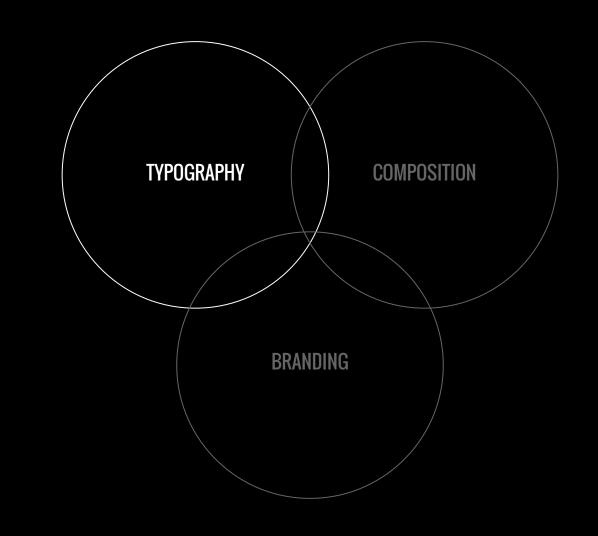
Cornell Tech 2016

Heather Luipold Adam Katz Matt Delbridge

CLASS 2: DESIGN BASICS

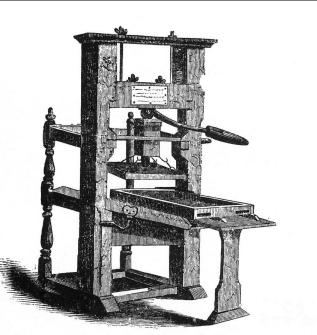
WHAT ARE THE COMPONENTS OF DESIGN?

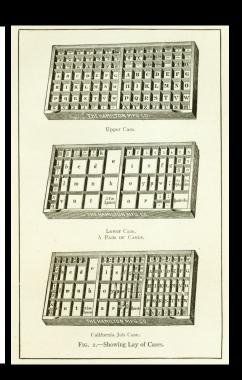




A BRIEF HISTORY OF THE PRINTED LETTER







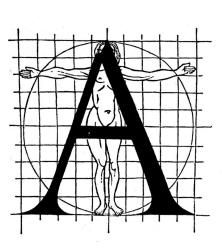
Movable type was invented by <u>Johannes Gutenberg</u> in fifteenth-century Germany. His typography took cues from the dark, dense handwriting of the period, called "blackletter."

Glos appellatur mariti soror: atquidem fratris uxor.
Leuir dicitur frater mariti: quasi leuus uir.
Fratriz appellantur quasi fratrum inter se uxores.
Amitini fratrum & matris & sominz silii.
Patrueles matrum fratrum silii.
Cosobrini ex duabus editi sororibus: de quibus exempla multa sunt in antiquis auctonbus: & maxime in Affranio: & uit ris uetutissimis scriptoribus.

Jenson's roman typeface cut in 1470

Working in Venice in the late fifteenth century, Nicolas

Jenson created letters that combined gothic calligraphic
traditions with the new Italian taste for humanist
handwriting, which were based on classical models.



The painter and designer <u>Geofroy Tory</u> believed
That the proportions of the alphabet should reflect the ideal human form.

SPECIME

By 70 HN BASKERVILLE of Birmingham.

T·Am indebted to you for two ▲ Letters dated from Corcyra. You congratulate me in one of them on the Account you have Received, that I still preserve my former Authority in the Commonwealth: and wish me Joy in the other of my late Marriage. With respect to the First, freely to Support and inforce them;

if to mean well to the Interest of my Country and to approve that meaning to every Friend of its Liberties, may be consider'd as maintaining my Authority; the Account you have heard is certainly true. But if it confifts in rendering those Sentiments effectual to the Public Welfare or at least in daring

P. VIRGILII MARONIS

BUCOLICA

ECLOGA I. cui nomen TITYRUS.

MELIBOEUS, TITYRUS.

TITYRE, tu patulæ recubans fub tegmine fagi Silvestrem tenui Musam meditaris avena: Nos patriæ fines, et dulcia linquimus arva; Nos patriam fugimus: tu, Tityre, lentus in umbra

- 5 Formofam refonare doces Amarvllida filvas. T. O Melibœe, Deus nobis hæc otia fecit: Namque erit ille mihi femper Deus: illius aram Sæpe tener nostris ab ovilibus imbuet agnus. Ille meas errare boves, ut cernis, et ipfum
- 10 Ludere, quæ vellem, calamo permifit agrefti. M. Non equidem invideo; miror magis: undique totis Usque adeo turbatur agris. en ipse capellas Protenus æger ago: hanc etiam vix, Tityre, duco: Hic inter denfas corylos modo namque gemellos,
- 15 Spem gregis, ah! filice in nuda connixa reliquit. Sæpe malum hoc nobis, fi mens non læva fuiffet, De cœlo tactas memini prædicere quercus: Sæpe finistra cava prædixit ab ilice cornix. Sed tamen, ifte Deus qui fit, da, Tityre, nobis.
- 20 T. Urbem, quam dicunt Romam, Melibœe, putavi Stultus ego huic nostræ fimilem, quo sæpe solemus Pastores ovium teneros depellere fœtus. Sic canibus catulos fimiles, fic matribus hædos

Text Page of Baskerville's Virgil, Birmingham, 1757 [81x5% inches]

John Baskerville created type with such contrast between thick and thin elements that his contemporaries are said to have accused him of "blinding all the Readers of the Nation; for the strokes of [his] letters, being too thin and narrow, hurt the Eye."

AaBbCcDdEeFf GgHhliJjKkLlMm NnOoPpQqRrS sTtUuVvWwXxY yZz012345678

abcdefqhi jklmnopqr stuvwxyz a dd AUERSCHE GIESSEREI · FRANKFURT AM MAIN

FETTE FUTURA

GOETHE STOFFE

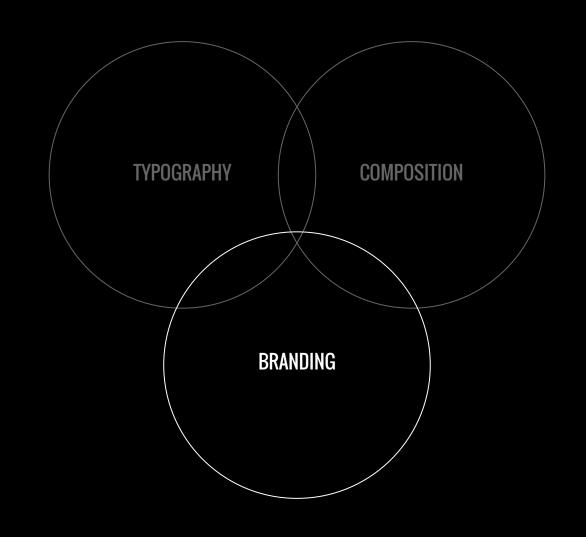
H. Berthold AG Type Foundry Akzidenz Grotesk - 1896 Herbert Bayer - Universal Bauhaus 1925 Futura 1927

(Based on Royal Grotesk)



Los Angeles 12 pt

Chicago (outline)



WHAT MAKES A BRAND



WHAT MAKES A BRAND



Aa Bb Cc Dd & Macintosh Aa Bb Cc Dd & Macintosh







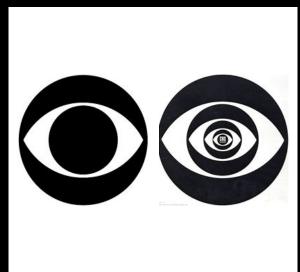
LOGO / IDENTITY SYSTEM

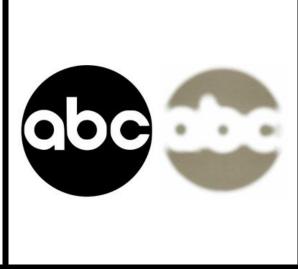
+ TYPOGRAPHY

COLOR Palette + WRITING / ATTITUDE

UI/UX

SOME OF THE FIRST ICONS DESIGNED FOR SCREENS.







