

E D I T.

Web Fundamentals

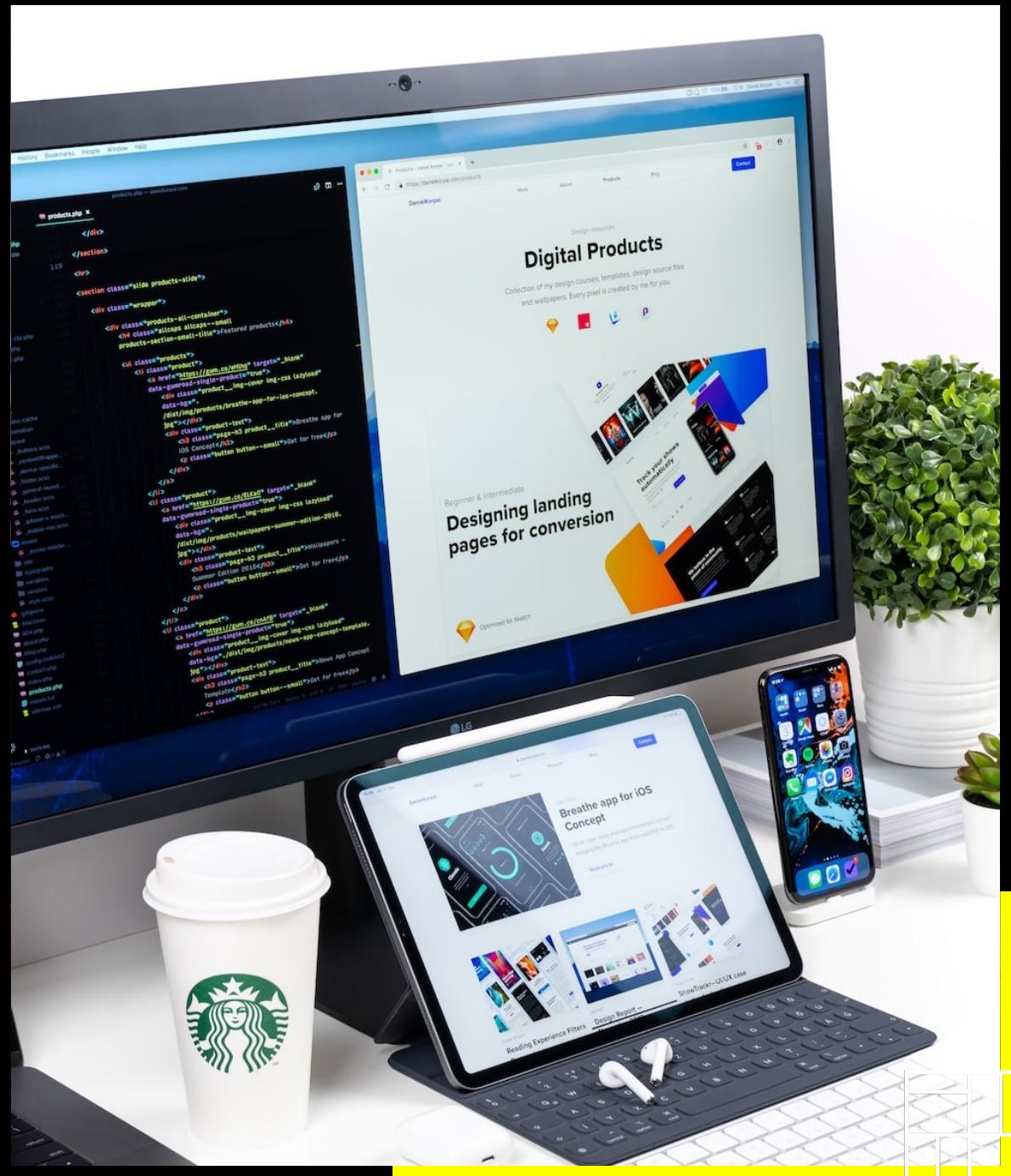
TUTOR

André Martins
UX Consultant, Hyphen



Conteúdo

- Um pouco de história
- User Experience (UX) Basics
- User Interface (UI) Basics
- Responsive grids
- Cor, Tipografia
- Inspiração
- Criar protótipo

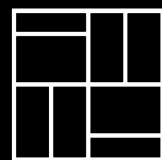


User Interface Basics



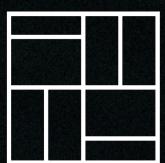
Review

- O que é User Interface?
- Tipos de User Interface: GUI, VUI, Gesture-based
- O que é User Interface Design?
- Arquitetura de informação: Users, Content, Context
- Content strategy: Substância, Estrutura, Workflow, Administração
- Card Sorting + UX Sitemap
- User Flows
- Sketching & Wireframing
- Design Patterns



A close-up photograph of a person's hands. One hand holds a black pen, poised to draw on a wireframe diagram of a user interface. The diagram includes a header bar with 'Top' and 'Bottom' sections, a main content area with a grid of four boxes, and a footer section. The other hand is visible, showing a ring on the ring finger. The background is dark, making the white wireframe and the pen stand out.

10 princípios de Usabilidade

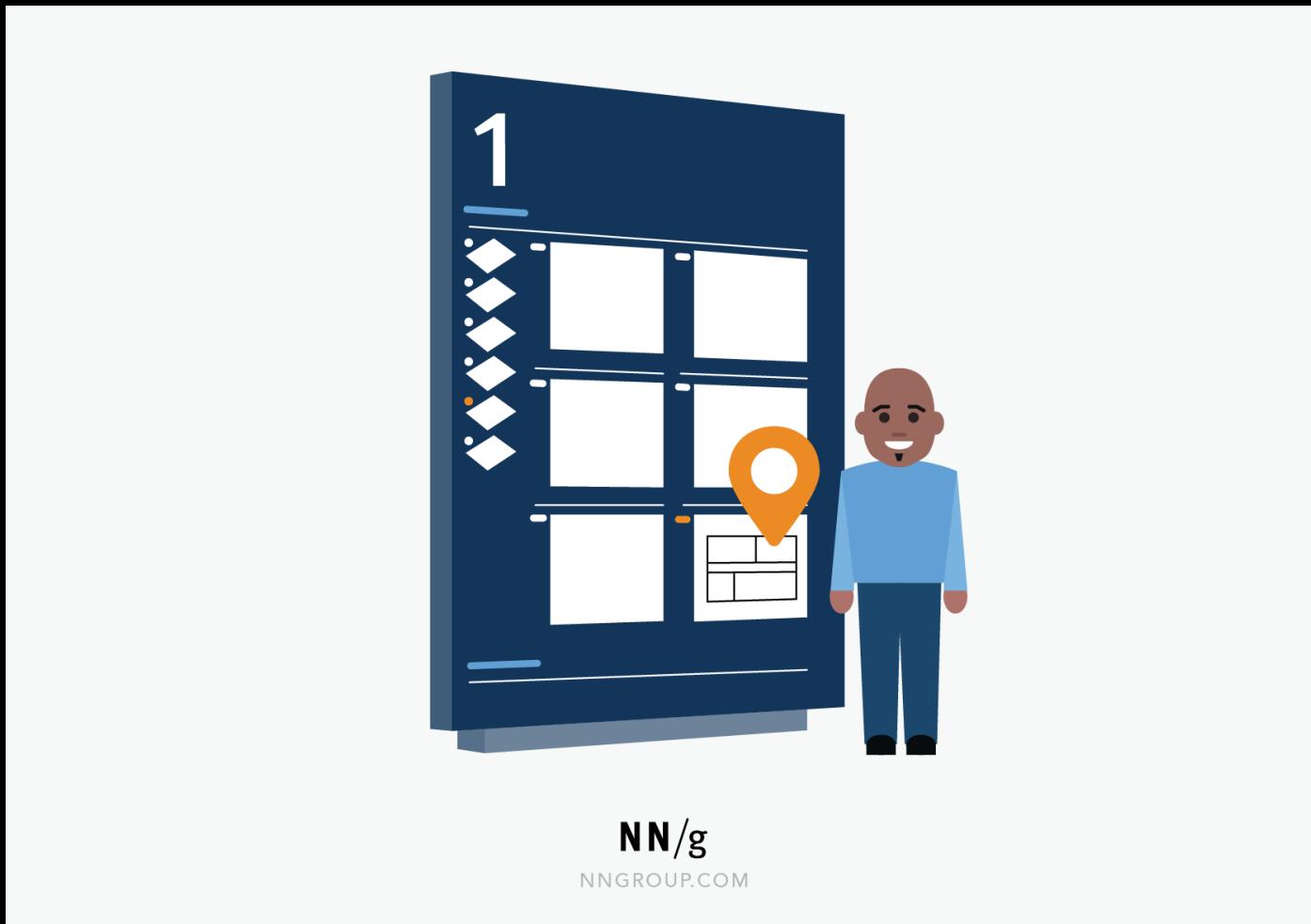


10 princípios de Usabilidade

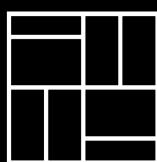
Visibilidade do Sistema

Objetivos:

- Manter o utilizador informado
- Resultado das ações e próximos passos
- Criar confiança



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Great picks!

What interests you?

DOGS • DEPRESSION • NEW MUSIC •

TRAVEL PHOTOGRAPHY • MOTIVATION •

DIY ✓ CATS ✓ EMOTIONS ✓

EUROPE TRAVEL • COMMODITIES •

HOME IMPROVEMENT • CUTE ✓

ANXIETY • PERSONAL DEVELOPMENT •

AFRICA TRAVEL • MARKETS •

SELF-HELP • FURNITURE •

MENTAL HEALTH • SOCIAL JUSTICE •

WORK-LIFE BALANCE • TRAVEL DEALS •

IMPACT INVESTING • NATURE •

MINDFULNESS • KITCHENS •

NATURE PHOTOGRAPHY • ASIA •

SUCCESS • CANADA •

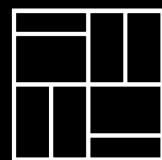
TECHNOLOGICAL CHANGE • EMPATHY •

Welcome to Hiking Project

Hang tight, we're downloading
your first area...

California
8,094 miles of trail

Google



SEARCH

X BAG

Striped knit maxi dress \$120.00 View full details ▶

HIDE FILTER

- Skirts (12)
- Sweaters
- Coats & J
- Pants (2)
- Suiting (
- Sport (7)
- Intimate
- Jewelry (
- Bags (12)
- Shoes (5)

SIZE & FIT

COLOR

PRICE

NEWNESS

MORE FILTERS

DISCOUNT



TOP RATED

★★★★★ 11 reviews

30% OFF FULL PRICE WITH CODE SUMMERLOVE

COLOR: IVORY NAVY

SIZE: SMALL SIZE CHARTS

xx-small x-small small medium

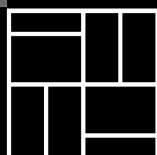
Large x-large ONLY A FEW LEFT

QUANTITY: 1

SIZE & FIT +

PRODUCT DETAILS +

ADD TO BAG WISHLIST



10 princípios de Usabilidade

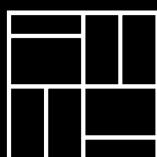
Correspondência entre sistema e mundo real

Objetivos:

- Falar a mesma língua do utilizador
- Correspondência com o resultado esperado
- Facilita a aprendizagem



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Upgrade

Medium

Search Bell User

- [Dreamit UrbanTech](#)
- [NYU Center for Urban Science + Progress \(CUSP\)](#)
- [Columbia University Center for Urban Real Estate \(CURE\)](#)

43



Twitter

Facebook

Bookmark

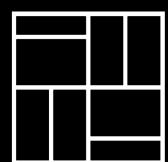
Conclusion

There are many reasons why NYC will lead smart building adoption.

Ambitious legislation, strong incentives, and industry champions are some, but not all. The city offers a cheap renewable source of recent college grads with top skills, funding, state-of-the-art technology, growing population trends, an old housing stock in need of retrofit, smart city challenges, large number of urban incubators, and even the city size to attract partner cities (Helsinki, Paris).

There's this mentality of doing, getting a quick buck, not building unicorns but small exits, and a mix of industries and businesses that's hard to find somewhere else. In the end, there's even this idea that if you can make it here, then you can make it anywhere. Time will tell who wins the smart building race at the end, but NYC sure has a good chance at it.

You highlighted

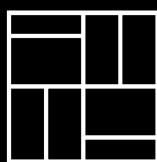


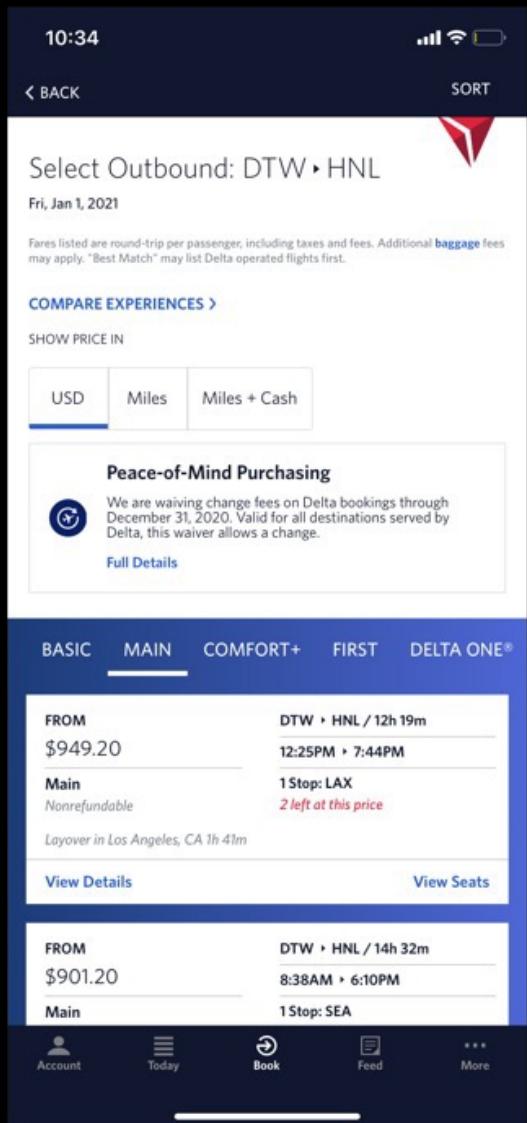
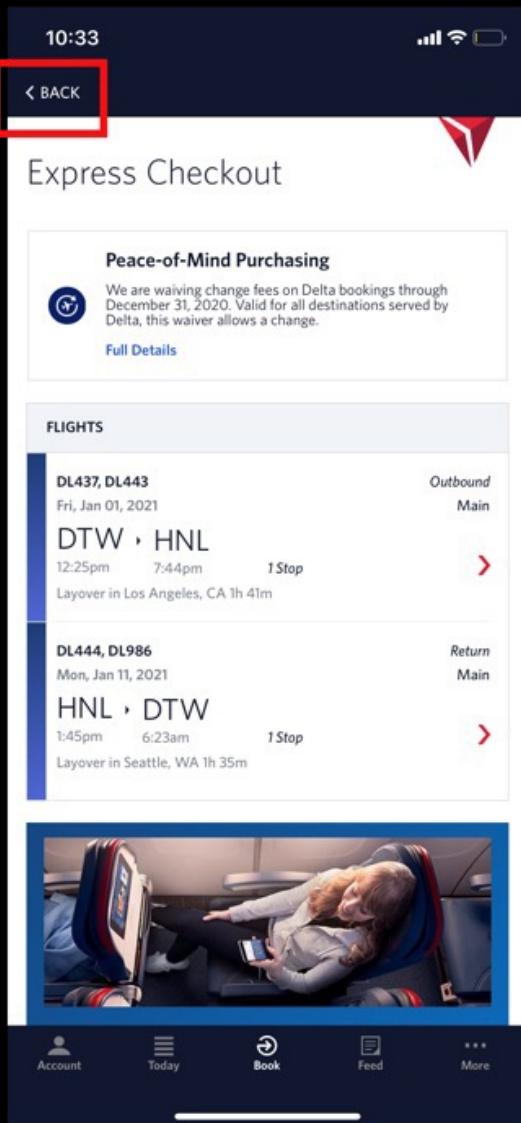
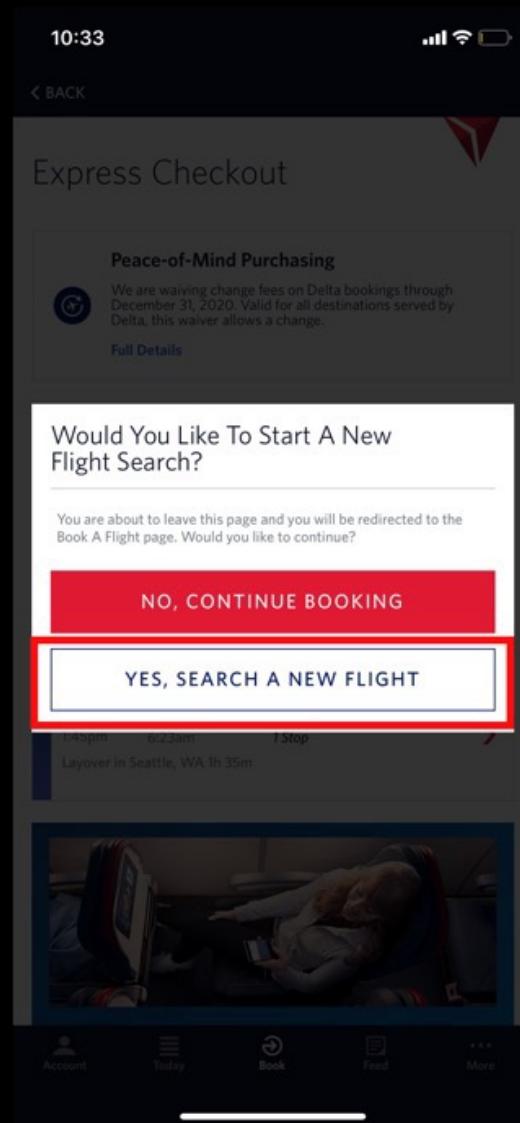
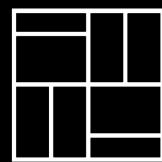
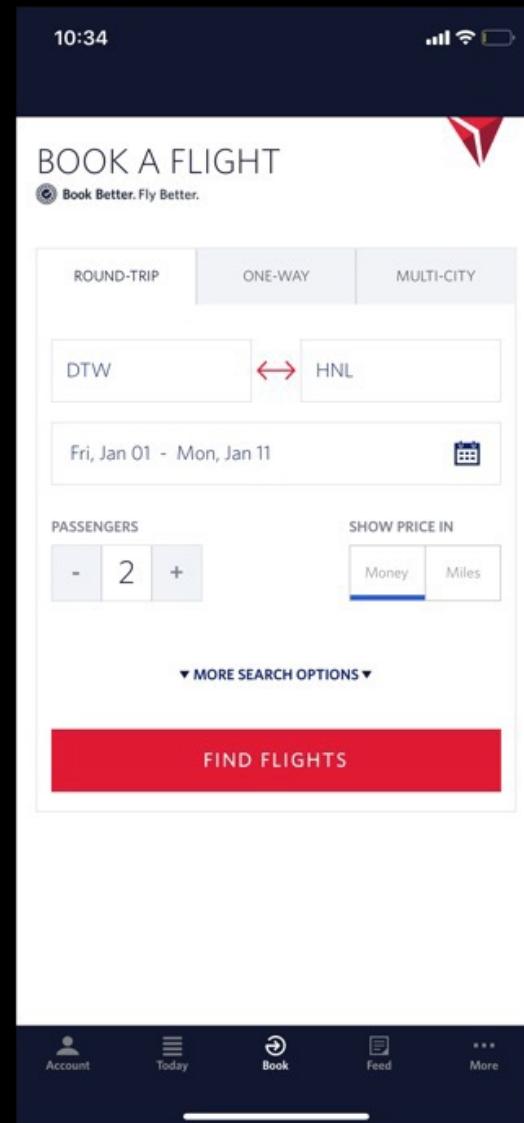
10 princípios de Usabilidade

