



Attention Layout, Colour, Text

Assignment 1

Questions?

Comments?

A1 deliverables

- Ideation
- Design pitch: Assumptions, strategy, feature hypotheses
- Sequential storyboards depicting baseline tasks for
- freelancer project dashboard or
- restaurant host station
- Design specifications: Text, Colours, Contrast, Sources
- Custom contribution

A1 cares about

- Text size
- Readable text layouts
- Neutral (greyscale) foreground and background colours
- Colours to convey highlights, information, and interactivity
- Contrast ratios
- Information organization and hierarchy
- Support for required tasks
- Clarity and learnability
- Meaningful icons (from, e.g., Noun Project)
- Illustrative content with no placeholders
- Alternatives to colour for information presentation

A1 doesn't care about

- Images
- Brand identity or logos
- Typeface choice and aesthetics
- Brand or colour aesthetics

Attention

Attention

Not everything we perceive is **important**.

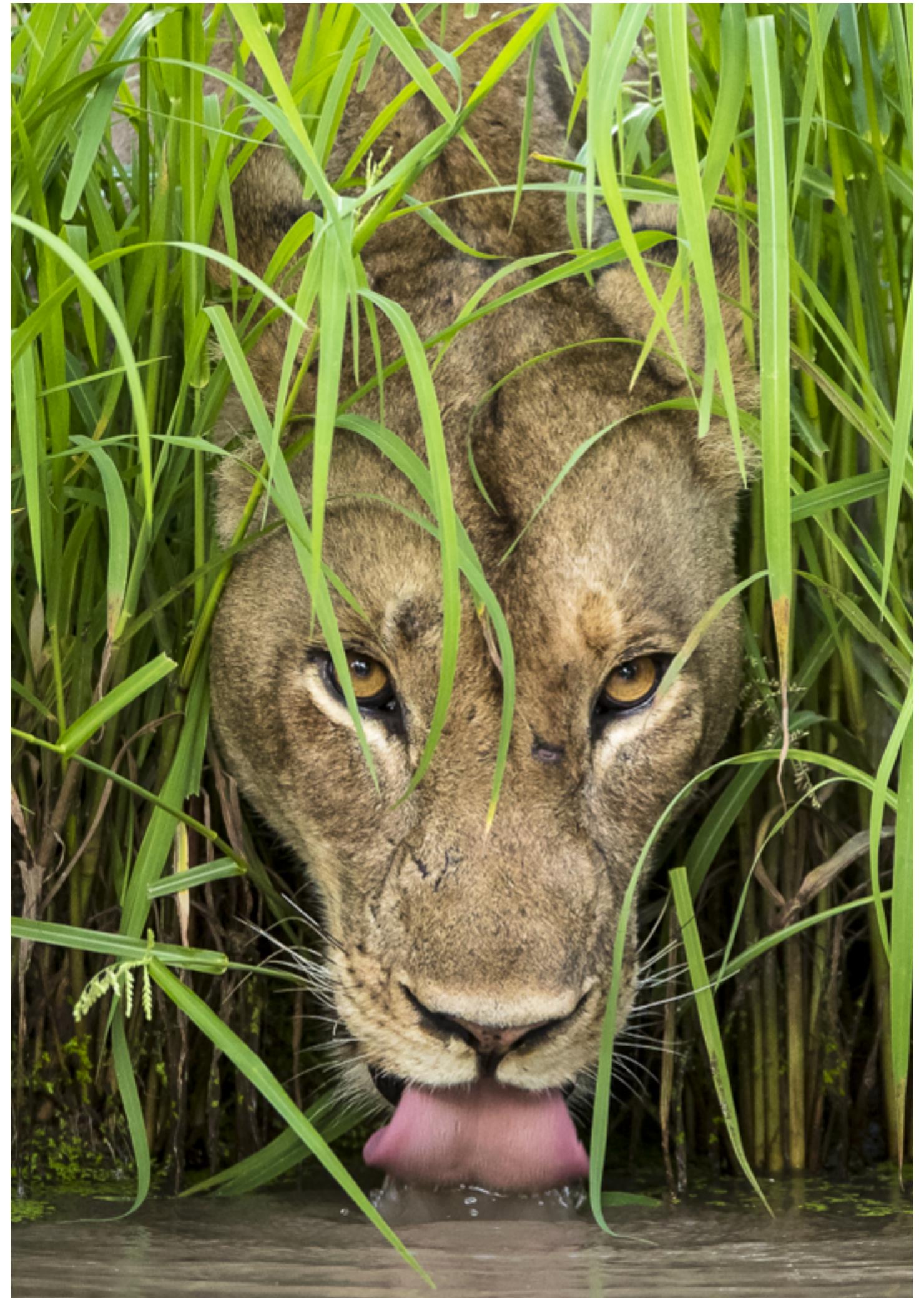
Attention is a filter that allocates resources to important stimuli for the situation (**signal**/information) and ignores the unimportant ones (**noise**/background).

Generally, there is a **single locus** of conscious attention.

Attention is needed because our capacity for perception is finite: we cannot see and understand everything, so we need to **prioritize**.

We **guide** the user's attention through normal operation and we try to **capture** it to give feedback or warn of errors.

Capturing attention



We reflexively focus on stimuli the brain perceives as **urgently salient**:

- Loud noises
- Bright lights and colours
- Unexpected motion

Changes from the norm guide attention.

We can use this principle to present important new information to users.

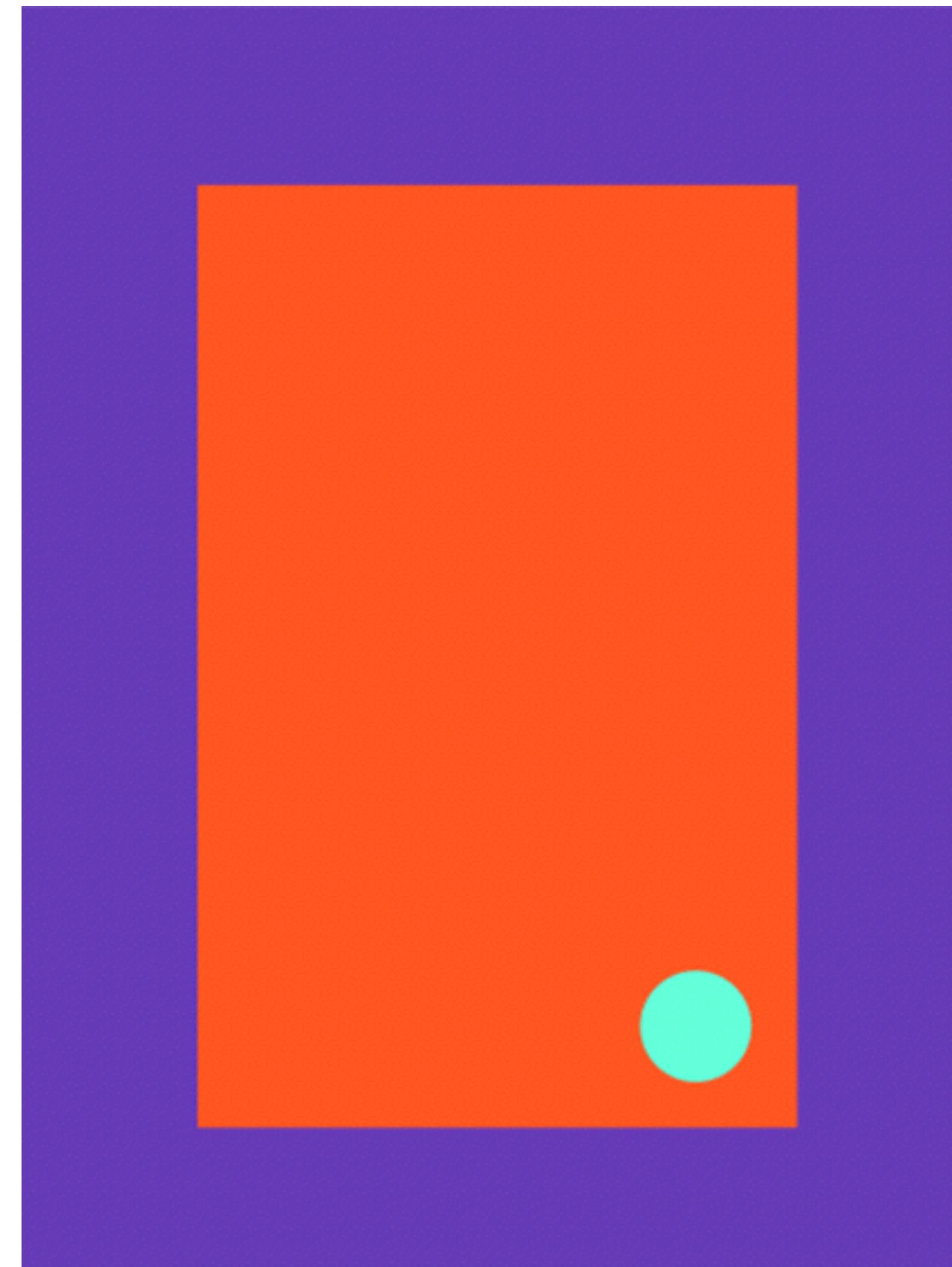
Motion

In nature, **motion means change**, which is important.

Motion can be (**sparingly!**) used to grab the user's attention.

However, constant motion will make it **hard to focus** on anything else and annoy the user.

Motion can also be used to ease the transition between states in digital objects and maintain **object continuity**.



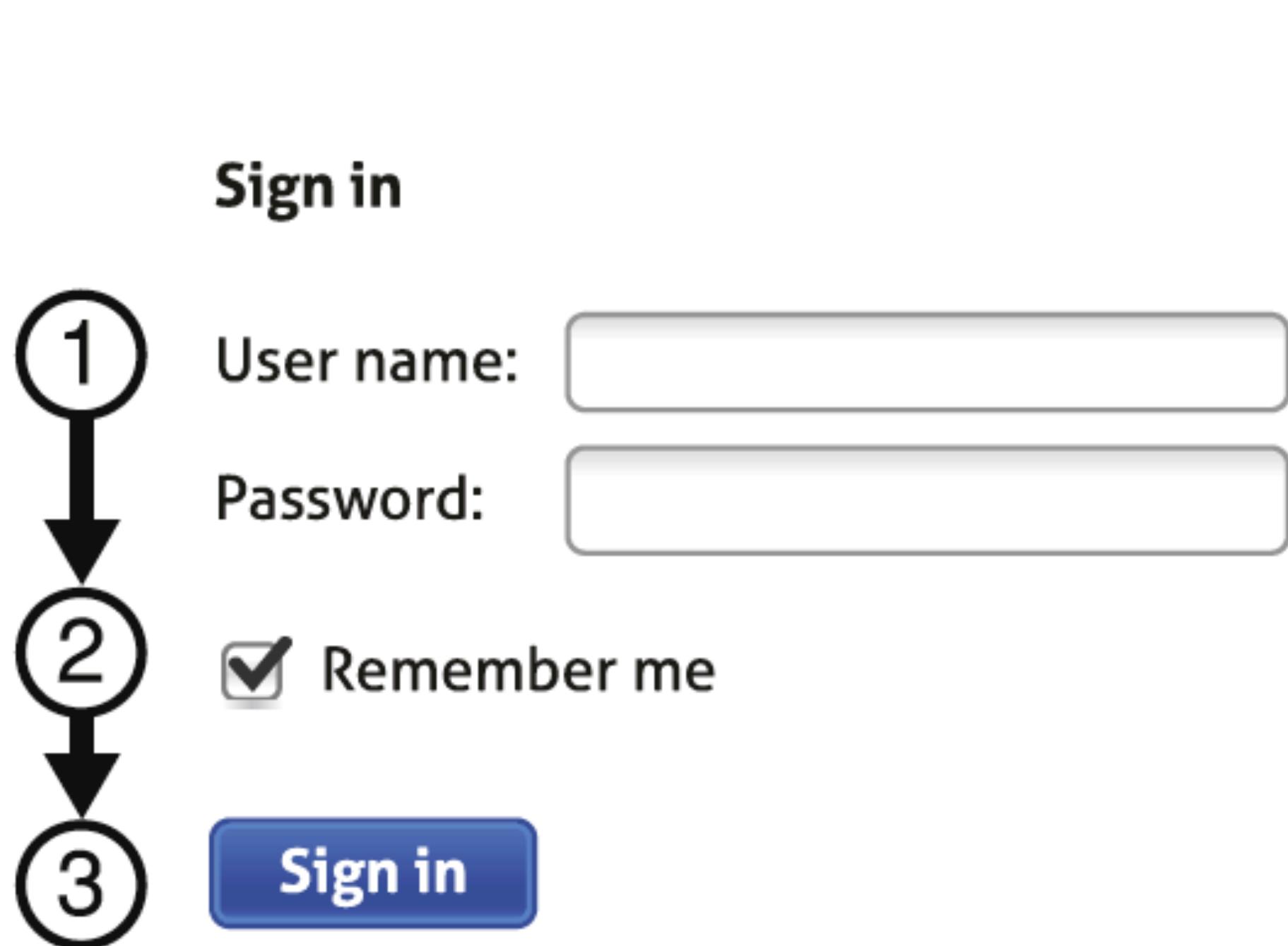
Guiding attention

A user's attention is a single spotlight. Good designs **guide attention** to finding important information quickly and easily.

Sign in

- 1 User name:
- 2 Password:
- 3 Remember me

Sign in



Try Dropbox free

Dropbox Basic

Get a Dropbox free account

Sign up for 2 GB of storage, and start accessing and sharing photos, documents, and other files from any device.

Sign up for free

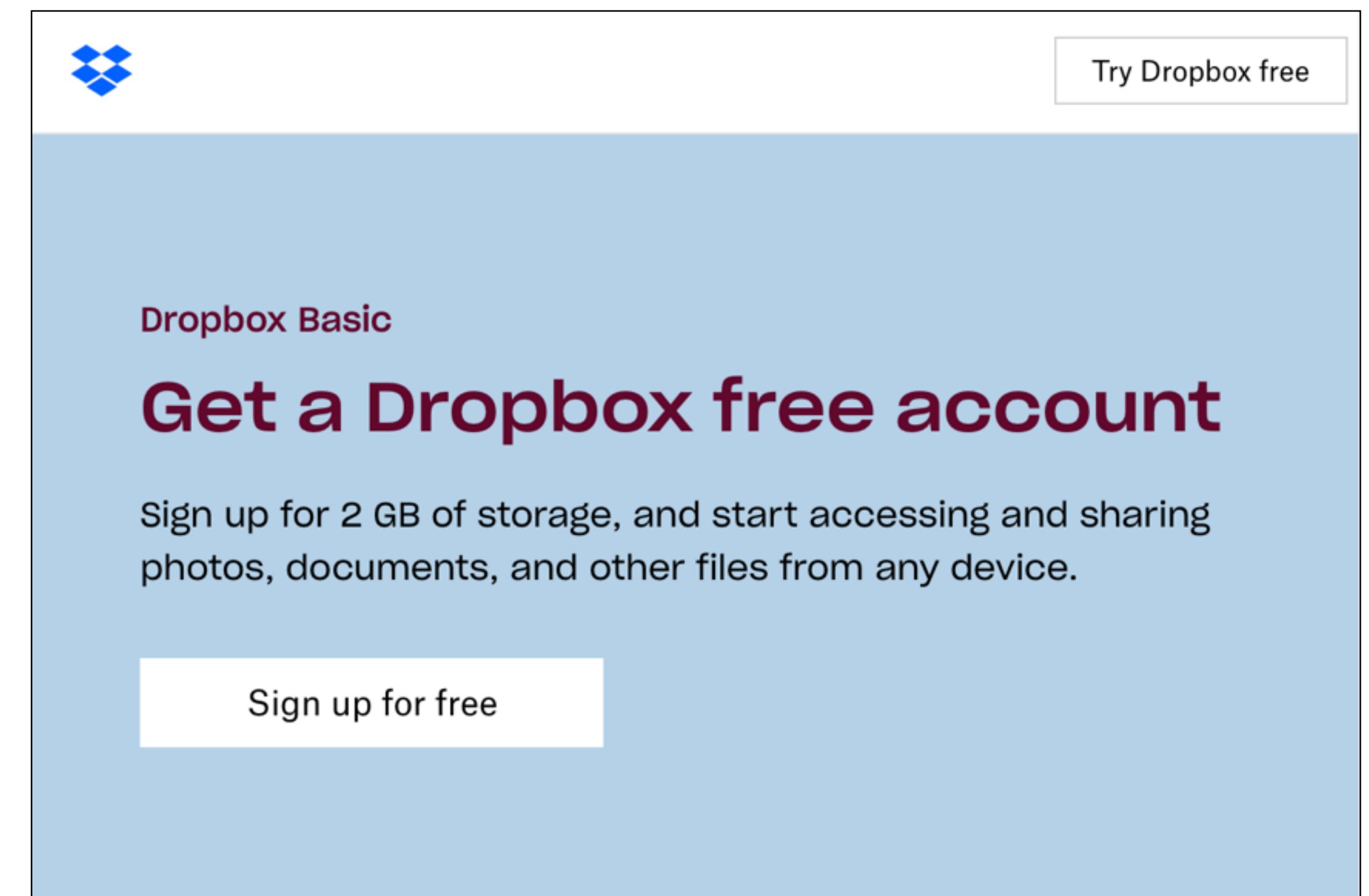
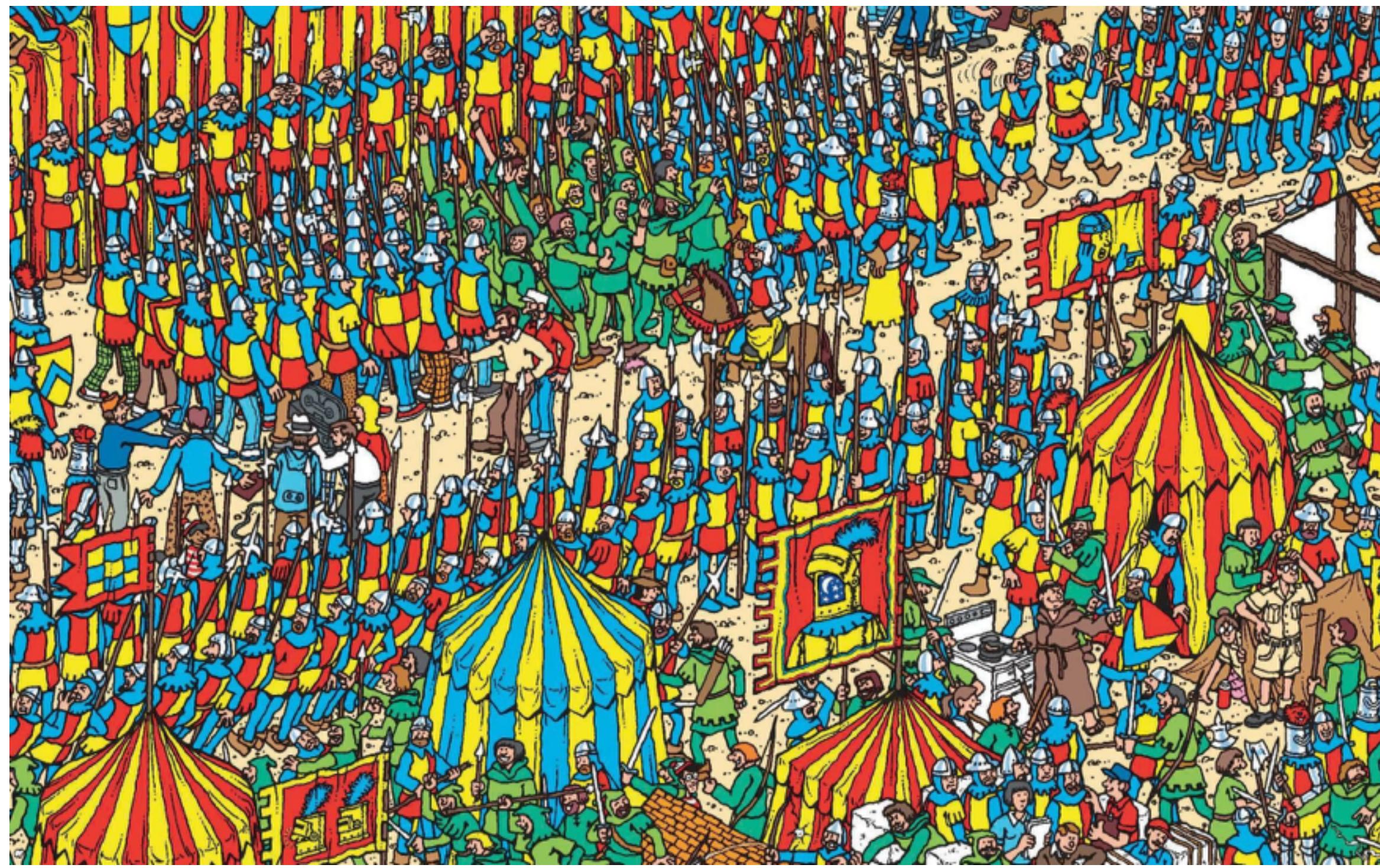


Figure and ground

The most important aspect of guiding attention is helping the user separate objects of interest (**figure**) from the background (**ground**).