CBS Eye William Golden - 1951

The first symbol that was deliberately considered for how it would appear on screen. "Unblinking eye of television."

ABC Logo Paul Rand - 1962

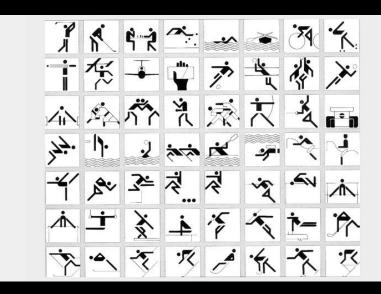
Wanted the letters to hold up even in the worst scenarios.

NBC Logo Fred Knapp - 1956

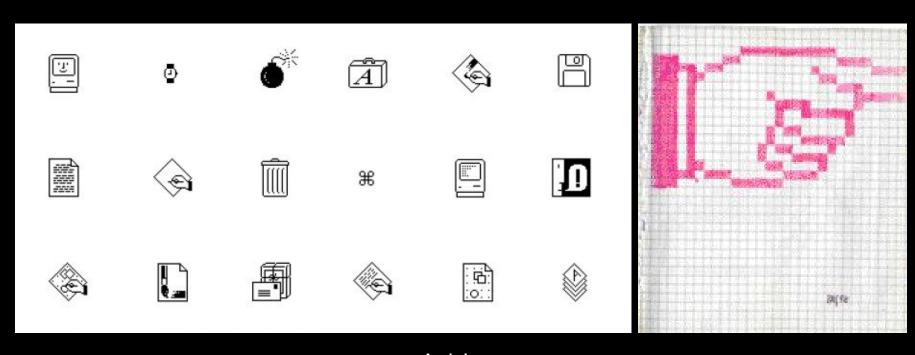
Fist animating logo.



Gerd Arntz and Otto Neurath ISOTYPES: 1930-40's

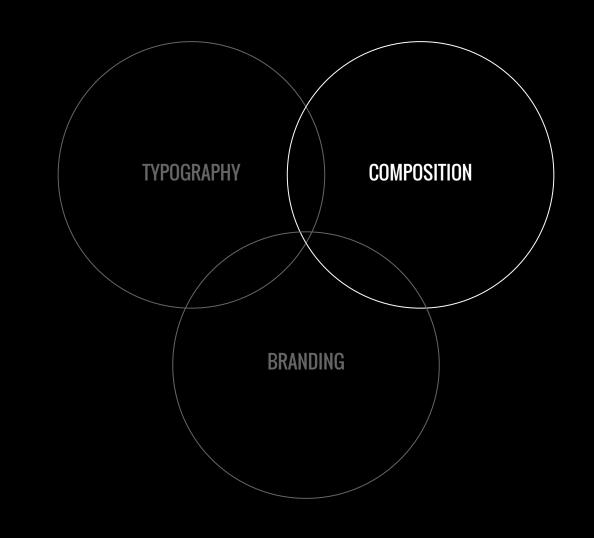






Apple Icons Susan Kare - 1983

Kare believes that good icons should be more like road signs than illustrations, easily comprehensible, and un cluttered with extraneous detail.



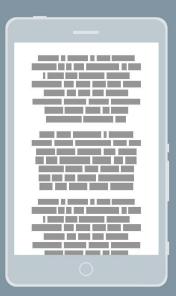
THE Z-EFFECT

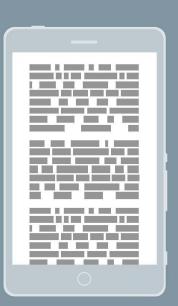


Your eye reads left to right top to bottom

ALIGNMENT







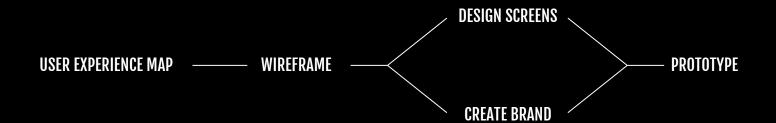
SCALE



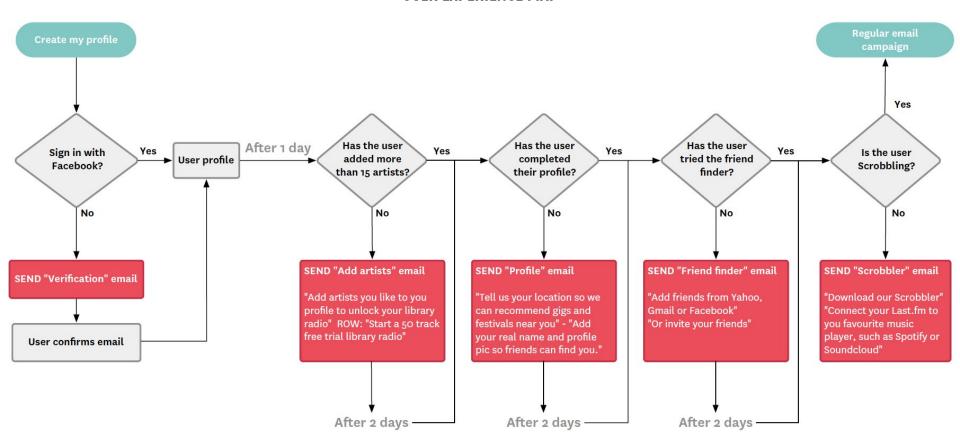
SO YOU NEED TO DESIGN A PRODUCT?

THE DESIGN PROCESS

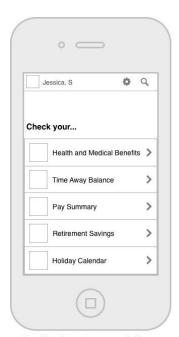
A BIRD'S EYE VIEW



USER EXPERIENCE MAP



WIREFRAME



Open the drawer to see available apps and websites



Drawer slides up from the bottom







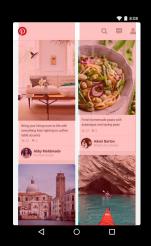


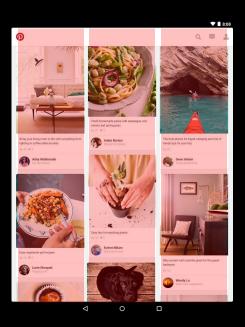
LET'S TALK DESIGN BASICS

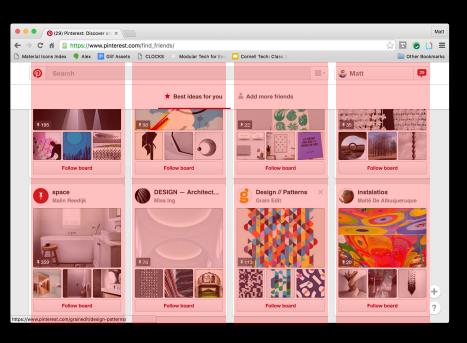
GRIDS

IT HELPS YOU LAYOUT A SCREEN. IT HELPS YOU SCALE TO DIFFERENT SCREEN SIZES.

WHY USE A GRID?