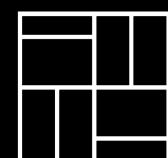
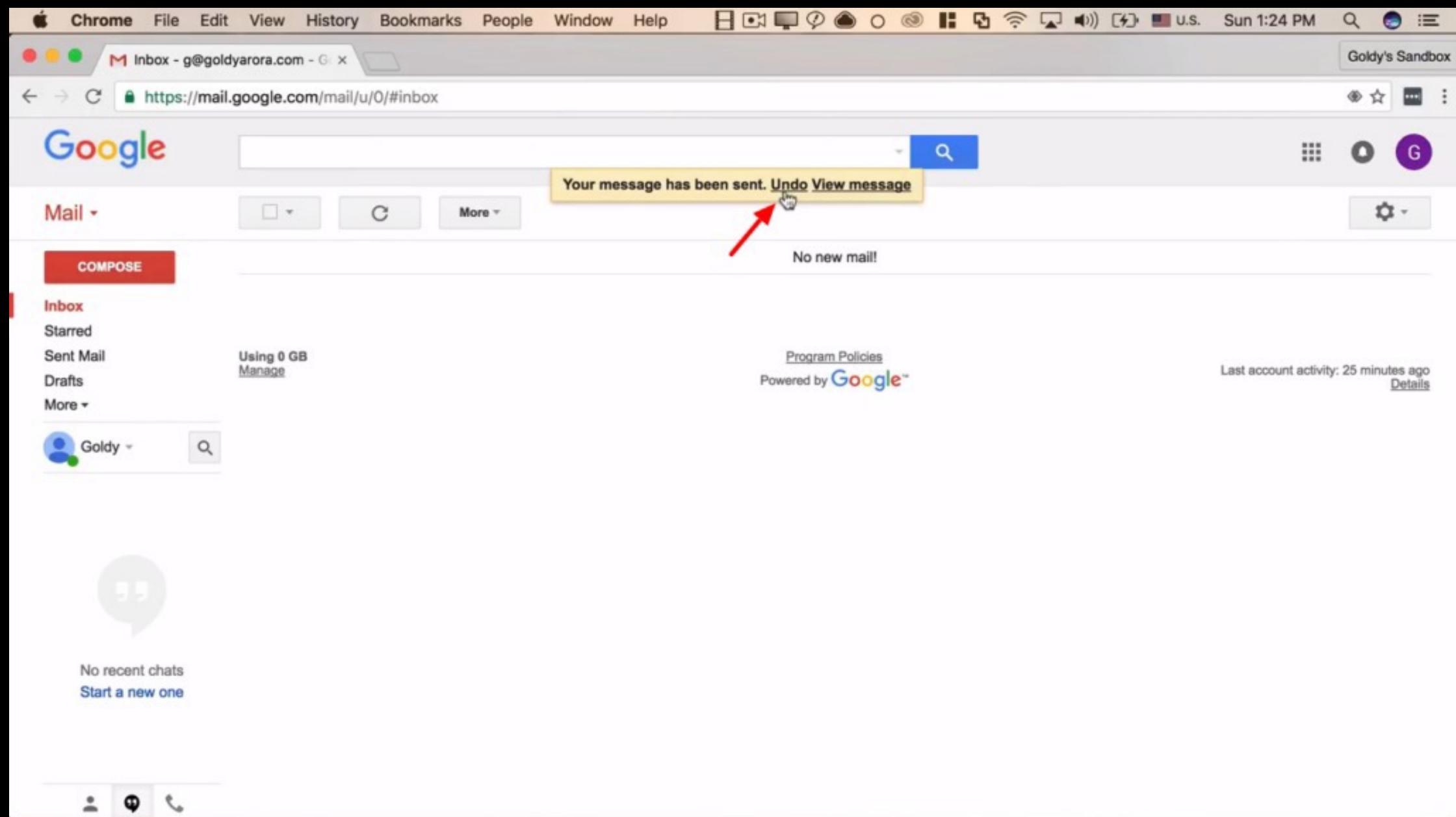
Liberdade e controlo

Objetivos:

- Corrigir os erros
- Empoderar o utilizador
- Evitar a frustração



1**2****3****4**

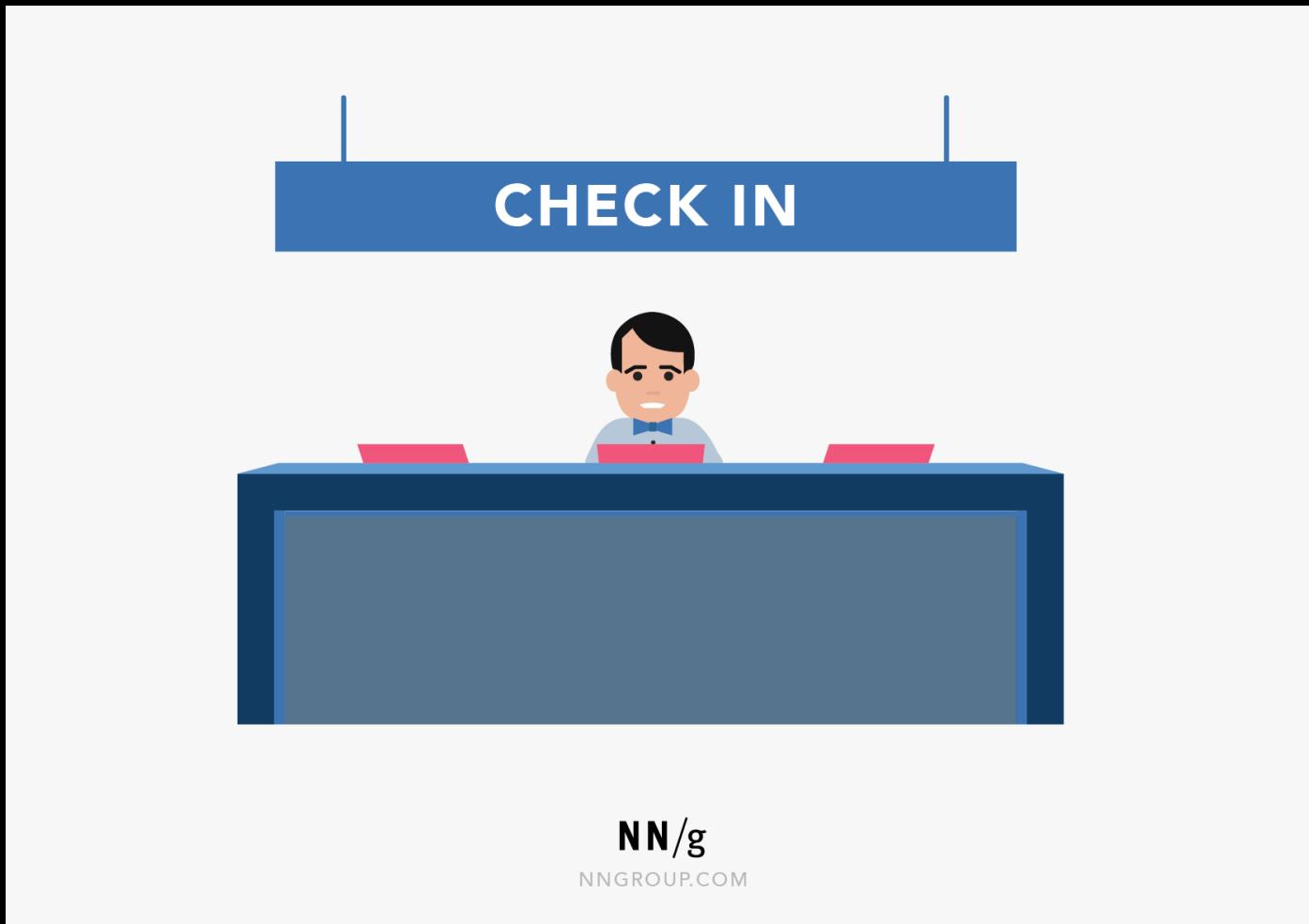


10 princípios de Usabilidade

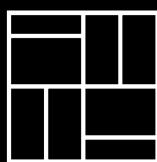
Consistência e padrões

Objetivos:

- Gerir expectativas
- Manter a consistência
- Reduzir a carga cognitiva



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Gmail Mail

Compose Mail

Inbox [3]

- Jason Cormwell > Please return my stapler - Hi, You seem to have taken my stapler. Please, 1:10 pm
- Paul McDonald > Fun Hike Yesterday! - Thanks for the great hike yesterday, It was awesome 1:06 pm
- Arielle Reinstein > July 4th weekend - Hi there! I heard you'll be around this weekend and I'd like to meet up. 1:06 pm
- JS Bach > Tonhalle concert Friday - Hey man, there's a great concert this Friday evening. Jun 22
- Christine Chiu > Hi Hiking, Looking for opinion on my diet/fitness app - Hi Hiking, I bumped into you at the festival last weekend. Jun 9
- Yan Tsaytin (2), Draft > Hey there! I heard you found a great place to go hiking. Let me know when you're free. Mar 28
- Kenneth, me (2) > Group dinner? - Sushi sounds great! On Fri, Mar 25, 2011 at 10:08 AM, Kenneth... Mar 26
- Kenneth, me (2) > Long timel - Hey Karl! Things have been really good! And lunch sounds great! Mar 24
- Michael Bologino > This weekend - Hi there. Let's meet up at 6PM tonight for burgers and then? Mar 24
- Anelle Reinstein > dipsa trail - When it stops raining I really want to hike the Dipsa Trail again. Mar 24
- Jason Toff > How are you? - Hey there, We haven't spoken in a while. How are you? Wow! Mar 24
- Jr Wikane > VW Auction in Tacoma - Hi, I was doing a search on Google for VWs in Tac... Mar 6

Chat

Search, add, or invite

Hiking Fan Set status here

Call phone

Arielle

Emily

Jason

Michael

Paul

Compose Mail

SEARCH MAIL

SEARCH THE WEB

Show search options

Create a filter

1 - 15 of 15

YAHOO! MAIL

Compose

INBOX (488)

- Drafts (40)
- Sent
- Spam
- Trash
- FOLDERS
- Conversations
- Home (21)
- Social (12)
- Travel (1)
- MESSAGER
- APPLICATIONS

Get your online store today.

\$25.46 a month

Get started

YAHOO! SMALL BUSINESS

Inbox (488)

- Sort by date
- Drafts (40)
- Sent
- Spam
- Trash
- Conversations
- Home (21)
- Social (12)
- Travel (1)
- MESSAGER
- APPLICATIONS

- Yahoo Shopping Father's Day treats: watches, tablets, tents, and more! Mon, 1:28 AM
- Hamilton Re: What time for dinner? Sun, 11:22 PM
- Hamilton Re: What time for dinner? Sun, 11:18 PM
- Hamilton Re: What time for dinner? Sun, 11:14 PM
- Seema Kamath Re: still up for the jog tomorrow morning? Thu, 12:47 AM
- Seema Kamath still up for the jog tomorrow morning? Thu, 12:42 AM
- Christopher Royer Hi Liam May 15
- Yahoo Search Yahoo recommends you update your browser to Firefox 21 May 15
- Scott Sparling Dinner tonight? May 14
- Ankit Shah Badminton @ 7? May 14
- Seema Kamath hey, what's up? May 14
- Yahoo Movies Take One: Insider Access with Leo, Exclusives with Channing ... May 10
- Huong Tran hiking this saturday? Apr 25
- Kevin Day Movie tonight? Apr 24
- Liam Smith new shuttle schedules start Monday Apr 17
- Lee J. Parry Spring Break! Apr 12
- Huong Tran we cooked a storm last weekend Apr 12
- Seema Kamath Pineapple!

Hi Liam

Watch live

Spam — Exchange (147 messages, 133 unread)

Mailboxes

- Inbox (144)
- Archived (1)
- E3 2014 (1)
- Google IO 2014 (1)
- WWDC 2014 (1)
- Spam (133)
- Drafts (23)

Sort by Date

Megan Geuss, Lee Hutchinson, zipLogic, PayPal, Linda, Lee Hutchinson, claimbodyBrown.com, service payed

Spam

See More from Lee Hutchinson

MSLGROUP.COM

Lee Hutchinson, Lee Hutchinson, PayPal, Linda, Lee Hutchinson, claimbodyBrown.com, service payed

Mail Activity

Mailbox 32

Later 2

Lists 1

Personal 27

Work 5

To Watch 1

To Buy 4

To Do 8

Archive 1

Trash 0

Sent 0

Big Sur this weekend?

Alison Johnson, David Gibson, Emma Williams, Lizzy Armour, Me & Tim Brown

Lizzy to Everyone Hey anyone down for a hike this weekend? I was thinking of going up to Big Sur; I hear the views from there are amazing.

David to Everyone

Emma to Everyone

Oh! Sounds fun, I'm in. What time were you guys thinking of going? I went up there last weekend and it

Elizabeth to Adam & 13 others

MUJI ONLINE MUJI: ORDER #112889

Dropbox Tom Smith joined your shared folder

Dealz, Dealz, Dealz Daily Deal: A night at the Roxy

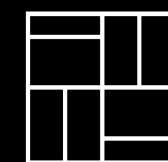
Jetsetter Every Morgans Hotel, Plus St Lucia

See More from Lee Hutchinson

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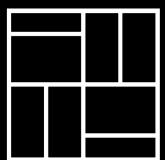
Lee Hutchinson, Lee Hutchinson, PayPal, Linda, Lee Hutchinson, claimbodyBrown.com, service payed

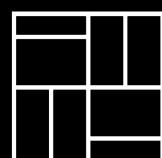
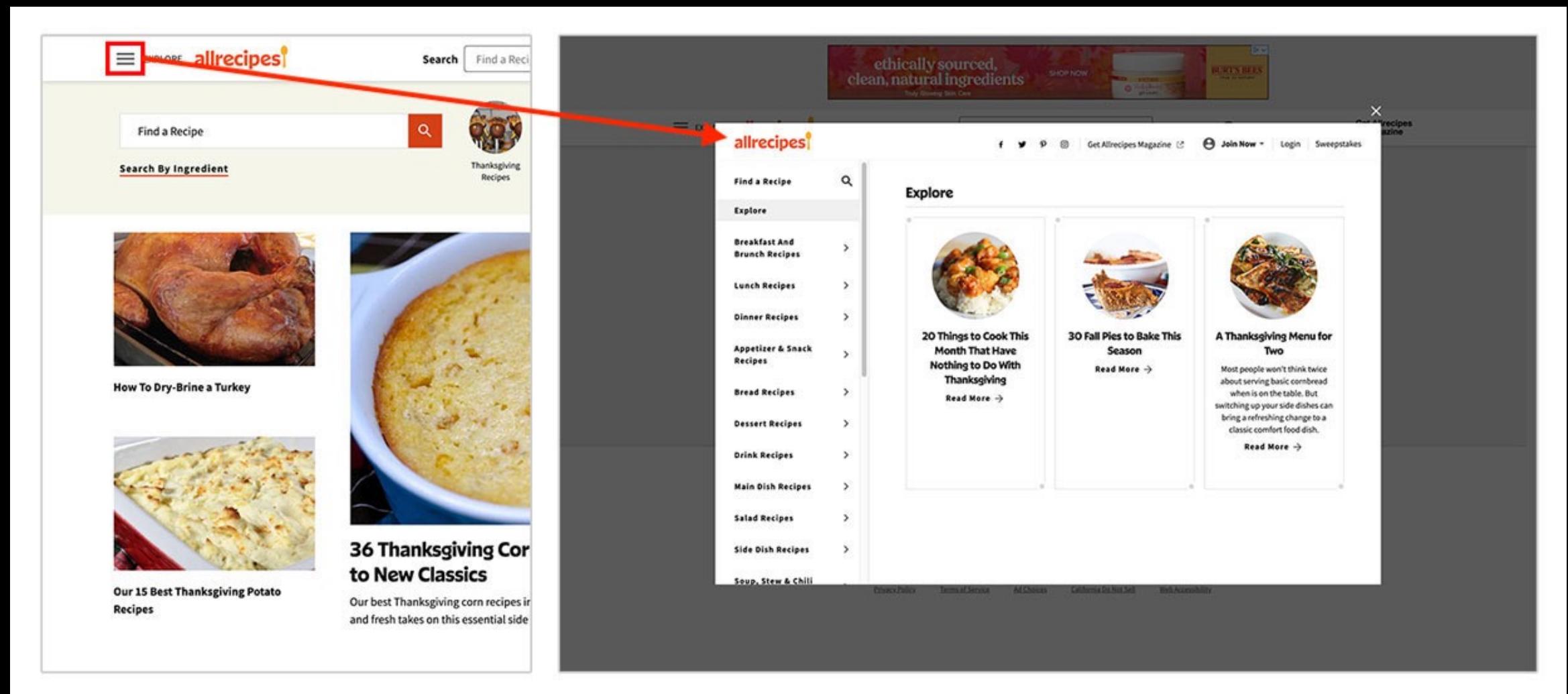
Mail Activity



The image displays four screenshots of e-commerce websites, each featuring a search bar and various navigation elements:

- Amazon:** Shows a search bar for "Pesquisa Amazon", a dropdown for "Todos", and a magnifying glass icon. Other menu items include "Envir para André Barcelos 4755-269", "Contas e Listas", "Devoluções e Pedidos", and a "Carrinho" (Cart) icon with a '0'.
- eBay:** Shows a search bar for "Pesquise o que quiser", a dropdown for "Todas as categorias", and a blue "Pesquisar" button. Other menu items include "Olá! Entre ou cadastre-se", "Ofertas do dia", "Ajuda e contato", "Enviar para", "BR Português", "Vender", "Lista de itens observados", "Meu eBay", a bell icon, and a shopping cart icon.
- AliExpress:** Shows a search bar with the query "relogio inteligente smart watch", a red "Pesquisar" button, and a shopping cart icon with a '0'. Other menu items include "Página inicial", "Favoritos", "Tecnologia", "Moda", "Saúde e Beleza", "Peças e Acessórios para Veículos", "Colecionáveis", "Desporto", "Casa e Jardim", "Ofertas", and "Até 10 \$".
- fnac:** Shows a search bar for "Pesquisar", a dropdown for "Todos os pro...", and a magnifying glass icon. Other menu items include "Lojas", "A minha conta", and a shopping cart icon with a '0'.