WAY OF THE PASSIVE FIST

Differentiate **signal** from **noise**.

Minimize **effort**.

Layout

Layout

Layout is the visual structure and organization of elements within a design. We expect layouts to:

- **Guide** the user to fulfill their needs
- Exhibit a clear **hierarchy** and **grouping**, exposing information architecture and internal organization of content
- Be **minimalist** and uncluttered
- Look logical, well-aligned, ordered, and **rational**
- Work **responsively** across platforms and screen sizes

Hierarchy and grouping

Focus and hierarchy

Interfaces should exhibit a clear hierarchy of nested elements that indicates element importance, relationships, and grouping.

The screenshot displays the homepage of the Nielsen Norman Group (NN/g) website. At the top left is the logo 'NN/g Nielsen Norman Group' with 'NN/g' in red. To the right is a blue button for 'Log in to UX Certification'. Below the logo is the tagline 'World Leaders in Research-Based User Experience'. A search bar with a 'Search' button is positioned to the right of the tagline. A horizontal navigation menu below the tagline includes links for 'Home', 'Articles' (which is underlined in red), 'Training & Events', 'Consulting', 'Reports & Books', and 'About NN/g'. The main content area features a large heading 'Articles & Videos'. On the left, there's a sidebar with a 'Topics' section listing 'Agile', 'Design Process', 'Ecommerce', 'Intranets', and 'Navigation'. On the right, there are five filter buttons: 'Most Recent' (underlined in blue), 'Most Popular', 'Videos Only', and 'Articles Only'. The main article listed is titled 'How Information-Seeking Behavior Has Changed in 22 Years', published on 'January 26, 2020 | Article: 14 minutes to read'. A brief description follows: 'We organize online information-seeking activities that lead to important decisions and actions according to 5 dimensions: purpose, method, content, social interaction, and device used to carry out the activity.'

Principles of hierarchy

Important objects are **prominent**

Elements are visually **nested**

There is a **call to action** or a starting place

The order of objects is **logical**

Conceptually related items are **visually related**



Grouping and Gestalt

Gestalt (“shape”) theory describes how objects are grouped into images:

“The whole is other (different) than the sum of its parts”

Emergence: the whole is identified before its elements

Reification: gaps are filled in

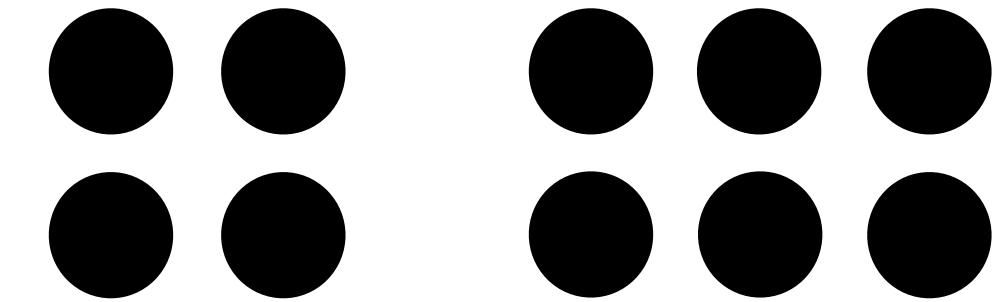
Invariance: recognition is independent of rotation, perspective and scale



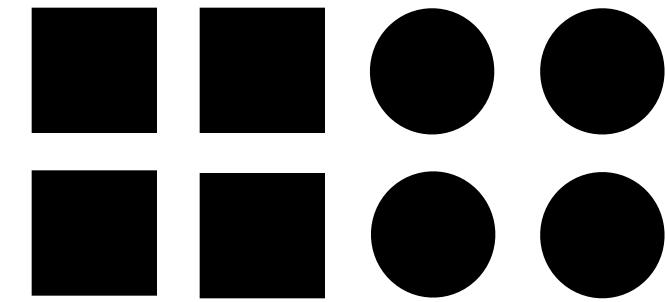
Gestalt principles of grouping

"Elements related by _____ are perceptually grouped into higher-order units."

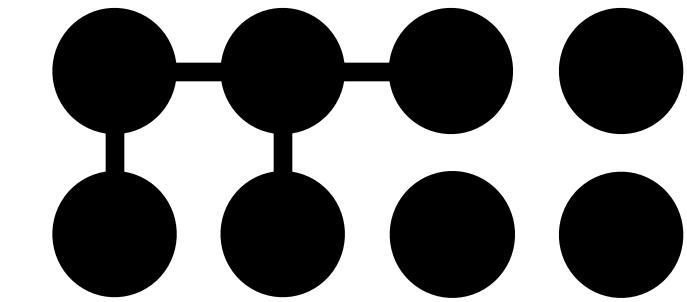
Proximity



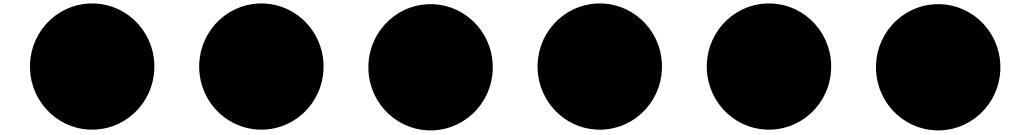
Similarity



Connectedness



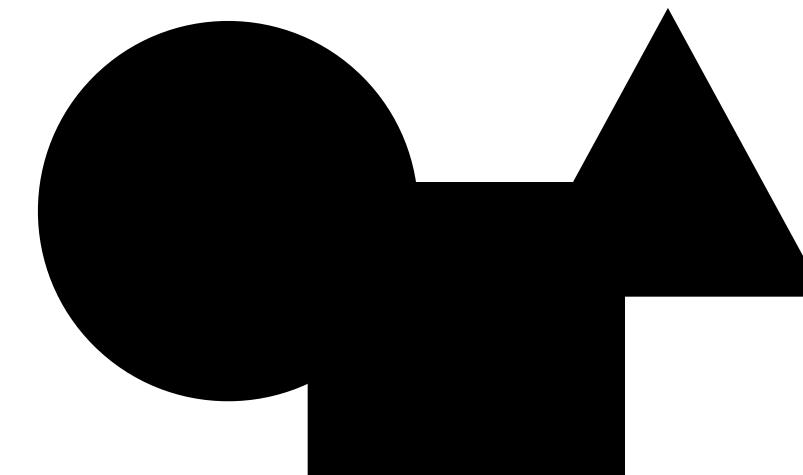
Common fate



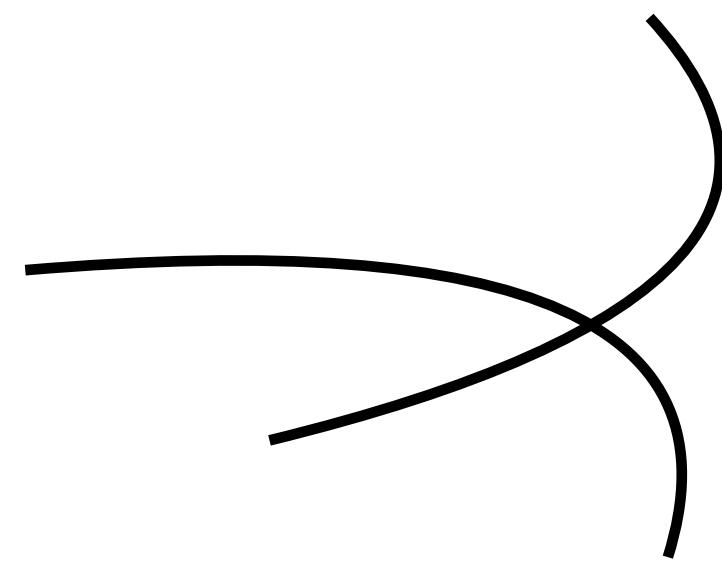
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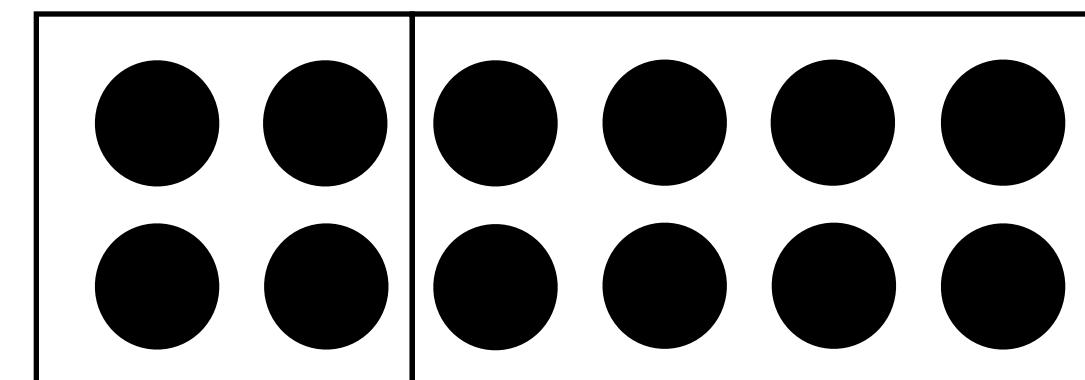
Simplicity



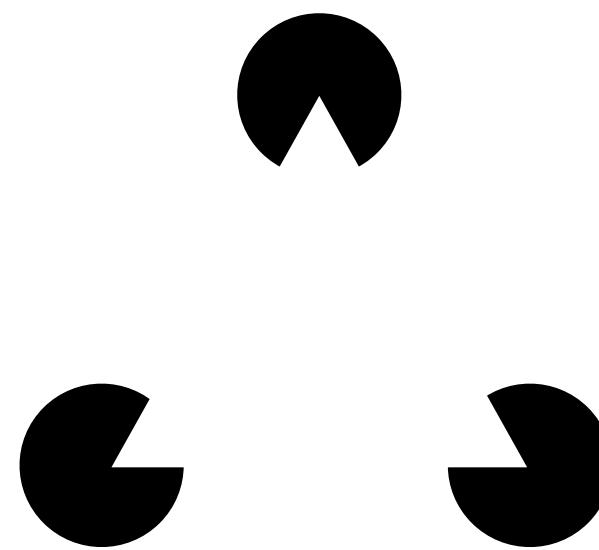
Continuation



Common regions



Closure



Negative space

Negative space

Space between features or elements.

Sometimes called “white space” from print history.

Negative space:

- more legible, reduced clutter
- easier to tell features apart
- helps touch targeting

Menu

quip

Shop



No negative space

Ponting defends England hierarchy

Triumphant Australia captain Ricky Ponting believes the level of criticism aimed at England coach Duncan Fletcher and captain Andrew Flintoff is unfair.

Australia won the first three Tests to regain the Ashes, and have won 14 out of 15 overall since their loss in 2005.

"There are 11 guys in the team, or 13 in the squad, and it's very harsh to blame the coach and captain," he said.

"They haven't played anywhere near as well as they'd liked but we haven't given them the opportunity to."

Ponting is only too well aware of the emotions that Fletcher and Flintoff are experiencing, as it is only 15 months since he became the first Australia captain for 19 years to lose an Ashes series.

Ponting, who celebrated his 32nd birthday on Tuesday, has responded magnificently with the bat in the current series, making over 500 runs in his first six innings, including two big centuries.

Passive negative space

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Active negative space

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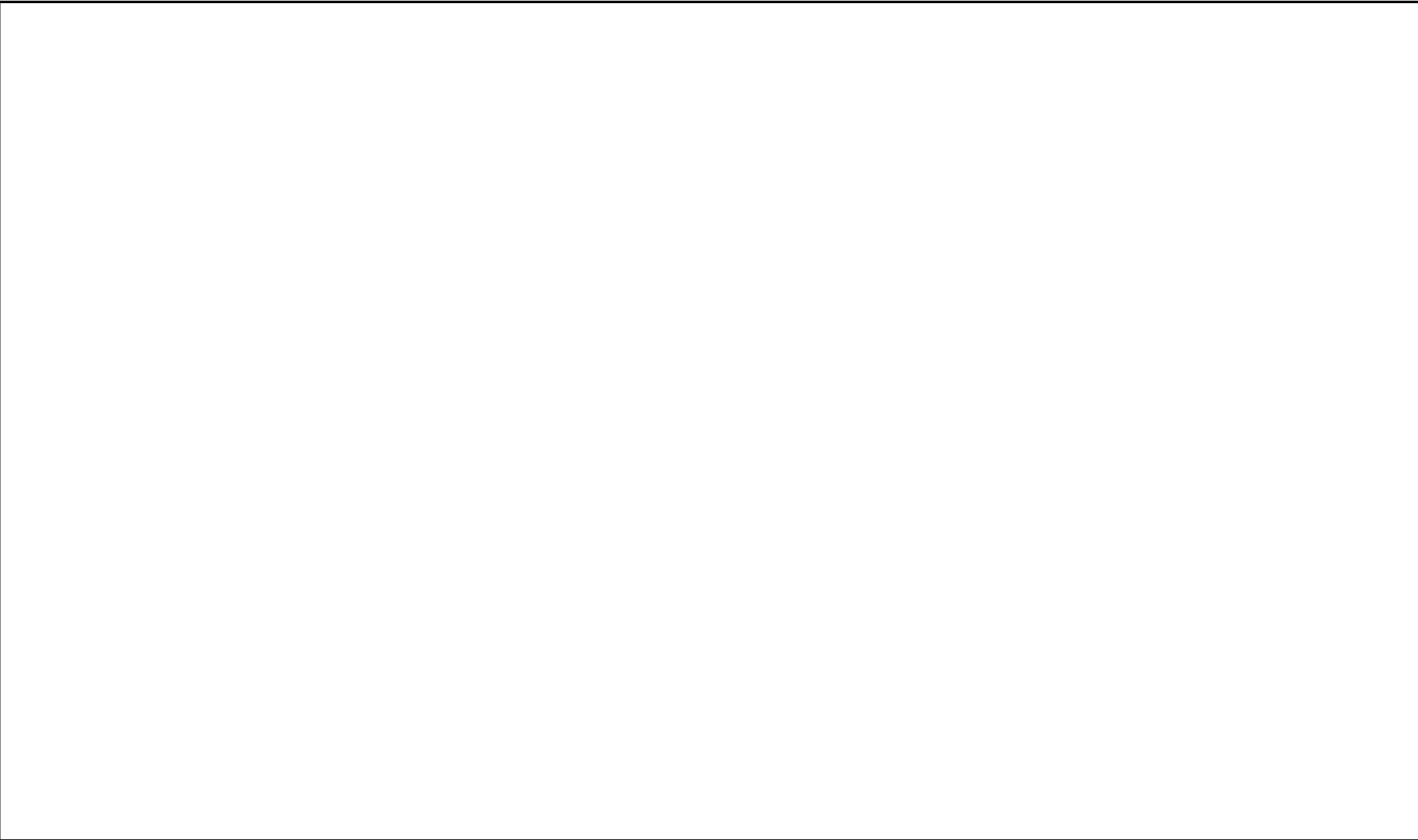
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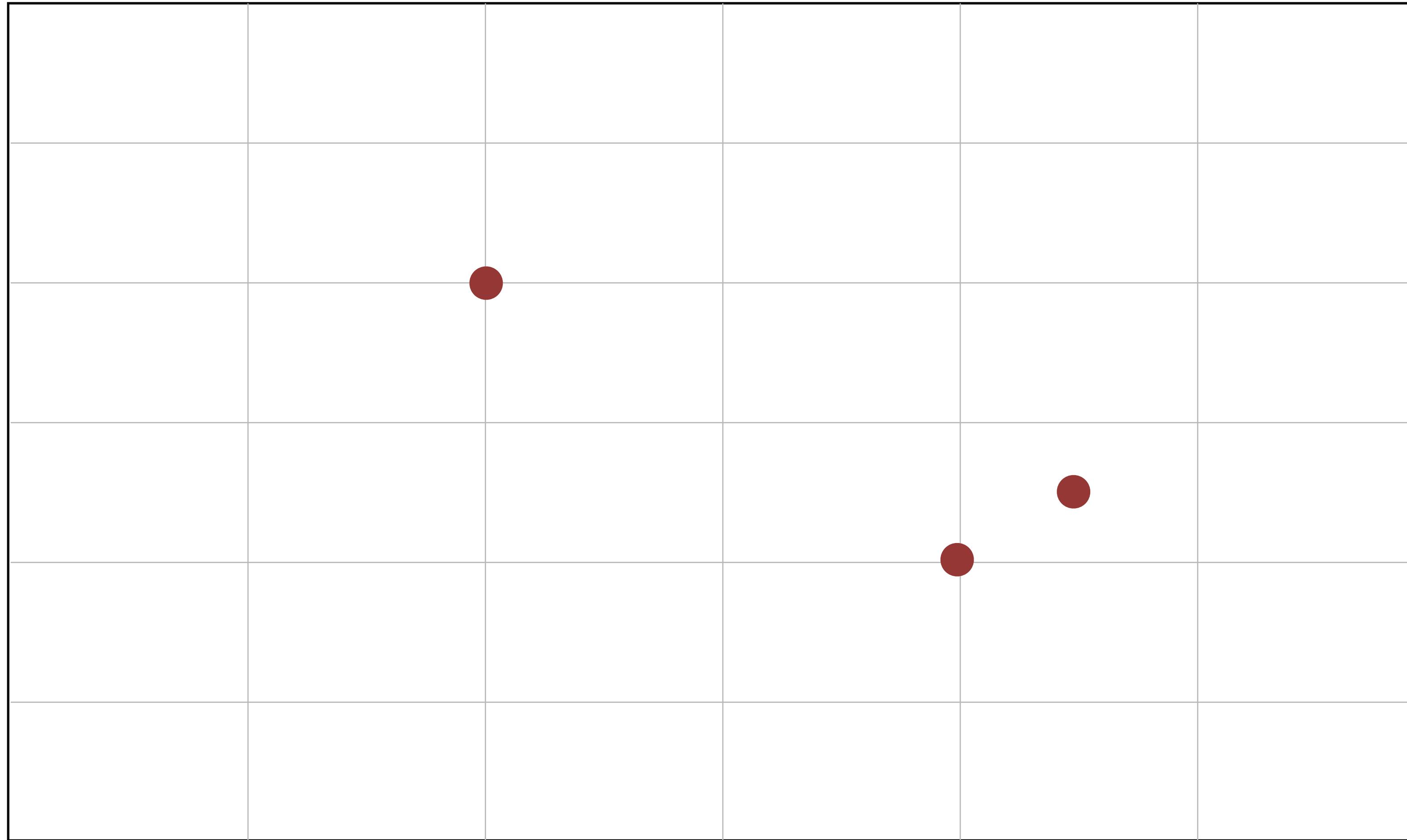
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Grids