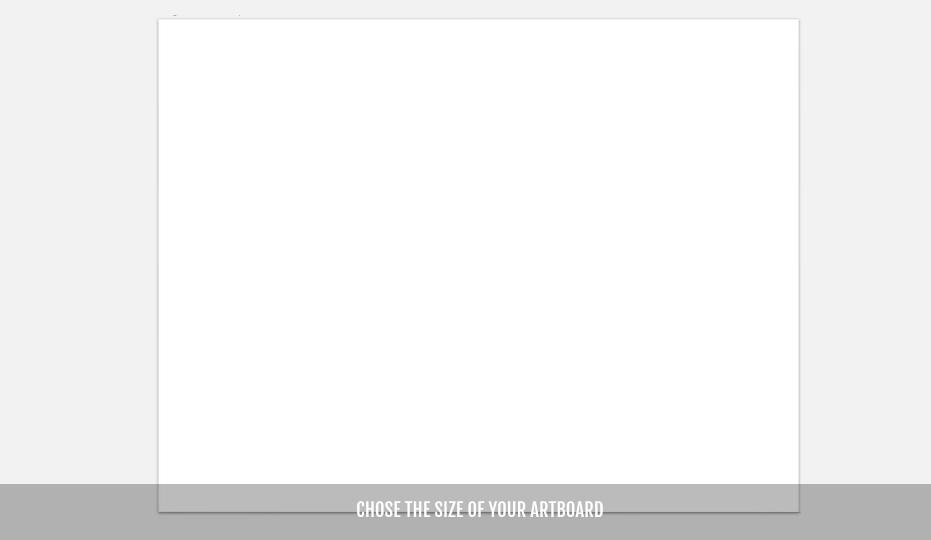


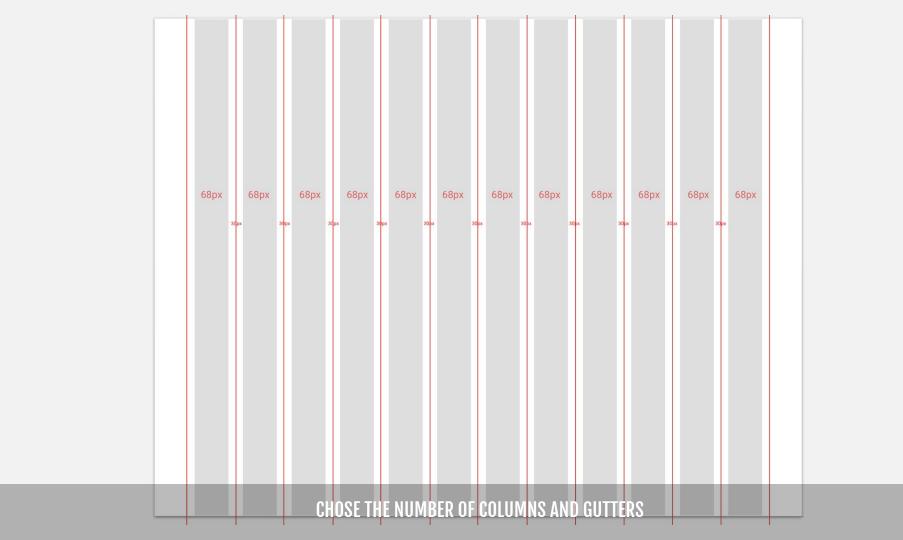


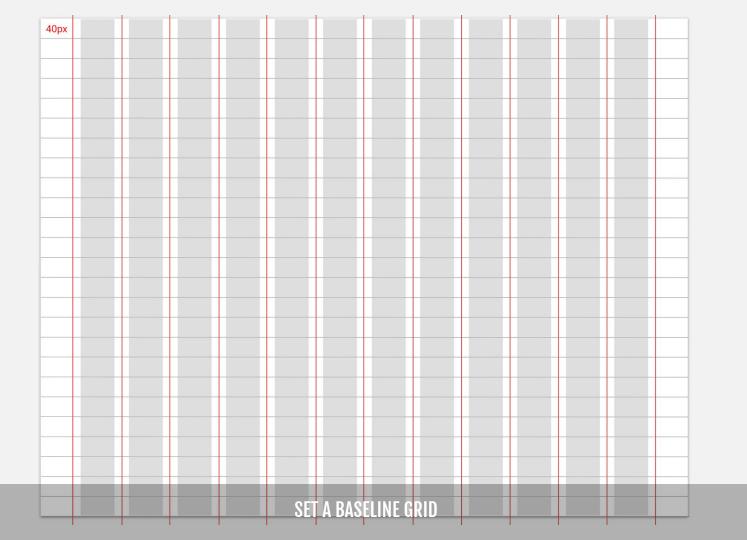


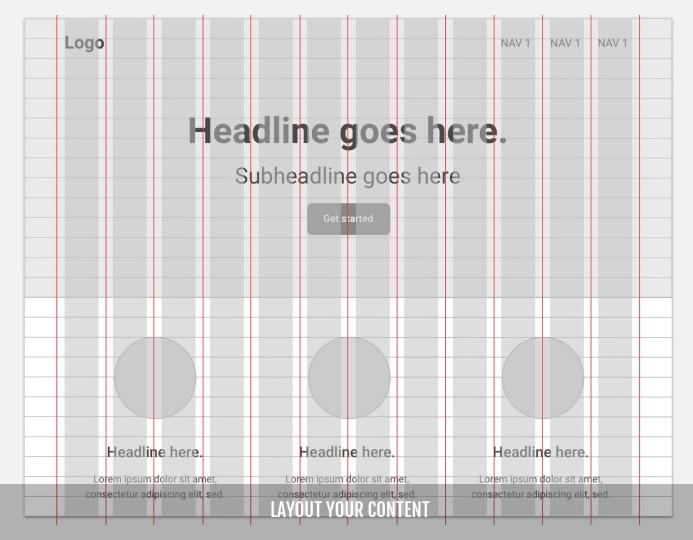
2 Columns 3 Columns

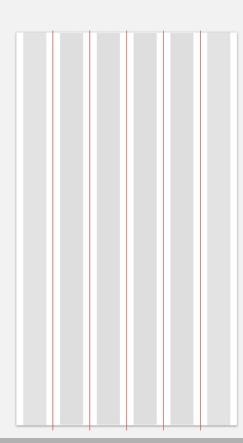
4+ Columns

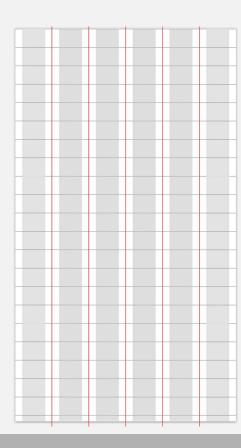


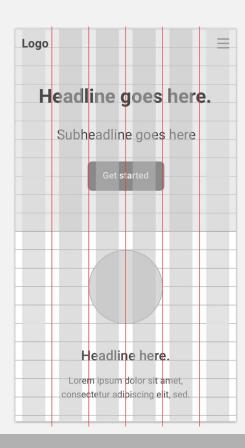






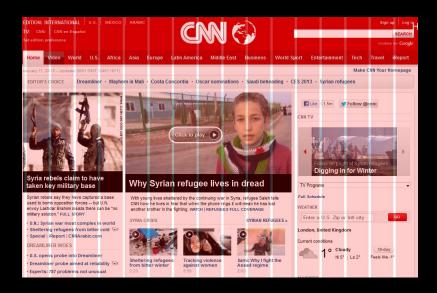






FIND THE GRID THAT WORKS FOR YOU



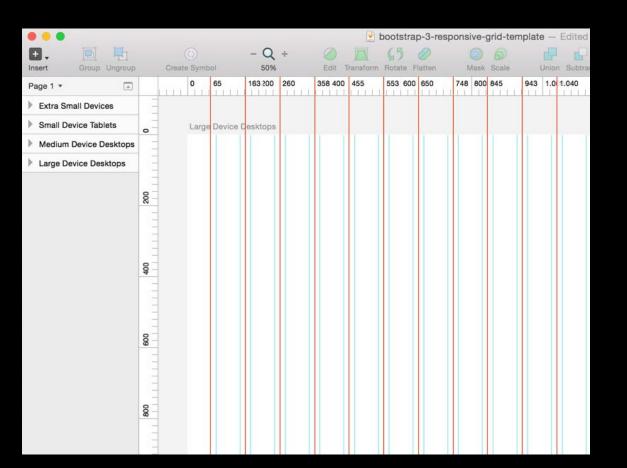


11 Column Grid

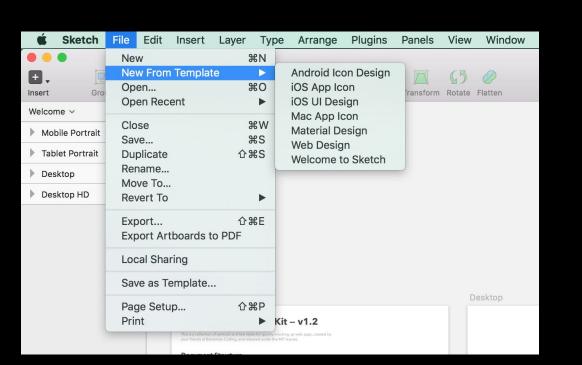
16 Column Grid

GRID RESOURCES

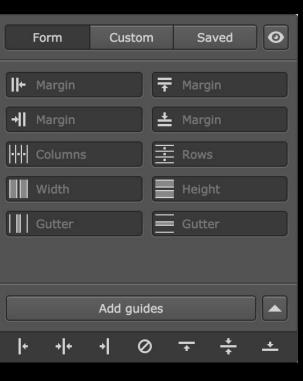




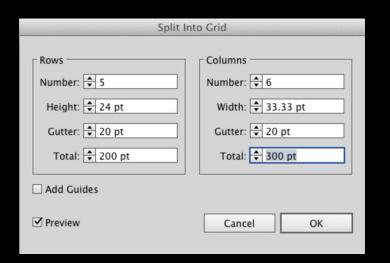
Sketch: Responsive Grid Template

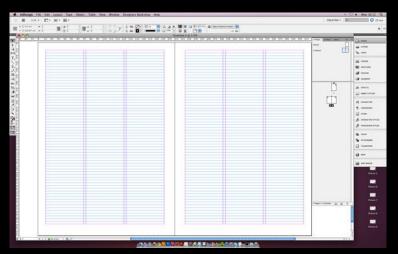


Sketch Templates



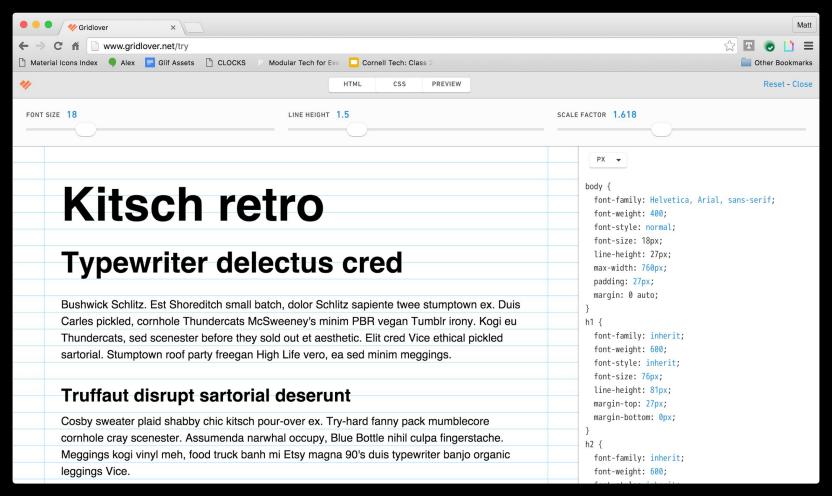
GuideGuide





Illustrator: Split Into Grid + Guides: Link

InDesign:Columns and Baseline Grid: Link



TYPOGRAPHY

serif
sans serif
square serif

script

Blackletter





— This is a headline.

SUBHEADLINE — This is a subheadline

HEADLINE

BODY COPY

CTA (CALL TO ACTION)

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

Get started now

BODYCOPY BEST PRACTICES

Type Size:

Line height:

Line Length:

Screen: 14–24 pixels

Print: 9-12 point

120–145% of the point size.

45 and 90 characters.

THESE ADE NOT HADD AND EAST DILLES

WARNING:

THESE ARE NOT HARD AND FAST RULES, JUST BEST PRACTICES AND A GOOD PLACE TO START.

Use as few typefaces as possible.

You should be able to get by with just **one**, maybe **two** typefaces. Make sure it has several different weights.

Find typefaces from the same family (or at least play nicely together).

Keep an eye out for typeface families that offer both serif and sans-serif characters (you can call them "twins").

Start with the body copy.

Why? Be-cause there's more body text than any-thing else. So start every project by mak-ing the body text look good, then worry about the rest.

Use well-drawn typefaces.

The eas-i-est and most vis-i-ble im-prove-ment you can make to your ty-pog-ra-phy is to use a pro-fes-sional font.

A good type designer does a lot of the work for you.

Less (copy) is more (digestible).

Aim to keep copy as concise as possible.

Remove unnecessary words whenever possible.

Hierarchy is key.

Ask yourself:

What you want your user to read first, second, and third?
What do you need your user to act on?

Create a repeatable structure.

Find a structure you can repeat throughout the experience.

Try to deviate as little as possible.



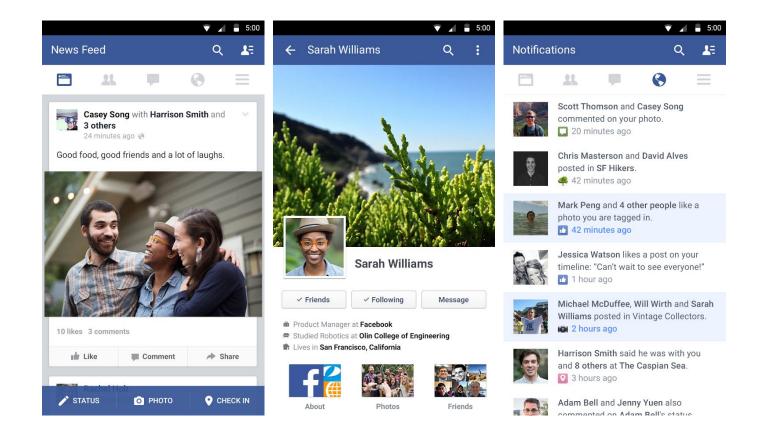
MOST LIKELY A GEOMETRIC SANS-SERIF.

HAS TO WORK AT SMALL SIZES.

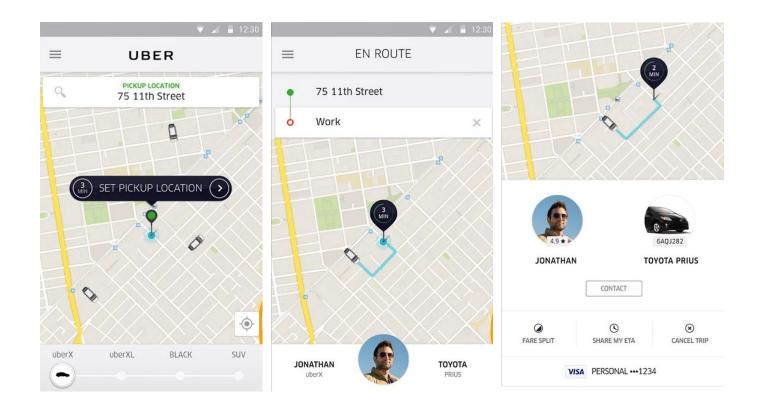
ONE TYPEFACE WITH MULTIPLE WEIGHTS SHOULD BE PLENTY.