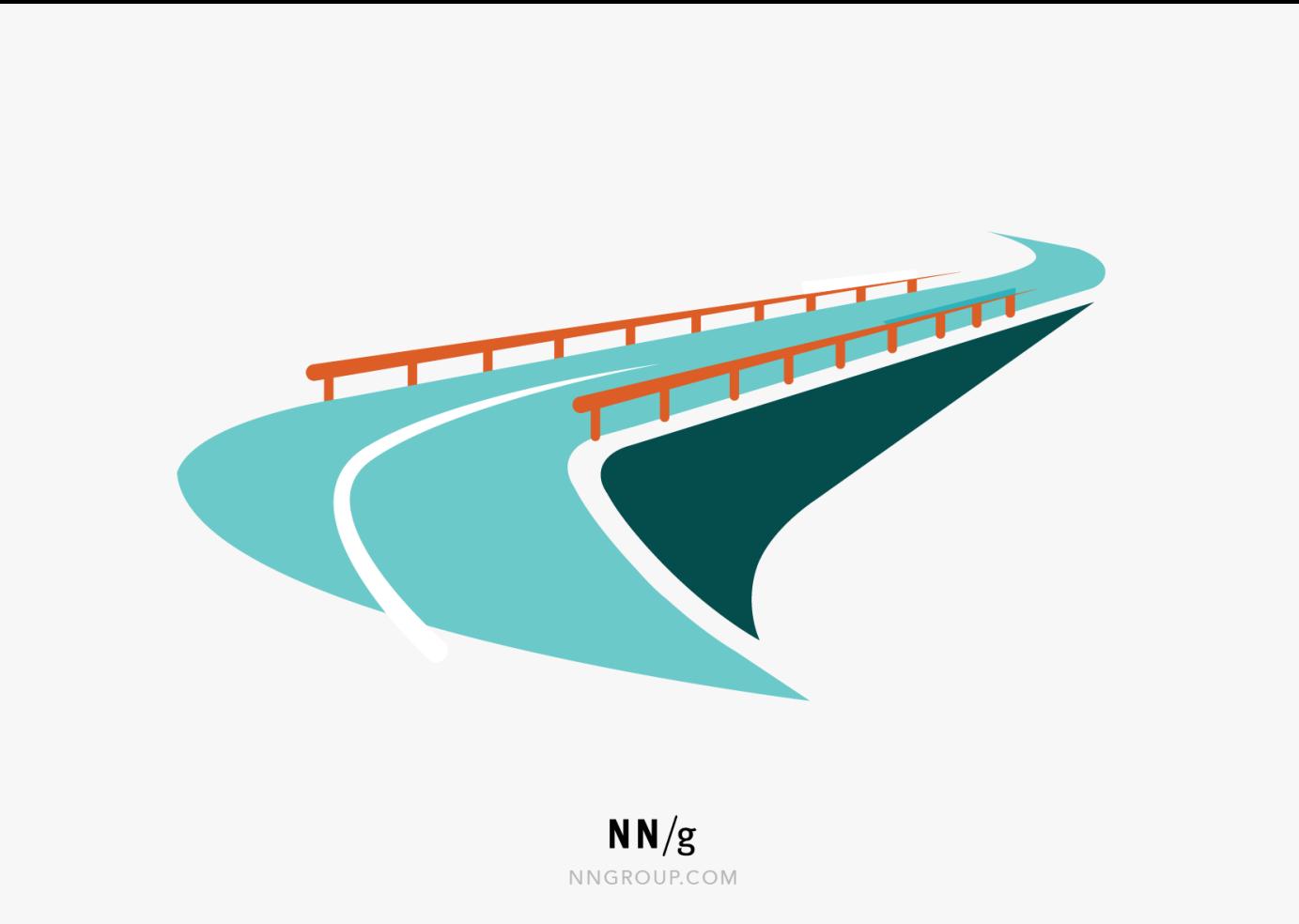


10 princípios de Usabilidade

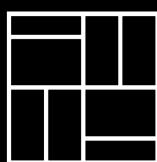
Previne os erros

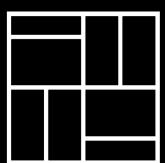
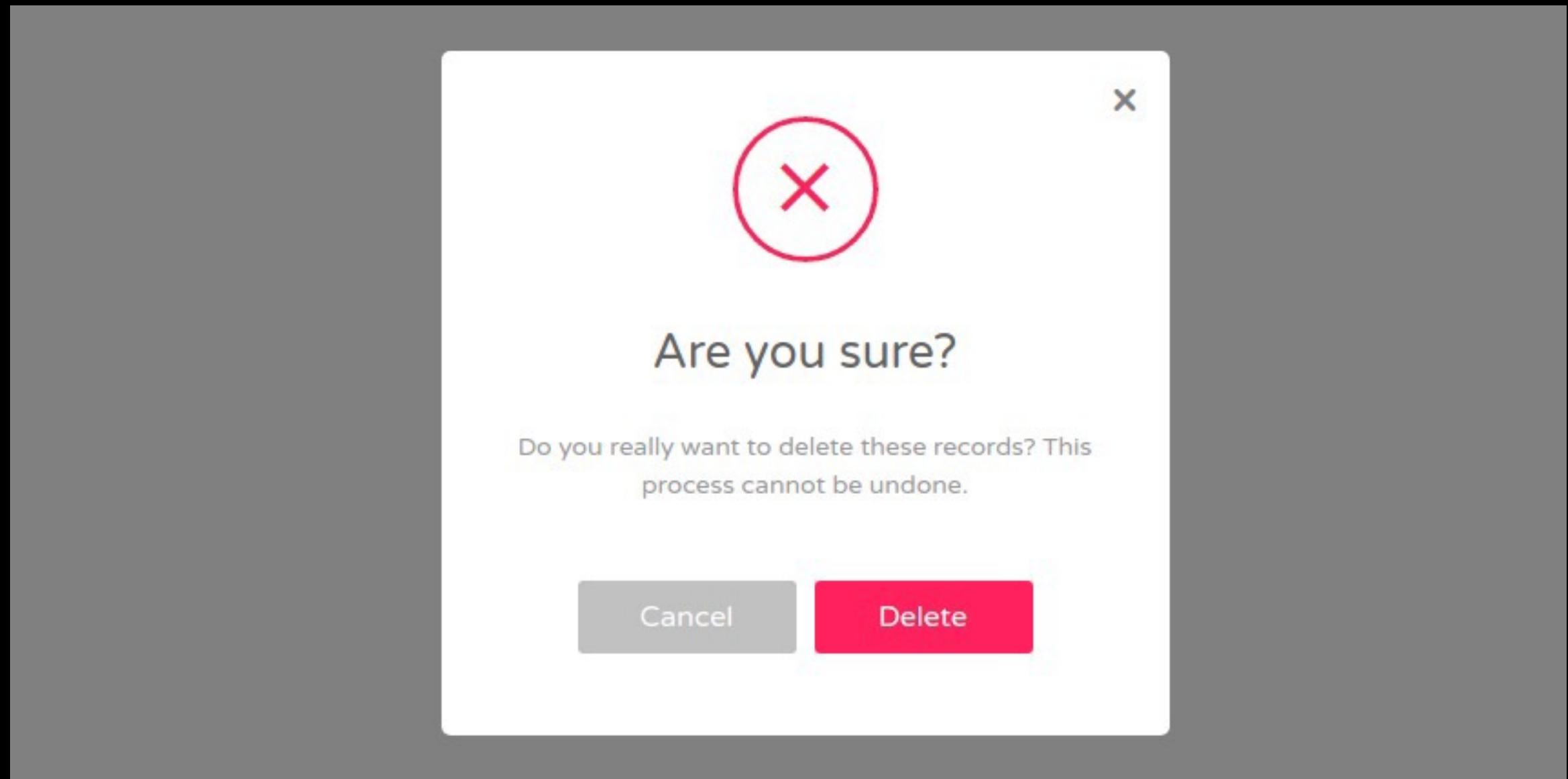
Objetivos:

- Antecipar a ação
- Avisar o utilizador
- Evitar “deslizes”

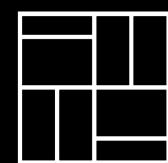


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The image shows a screenshot of the Southwest Airlines website. A hand is interacting with a modal calendar overlay titled "Select depart date". The calendar displays two months: July 2015 and August 2015. In July, the 8th is highlighted in blue and the 15th is circled in red with a cursor pointing at it. In August, the 1st is highlighted in green. The background of the website features a large image of a hand pointing at a screen, with the letters "Jul" and "Aug" overlaid in large, semi-transparent fonts. The main search form includes fields for departure (BOS) and arrival (LGA) airports, dates (07/08 to 07/11), and passenger counts (1 Adult, 0 Seniors). A "Search" button is visible at the bottom right of the form.

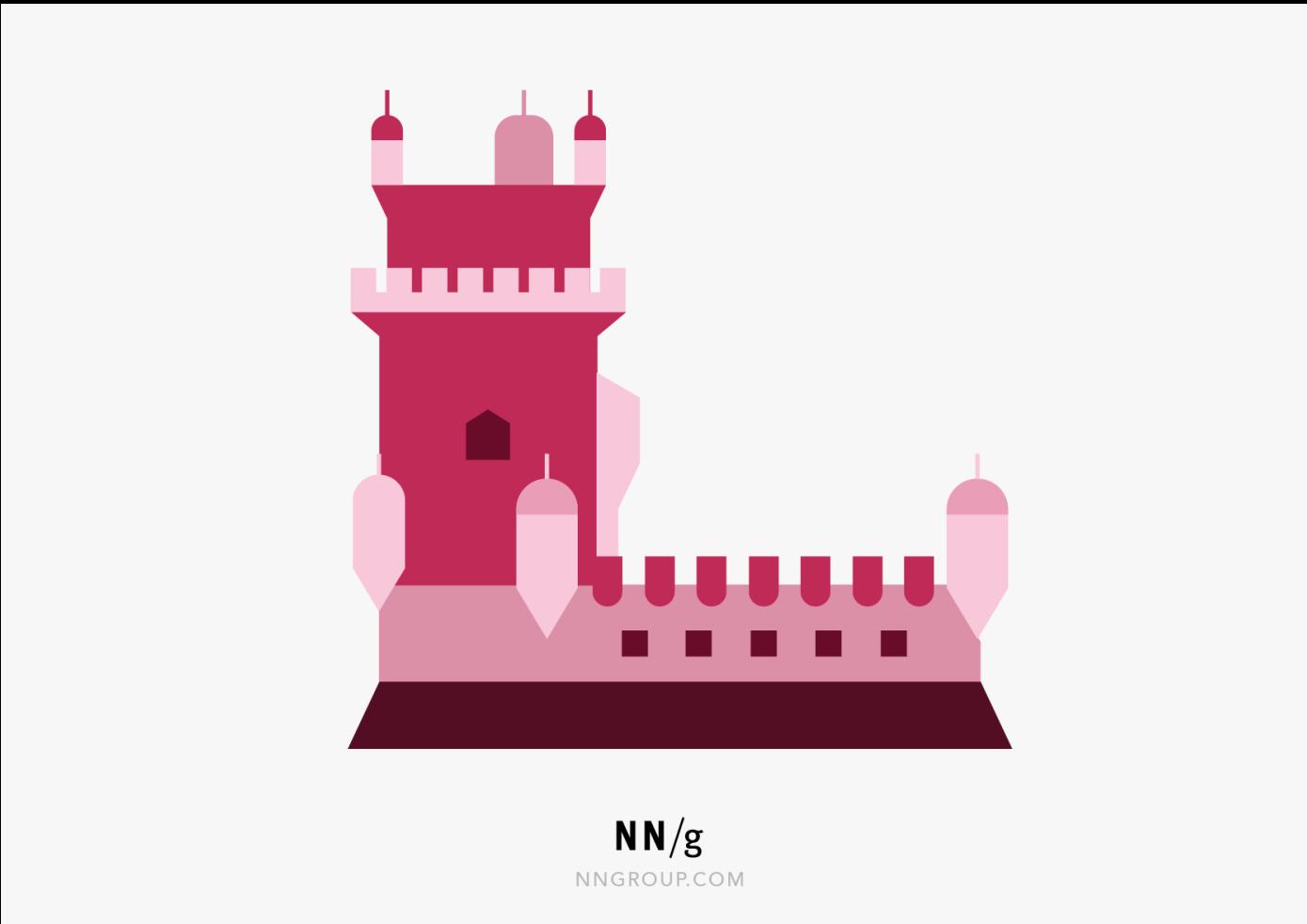


10 princípios de Usabilidade

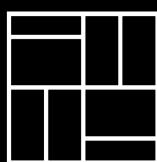
Reconhecer em vez de lembrar

Objetivos:

- Permitir o reconhecimento
- Reduzir a carga cognitiva
- Guiar o utilizador



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A

Field label

Help text

B

In field label

Help text

C

In field label + help text

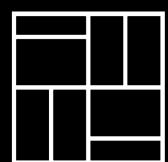
Field label

Help text

User input

Help text

User input

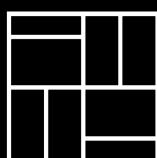


Your Recently Viewed Items and Featured Recommendations

You viewed



[View or edit your browsing history](#)



iPad

Help Me Get to Zero

Search

Groupon to raluca@ 12:10 PM
17% Off Dell 17.3" 1.7GHz 1TB Notebook, Mach 3 Refill Cartridges, Otterbox Case for iPhone 5/5s & More

For Raluca | April 9, 2014 FREE Shipping with \$19.99 Purchase | FREE Returns D...

Hello to raluca@ 12:07 PM
Hi RALUCA, can cool be taught?

Do you think cool can be thought? Can cool be found? With Pim as your guide...

SwimOutlet.com to raluca@ 12:02 PM
Monterey Bay, CA: Swim with USA's...

Please click here if e-mail below is not displayed correctly. © SwimOutlet.com...

CRICKET to raluca@ 11:17 AM
Time to play – it's the Week of the Yo...

Be a kid again during the Week of the Young Child view in browser Since child...

The LunchMaster 10:52 AM
A friendly reminder to order for April...

April is right around the corner, don't forget to order your LunchMaster meals....

Fidelity Investments 10:50 AM
Last chance to register, if you haven...

Learn from Fidelity professionals. View in your browser Raluca Budiu Secure Logi...

SwimOutlet.com to raluca@ 10:50 AM
G...

12:26 PM 33%

Groupon to raluca@ 12:10 PM

12:10 PM

GROUPON Goods®

For Raluca | April 9, 2014

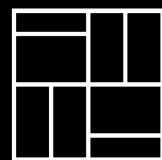
FREE Shipping with \$19.99 Purchase | **FREE Returns**

Dell 17.3" 1.7GHz 1TB Notebook
Over 300 bought
\$648.60 \$539.99

VIEW DEAL

Gillette MACH3

← →

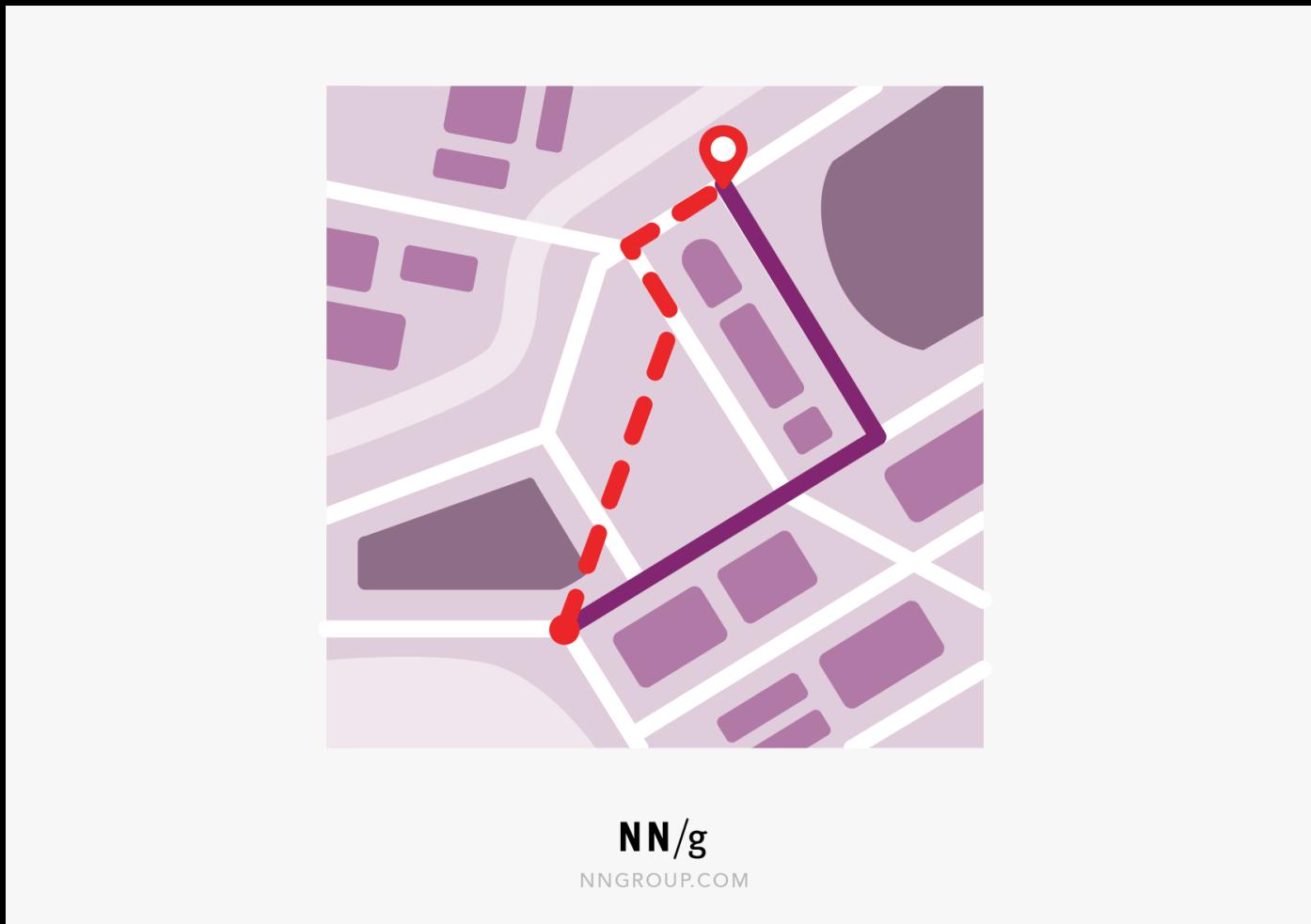


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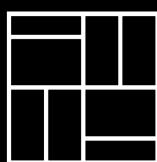
Flexibilidade e eficiência