Blank canvas is scary



Grids and rationality



Designs as grids



KAMILKAMYSZ.COM

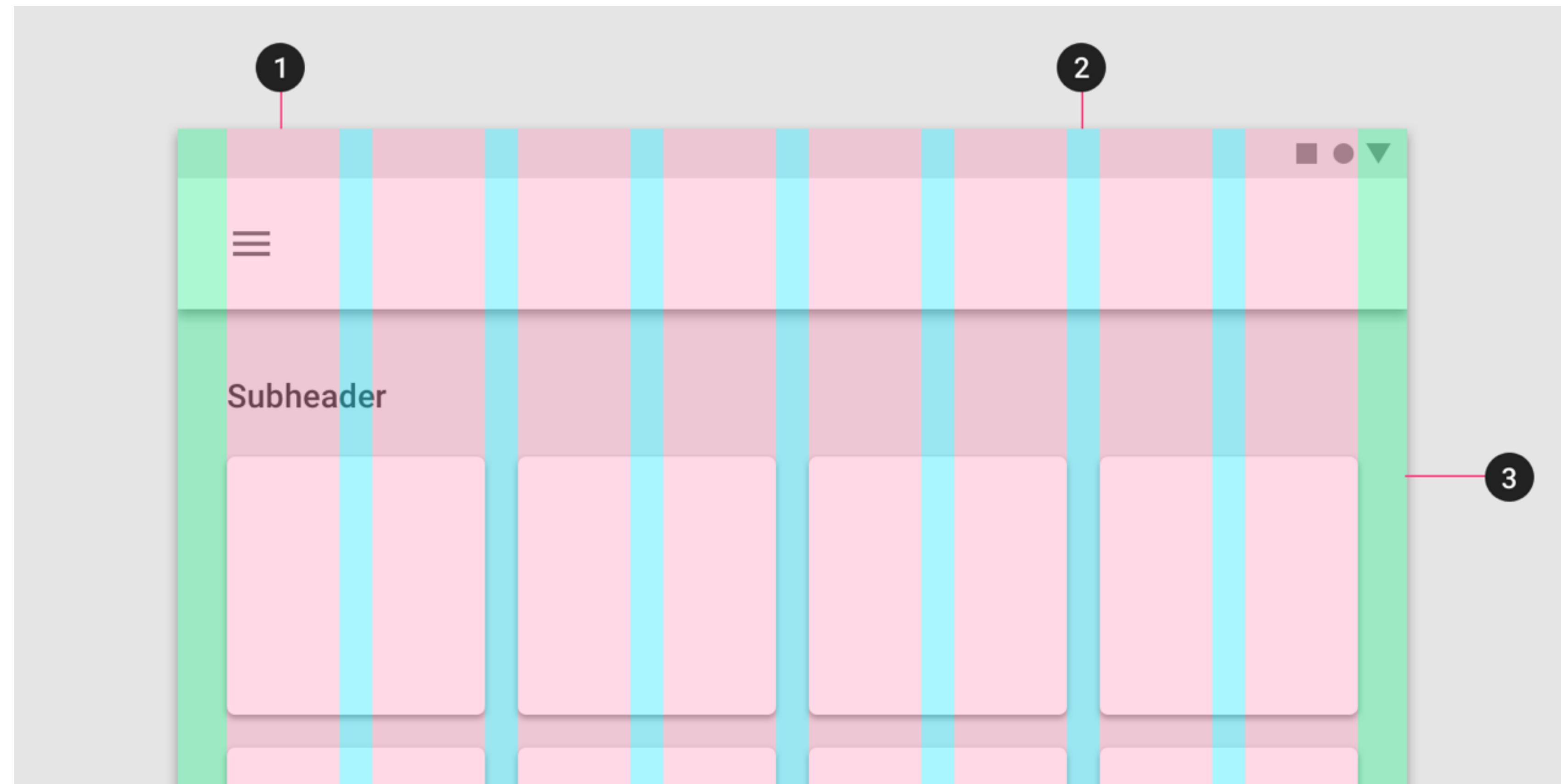
Designs as grids



KAMILKAMYSZ.COM

Designs as grids

Split the width of your canvas into equal units (1) with gutters (2) between them and margins (3) on either side.



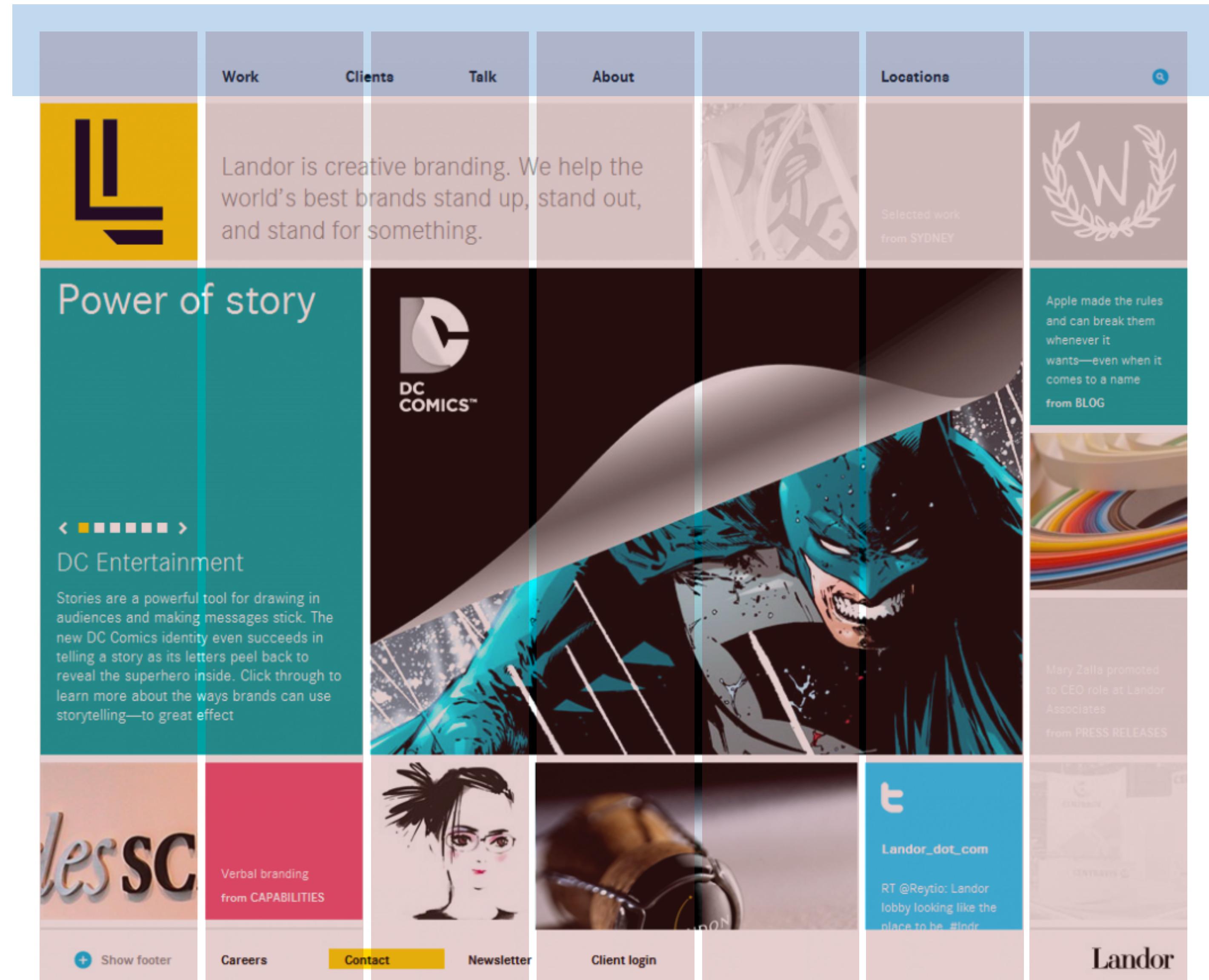
Designs as grids

Works best with multiples of 2, 3, and 4.

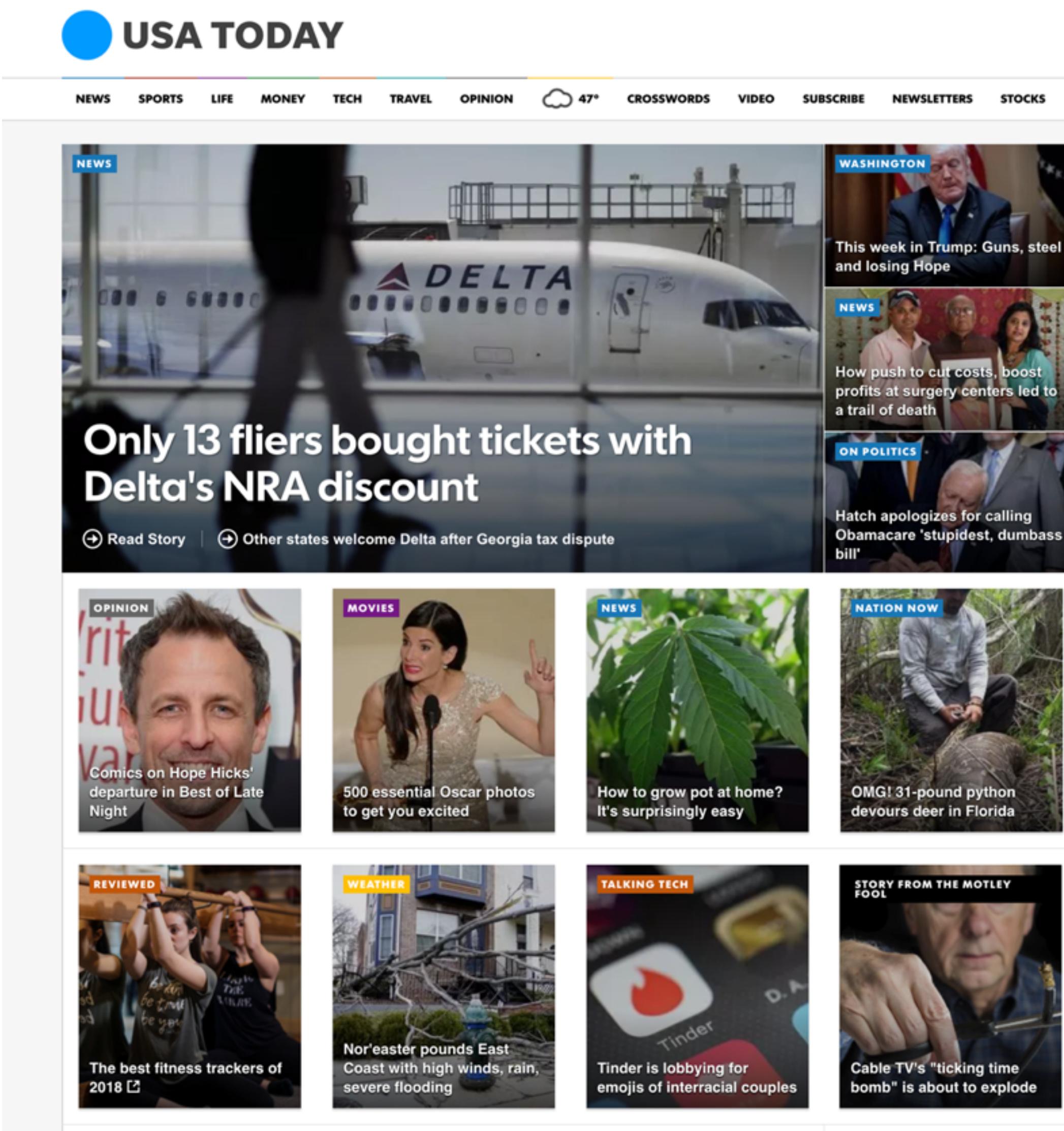
Bigger elements take up multiple units of width

Guaranteed consistent spacing between elements

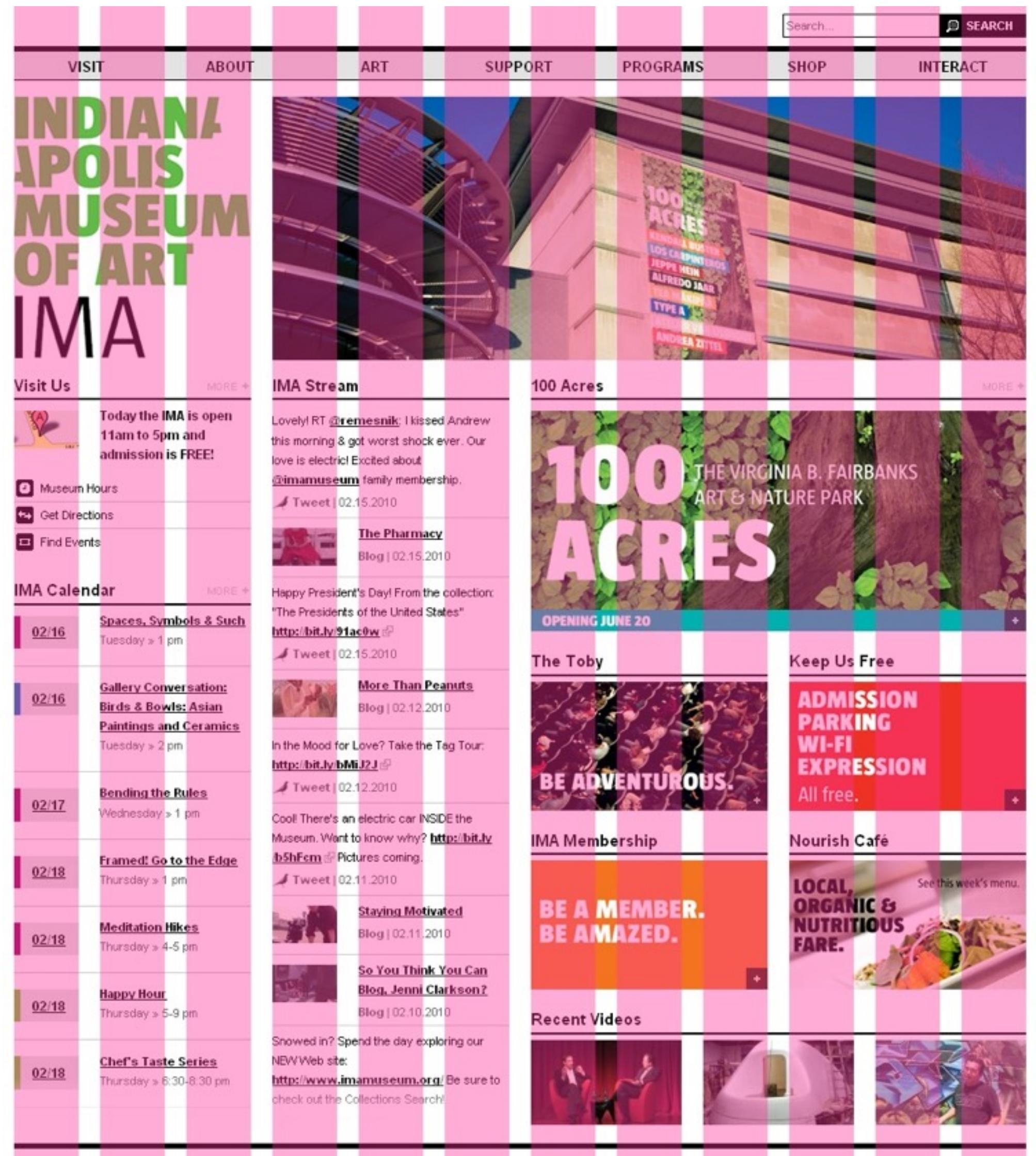
Grids can be vertical, horizontal, or both



Explicit and subtle grids



The USA Today website features a prominent grid-based layout. At the top, a large banner image of a Delta airplane is overlaid with a dark news card. Below this, the main navigation bar includes links for NEWS, SPORTS, LIFE, MONEY, TECH, TRAVEL, OPINION, CROSSWORD, VIDEO, SUBSCRIBE, NEWSLETTERS, and STOCKS. A weather widget shows 47°. The main content area contains several news cards: one about Delta's NRA discount, another about President Trump, and others on surgery centers, politics, and a python attack. Below these are four columns of smaller news cards covering topics like late-night comedy, Oscar photos, growing marijuana, and a python attack. At the bottom, there are four more columns of cards: fitness trackers, weather, Tinder, and cable TV.