TYPE SHOULD BE SIMPLE AND READABLE.

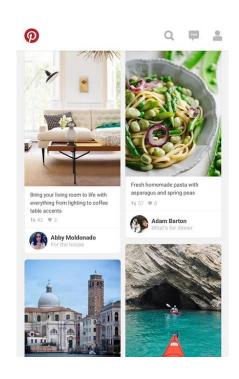
Helvetica



FF Clan

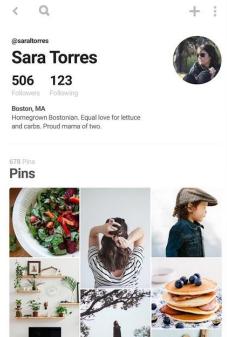


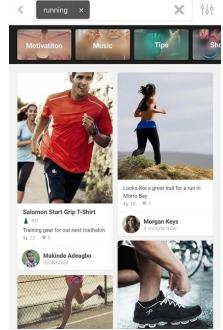
Helvetica Neue





Bloomingdale's \$450.00

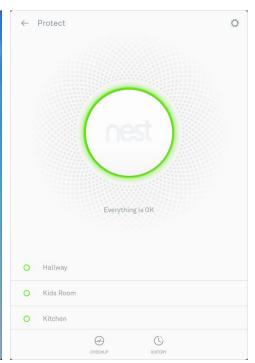




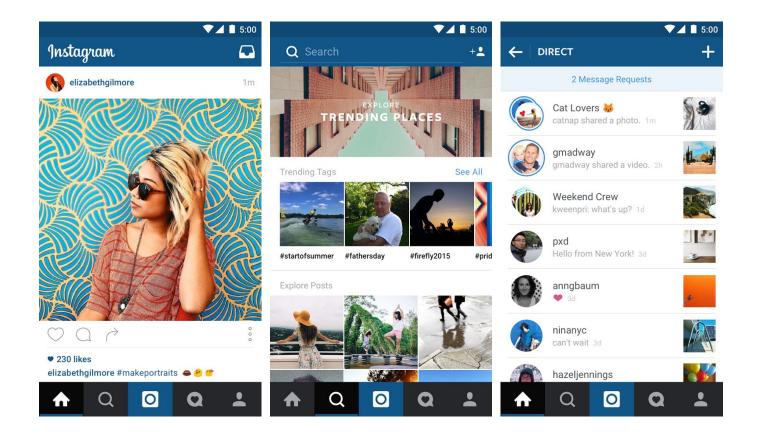
Akkurat



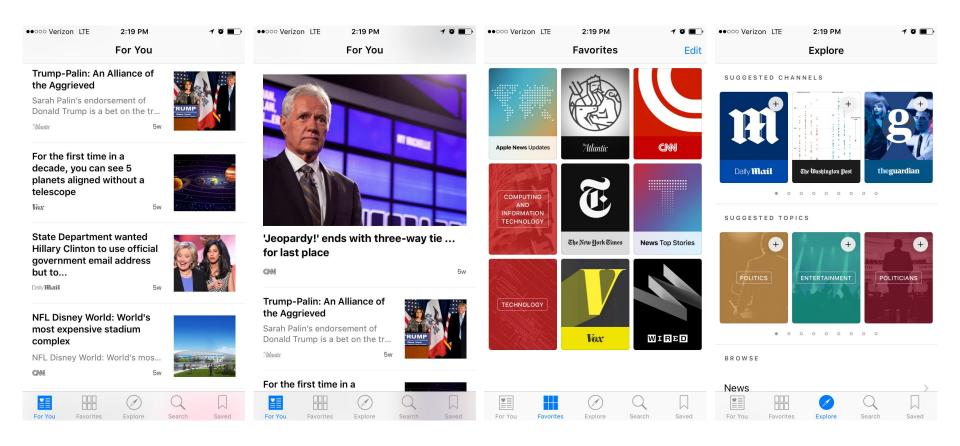




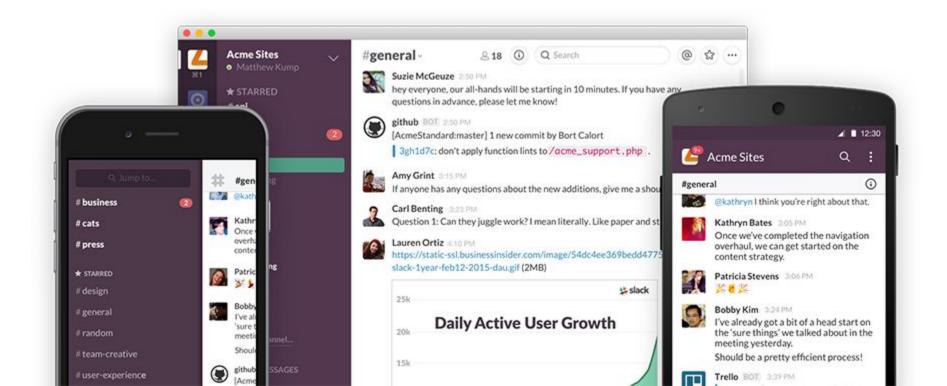
Helvetica Neue for IOS, Roboto for Android, Freight Sans



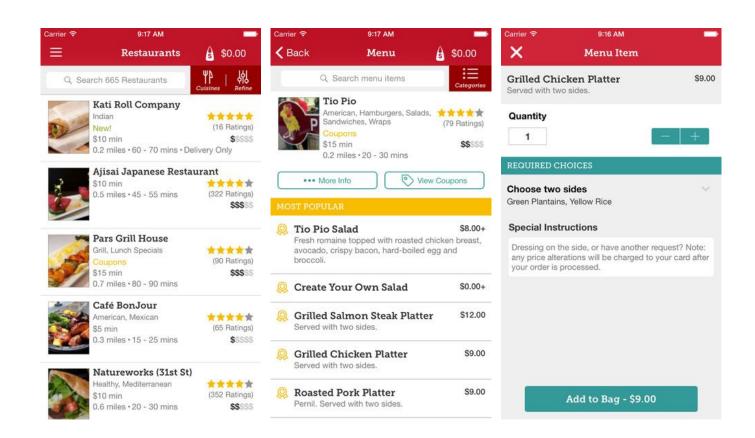
San Francisco



Lato



Museo Slab, Helvetica



Helvetica Roboto Graphik Lato Avenir **Droid Sans** Verdana

Proxima Nova



CONSIDER WHAT YOU ARE TRYING TO COMMUNICATE WITH YOUR TYPOGRAPHY DECISION.