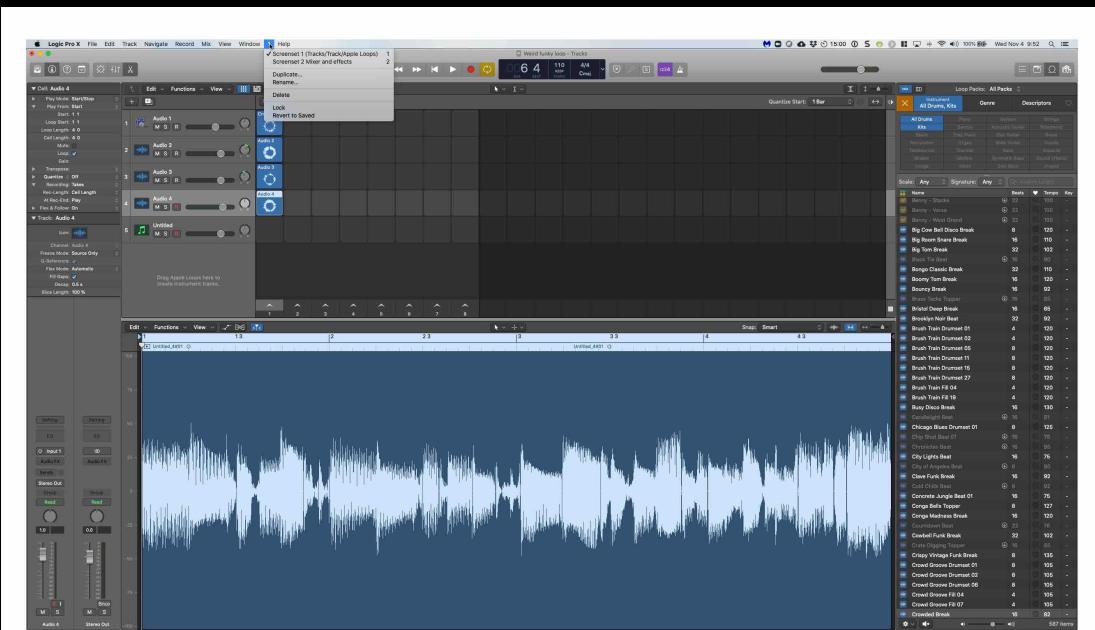
Objetivos:

- Rapidez de execução
- Promove a personalização
- Empodera o utilizador

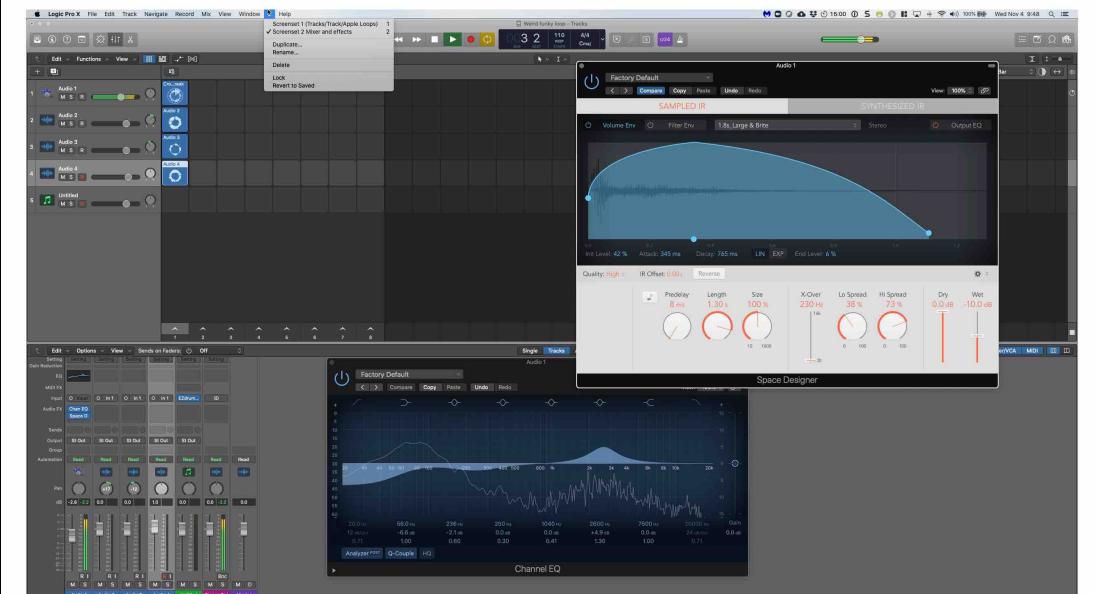


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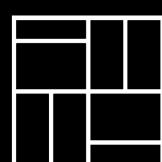


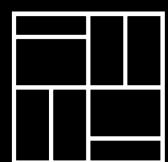
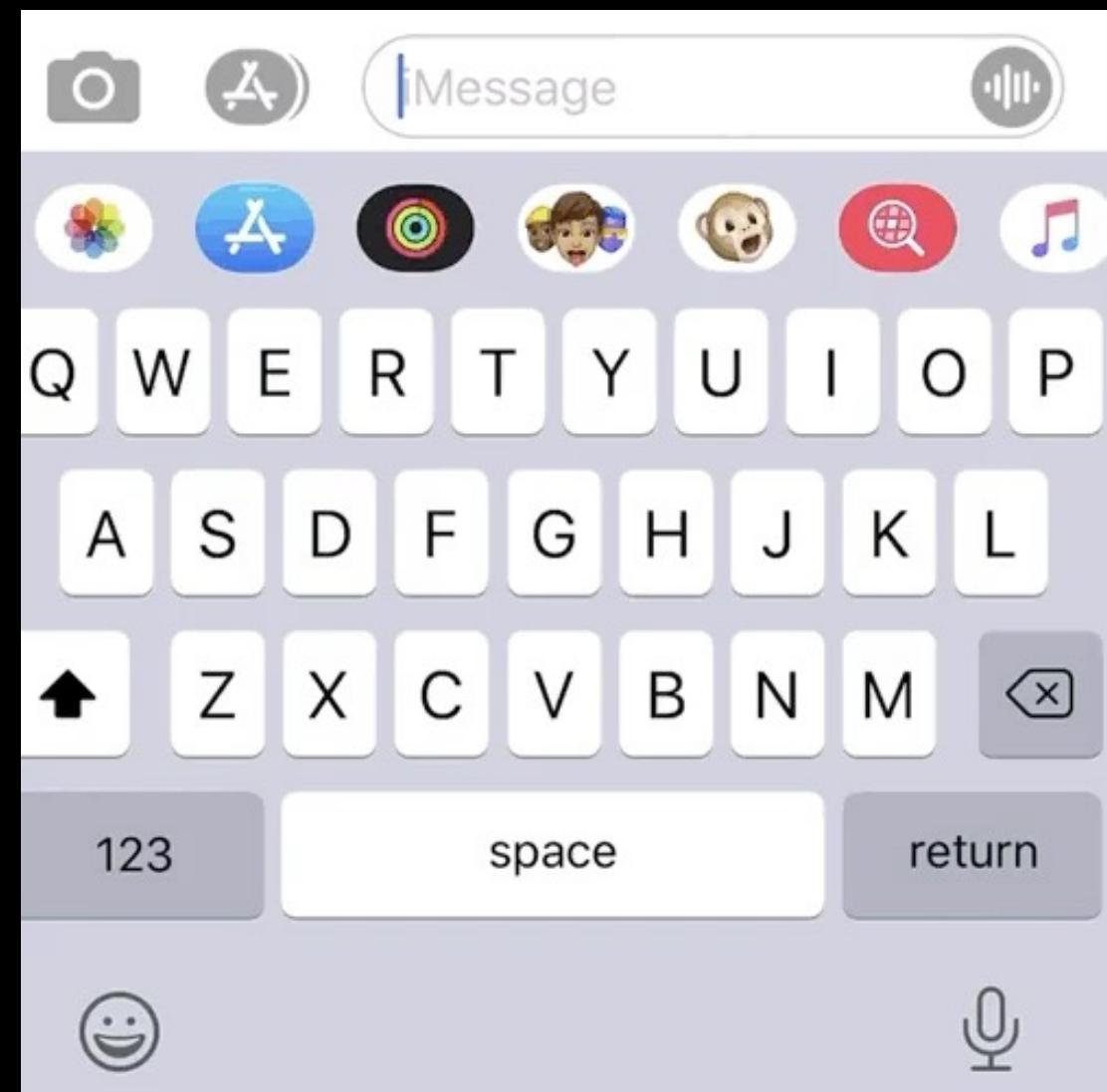


Screenshot 1



Screenshot 2



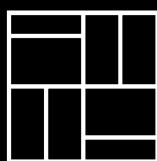


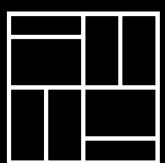
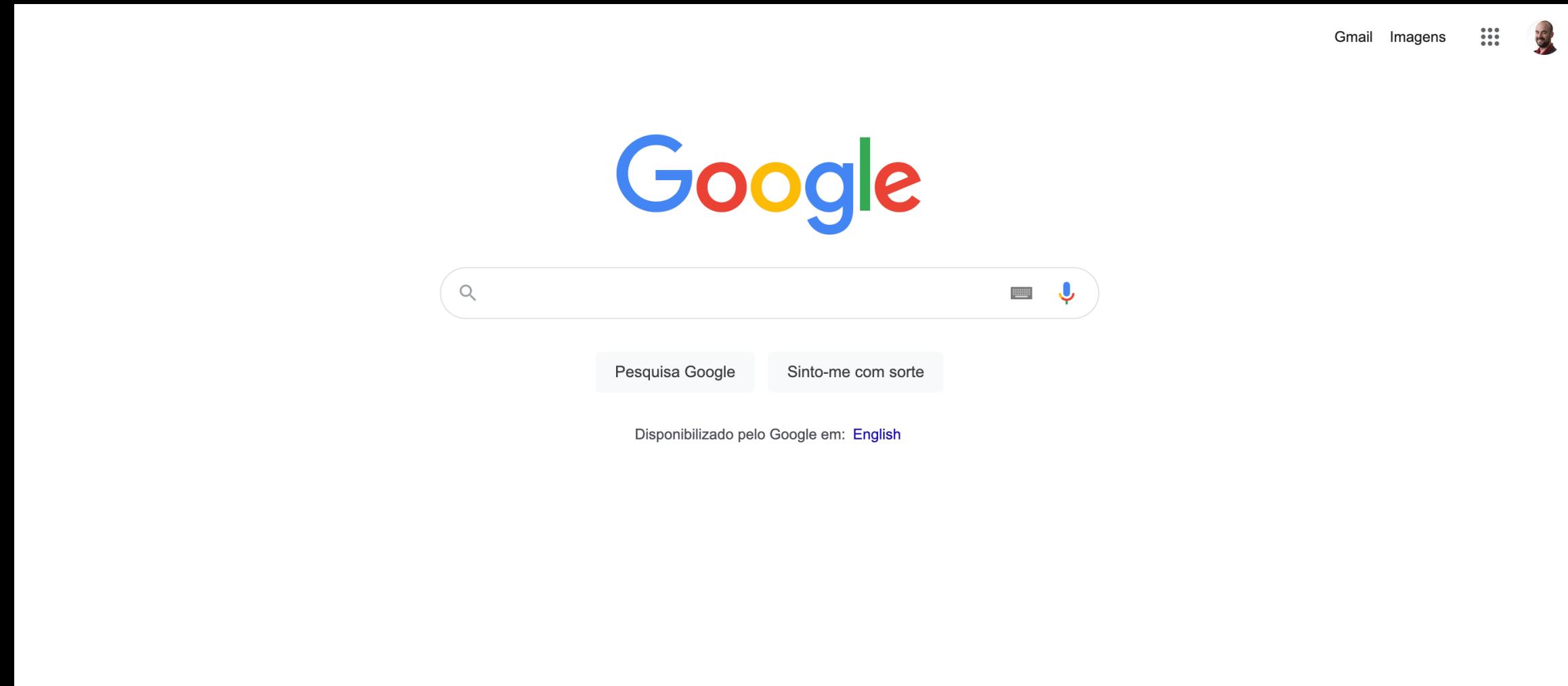
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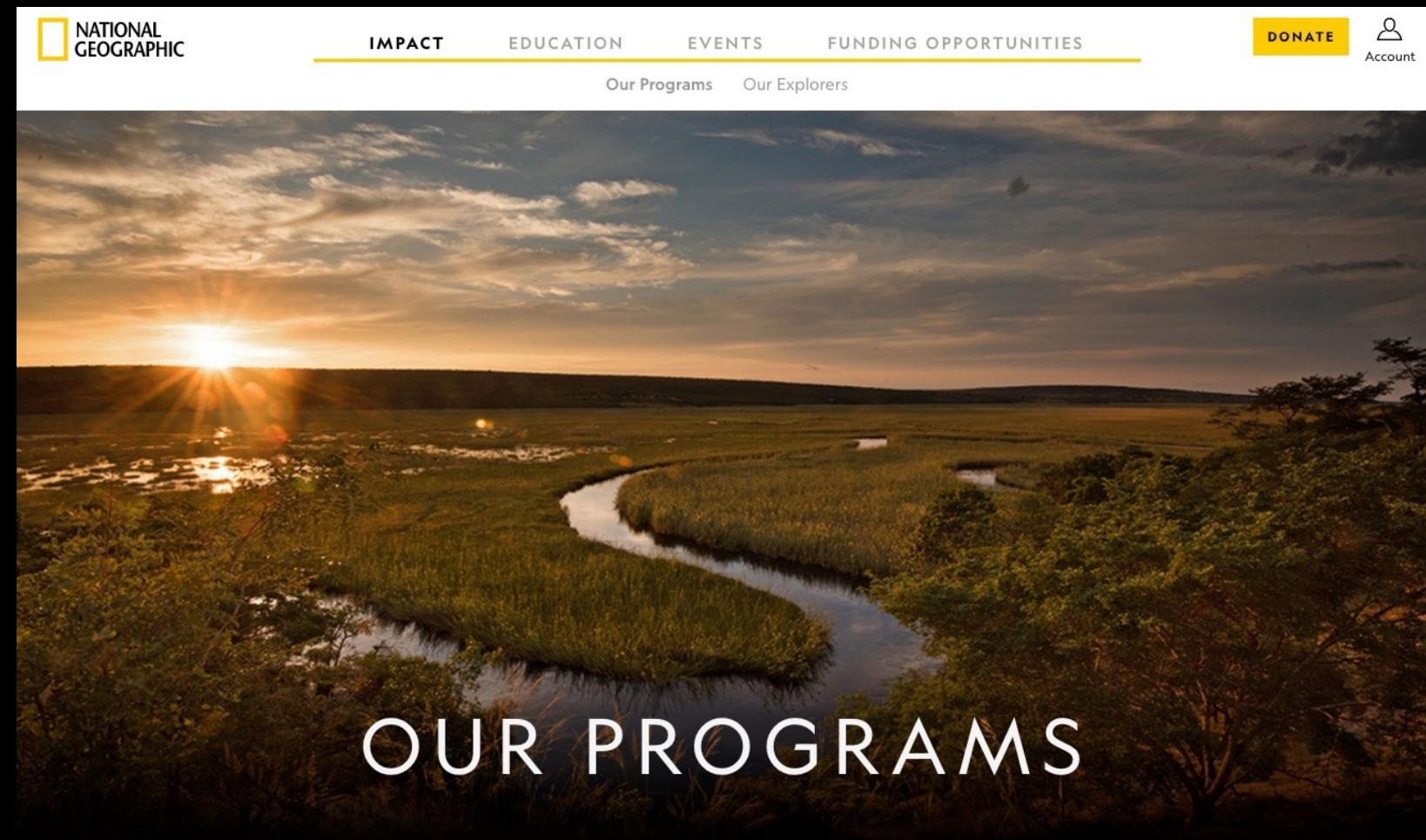
Simplicidade e minimalismo

Objetivos:

- Manter o foco no essencial
- Evitar distrações
- Criar boa impressão







The image shows the homepage of the National Geographic website. At the top left is the National Geographic logo. To its right are navigation links: IMPACT (underlined), EDUCATION, EVENTS, and FUNDING OPPORTUNITIES. Below these are two smaller links: Our Programs and Our Explorers. On the far right are a DONATE button and an Account icon. The main visual is a wide-angle photograph of a wetland at sunset, with the sun low on the horizon and its light reflecting off the water and clouds. Overlaid on the bottom half of the image is the word "OUR PROGRAMS" in large, white, sans-serif capital letters. Below this, in a white box, is the text "NOW MORE THAN EVER, OUR PLANET NEEDS OUR HELP." followed by a smaller line: "The National Geographic Society supports research, exploration, and conservation in every part".

NATIONAL
GEOGRAPHIC

IMPACT EDUCATION EVENTS FUNDING OPPORTUNITIES

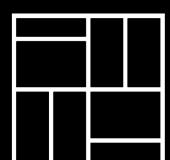
DONATE Account

Our Programs Our Explorers

OUR PROGRAMS

NOW MORE THAN EVER, OUR PLANET
NEEDS OUR HELP.