The Indiana Museum of Art (IMA) website uses a subtle grid structure. The header features a navigation menu with links for VISIT, ABOUT, ART, SUPPORT, PROGRAMS, SHOP, and INTERACT. A search bar is located at the top right. The main title "INDIANA APOLIS MUSEUM OF ART IMA" is displayed in large, bold letters. To the right of the title is a large image of the museum building. Below the title, there are sections for "Visit Us" (with links to Museum Hours, Get Directions, and Find Events), "IMA Stream" (with a tweet from a user), and "IMA Calendar" (listing events for February 16, 17, 18, and 19). To the right of the calendar are sections for "100 Acres" (with a photo of a colorful mural), "The Toby" (with a photo of a painting), "Keep Us Free" (with a photo of a painting), "ADMISSION PARKING WI-FI EXPRESSION" (with a photo of a painting), and "Nourish Café" (with a photo of food). A large "100 ACRES" graphic is prominently displayed in the center-right of the page.

Responsive layout

Responsive design

Interfaces are designed for variable screen dimensions.

Layouts should be usable at any size.

This involves setting **constraints** and **rules** rather than fixed pixel values.

Since 2017, more web pages are served to mobile than desktop views.

The current trend is **mobile-first**.



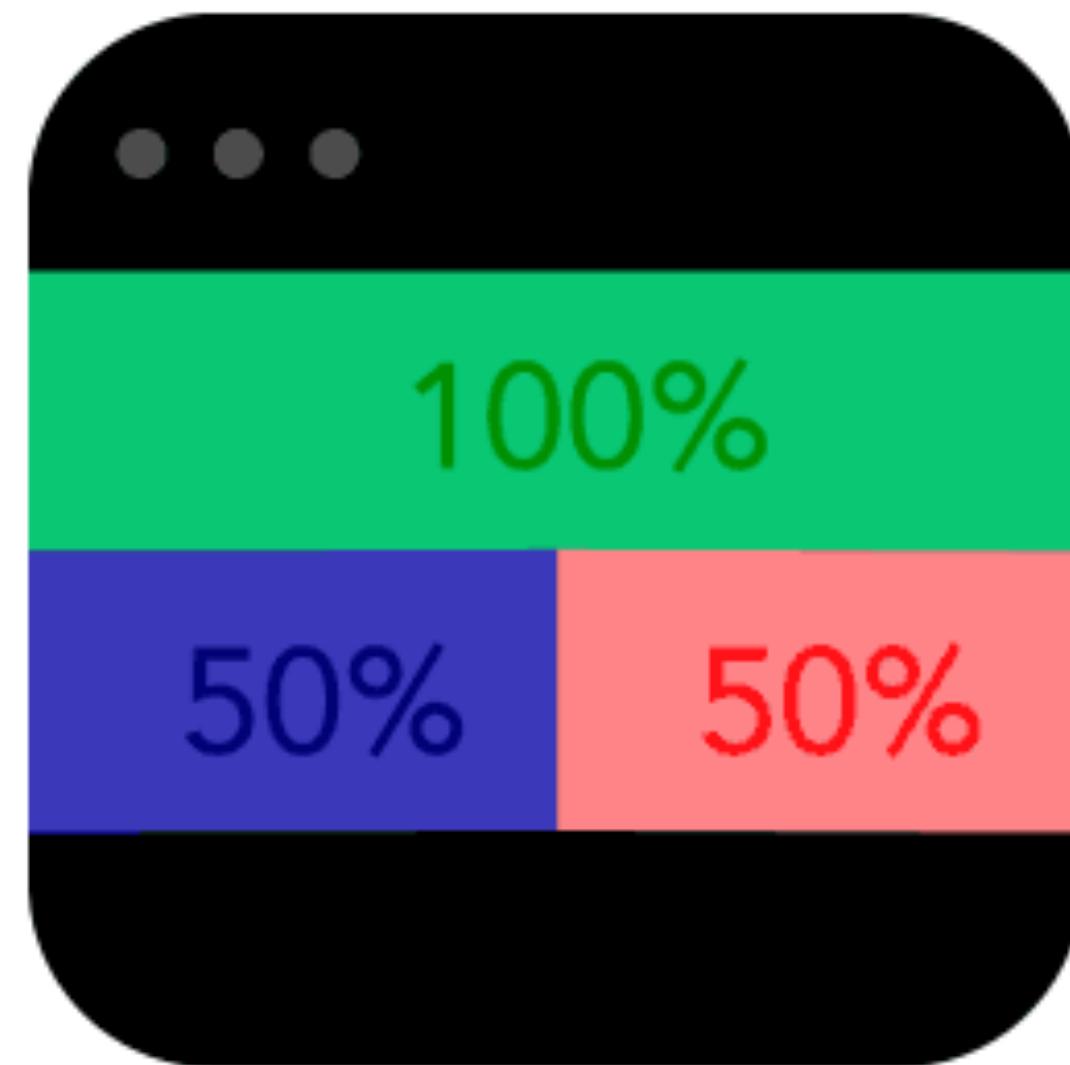
Web design is responsive design.
Responsive web design is web design,
done right.

~ Andy Clarke

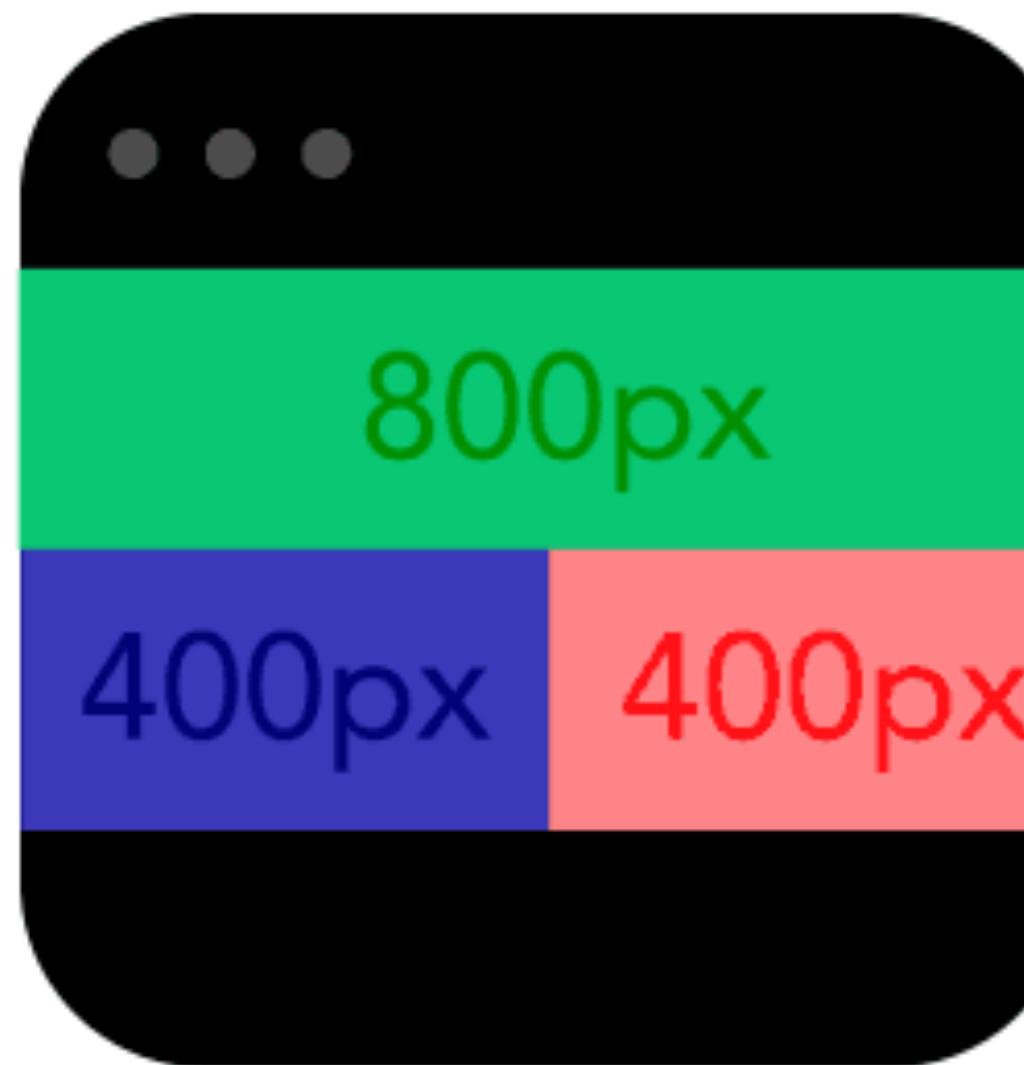
dm | DesignMantic

Responsive design principles

Relative Units



Static Units



Use **relative** units

BLOG.FROONT.COM

Responsive design principles

With Breakpoints



Without Breakpoints



Reflow and rearrange content

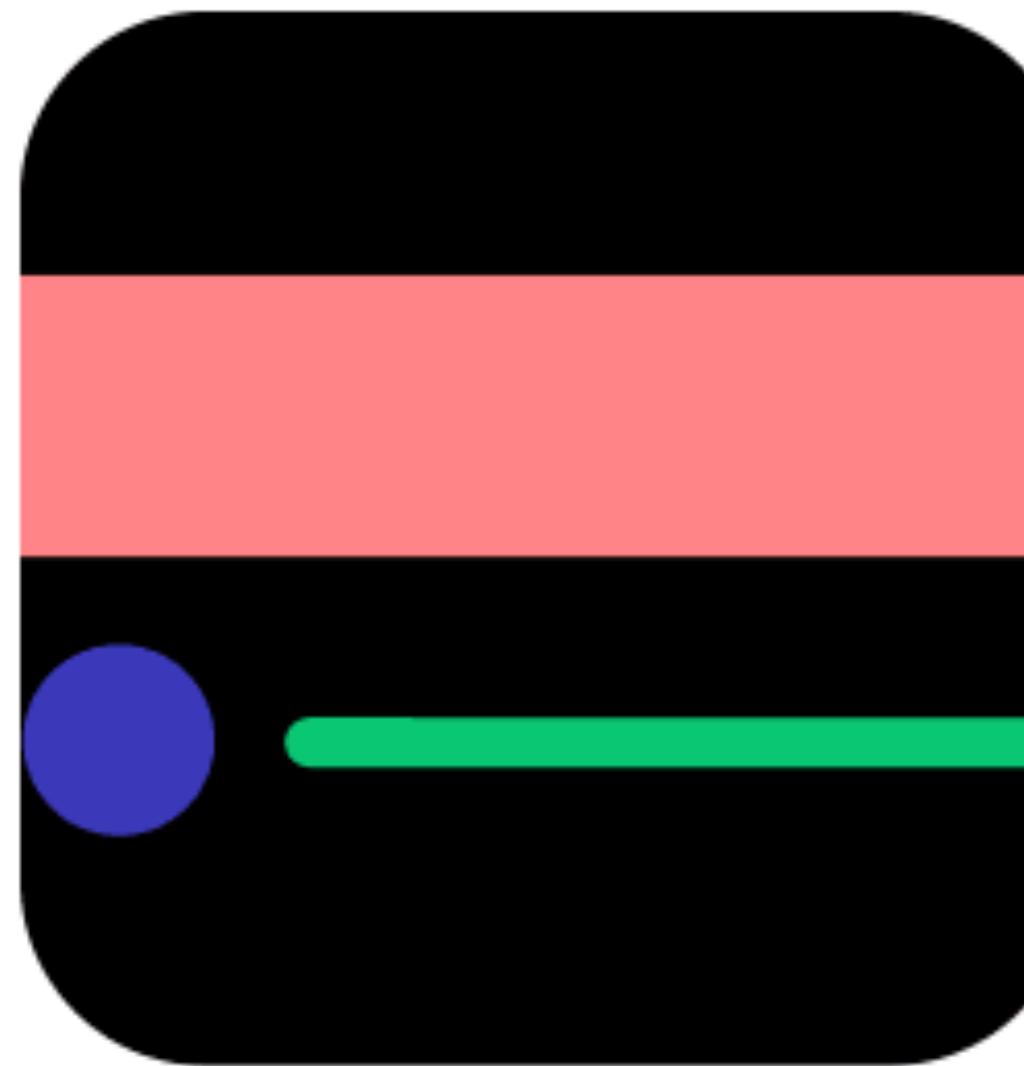
BLOG.FROONT.COM

Responsive design principles

Max width



No max width

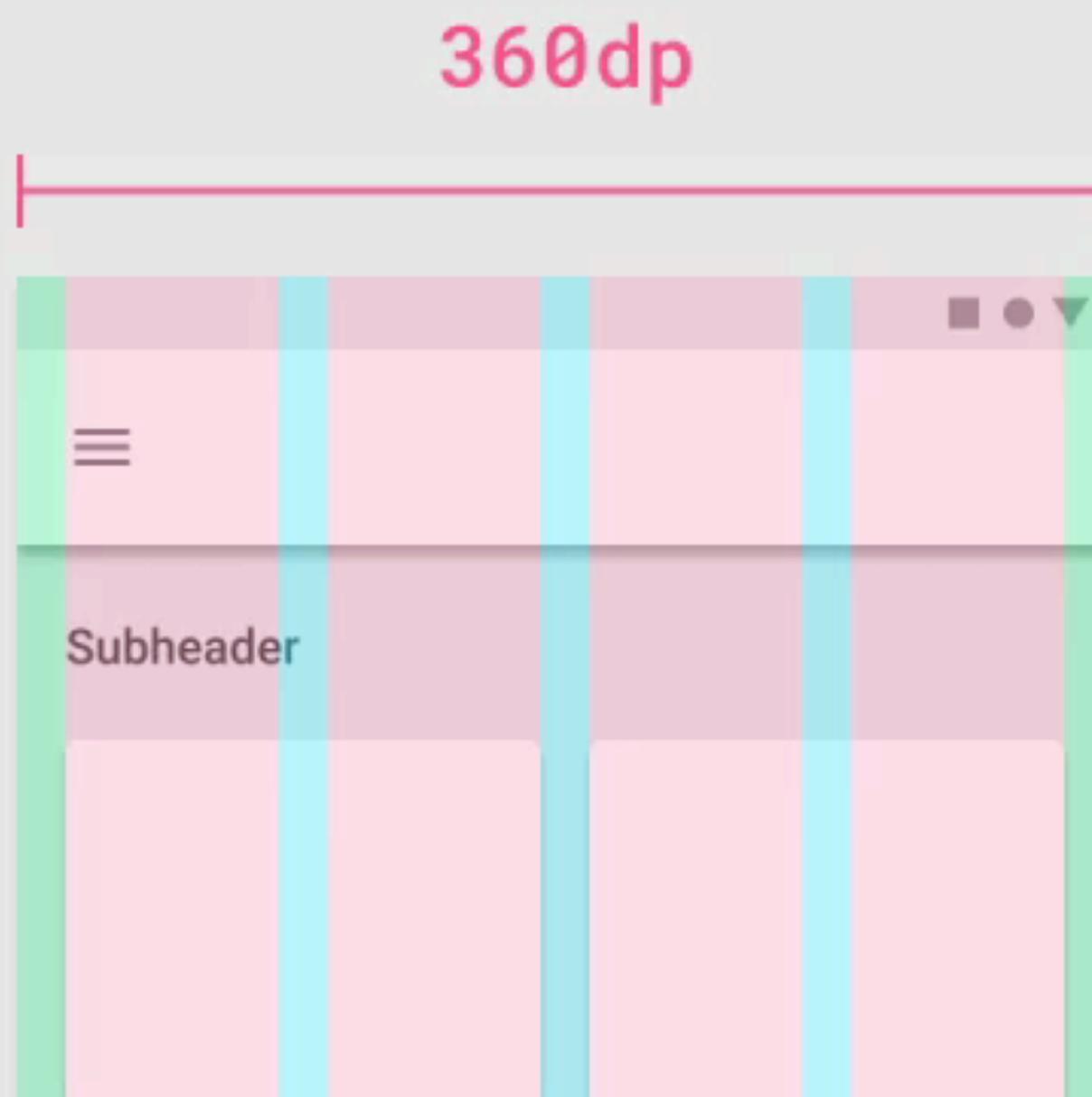


Constrain **min** and **max** widths

BLOG.FROONT.COM

Responsive grids

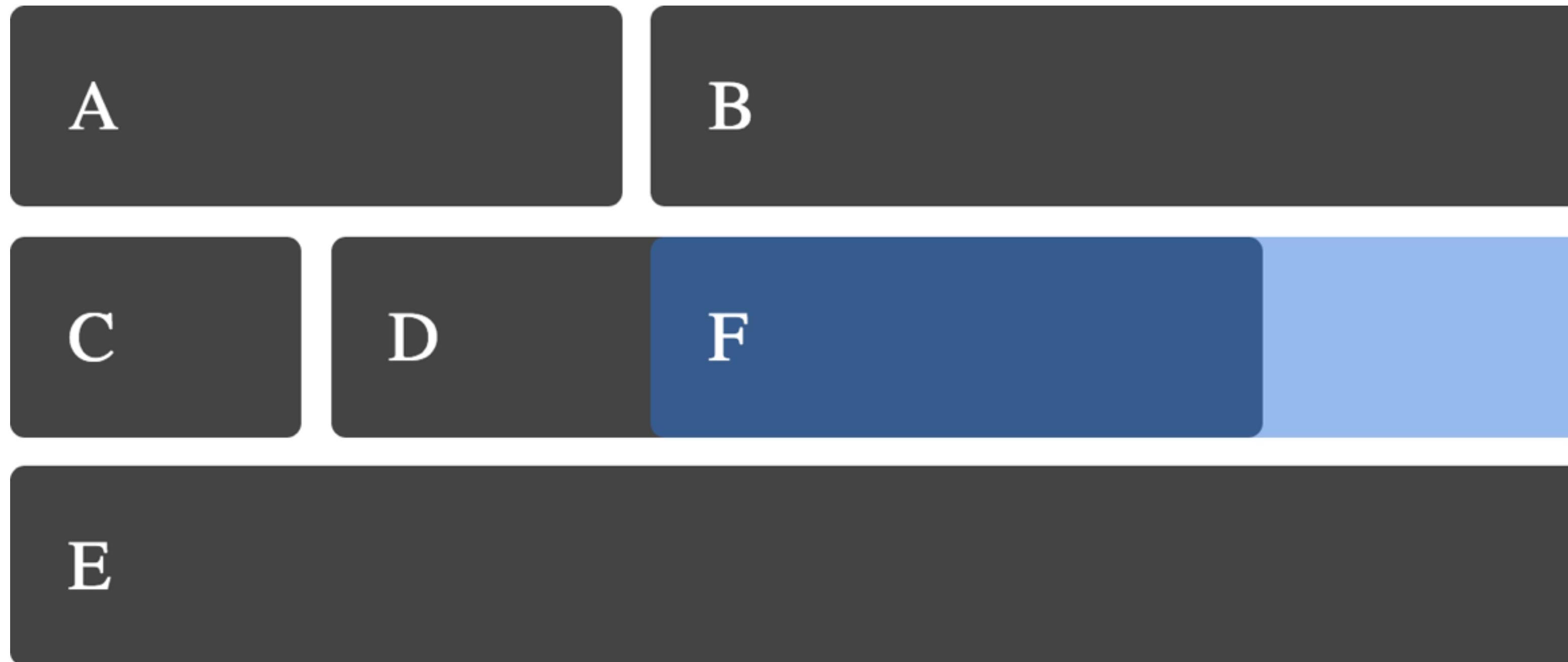
Material Design has guidelines and system support to create responsive reflowing grids.