littleBits

SHOP

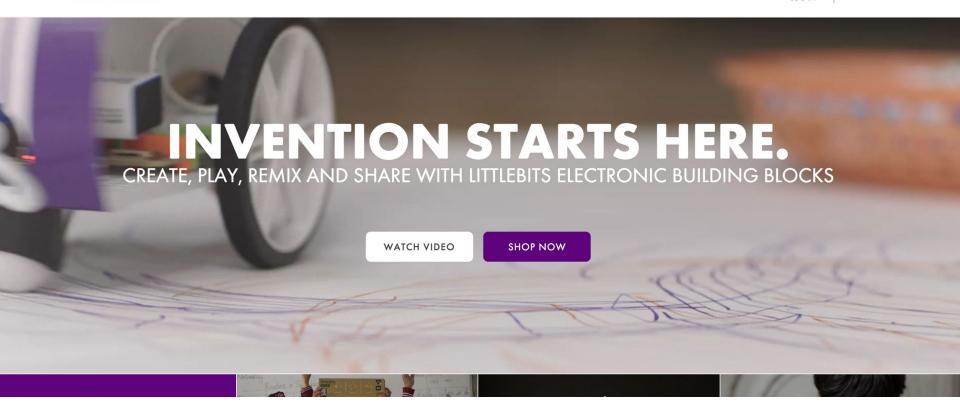
INVENT

COMMUNITY

EDUCATORS

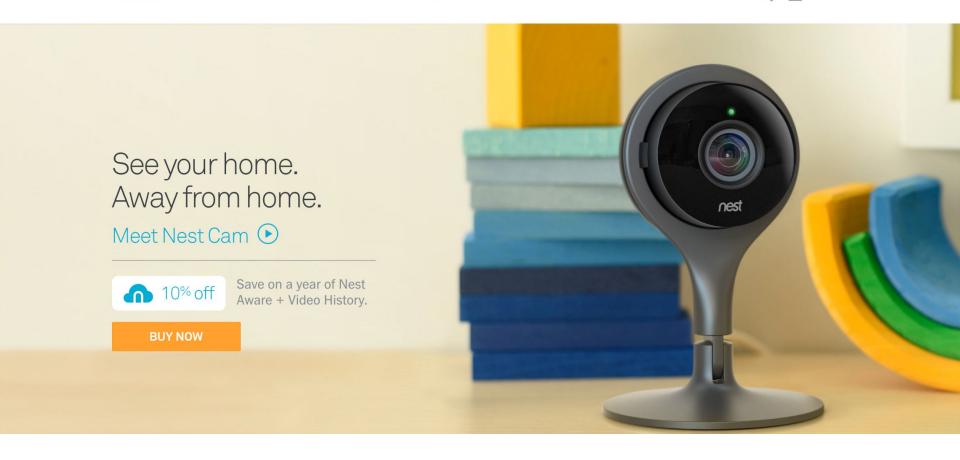




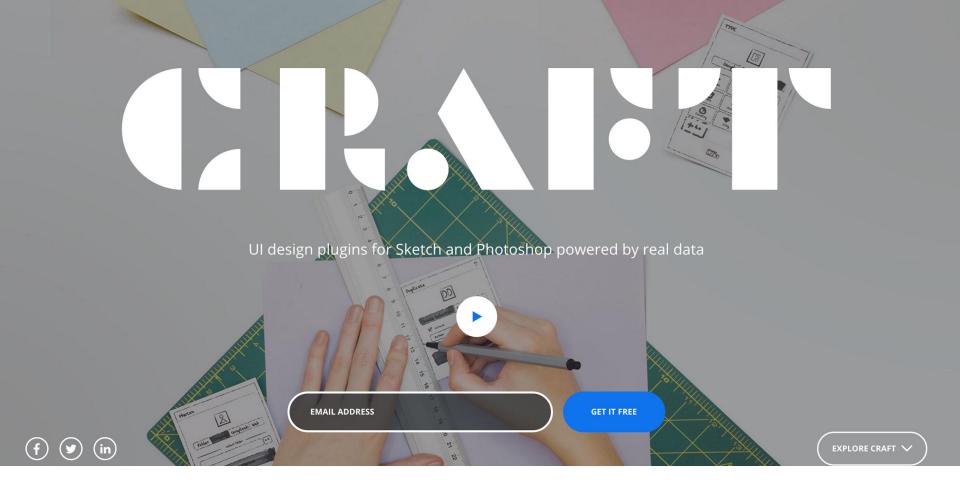


Bold and loud.





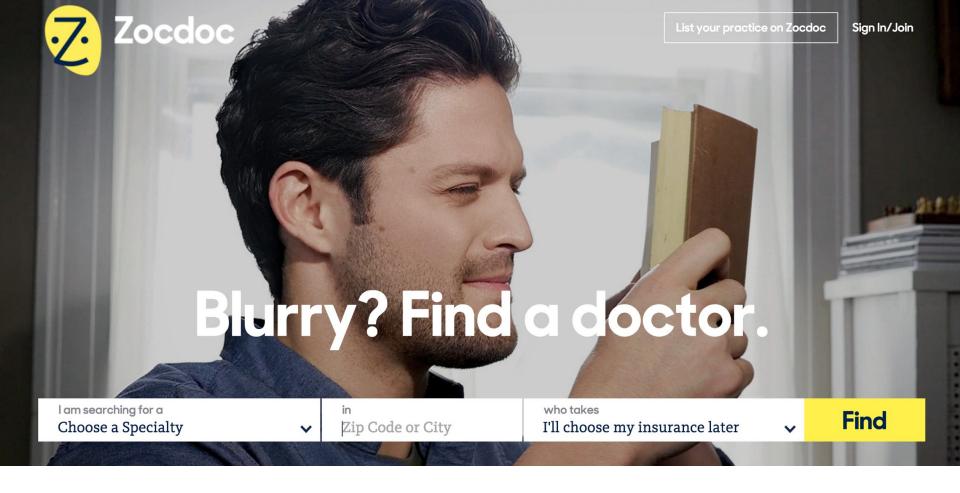
Softer, more expected. Feels like lifestyle-y tech.



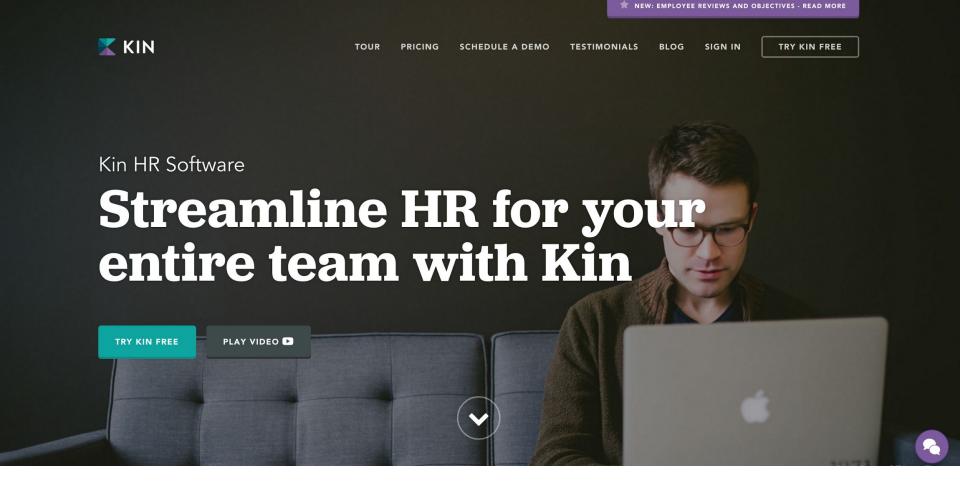
Playful and fun.

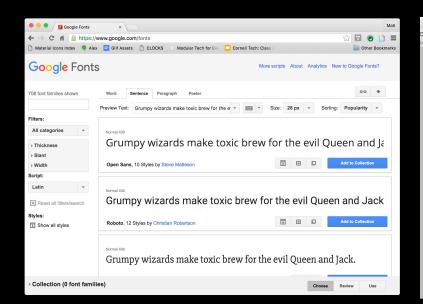


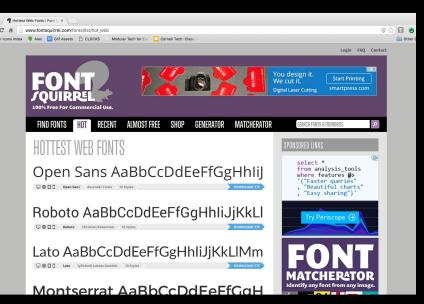
Formal but contemporary.



Cool and fun.







Google Fonts

Font Squirrel

Domine **Open Sans**

The Grav Wolf

The gray wolf is one of the world's best known and well researched animals, with probably more books written about it than any other wildlife species. It has a long history of association with humans. having been despised and hunted in most pastoral communities due to its attacks on livestock, while conversely being respected in some agrarian and hunter-gatherer societies.