The National Geographic Society supports research, exploration, and conservation in every part

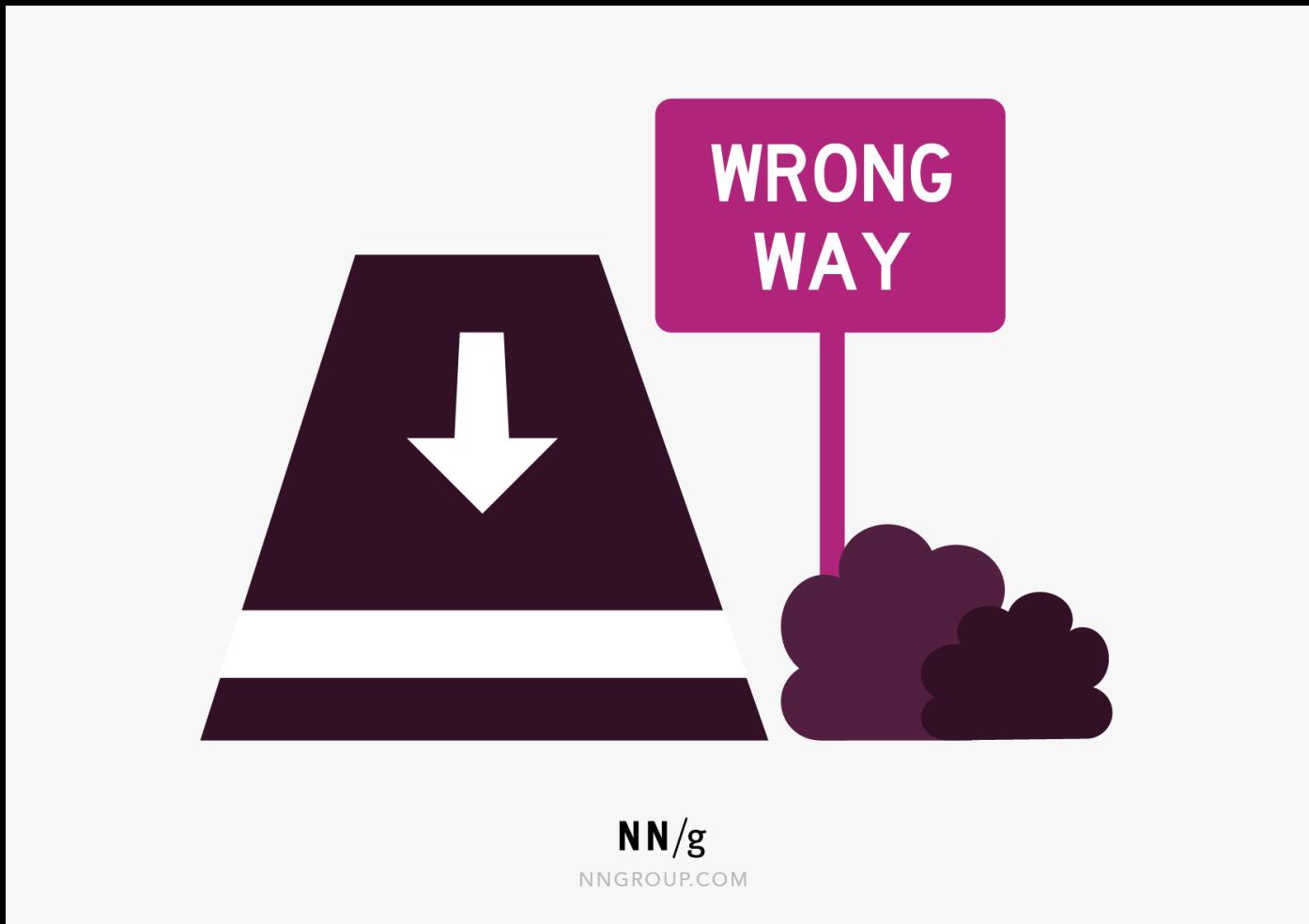


10 princípios de Usabilidade

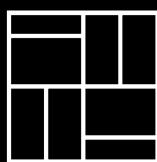
Recuperar de erros

Objetivos:

- Informar o utilizador
- Ajudar a corrigir



NN/g
NNGROUP.COM



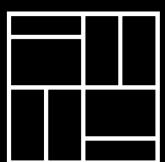
Name

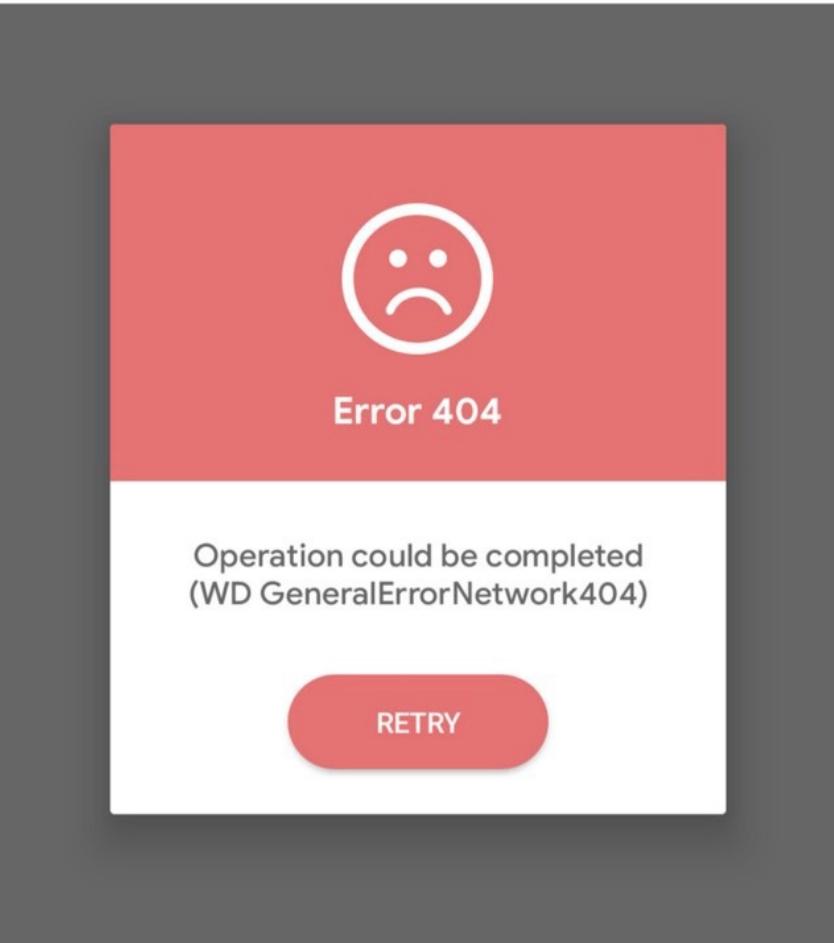
Jay Buttons

Choose your username

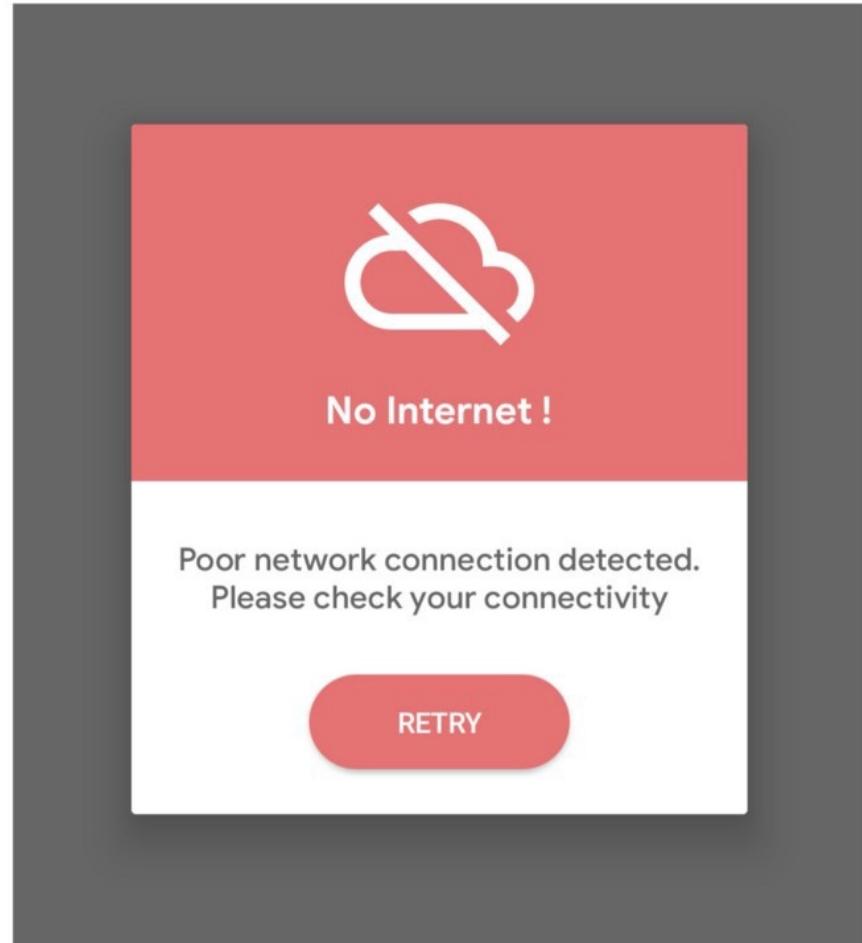
j.a.y..buttons @gmail.com

A fan of punctuation! Alas, usernames can't have consecutive periods.

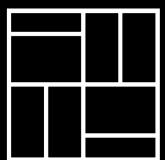




CONFUSING ERROR MESSAGE



CLEAR ERROR MESSAGE

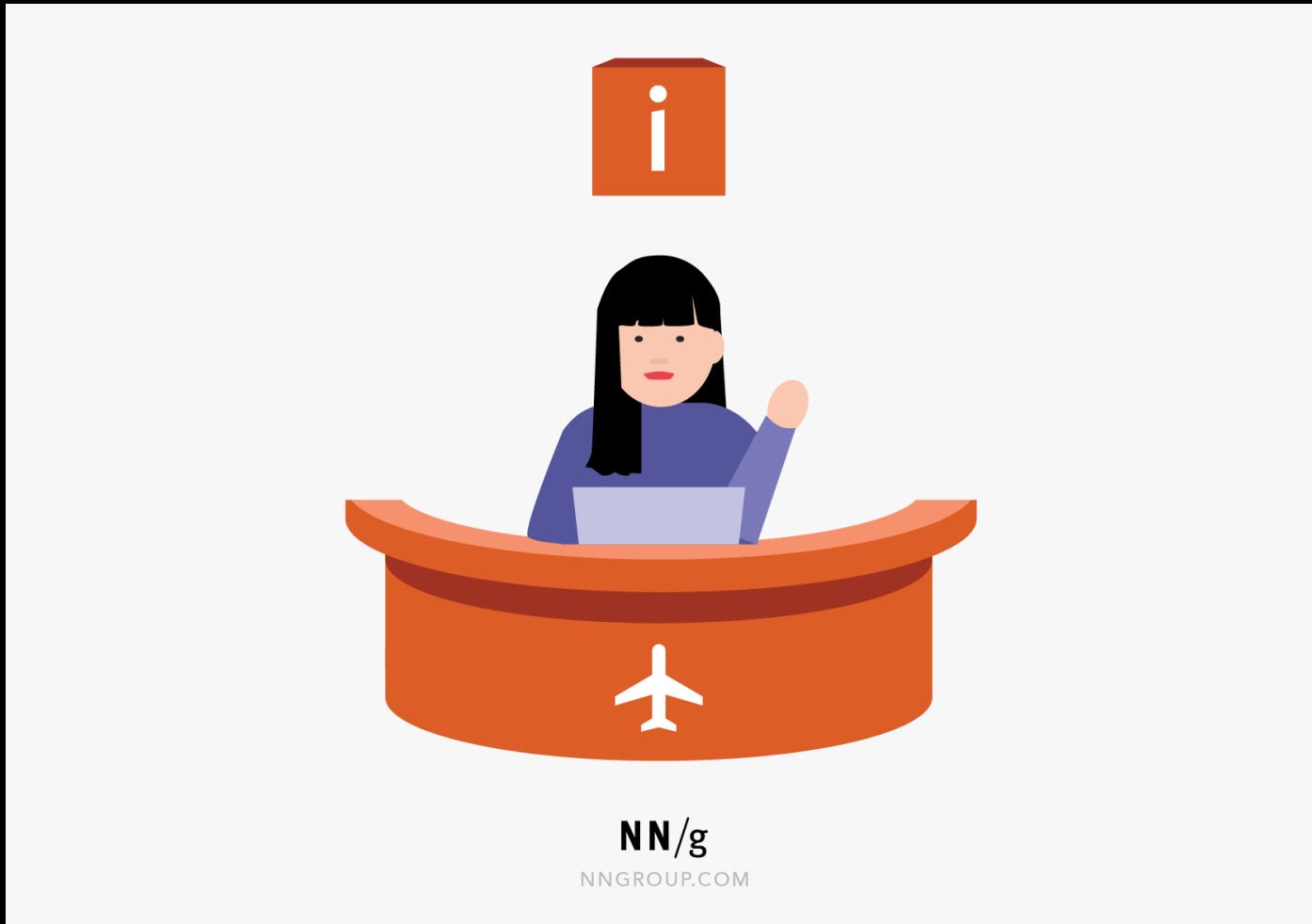


10 princípios de Usabilidade

Ajuda e documentação

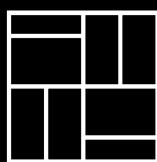
Objetivos:

- Guiar o utilizador



NN/g

NNGROUP.COM



Choose a project template



Blank Project



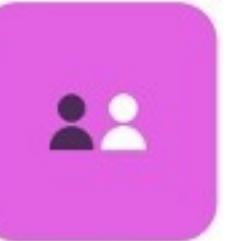
Design Project Plan



Asana Basics Training



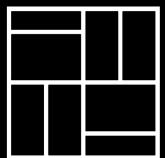
Team Brainstorm



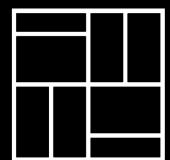
1:1 Meeting Agenda

General templates By maliberty.com Type: Design ▾

-  Import spreadsheet
Import data from a CSV file
-  Agency Collaboration
List layout
-  Creative Asset Feedback & Approval
Board layout
-  Creative Requests
Board layout
-  Design Project Plan
List layout



The image shows a screenshot of the O'Reilly website. At the top left is the O'REILLY logo. To its right is a search bar with the placeholder "Find a Solution...". The main navigation menu on the left includes links for Home, Featured, Explore, Attend, Newsletters, Settings, Support, and Sign Out. A prominent red circular icon with a play/pause symbol is positioned above the "Explore" link. A modal window is centered over the page, featuring a white background and a black border. It contains the text "Get there from anywhere" in bold, followed by a descriptive paragraph about accessing training courses from anywhere. Below this text is the message "Step 2 of 2". In the bottom right corner of the modal is a red "Close" button. The background of the page is a dark grey color with some blurred text and images visible, including a "Oct 16—Spotlight on Cloud: DevSecOps Lessons Learned" event listing and a colorful abstract image of overlapping squares.

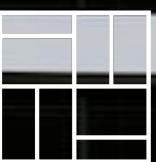


Exercício

Princípios de design

- Agora, escolhe uma das 3 plataformas sobre as quais tens vindo a trabalhar
- Encontra um ou mais exemplos dos 10 princípios enunciados
- Tira screenshot
- Agrupa-os, por ordem, num ficheiro Google Slides e partilha o link no Slack

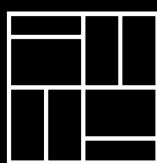
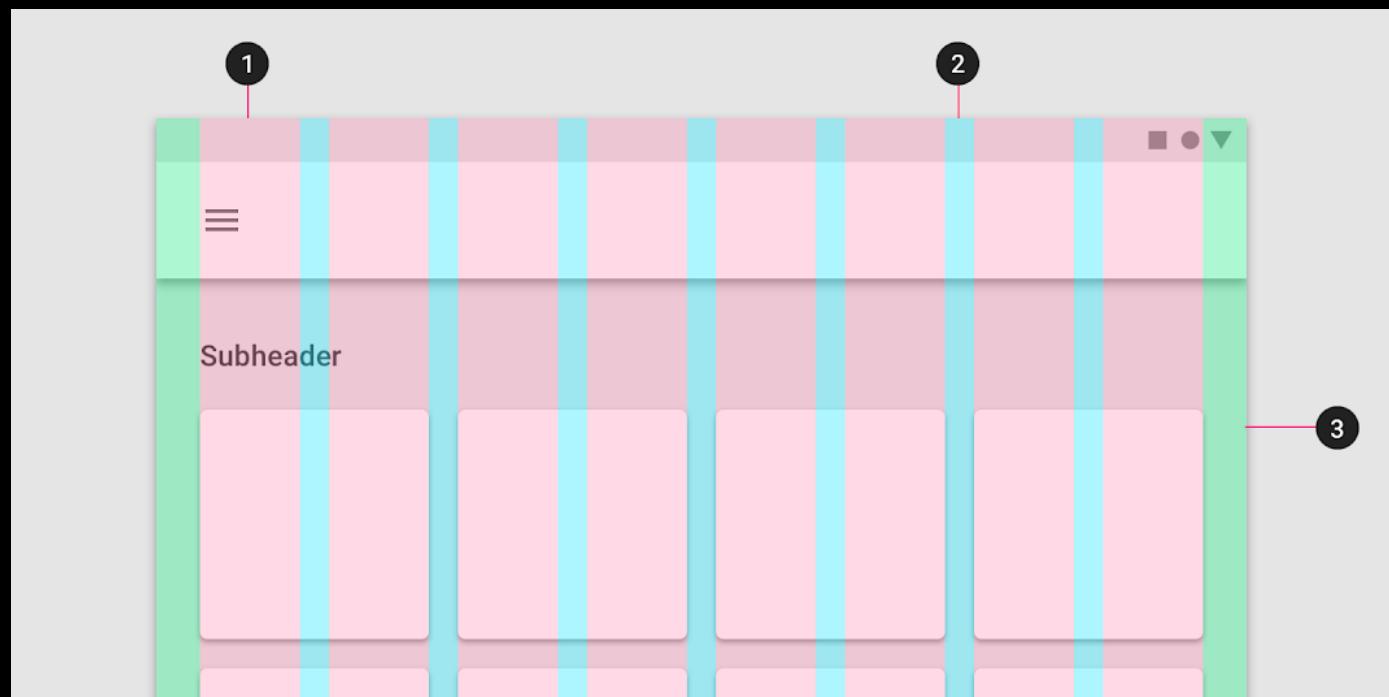
Responsive Grids



Responsive grids

Layout

- a disposição de itens predeterminados, como imagens, texto e componentes num ecrã
- usam elementos e espaçamento uniformes para incentivar a consistência entre plataformas e tamanhos ecrã