[HTTPS://MATERIAL.IO/DESIGN/LAYOUT/RESPONSIVE-LAYOUT-GRID.HTML](https://material.io/design/layout/responsive-layout-grid.html)

Responsive grids: CSS

CSS is adding native properties that support responsive grid layouts across browsers.



GRIDBYEXAMPLE.COM

Colour



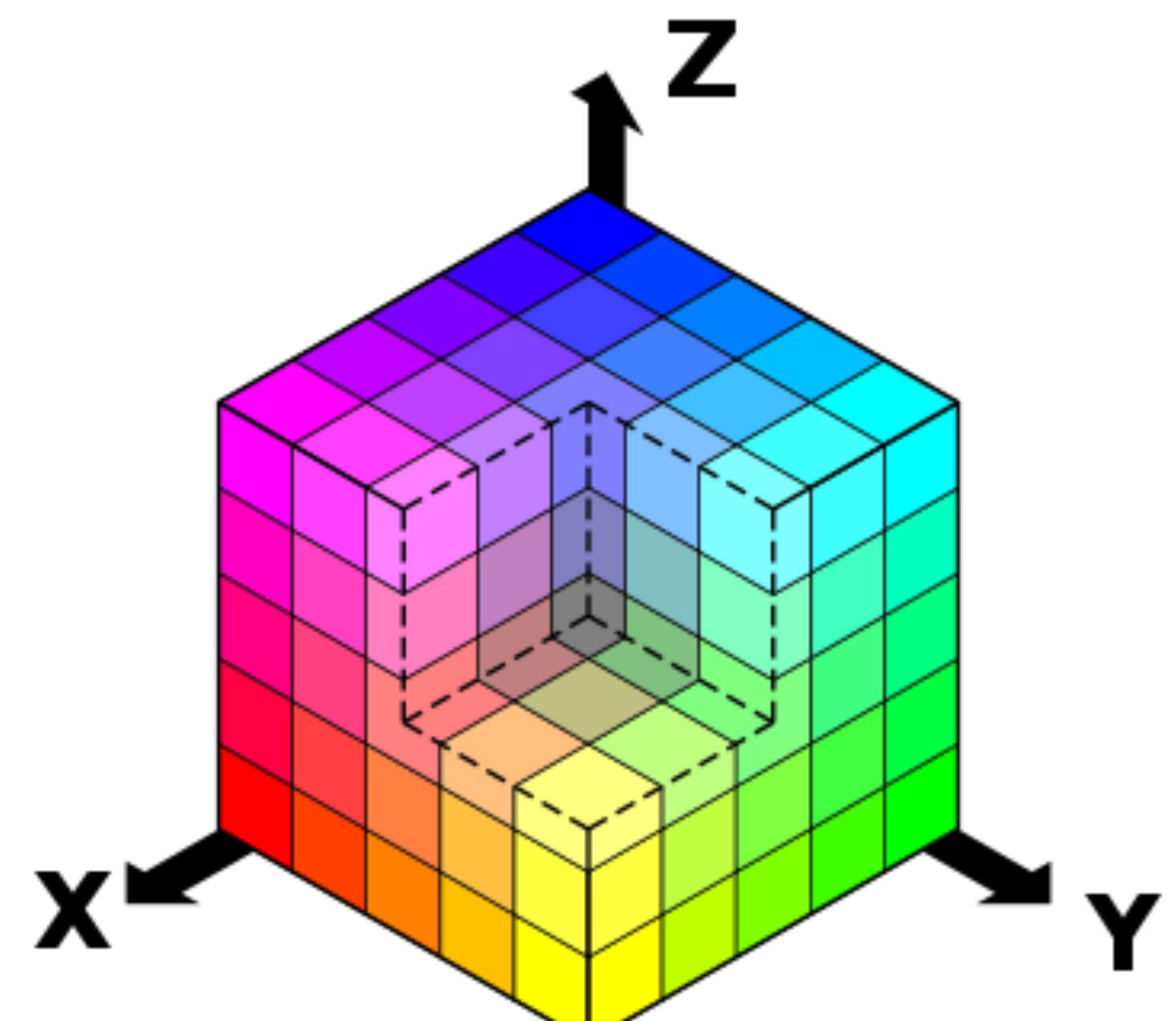
Colour Model: RGB

A 3-dimensional vector encoding the brightness of **Red**, **Green**, and **Blue**.

An **additive** model for digital screens:
adding all colours makes white.

Web colours are defined using three 8-bit numbers (0-255), written as 3x2 hexadecimal digits (0-F):

- #FF0000
- #3399CC



#**FFFFFF**

The role of colour

Colour roles:

- Background areas
- Foreground items
- Highlight / action
- Status
- Warning

Reasons to employ colours:

- Contrast and clarity
- Hierarchy and order
- Mood and harmony

Colour as information

Colour is seen before shapes. Use colour to help users group elements and navigate complex interfaces.



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LOOKING FOR A JOB

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APPLY NOW



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MANAGING A WORKPLACE

Discover our range of services designed to keep business booming.

OUR SERVICES



We're raising the bar for workforce management.

We believe that when the right people come together, creativity thrives, opportunities appear, and business grows.

ABOUT US »

Colour Legibility

Colour legibility

Colour **legibility** refers to how easy it is to tell which colour we are looking at and how close it is to the colour the designer intended.

Legibility depends on:

- Lighting and viewing conditions
- Colour selection
- Background colours
- Size and shape of image



Colour vision deficiency

Colour vision deficiency is the decreased physical ability to see colour or differences in colour.

Up to **4.5%** of the population in some countries, mostly men

Red/green deficiency is most common and sometimes total.

Blue/yellow deficiencies are rare

Monochromacy is very rare



COLOURBLINDAWARENESS.ORG





Colour vision deficiency

Design to **accommodate** colour vision deficiency and variations in legibility:

Avoid salient **red-green** distinctions



Colour vision deficiency

Design to **accommodate** colour vision deficiency and variations in legibility:

Avoid salient **red-green** distinctions

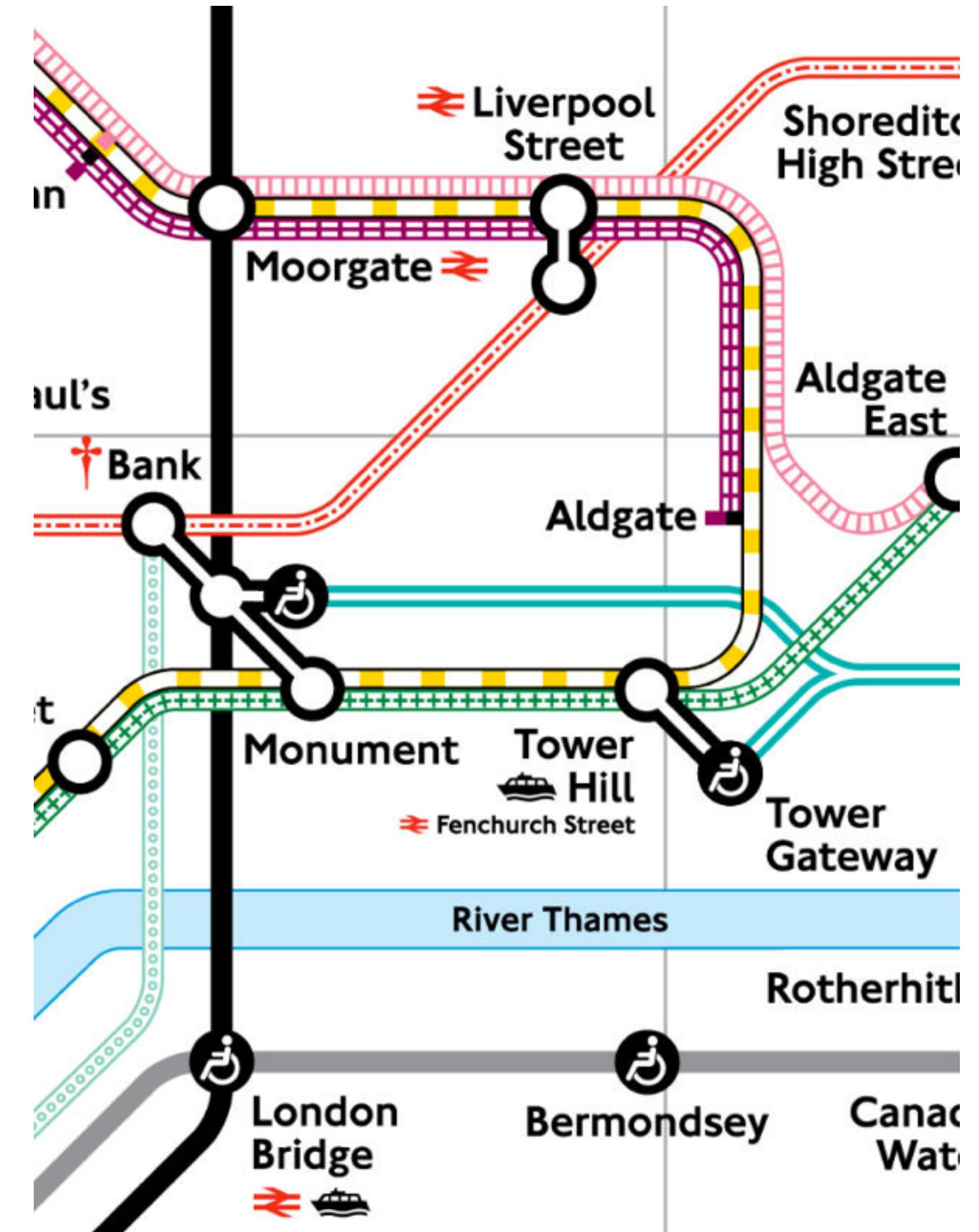
Cyan-orange contrasts work for almost everyone

Never use colour as the **only** method of differentiation



colourblindawareness.org

Supplement colour information



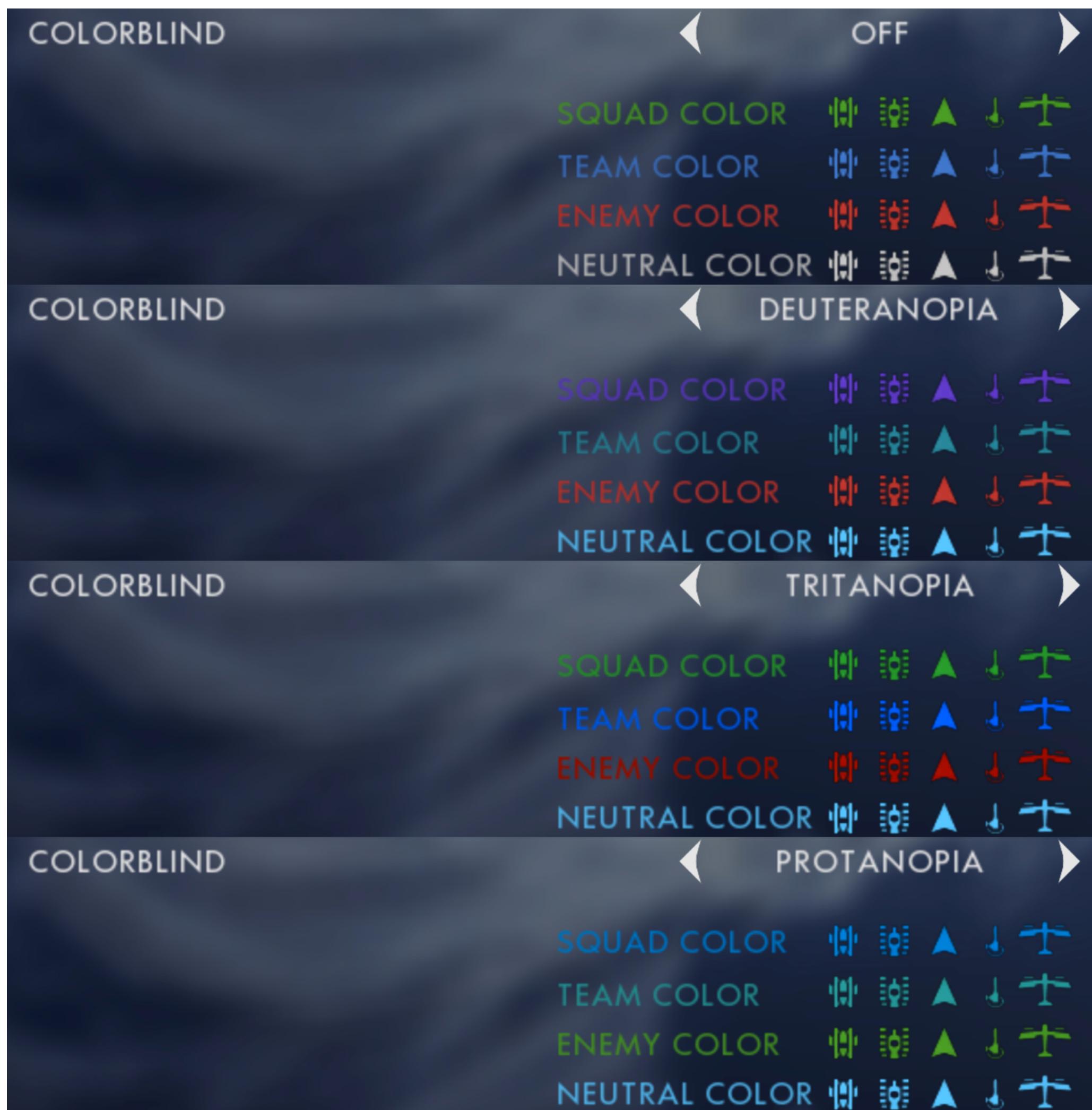
HUE / BRILLIANTMAPS.COM/COLOUR-BLIND-TUBE-MAP/

Use cyan and orange



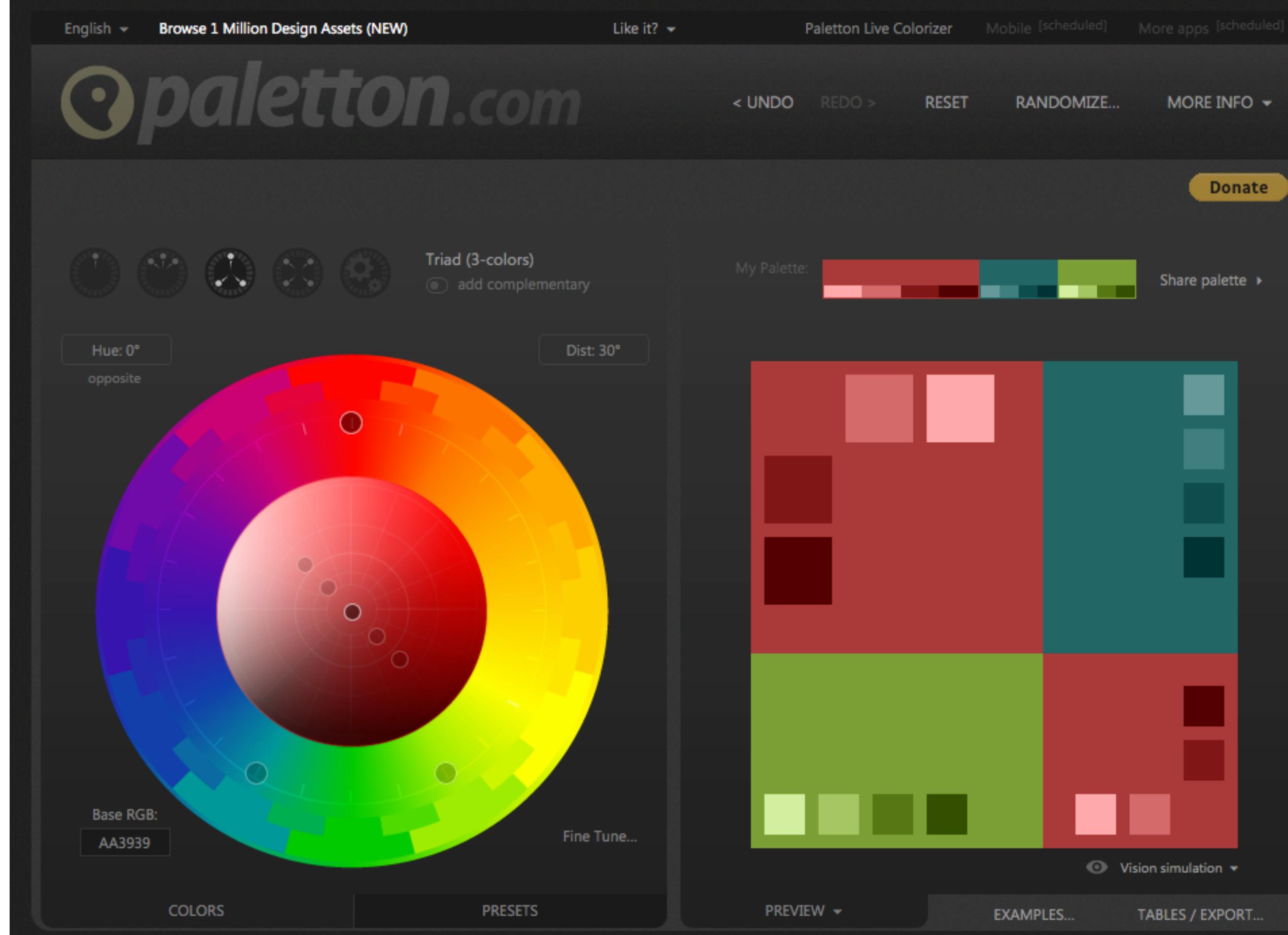
SPLATOON 2

Allow customization



BATTLEFIELD 1

Colour accessibility



No vision simulation

Color blind simulation > Protanopia (*1 % of men*)
Desaturate > Deuteranopia (*1 % of men*)
Gamma simulation > Tritanopia (*rare, cca 0,003 % of population*)

Web Colors (legacy 216-color palette)

EXAMPLES... TABLES / EXPD

No vision simulation

Color blind simulation > Protanomaly (*1 % of men*)
Deuteranomaly (*5 % of men, 0.4 % of women*)
Tritanomaly (*very rare*)
Dyschromatopsia (*incomplete achromatopsia*)
Full achromatopsia (*unable to see color*)

No vision simulation

Color blind simulation > Lighten: Lousy LED display or light ink print
Desaturate > Darken: Weak CRT display or heavy laser print
Gamma simulation >

Web Colors (legacy 216-color palette)

PALETTON.COM/

Text

Text

Text is a crucial way of conveying important information to the user.