The Fear of Wolves

Although the fear of wolves is pervasive in many human societies, the majority of recorded attacks on people have been attributed to animals suffering from rabies. Non-rabid wolves have attacked and killed people, mainly children, but this is unusual, as wolves are relatively few, live away from people, and have been taught to fear humans by hunters and shepherds.

Montserrat

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Playfair Display

Fira Sans

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Alegreya Sans

Alegreya

rak rak

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Salome

Martin calls to say he's sending old electrical equipment. That's good – we can always use some more electrical equipment.

FINGERS SNAPPING AT THE CATACOMB STABBINGS

Typography is the craft of endowing human language with a durable visual form.

LEAGUE SPARTAN

League Spartan.

This version missed the boot.

The counter in the olbernote version of the capital Q was just a little too round, and we had to scrop it and stert

This version missed the boot.

Every piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just the little of the piece of the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to make the glyphs flow notureally. Each character is more just to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of negative space is carefully inspected to the piece of neg

LEAGUE SPARTAN

A new classic in a single strong weight.

Graphique After Break carozine type master

Geography is the science that studi and phenomena of Earth. A literal translation would be "to describe or write about the Earth".

abcdefghijklmnopgrstuvwxyz 56789

Händgrovels 12345 Händarovels 12345

{}[]()><\$*-+=/_%^@\&|~?'"!,.;:

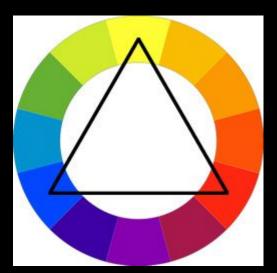
Händgrovels 12345 Händgrovels 12345

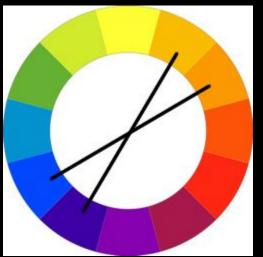
Typewolf: The Definitive Guide to Free Fonts

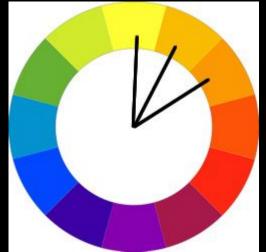
COLOR

ON HOW SOMEONE INTERPRETS YOUR BRAND.

COLOR CAN HAVE A STRONG IMPACT





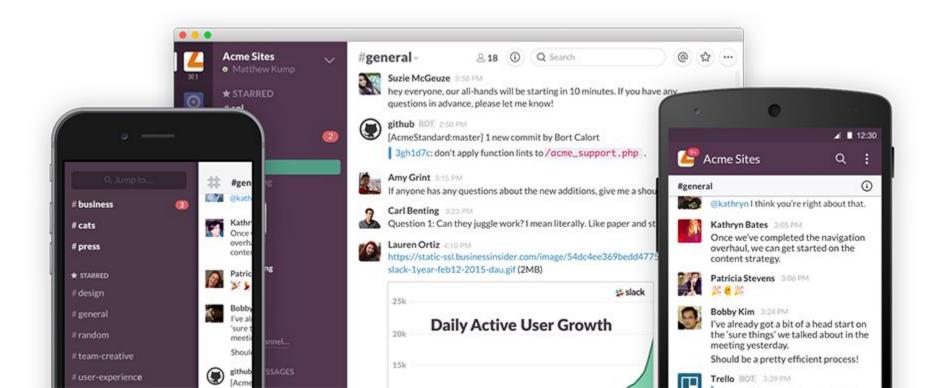


Triadic Color Scheme

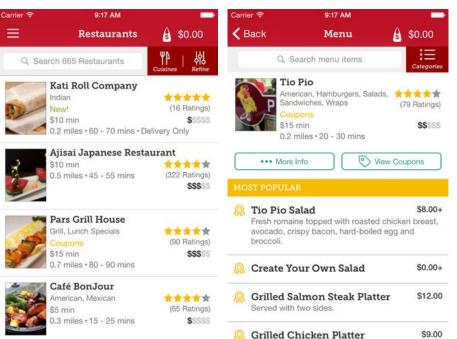
Compound Color Scheme (aka Split Complimentary)

Analogous









(352 Ratings)

\$\$555

Natureworks (31st St) Healthy, Mediterranean

0.6 miles • 20 - 30 mins

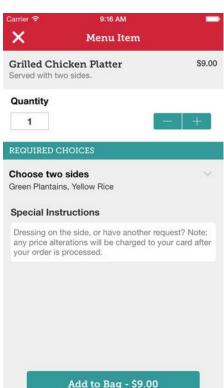
\$10 min

Served with two sides.

Roasted Pork Platter

Pernil. Served with two sides.

\$9.00





As a shade of the page color, I "frame" your view by drawing attention

Your eyes were drawn to me due the contrast between my background and the page color Providing a "framing" element for the user's eyes really does help focus their attention

Again the contrast
between elements
guided your eyes to
the most apparent
part of the design, the
main content

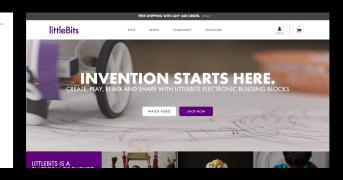
I'm a pretty great option too. I may not be the best fit for you. Don't choose this option.
Don't choose this option.

LET'S BREAK DOWN A FEW SITES





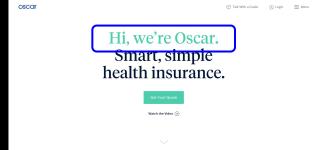


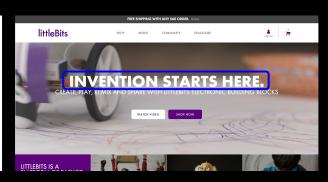


HEADLINE

SETS THE TONE AND TELLS VISITORS WHAT TO EXPECT.





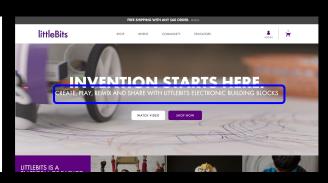


SUBHEADLINE

HELPS US UNDERSTAND MORE ABOUT YOUR PRODUCT.





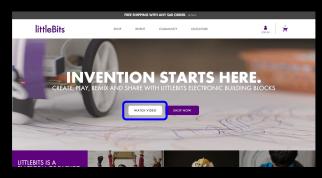


PRIMARY CTA

SHOW ME THE FIRST THING YOU WANT ME TO DO AND TELL ME WHAT IT WILL DO.







COLORED TEXT

ARROW TO DRIVE HOME
THAT IT'S CLICKABLE

BUTTON

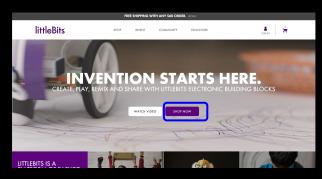
BUTTON

SECONDARY CTA

WHAT ELSE CAN I DO HERE?







COLORED TEXT

ARROW TO DRIVE HOME That It's Clickable **TEXT WITH ICON**

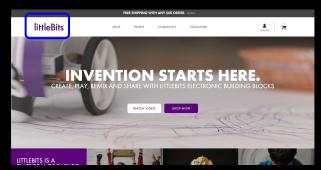
BUTTON WITH COLOR SHIFT

BRANDING

WHO ARE YOU?



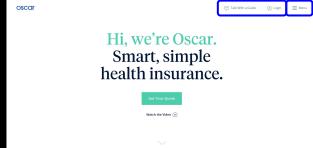


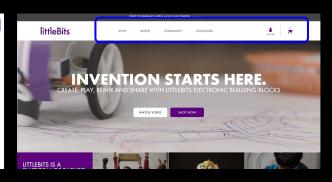


NAVIGATION

HOW DO I GET AROUND?







SCROLLING PROMPT

IS THERE MORE ON THIS PAGE?