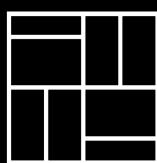
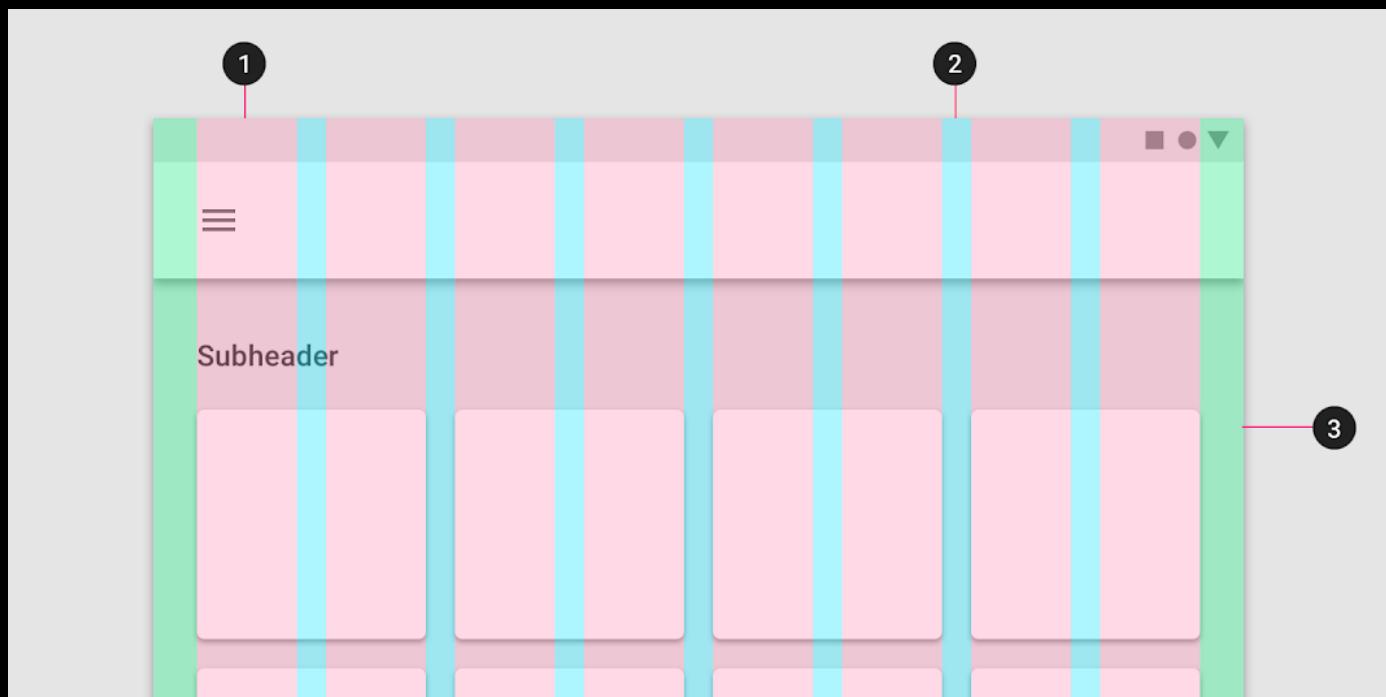


Responsive grids

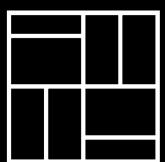
Layout

Devem ser:

- Equilibrados: usar grelhas para organizar os elementos visuais
- Responsivos: organizar os elementos visuais dependendo do tamanho da tela
- Padronizados: usar elementos padronizados organizados espacialmente



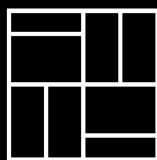
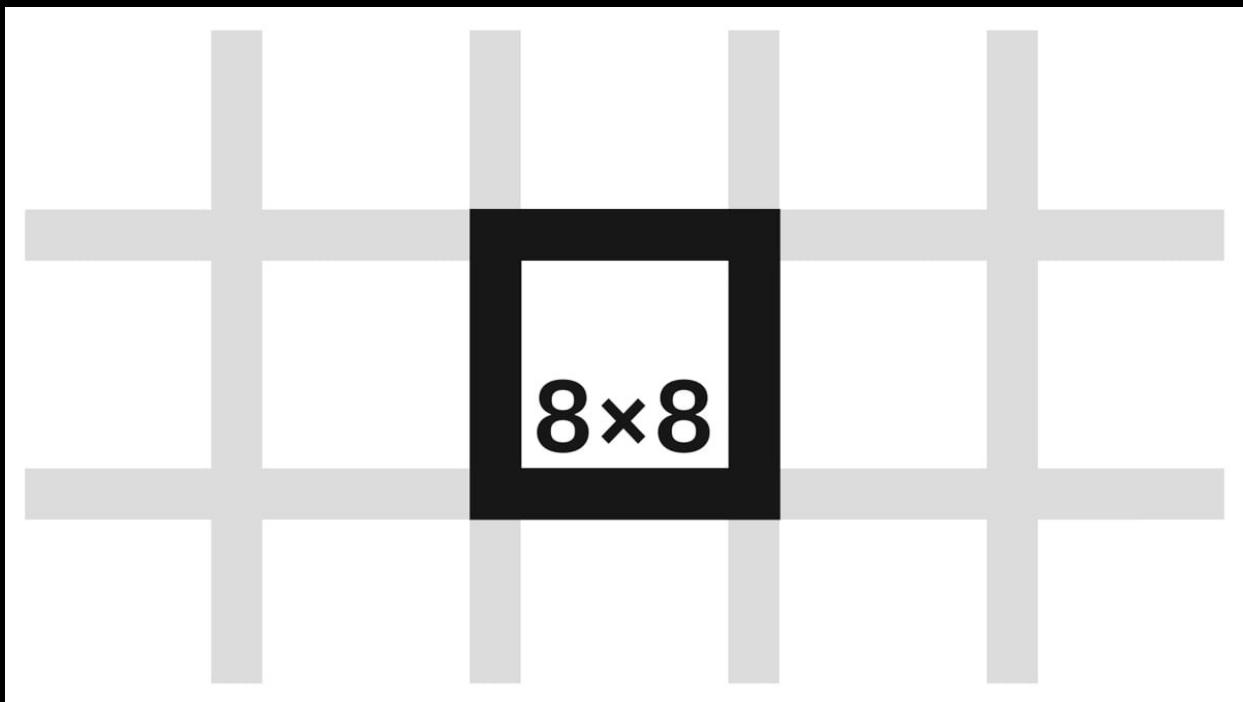
Uma grelha responsiva permite que um layout mude dinamicamente com base no tamanho do ecrã. Isso também garante layouts consistentes em todas as páginas do site.



Responsive grids

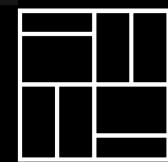
8px

- uma prática recomendada é criar o layout com uma grelha de 8px, uma base geométrica para todos os elementos visuais que também incluem tipografia e iconografia
- a maioria dos ecrãs populares é divisível por 8
- a utilização de números como 8 para dimensionar e espaçar elementos torna o dimensionamento para uma ampla variedade de dispositivos fácil e consistente





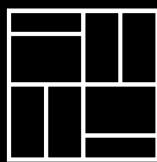
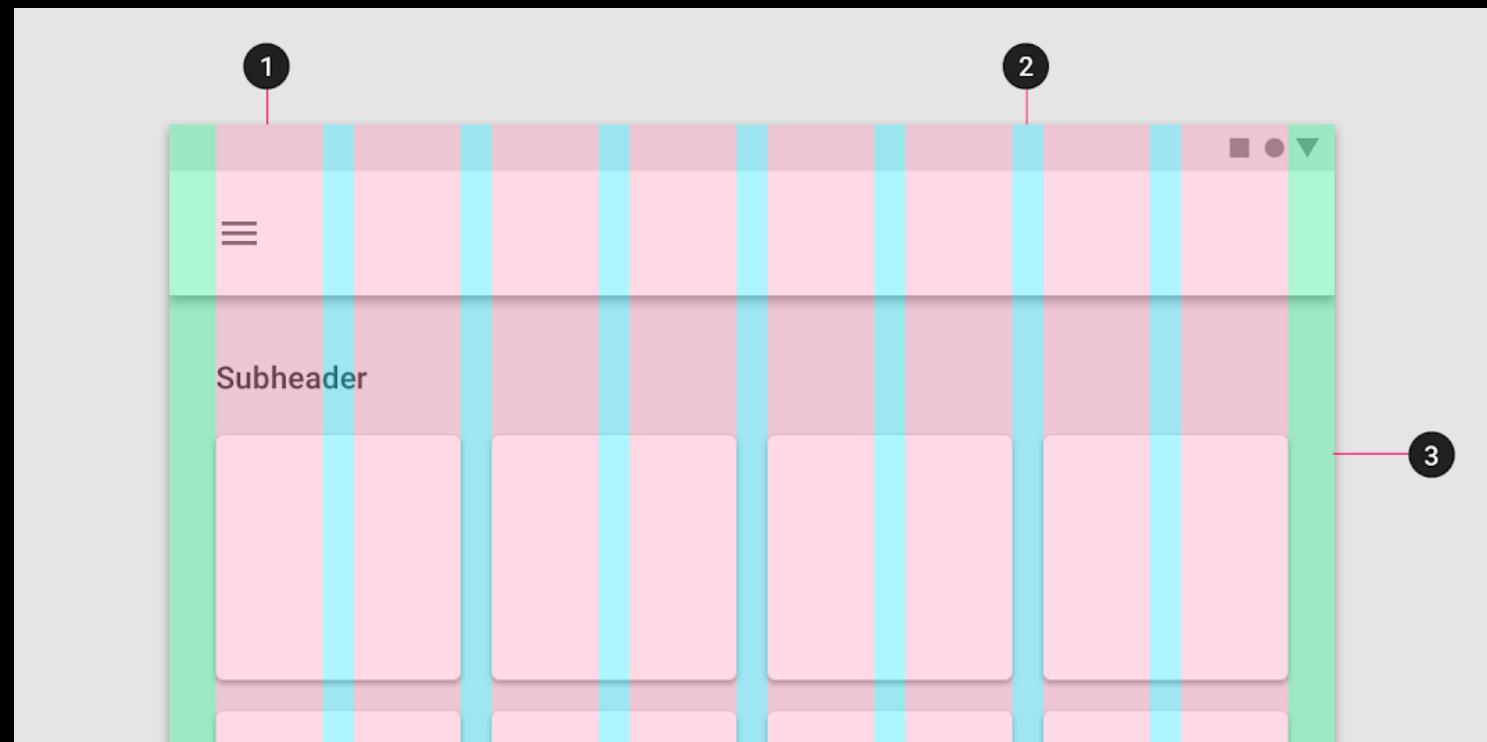
Headline



Responsive grids

Layout fundamentals

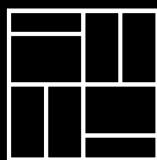
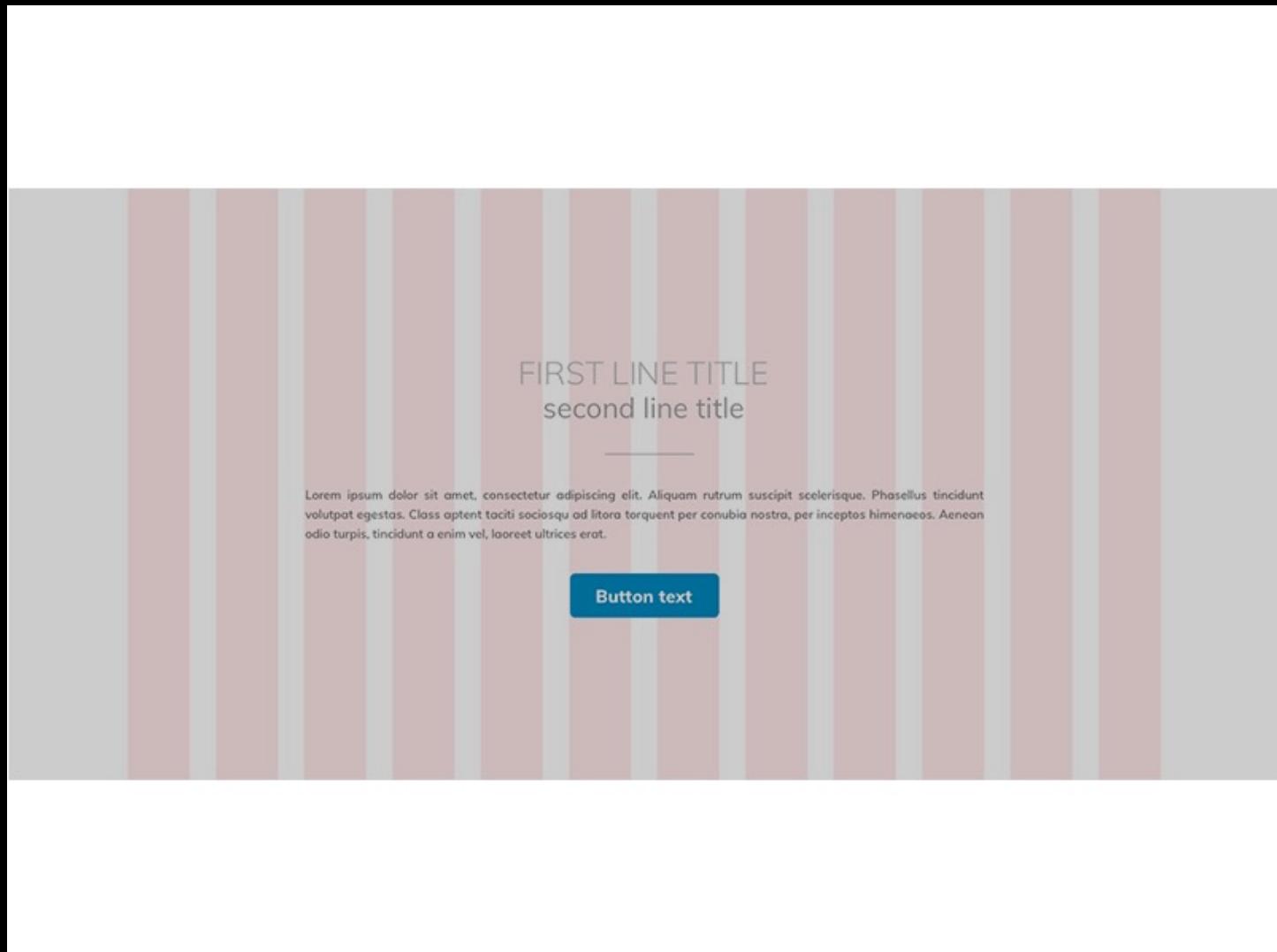
- Colunas
- *Gutters*
- Margens



Layout fundamentals

Colunas

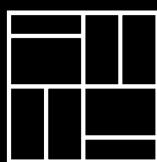
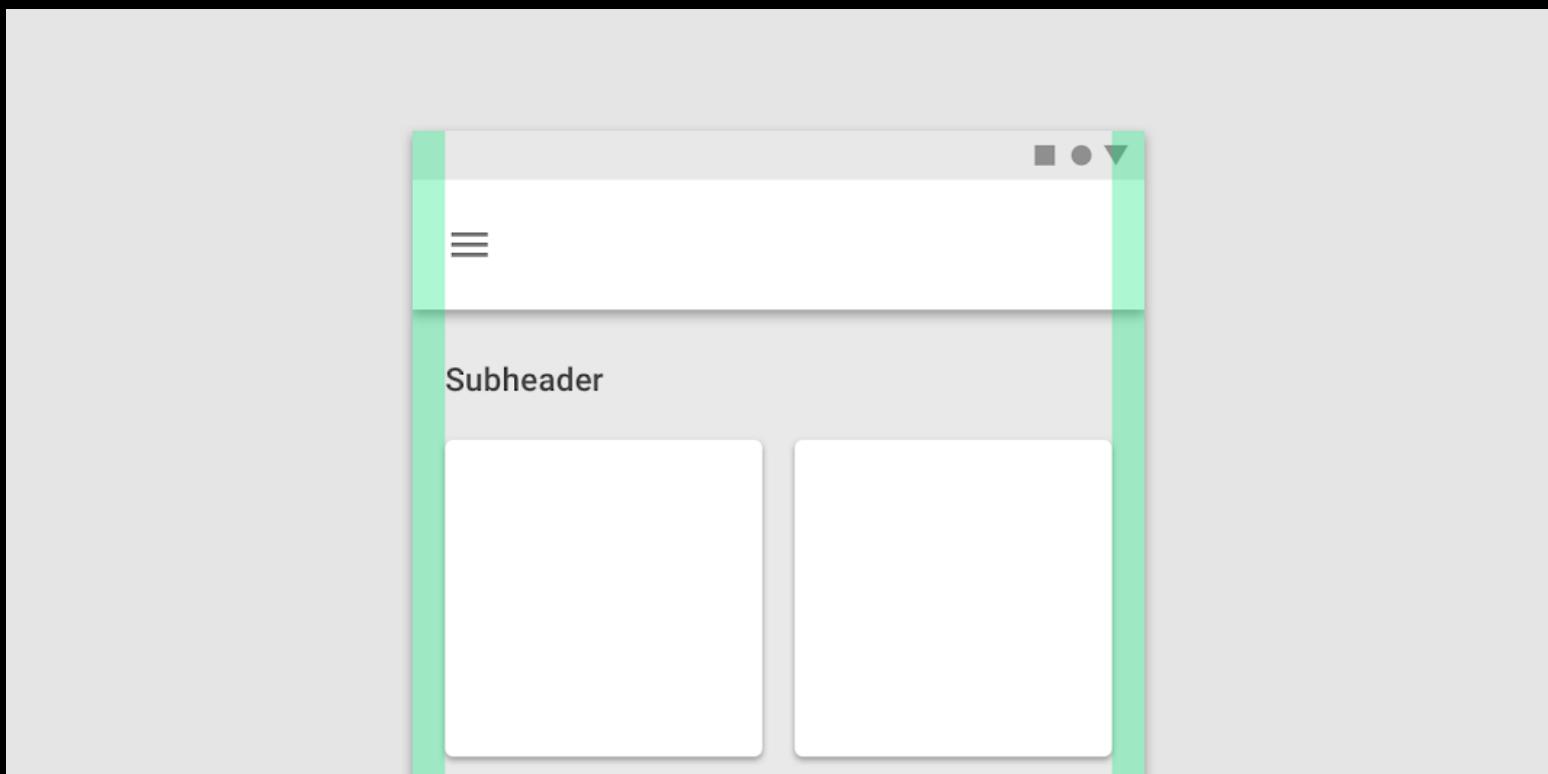
- num sistema de grelha responsiva podemos ter o número de colunas que quisermos desde que seja par
- Estabeleceu-se como boa prática:
 - Desktop: 12 colunas
 - Mobile: 4 colunas
- sempre alinhadas ao centro
- a largura das colunas altera-se com o tamanho do ecrã



Layout fundamentals

Margens

- as margens externas da grelha
- pode ter a mesma largura das *gutters* ou maior
- podem ser fixas ou fluidas