It appears as **titles** and **headings**, as **body** text, as **labels** for UI elements, and as **decoration** in logos and background images.

Some key considerations for interfaces that use text:

- **Legibility:** How easy is it to tell letters apart
- **Readability:** How easy is it to read big blocks of text
- **Comprehension:** How easy is the text to understand
- **Information foraging:** minimizing user effort when seeking information

Legibility

Legibility

How easy is it to tell individual glyphs (letters) apart from each other and from their background?

Three major factors influence legibility:

- **Contrast:** difference between text and background
- **Font size:** large enough to be readable
- **Typeface choice:** simple, robust typefaces

Contrast ratio

Contrast is the difference in luminance (~brightness) between two objects, or between an object and its background.

Contrast ratio is a reliable measure of contrast for objects of different colours. It ranges from **21:1** (white/black) to **1:1** (white/white).

The contrast ratio for all text should be at least **4.5:1**, though **7:1** is recommended.

21:1	8.6:1	4:1	3.13:1	1.37:1	1.25:1	1.07:1	1:1
------	-------	-----	--------	--------	--------	--------	-----

21:1	15.5:1	10.9:1	7.4:1	4.7:1	2.8:1	1.7:1	
------	--------	--------	-------	-------	-------	-------	--

Contrast ratio checkers

Color Contrast Checker

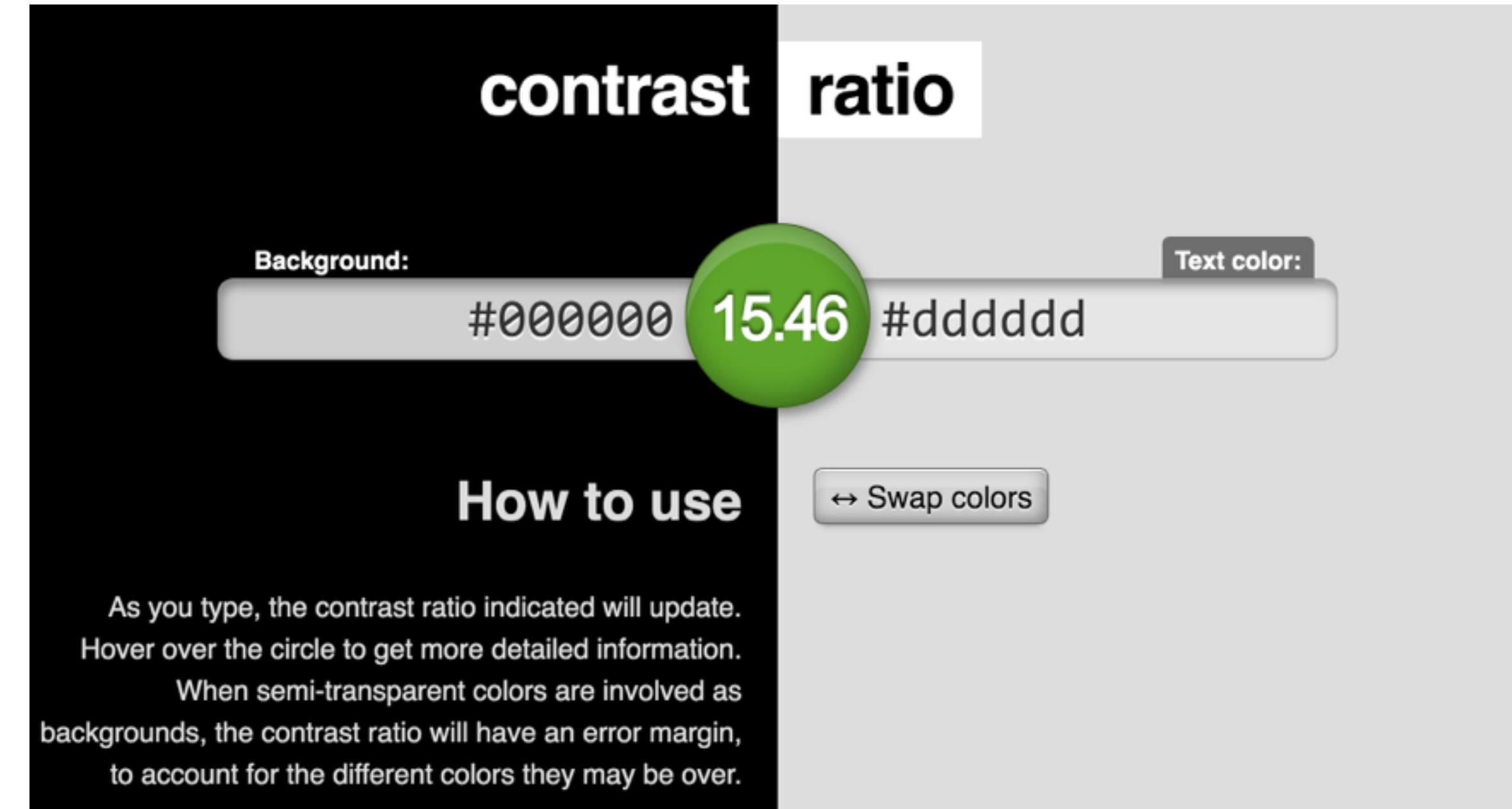
[Home](#) > [Resources](#) > Color Contrast Checker

Foreground Color: #2424FF
Background Color: #FFFFFF

Lightness (blue gradient slider)

Contrast Ratio: 7.58:1

[permalink](#)



WebAIM
Web Accessibility In Mind

contrast ratio
Includes transparency

[WEBAIM.ORG / CONTRAST-RATIO.COM](#)

Font size

Font size is measured in **pt** (1/72 in) or **px** (pixels).

Lato 16 pt

Lato 24 pt

Lato 36 pt

Lato 48 pt

Lato 60 pt

Lato 72 pt

Lato 96 pt

Lato 108 pt

Minimum font size
for body text at
1080p is **16 px.** *

* DEPENDS ON SCREEN SIZE AND RESOLUTION

Legibility best practices

- **16 px** minimum for body text at 1080p (1920 x 1080 px)
- Contrast ratio of **4.5:1** or more (better **7:1**)
- Well-established, modern, utilitarian typefaces for labels and text:

E.g., Lato, Roboto, Arial, Verdana, Open Sans, Calibri

- Use custom "fancy" fonts very sparingly

to do :

- get into the garden
- get the groundskeeper wet
- steal the groundskeeper's keys
- make the groundskeeper wear his sun hat
- rake in the lake
- have a picnic

(bring to the picnic blanket : sandwich,
apple, pumpkin, carrot, jam, thermos,
radio, basket)

to do :

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basket)

Readability

Readability

How easy is it to read **big blocks of text**.

Readability depends on:

- Line and paragraph spacing
- Alignment within blocks of text
- Column width

Line spacing

Man bun YOLO humblebrag tbh. Meditation locavore swag portland deep v photo booth forage irony four dollar toast etsy drinking vinegar jianbing asymmetrical.

1.0

Aesthetic polaroid banjo, pork belly raclette blue bottle subway tile neutra forage gastropub. PBR&B raclette bushwick, air plant cronut kickstarter pabst.

1.5

Affogato tousled kogi actually four loko la croix brunch. Mumblecore thundercats kogi poke cliche vape food truck. Man bun letterpress polaroid, ennui tattooed la croix celiac lomo wayfarers tofu succulents chillwave.

2.0

Paragraph spacing

Use active separation between paragraphs (at least **1.5x** line spacing).

Ponting defends England hierarchy

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Alignment

Left-aligned text lets the eye consistently find the start of a line. This is useful when reading blocks of text, but makes line ends uneven and unpredictable.

Centred text is a great idea for symmetry and headings, but should not be used in body text.

Titles and subtitles are okay.

Right-aligned text is useful when we want line ends to align, e.g., in UI elements like forms, and when dealing with numbers.

Readability Best Practices

- **Left-aligned, non-justified** text
- **Line spacing** of 1.5 times the font size
- **Paragraph spacing** of 1.5 times line spacing
- Traditional case setting (NOT ALL CAPS)
- Measure (column) width of **60-70 characters**
- Sensible line breaks

Comprehension

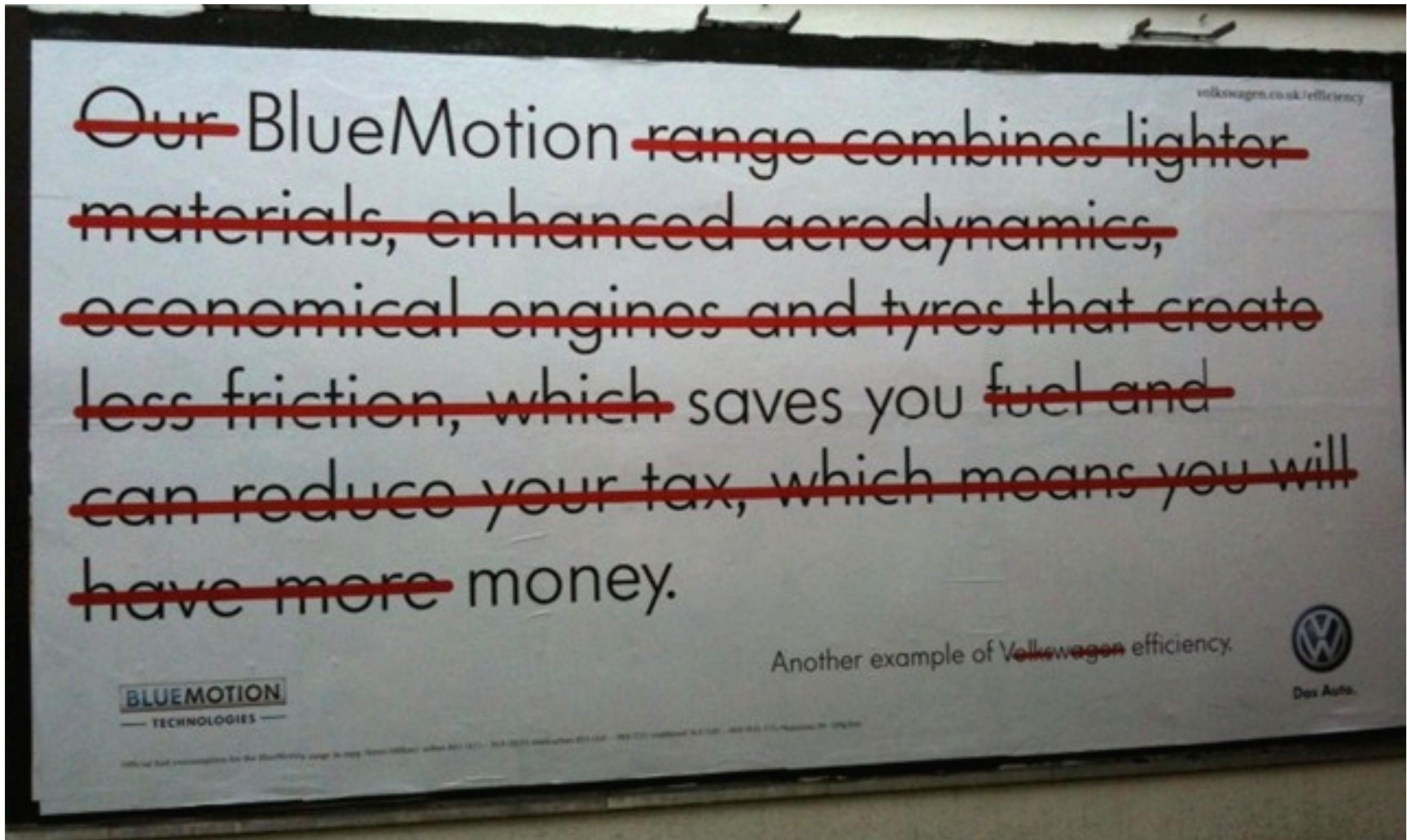
Comprehension

How easy is it to understand the text once it's been read

Comprehension depends on:

- Amount of text
- Vocabulary and grammar
- Prioritization
- Clear text hierarchy

Amount



Vocabulary and grammar

Write in the user's **vocabulary**; avoid renaming common things

Aim interfaces at an **8th** grade reading level (max 12th for **educated / B2B** interfaces)

(Flesch-Kinkaid measures that)

Use **active voice** and **simple sentences**



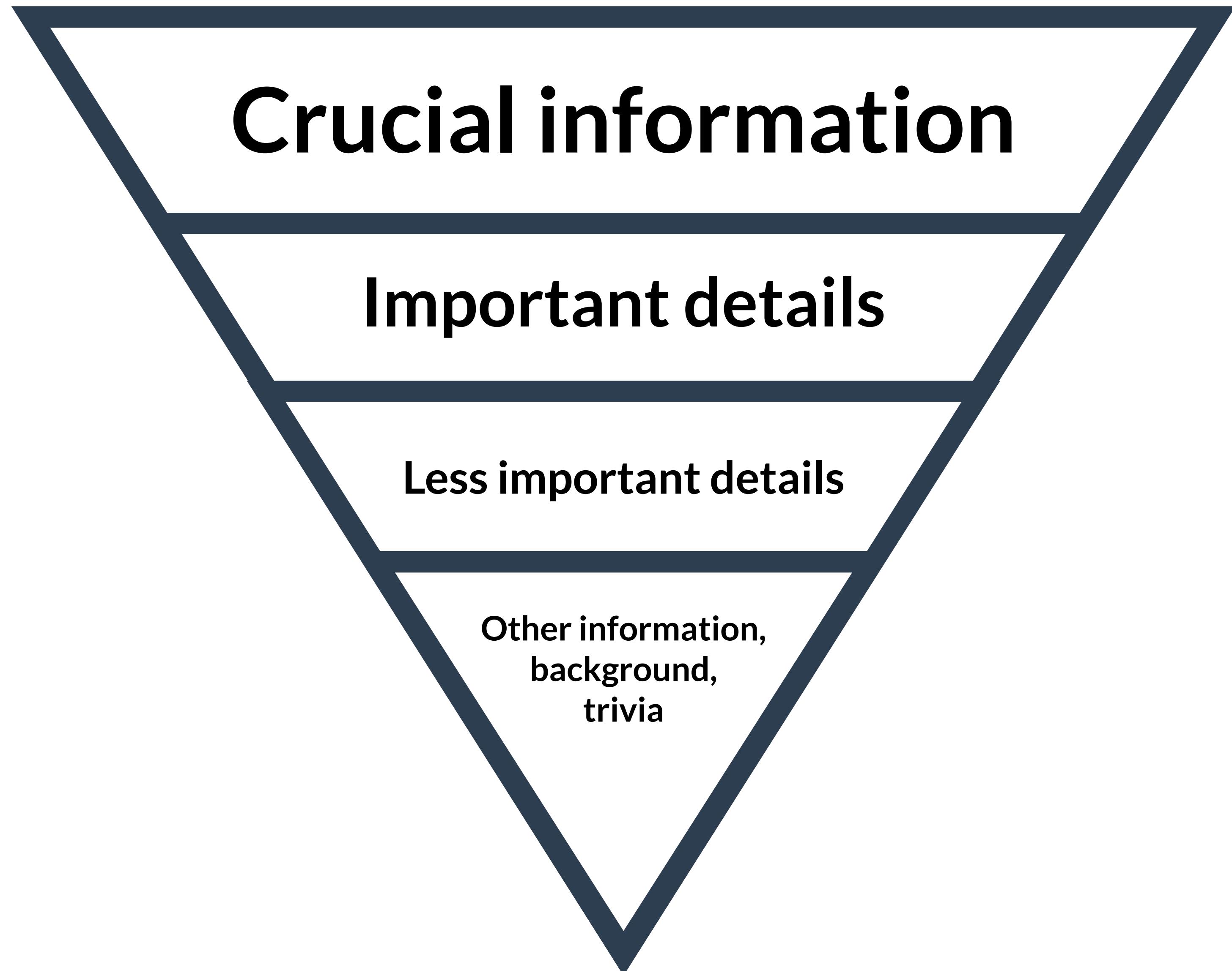
THE UP-GOER FIVE TEXT EDITOR

CAN YOU EXPLAIN A HARD IDEA USING ONLY THE [TEN HUNDRED](#) MOST USED WORDS? IT'S NOT VERY EASY. TYPE IN THE BOX TO TRY IT OUT.

When we try to use a cool new box of ones and nothings to see stuff from all over the world, to buy things, to talk to friends, or to watch a movie, how do we make the box do what we want?

I like making the boxes fun and easy to use by anyone.

Prioritization (the inverted pyramid)



McConnell says Republicans do not have votes to block witnesses - reports

Trump's defense team and his Republican allies have argued against the inclusion of witnesses at impeachment trial



▲ Mitch McConnell arrives at the US Capitol for the impeachment trial of Donald Trump in Washington DC on Tuesday. Photograph: Erik S Lesser/EPA

Republicans do not yet have the needed votes to block witnesses from appearing at the Senate impeachment trial of Donald Trump, the majority leader, Mitch McConnell, told his caucus in a meeting on Tuesday night, according to [multiple reports](#).

Combine techniques

Hierarchy in text lets the reader scan for important headings and understand the underlying structure of text.

Title

Title

First header

Bicycle rights yr pour-over, taxidermy raw denim schlitz freegan listicle green juice flannel succulents. Fanny pack migas viral enamel pin tattooed snackwave cloud bread tumeric vegan

Second header

Chambray vaporware mixtape. Hashtag fashion axe pabst mixtape art party cronut. Bicycle rights offal selvage cold-pressed, poke ramps four loko vaporware brooklyn thundercats.

First header

Bicycle rights yr pour-over, taxidermy raw denim schlitz freegan listicle green juice flannel succulents. Fanny pack migas viral enamel pin tattooed snackwave cloud bread tumeric vegan

Second header

Chambray vaporware mixtape. Hashtag fashion axe pabst mixtape art party cronut. Bicycle rights offal selvage cold-pressed, poke ramps four loko vaporware brooklyn thundercats.

Information foraging

How much is a double room at the Holiday Inn in Bradley?