SCROLLING PROMPT

IS THERE MORE ON THIS PAGE?







LET'S ZOOM IN A BIT

oscar





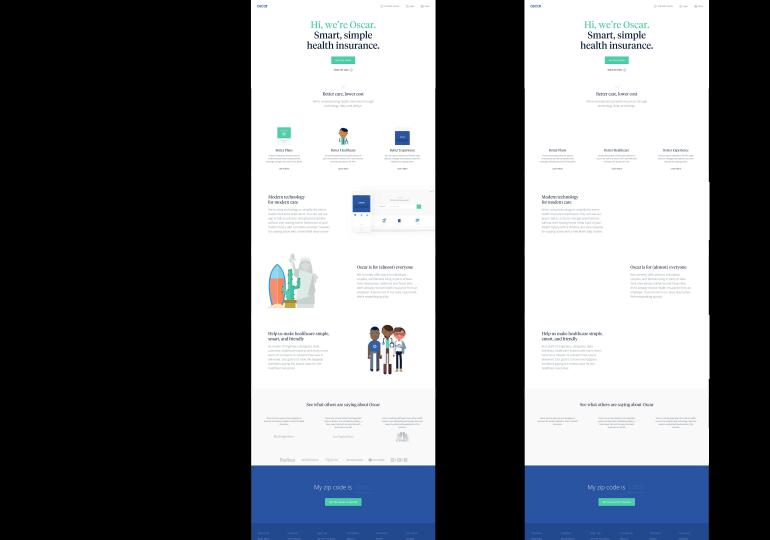


Hi, we're Oscar. Smart, simple health insurance.

Get Your Quote

Watch the Video 🕟





This is for headlines

Open Sans This is for body copy

Typefaces

Styles

Colors

Tempos

This is for headlines

H1: 72px

H2: 32px

H3: 24px



Open Sans

This is for body copy

P1: 24px

P2: 14px

Better care, lower cost

We're revolutionizing health insurance through technology, data, and design.

H2 P1



Better Plans

Choose from plans that are easy to understand, provide comprehensive coverage, and give you lots of free perks.

Learn More



Better Healthcare

Access thousands of top-notch doctors in your area, talk to a doctor 24/7, and visit your primary care doctor for free.

Learn More



Better Experience

Use our app or website to find the right doctors, manage prescriptions, and earn rewards for staying active.

Learn More

Modern technology for modern care

We're using technology to simplify the entire health insurance experience. You can use our app to talk to a doctor and get prescriptions



Н3

P2

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Get a Quote

H2

P1



l y

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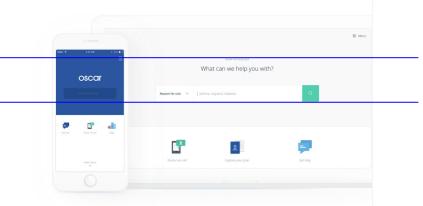
Learn More

Learn More

Learn More

Modern technology for modern care

We're using technology to simplify the entire health insurance experience. You can use our app to talk to a doctor and get prescriptions without ever leaving home. Keep track of your health history with a timeline and earn rewards for staying active with a free Misfit step tracker.





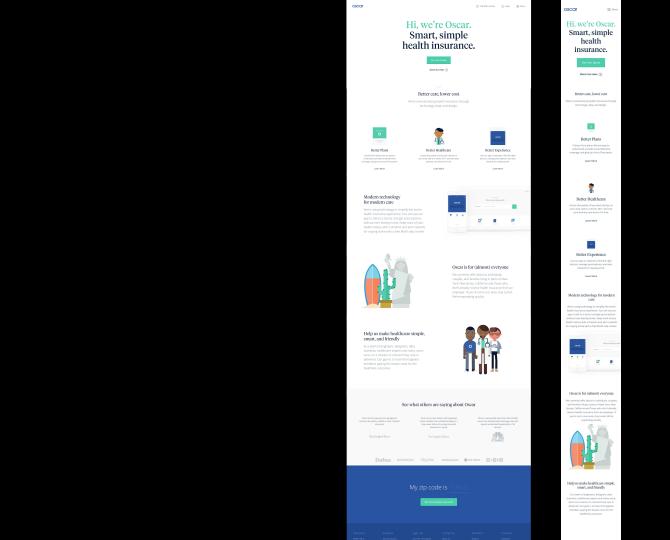


Oscar is for (almost) everyone

We currently offer plans to individuals, couples, and families living in parts of New York, New Jersey, California and Texas who don't already receive health insurance from an employer. If you're not in our area, stay tuned. We're expanding quickly.

H2

P1





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Smart, simple health insurance.



Watch the Video ()

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■ Menu

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Help us make healthcare simple, smart, and friendly

As a team of engineers, designers, data scientists, healthcare experts and many more, we're on a mission to reinvent how care is delivered. Our goal is to have the happiest members paying the lowest costs for the healthiest outcomes.

Typefaces

Styles

Colors

Tempos

This is for headlines

H1: 64px 44px

H2: 32px 24px

H3: 24px 21px



Open Sans

This is for body copy

P1: 24px

P2: 14px

AS WITH ANYTHING GOOD DESIGN TAKES PRACTICE, PRACTICE, PRACTICE

BUT THIS IS JUST THE START,

DESIGN A ONE PAGE WEB-SITE PROMOTING YOUR FINAL PROJECT IDEA. MAKE A MOBILE AND DESKTOP VERSION.

TUESDAY:

TYPOGRAPHY RESOURCES

Professional Web Typography →

A free online book (although you should donate if you find it useful) that covers the fundamentals of web typography.

The Elements of Typographic Style Applied to the Web \rightarrow

A summary of Robert Bringhurst's typography-bible *The Elements of Typographic Style* and how it applies to the web.

Fontology \rightarrow

A complete curriculum on the typographic arts structured as a workbook.

<u>History of Western Typography</u> →

A Wikipedia article about the origins of Western typography. Highly recommended reading for all designers.

Just My Type

A collection of font pairings from Typekit and H&FJ.

Butterick's Practical Typography →

An in-depth, free e-book that covers the fundamentals of typography.

Typoguide \rightarrow

A nice overview of everyday typographic challenges.

Best Practices of Combining Typefaces →

A Smashing Magazine article about the do's and don'ts of mixing typefaces.

Typeface Anatomy & Glossary →

A glossary of common typography terminology.

Typedia \rightarrow

The encyclopedia of typefaces.

The History of Typography Animation →

A complete history of typography in a 5 minute paperletter animation.

RESPONSIVE RESOURCES

Smashing Magazine

Designing With Grid-Based Approach

Grid Lover

Useful tool for exploring how a grid can

Grid Tools

http://design.google.com/

Useful tool for exploring how a site functions responsively.

Device size chart

Device sizes.

COLOR RESOURCES

Smashing Magazine

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APP DESIGN INSPIRATION

http://www.pttrns.com/

http://www.mobile-patterns.com/

http://inspired-ui.com/

https://www.cocoacontrols.com/

http://www.lovelyui.com/

http://androidux.com/

https://developer.yahoo.com/ypatterns/about/libraries.html

Top Fonts according to Type Wolf.

Top 10 Most Popular Fonts of 2015	Top 10 Most Popular Fonts of 2014	Top 10 Most Popular Fonts of 2013
Futura	Brandon Grotesque	Proxima Nova
Apercu	Futura	Apercu
Gotham	Apercu	Brandon Grotesque
Proxima Nova	Avenir	Futura
Avenir	Proxima Nova	Avenir
Caslon	Franklin Gothic	Gotham
Brown	GT Walsheim	Inconsolata
GT Walsheim	Gotham	Garamond
Circular	Circular	Open Sans
Brandon Grotesque	Caslon	Montserrat

QUESTIONS?