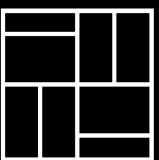
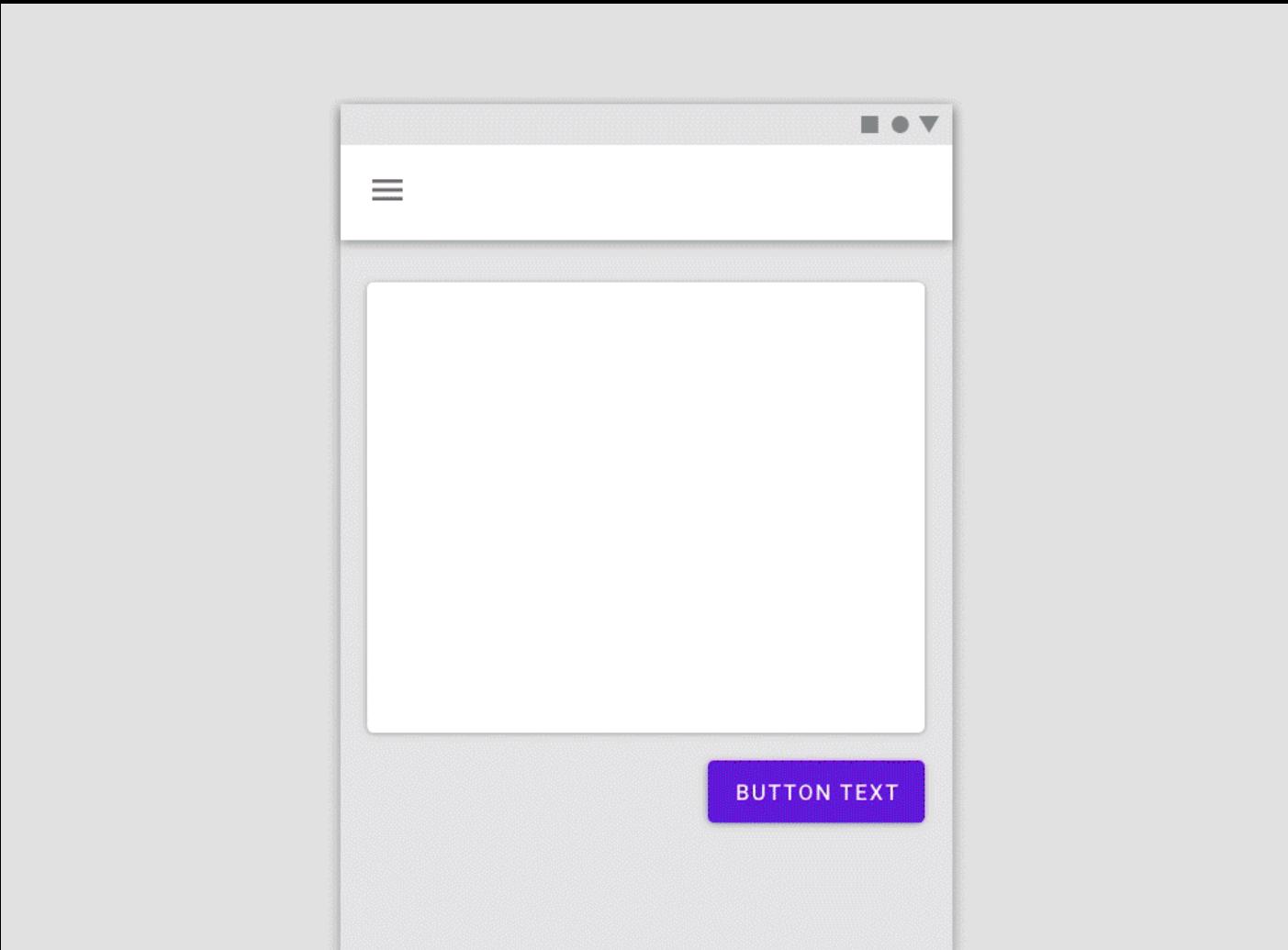


Layout fundamentals

Margens

- Fixas:

as margens são de tamanho fixo dentro de um *breakpoint* quando a grelha é fluida



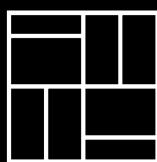
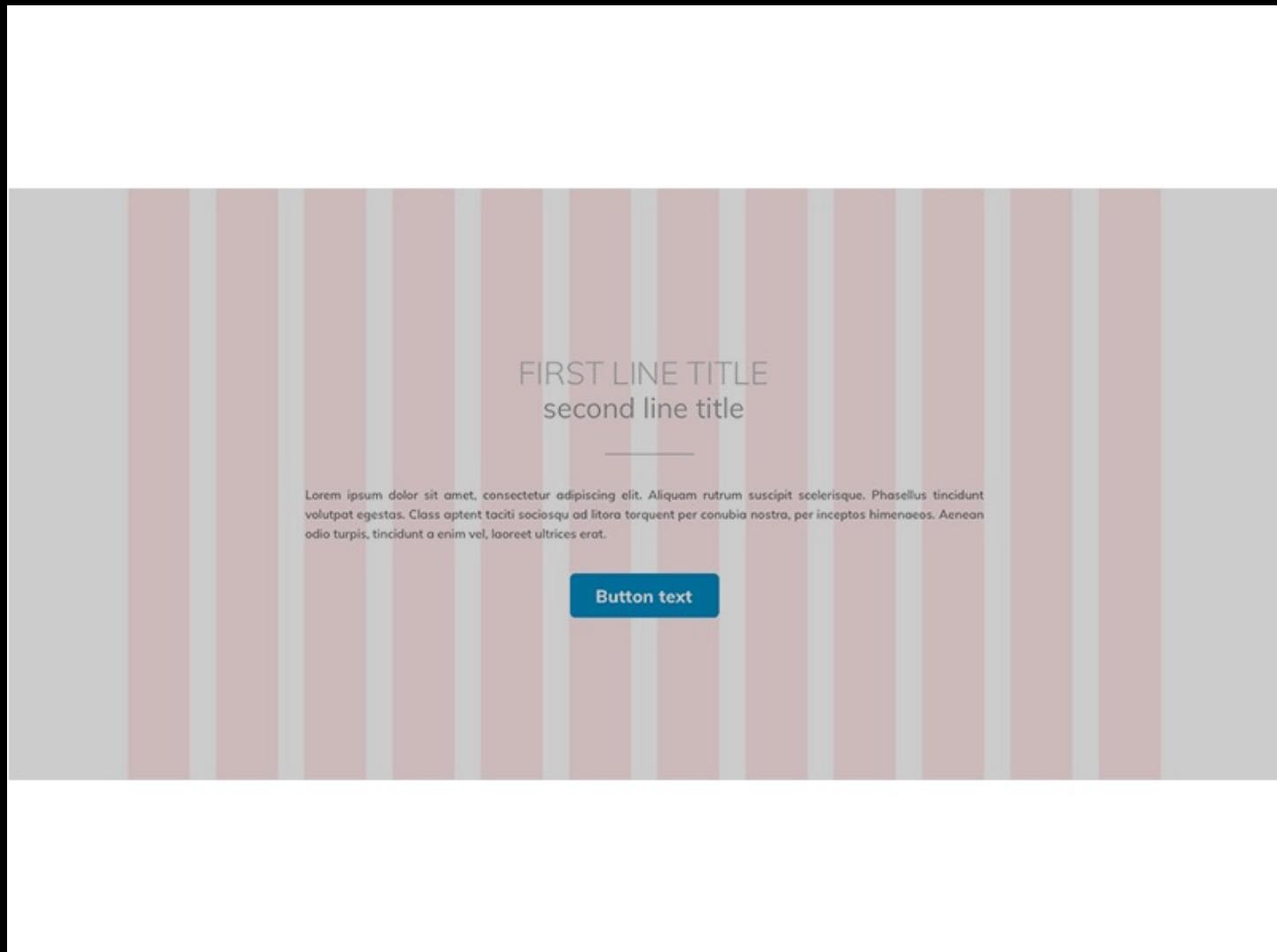
Layout fundamentals

Margens

- Fluidas:

as margens são de tamanho fluido, aumentando com o tamanho do ecrã

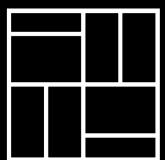
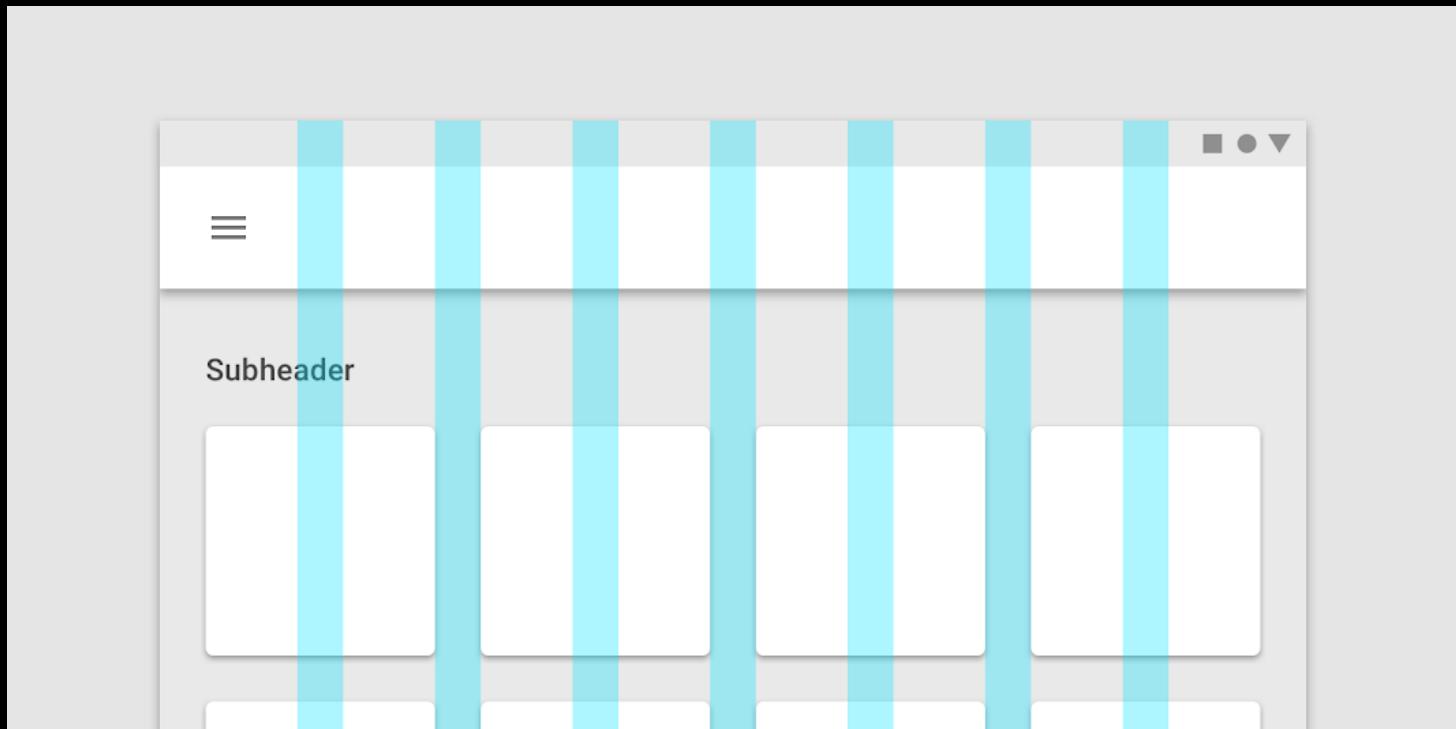
normalmente tornam-se fluidas quando as colunas se tornam fixas, a partir de um determinado breakpoint, para evitar que o conteúdo se espalhe demasiado



Layout fundamentals

Gutters

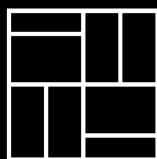
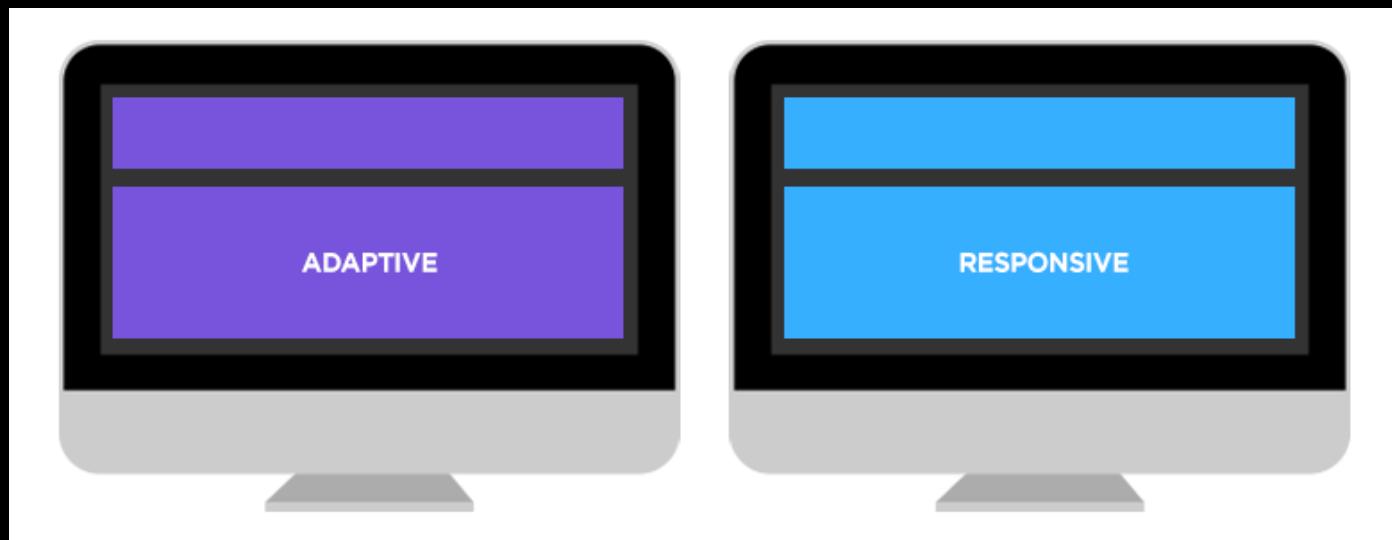
- são os espaços entre colunas
- são valores fixos, que se alteram consoante os *breakpoints*



Responsive grids

Layout anatomy

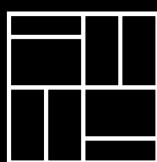
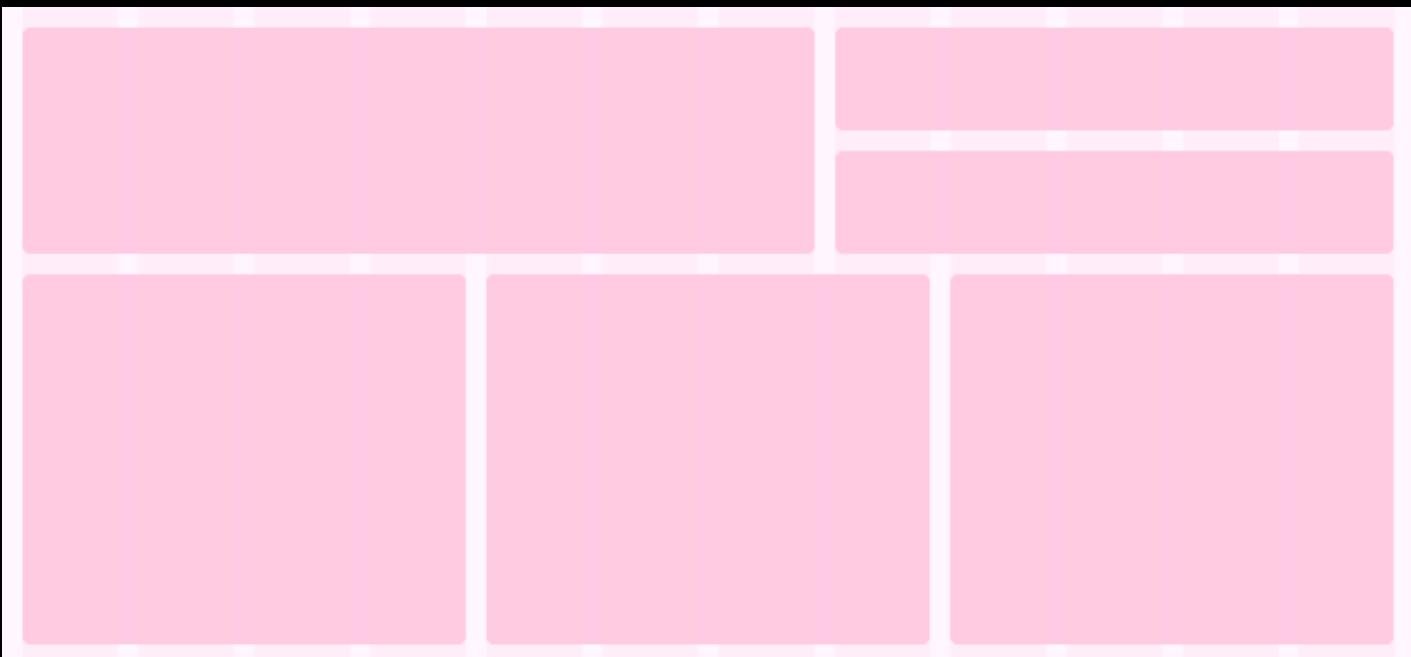
- Áreas do layout que contêm o conteúdo
- As regiões de layout podem abranger um qualquer número de colunas e redimensionar com a grelha



Responsive grids

Layout anatomy

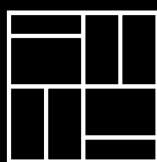
- As regiões de layout podem abranger todas as colunas e acompanhar o redimensionamento destas, ou manterem-se fixas na grelha
- Podemos usar o layout de duas maneiras diferentes:
 - Spanning
 - Offset