Pennsylvania

Bedford Motel/Hotel: Crinaline Courts

(814) 623-9511 S: \$18 D: \$20

Bedford Motel/Hotel: Holiday Inn

(814) 623-9006 S: \$29 D: \$36

Bedford Motel/Hotel: Midway

(814) 623-8107 S: \$21 D: \$26

Bedford Motel/Hotel: Penn Manor

(814) 623-8177 S: \$19 D: \$25

Bedford Motel/Hotel: Quality Inn

(814) 623-5189 S: \$23 D: \$28

Bedford Motel/Hotel: Terrace

(814) 623-5111 S: \$22 D: \$24

Bradley Motel/Hotel: De Soto

(814) 362-3567 S: \$20 D: \$24

Bradley Motel/Hotel: Holiday House

(814) 362-4511 S: \$22 D: \$25

Bradley Motel/Hotel: Holiday Inn

(814) 362-4501 S: \$32 D: \$40

Breezewood Motel/Hotel: Best Western Plaza

(814) 735-4352 S: \$20 D: \$27

Breezewood Motel/Hotel: Motel 70

(814) 735-4385 S: \$16 D: \$18

How much is a double room at the Quality Inn in Columbia?

South Carolina						
City	Motel/Hotel	Area code	Phone	Rates		
				Single	Double	
Charleston	Best Western	803	747-0961	\$26	\$30	
Charleston	Days Inn	803	881-1000	\$18	\$24	
Charleston	Holiday Inn N	803	744-1621	\$36	\$46	
Charleston	Holiday Inn SW	803	556-7100	\$33	\$47	
Charleston	Howard Johnsons	803	524-4148	\$31	\$36	
Charleston	Ramada Inn	803	774-8281	\$33	\$40	
Charleston	Sheraton Inn	803	744-2401	\$34	\$42	
Columbia	Best Western	803	796-9400	\$29	\$34	
Columbia	Carolina Inn	803	799-8200	\$42	\$48	
Columbia	Days Inn	803	736-0000	\$23	\$27	
Columbia	Holiday Inn NW	803	794-9440	\$32	\$39	
Columbia	Howard Johnsons	803	772-7200	\$25	\$27	
Columbia	Quality Inn	803	772-0270	\$34	\$41	
Columbia	Ramada Inn	803	796-2700	\$36	\$44	
Columbia	Vagabond Inn	803	796-6240	\$27	\$30	

Information foraging

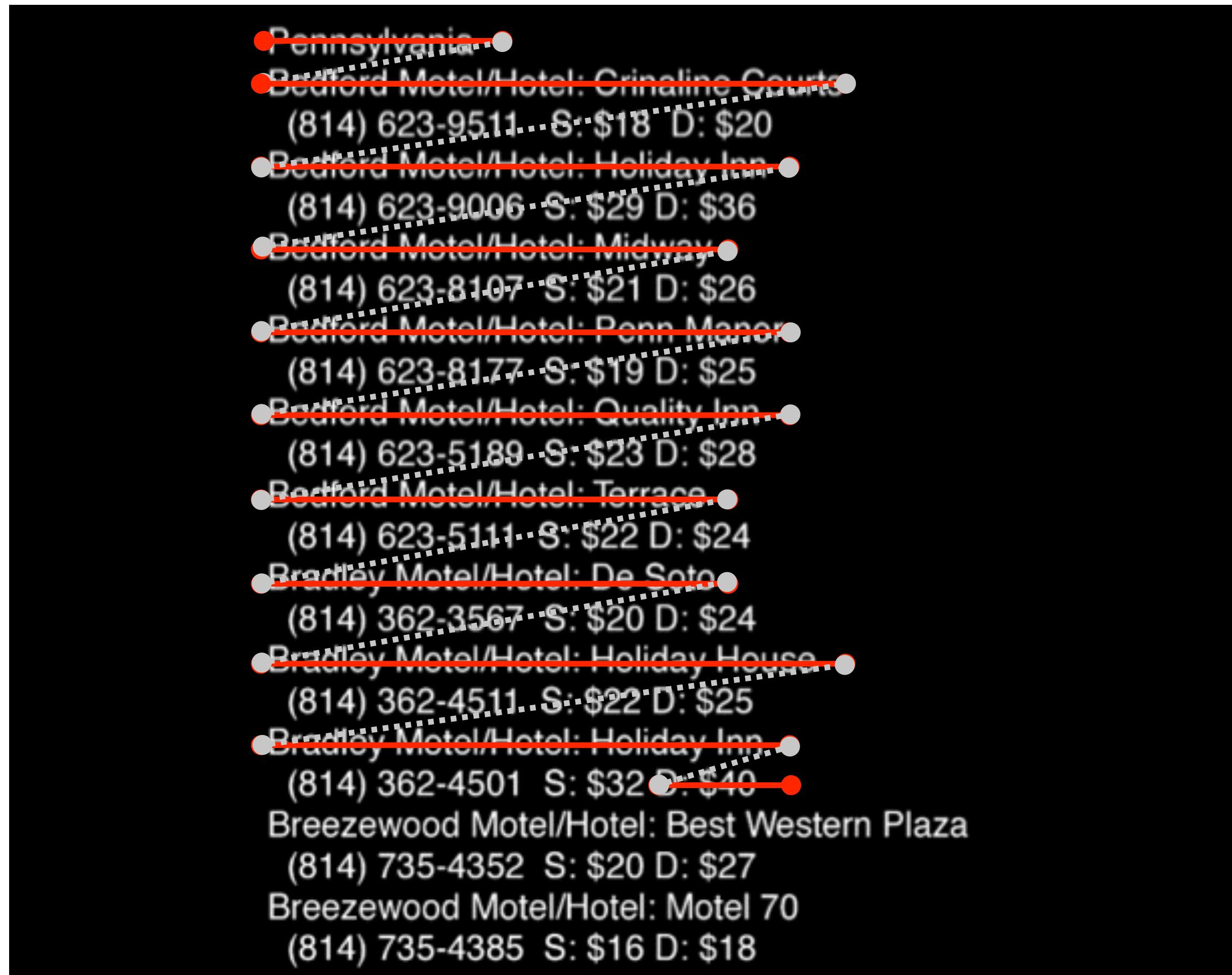
Humans **forage** for information: we look for the highest yield for lowest effort.

- **Scanning:** we scan interfaces until we find a promising clue to the information we need
- **Satisficing:** trying a suboptimal but promising lead is faster and more fun than optimizing for the best one
- **Recovery:** the penalty for skipping something is usually low

Violating any of these tendencies makes finding information harder and more frustrating.

Forced scanning patterns

How much is a double room at the Holiday Inn in Bradley?

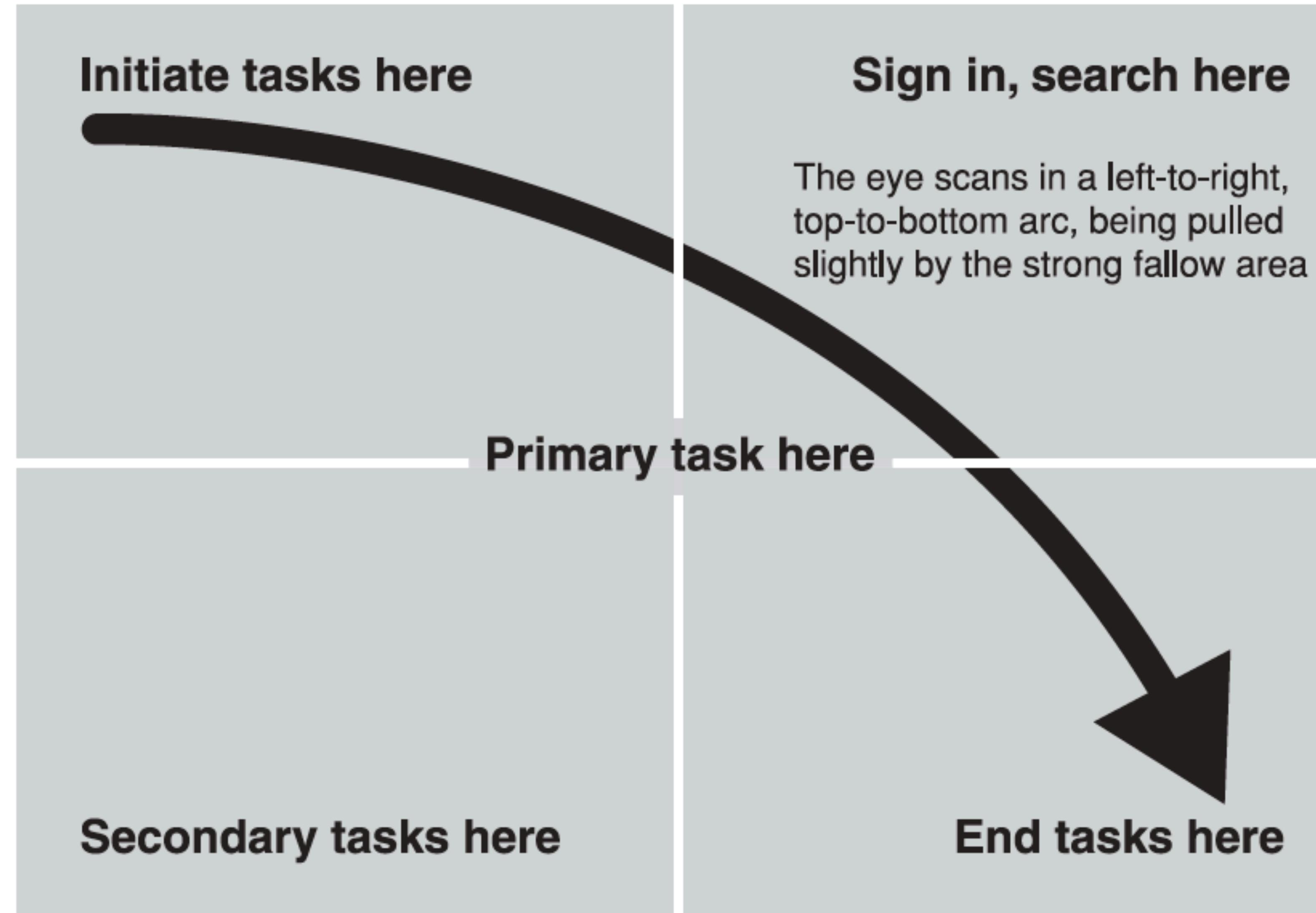


Forced scanning patterns

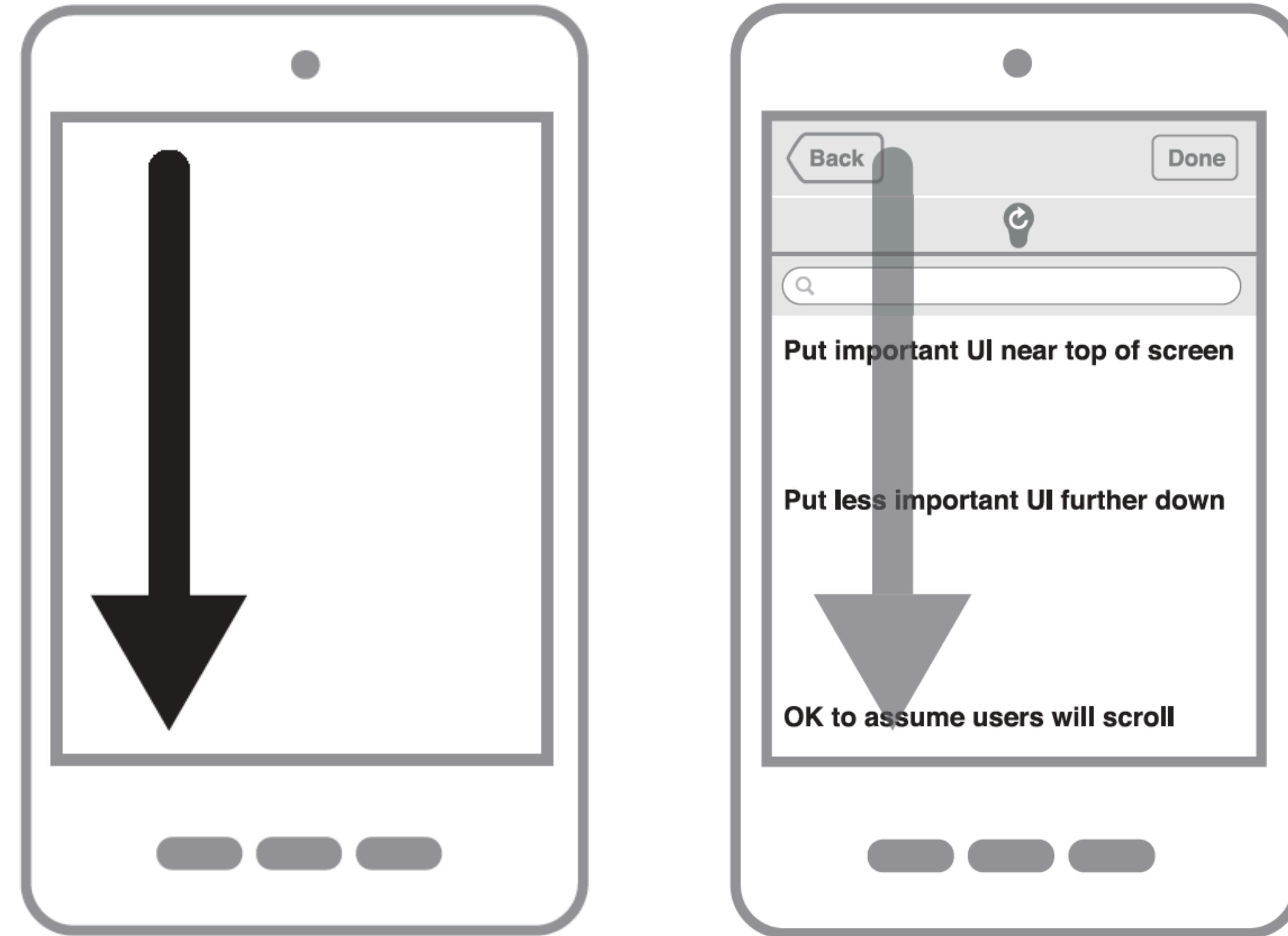
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Scanning patterns



Mobile scanning patterns



Reading patterns

Readers approach text with different objectives in mind, and prefer avoid reading any text that doesn't get them closer to their goals.

Awareness of reading or scanning patterns in text blocks will help us design to support them. Two key principles:

- **Hierarchy:** let readers “zoom in” on the correct block of text by guiding their attention
- **Sloth:** let readers find the important information within an interface and skip the rest.

Commitment pattern

Word by word, like in a book. Everything is important.

October arrived, spreading a damp chill over the grounds and into the castle. Madam Pomfrey, the nurse, was kept busy by a sudden spate of colds among the staff and students. Her Pepperup potion worked instantly, though it left the drinker smoking at the ears for several hours afterward. Ginny Weasley, who had been looking pale, was bullied into taking some by Percy. The steam pouring from under her vivid hair gave the impression that her whole head was on fire.

Spotted pattern

Skipping all body text looking for something specific (button, link)

GameMaker: Marketplace End User Licence Agreement ("EULA")

GameMaker: Marketplace End User License Agreement ("EULA")

About this document

This document applies to your use of software products licensed, or services obtained, from the GameMaker: Marketplace (which we'll call "the Marketplace" as shorthand). This document is the default contract between customers of the Marketplace (that's you!) and people or businesses from whom they can license products on the Marketplace. We call those products "Assets" in this EULA (there's more about them explained below). It also applies to the provision of services via the Marketplace ("Services"). The people or businesses providing the Assets or Services are called "the Publisher" in this EULA and they are either: (i) YoYo Games Limited (company number 05260718) of River Court, 5 West Victoria Dock Road, Dundee, United Kingdom ("YoYo Games"); or (ii) any third party business that distributes products from the Marketplace.

I do not agree to this EULA

I have read and agree to this EULA

Layer-cake pattern

Reading headings and ignoring body text until relevant

Career [edit]

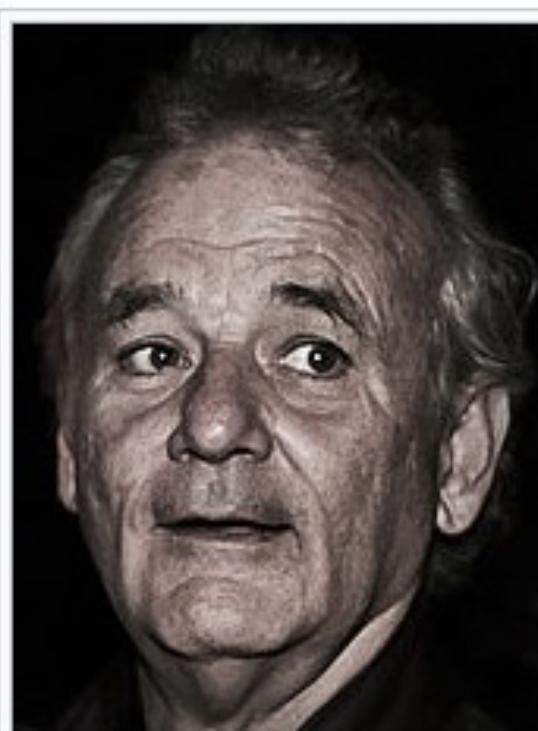
Second City [edit]

With an invitation from his older brother, Brian, Murray got his start at [The Second City](#) in Chicago, an improvisational comedy troupe, studying under [Del Close](#).^[14] In 1974, he moved to [New York City](#) and was recruited by [John Belushi](#)^[15] as a featured player on [The National Lampoon Radio Hour](#).

Saturday Night Live [edit]

In 1975, an [Off-Broadway](#) version of a [Lampoon](#) show led to his first television role as a cast member of the [ABC](#) variety show [Saturday Night Live with Howard Cosell](#). That same season, another variety show titled [NBC's Saturday Night](#) premiered. Cosell's show lasted just one season, canceled in early 1976. After working in [Los Angeles](#) with the "guerrilla video" commune [TVTV](#) on several projects, Murray rose to prominence in 1976. He officially joined the cast of [NBC's Saturday Night Live](#) for the show's second season, following the departure of [Chevy Chase](#).^[16] Murray was with [SNL](#) for three seasons from 1977 to 1980.^[17] A [Rutland Weekend Television](#) sketch [Eric Idle](#) brought for his appearance on [SNL](#) developed into the 1978 [mockumentary All You Need Is Cash](#) with Murray (alongside other [SNL](#) cast members) appearing as "Bill Murray the K", a send-up of New York radio host [Murray the K](#), in a segment of the film that is a parody of the [Maysles Brothers](#)'s documentary [The Beatles: The First U.S. Visit](#). During the first few seasons of [SNL](#), Murray engaged in a romantic relationship with fellow cast member [Gilda Radner](#).^[18]

Film career [edit]



Murray landed his first starring role with the film [Meatballs](#) in 1979. He followed this up with his portrayal of Hunter S. Thompson in 1980's [Where the Buffalo Roam](#). In the early 1980s, he starred in a string of box-office hits, including [Caddyshack](#), [Stripes](#), and [Tootsie](#). Murray was the first guest on [NBC's Late Night with David Letterman](#) on February 1, 1982. He later appeared on the first episode of the [Late Show with David Letterman](#) on August 30, 1993, when the show moved to CBS. On January 31, 2012 – 30 years after his first appearance with Letterman – Murray appeared again on his talk show. He appeared as Letterman's final guest when the host retired on May 20, 2015.^[19]

Murray began work on a film adaptation of the novel [The Razor's Edge](#). The film, which Murray co-wrote, was his first starring role in a [dramatic film](#). He later agreed with [Columbia Pictures](#) to star in [Ghostbusters](#)—in a role originally written for [John Belushi](#)—to get financing for [The Razor's Edge](#).^[20] [Ghostbusters](#) became the highest-grossing film of 1984 and the highest-grossing comedy of all-time.^[21] [The Razor's Edge](#), which was filmed before [Ghostbusters](#) but not released until after, was a box-office flop.

Frustrated over the failure of [The Razor's Edge](#), Murray retired from acting for four years to study [philosophy](#) and [history](#) at [Sorbonne University](#),

F-pattern

Reading the first line, then half of another line a few lines down, and then scanning down the left-hand side of the screen.

F-pattern reading occurs when users are faced with a “wall of text” with no hierarchy or anchors but are unwilling to commit to reading it.

Instead, they hope to spot a relevant word by scanning down the page.

The last two elements pretty much summarize all web behavior: the vast majority of the web users would rather finish their tasks as fast as possible with the minimum amount of effort; they visit a page because they want to find a quick answer rather than read a dissertation on the topic and educate themselves.

When writers and designers have not taken any steps to direct the user to the most relevant, interesting, or helpful information, users will then find their own path. In the absence of any signals to guide the eye, they will choose the path of minimum effort and will spend most of their fixations close to where they start reading (which is usually the top left most word on a page of text). It's not that people will always scan the page in the shape of an F. Although years of reading have likely trained people into thinking that more important content comes before less important content, no user really feels that the content has been arranged so the most important things appear in an F shape. The F-pattern is the default pattern when there are no strong cues to attract the eyes towards meaningful information.

People tend to minimize [interaction cost](#) and maximize the benefit they get from the work they do. For their eyes, this translates to spending few fixations, while still gleaning the information they need; being productive, engaged, and successful with what they take in from those fixations. Economizing on time means fewer fixations — looking at fewer words.

In some cases, people will get bored or fatigued as they scan text. Other times, the words they read offer only a weak [information scent](#), which may be enough gratification to continue scanning, but not enough to read more of the text.

Layout, colour, text

HARMFUL EFFECTS OF ALCOHOL & DRUGS ON THE FETUS & INFANT

ALCOHOL

- Drinking alcohol during pregnancy significantly increases risk of having a baby born with Fetal Alcohol Syndrome (FAS). A pregnant mother must realize that if she drinks, then so does her baby!
- FAS babies are abnormally small at birth and have small heads.

FETAL ALCOHOL SYNDROME

HEAD

- Small head size (microcephaly)

BRAIN

- Brain damage
- Motor retardation
- Below average ability and intelligence
- Hypotonia

NOSE

- Broad and flat
- Upturned nostrils

EYES

- Short eye span
- Droopy eye lids
- Small, widely spaced eyes

EAR

- Large, poorly developed ears

CHIN

- Small chin

OTHER ABNORMALITIES

- Stunting of growth
- Heart and kidney damage
- Alcohol withdrawal tremors, and seizures

SMOKING

SMOKING DURING PREGNANCY:

- Increases risk of miscarriage.
- Increases premature labor and birth.
- Causes constriction and damage to the blood vessels of the umbilical cord, decreasing the flow of blood, oxygen, and nutrients vital to the developing fetus.
- Almost always causes low-birth-weight babies.
- May cause baby to be born with a small head (microcephaly), impairs growth, intellect, and emotional development.

SMOKING REDUCES FLOW OF OXYGEN & NUTRIENTS TO FETUS

LOW-BIRTH-WEIGHT BABY BORN THREE WEEKS PREMATURE

MARIJUANA

MOTERS WHO SMOKE MARIJUANA DURING PREGNANCY:

- Damage blood vessels of the umbilical cord, and reduce their ability to transport and supply oxygen and nutrients to the developing fetus.
- Increase risk of low-birth-weight baby.
- Increase risk of miscarriage.
- Increase risk of stillbirth.
- Increase risk of baby being born with a small head (microcephaly), poor growth, irritability, birth defects and deformities.

COCAINE

COCAINE USE DURING PREGNANCY INCREASES RISK OF:

- Fetal death.
- Premature labor and delivery.
- Miscarriage.
- Sudden Infant Death Syndrome (SIDS). Babies die in their sleep without warning.
- Blood pressure changes caused by cocaine use.

BLOOD VESSEL BURSTING IN BRAIN

INCREASES IN BLOOD PRESSURE may cause blood vessels in the fetal brain to burst, causing permanent brain damage.

HOW DRUGS TRAVEL FROM THE MOTHER TO FETUS AND INFANT

PATHWAY OF DRUGS THROUGH THE MOTHER TO THE FETUS

- Drug enters body through the mouth. (Drugs also enter the body through intravenous injection and by smoking or snorting chemicals through the nose.)
- Drug enters the stomach.
- Drug enters the intestine.
- Drug is absorbed through the intestine and enters the mother's bloodstream.
- Drug passes through the placenta and is carried through the umbilical cord to fetus.
- Drug enters blood circulation of fetus and is pumped throughout the infant.

DRUGS BEING TRANSFERRED TO THE INFANT DURING BREASTFEEDING

Alcohol, drugs, and harmful substances taken by this mother are transferred to her infant while breast feeding. These microscopic chemicals pass through milk glands and ducts at the breast when the infant is feeding. The chemicals are then absorbed and pumped throughout the infant.

Milk glands and ducts

Drug molecules

ALCOHOL, DRUGS, AND HARMFUL SUBSTANCES TAKEN BY THE PREGNANT MOTHER THAT TRAVEL THROUGH THE BLOODSTREAM TO THE FETUS

(Alcohol • Nicotine • Marijuana • Cocaine • LSD • PCP • Heroin • Medications • Sleeping Pills • Sedatives • Aspirins • Foods containing caffeine such as Coffees, Tea, Colas, and Chocolate)

Umbilical cord

Artery

Vein

Blood vessels of the mother

Placenta

Fetus

Drug molecules being transported throughout the blood circulation system of the fetus

Drug hypodermic circulating in the amniotic fluid

Amniotic fluid

Uterus

The fetus shares almost everything the mother takes into her body, whether eaten, smoked, injected, sniffed, or swallowed. Drugs and harmful substances such as alcohol, nicotine, marijuana, cocaine, LSD, PCP, heroin, medications, aspirins, and foods containing caffeine, are all transferred from the mother's bloodstream to the blood circulation of the fetus—and therefore must be avoided! These chemicals easily pass through the placenta and are transported through the large blood vessel of the umbilical cord to the fetus, with the two smaller arteries carrying oxygenated blood, containing waste products back to the placenta. During the entire pregnancy, especially the first few months, the developing fetus is extremely fragile, vulnerable, and has great difficulty in ridding itself of harmful chemicals remaining unprocessed in the bloodstream or circulating in the amniotic fluid. Exposure to these substances greatly increases the risk of miscarriage, early infant death, low-birth weight, SIDS, stillbirth, premature birth, brain damage, mental retardation, growth impairment, birth defects and deformities, addiction and withdrawal.

dong hyun lee 2007

Questions?

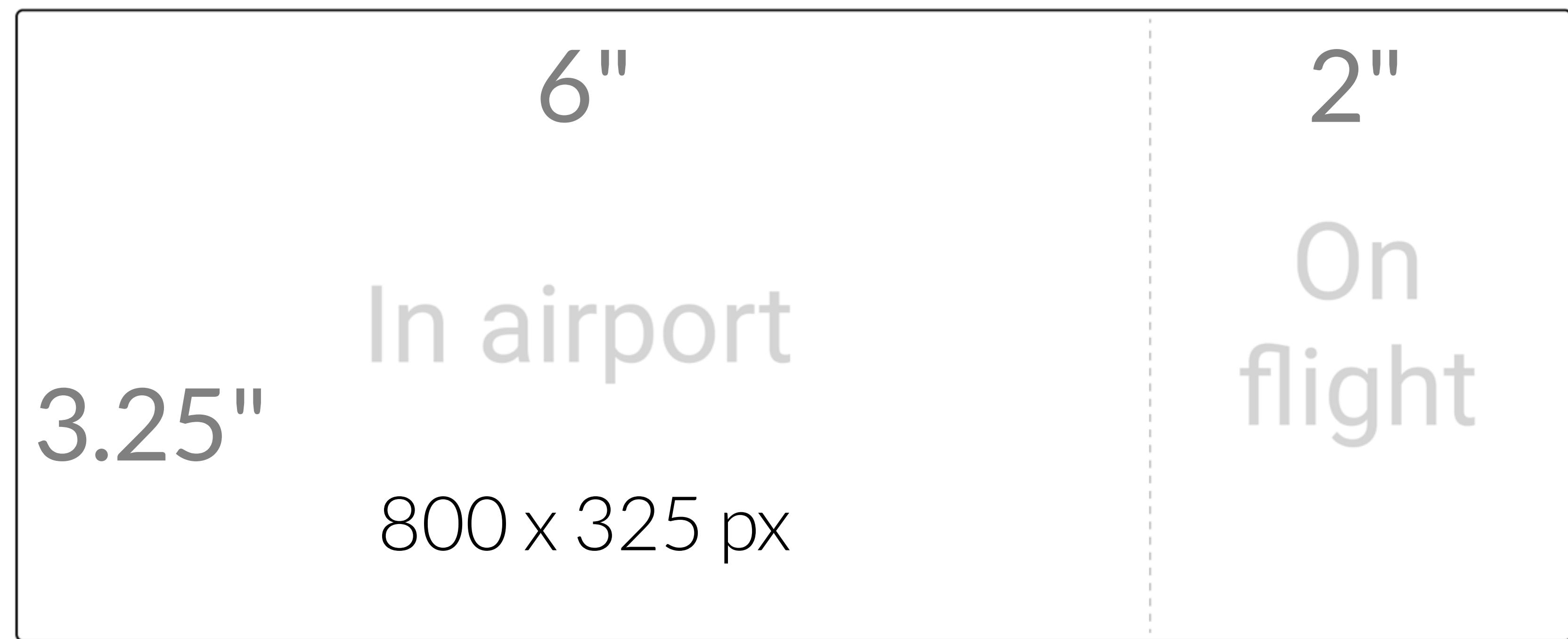
Workshop: Boarding Pass

Boarding pass redesign (2%)

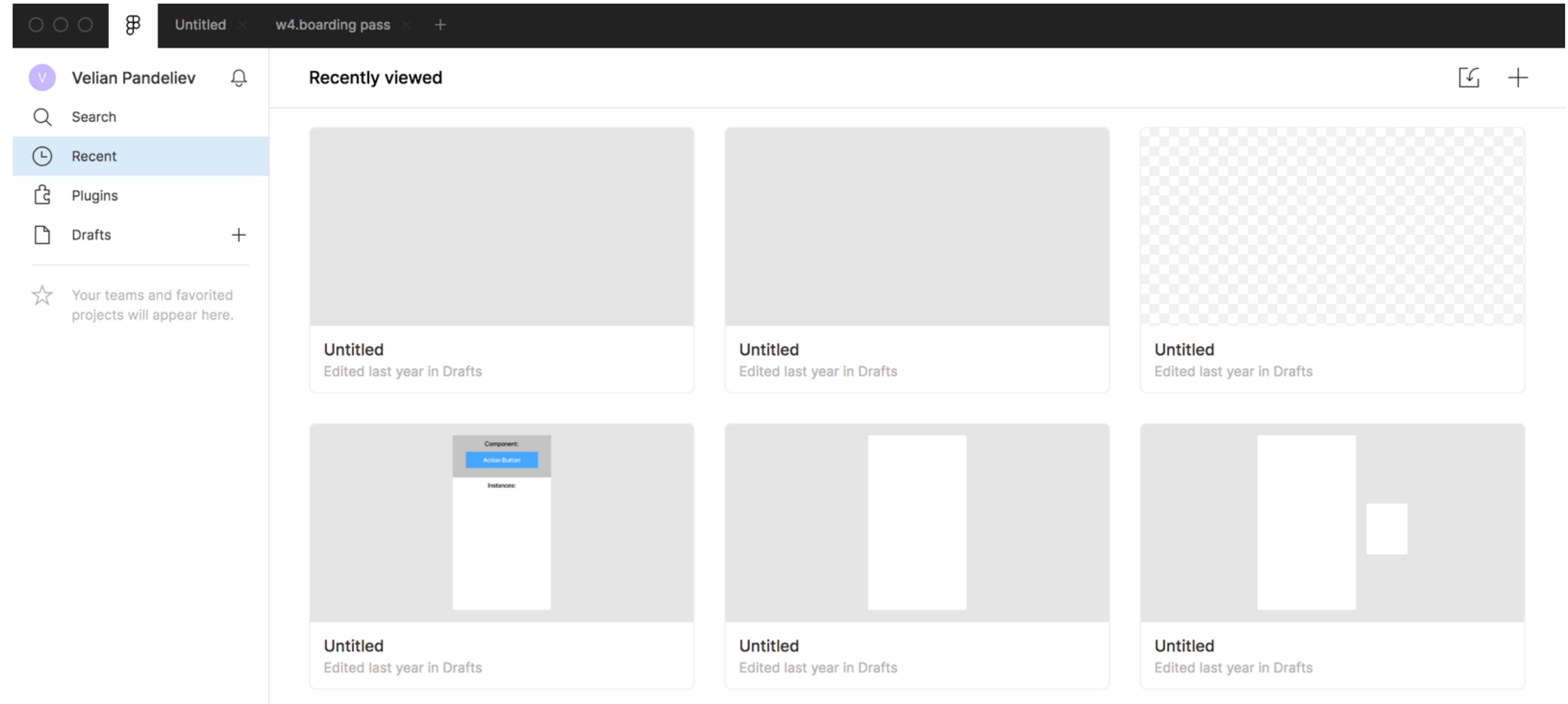
Individually design a paper **boarding pass** that shows passengers required and useful information in the airport and during their flight.

Work in **Figma** and download template from Quercus

Passenger name
Airline name and branding
Flight number
Departure gate information
Departure airport
Arrival airport
Departure time
Boarding time
Seat assignment
Bar code
The words "Boarding Pass"



To import template, drag into File view



To add grids with gutters

Select the "Boarding pass" frame

Find "Layout grid" on the right

Press "+"

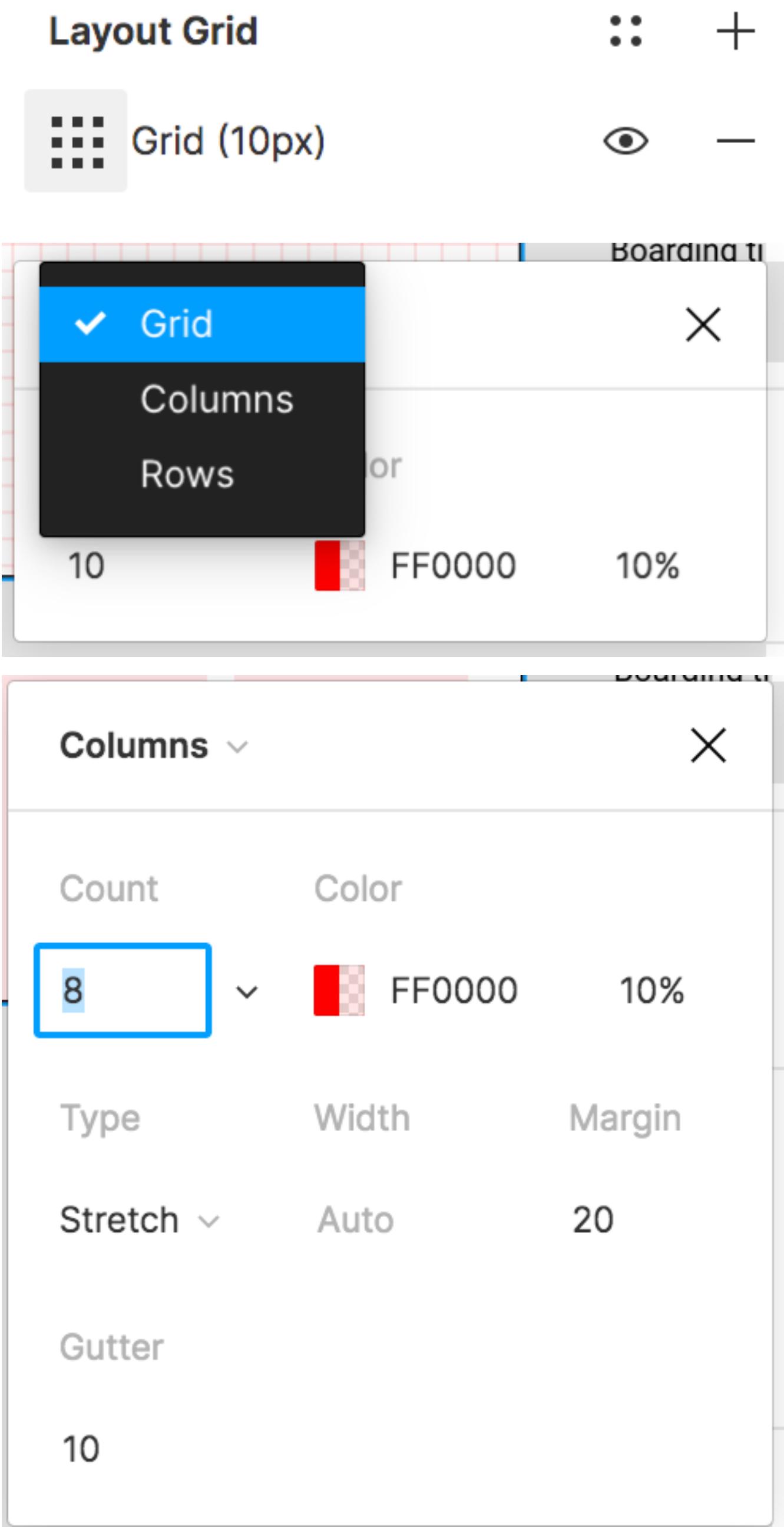
Click on the icon to the left of the grid

Click on the dropdown chevron next to "Grid"

Change to "Columns"

Pick a number of columns, add margin and gutter

Repeat for rows.



Challenge:

Double the length of your passenger's name

Challenge:

Try a vertical orientation

Challenge:

Use bilingual labels (EN/FR)

In airport

On flight

When ready,

Select "Boarding Pass" frame

Ensure all your elements are nested under the frame.

Find "Export"

Export as PDF

Submit to Quercus