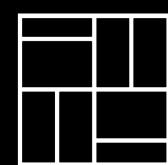
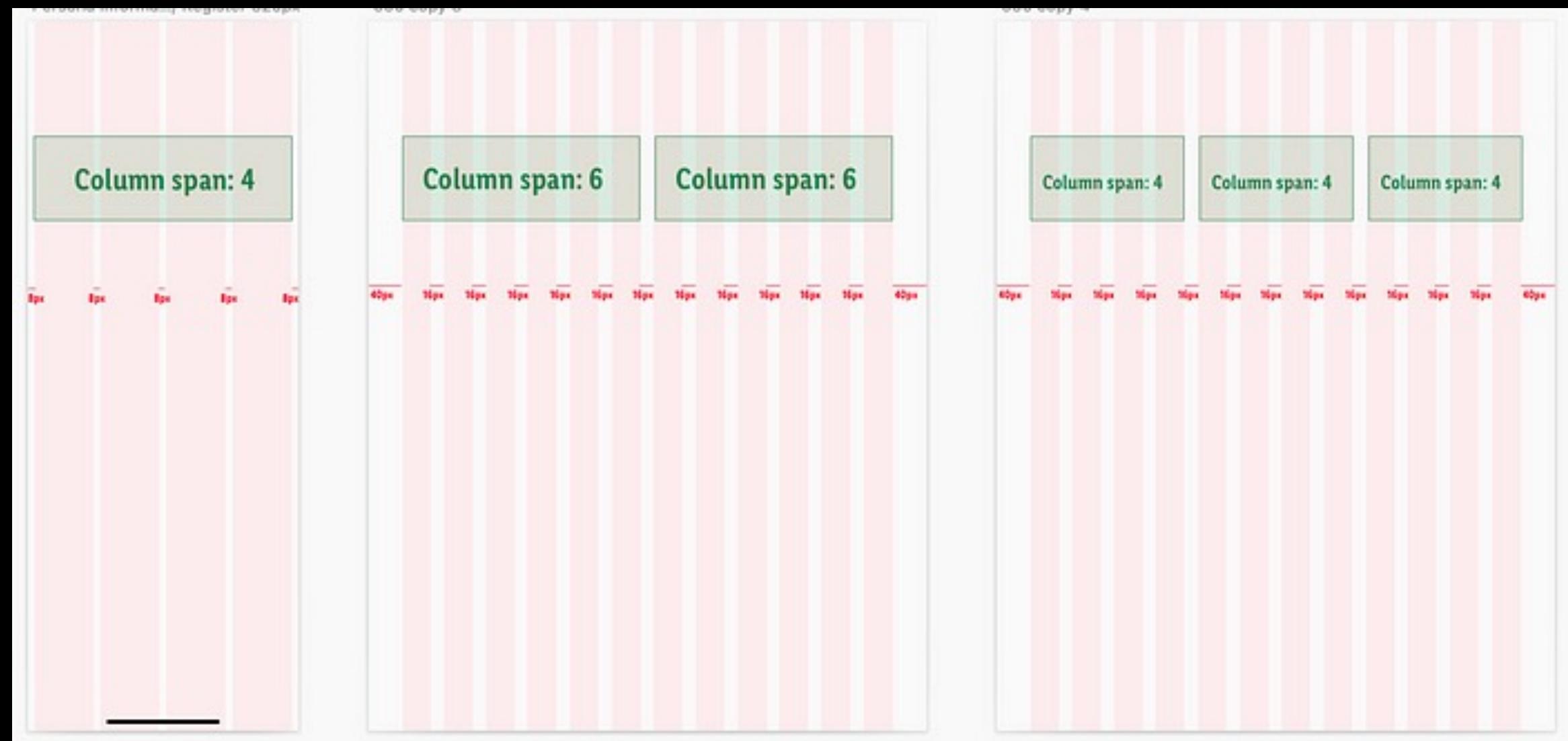


Layout anatomy

Spanning

- usamos todas as colunas disponíveis e criamos grupos de “column spans”
- o conteúdo da página estende-se pela totalidade das colunas, usando todo o espaço fornecido
- o conteúdo é redimensionado conforme o tamanho do ecrã muda

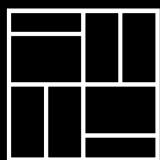


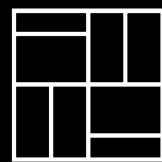
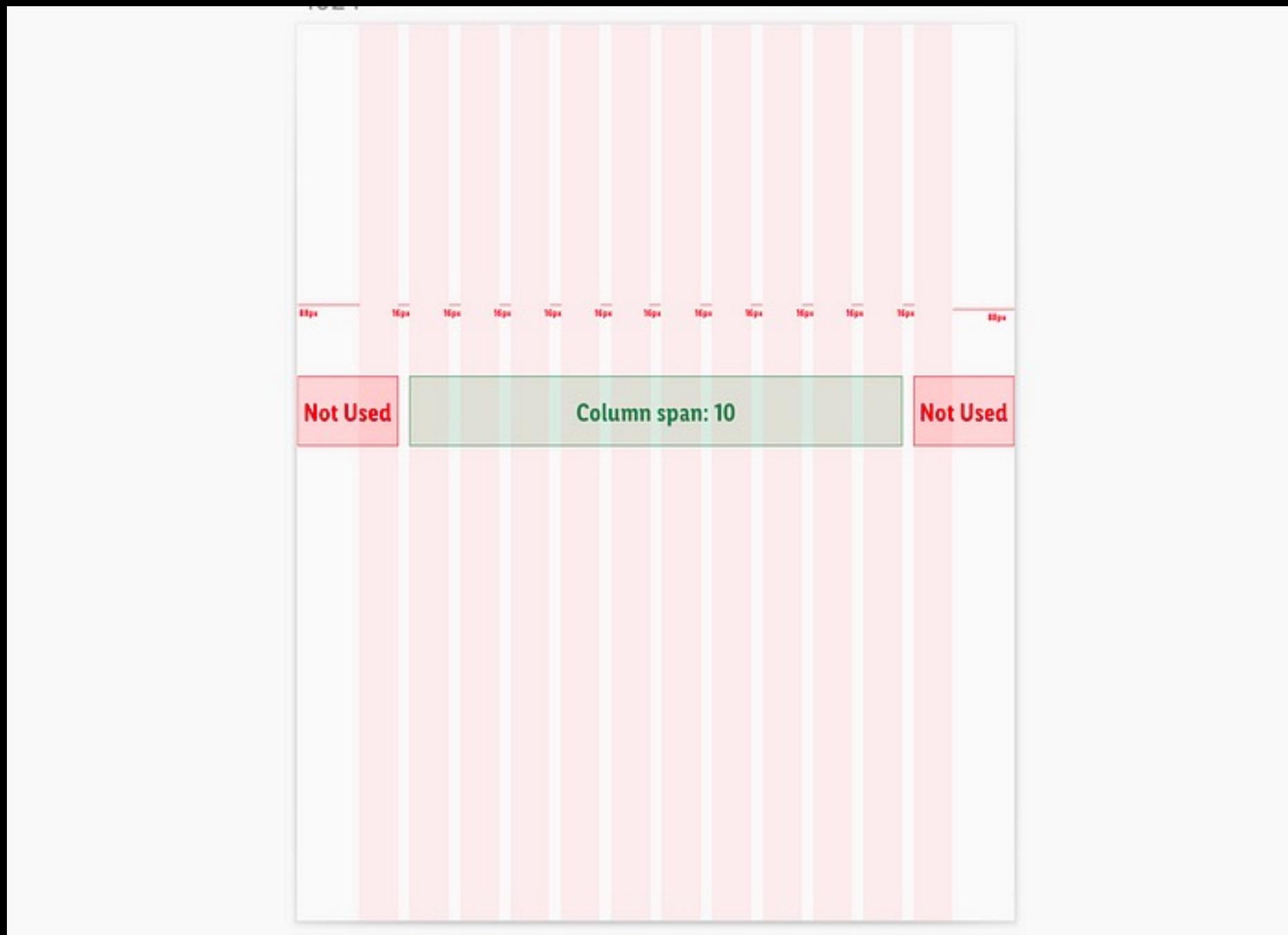


Layout anatomy

Offset

- O conteúdo ocupa apenas algumas colunas, sempre centrado no layout



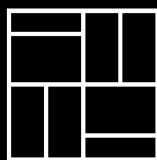
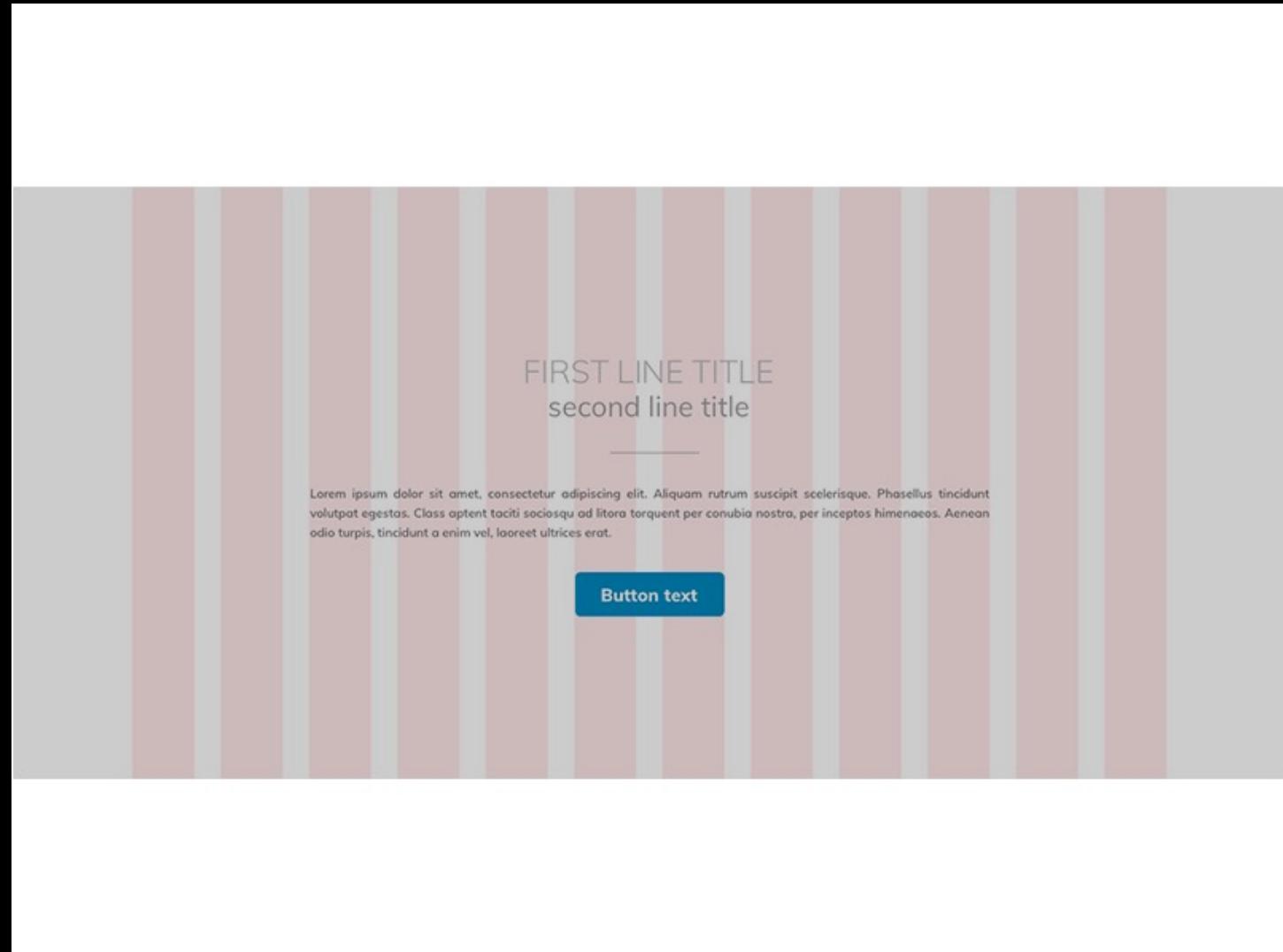


Responsive grids

Layout types

Fluída

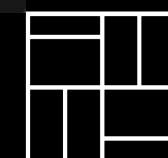
- Usa praticamente 100% da largura do ecrã
- O tamanho das colunas acompanha o crescimento horizontal do ecrã
- O valor das gutters e margens mantém-se
- Muito usado em dashboards e web applications



The screenshot shows a web-based music player interface, likely a clone of Spotify. The main header features a navigation bar with icons for back, forward, and search, followed by a user profile for André Martins and an 'Atualizar' button. The title of the page is 'Rádio de Standing Next To Me', which is also displayed as the name of the public radio station on the left. Below the title, it says 'PLAYLIST PÚBLICA'. A description below the title mentions artists like The Last Shadow Puppets, Dirty Pretty Things, The Fratellis, and The Libertines. The main content area displays a table of songs with columns for number, title, album, date added, and a more options icon. The first few songs listed are:

#	TÍTULO	ÁLBUM	DATA ADICIONADA	
1	Standing Next To Me The Last Shadow Puppets, Alex Turner, Miles Kane	The Age Of The Understatement	2:23	
2	Trust Me... I'm A Genius The Family Rain	Under The Volcano	2:12	
3	Stuck on the puzzle - intro Alex Turner	Submarine - Original Songs From The Film By Alex Turner	0:54	
4	Don't Panic Coldplay	Parachutes	2:17	
5	Weight of Love The Black Keys	Turn Blue	6:50	
6	Fireside Arctic Monkeys	AM	3:01	

At the bottom of the screen, there is a promotional banner for 'O MELHOR DE COI LERAY' from Digster, featuring a thumbnail of a woman and the text 'O MELHOR DE COI LERAY'. The footer contains playback controls (rewind, play, fast forward) and a progress bar indicating the song is at 0:47 of 2:18. On the far right, there is a small grid icon.



Calendar Today < > March 2023

SUN MON TUE WED THU FRI SAT

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31 1

Meet with... Search for people

My calendars

- André Martins
- Birthdays
- Reminders
- Tasks

Other calendars

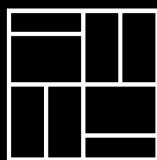
- Holidays in Portugal

Certificação UX-PM N1 - Interno
9:30am – 5:30pm
<https://us02web.zoom.us/j/81619763343>

Certificação UX-PM N1 - Interno
9:30am – 5:30pm
<https://us02web.zoom.us/j/81619763343>

Certificação UX-PM N1 - Interno
9:30 – 11:30am
<https://us02web.zoom.us/j/81619763343>

Linha de Crédito IKEA - atualizações

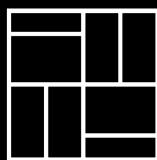
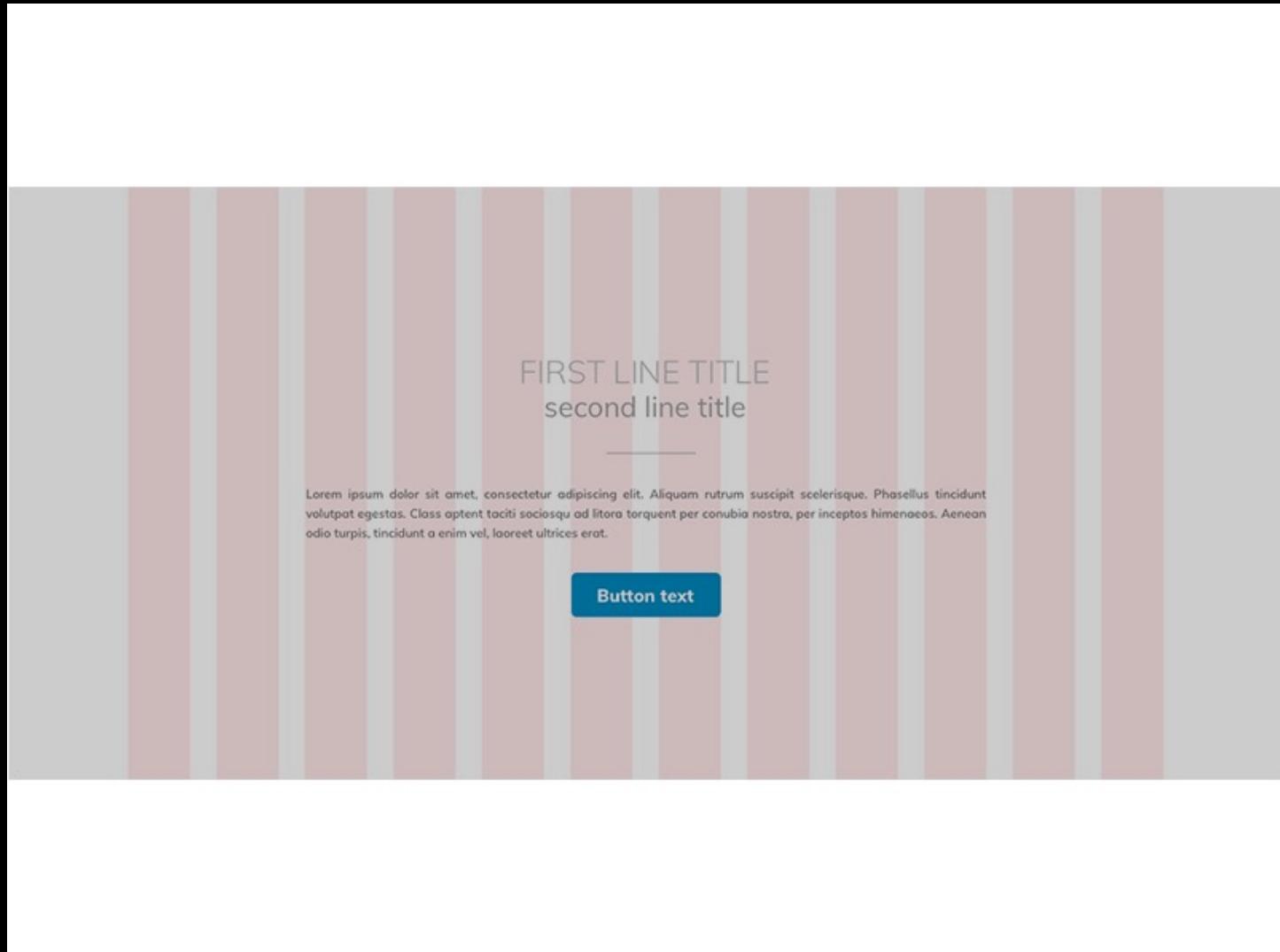


Responsive grids

Layout types

Fixa

- Tem uma largura máxima
- Este limite é criado para permitir melhor legibilidade e scan do conteúdo, nomeadamente em ecrãs muito grandes
- Aqui as colunas e *gutters* mantém o tamanho enquanto que as margens acompanham o crescimento do ecrã



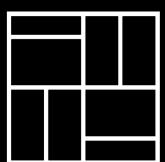
The screenshot shows the UX Collective website interface. At the top, there's a navigation bar with links for Home, About, Editors' picks, Receive our newsletter, and Publish a story. Below the navigation, there are two pinned posts:

- Veterans can trust the US Department of Veterans Affairs again because of design** by dave hoffer. This post discusses how design has improved the US Department of Veterans Affairs. It includes a thumbnail image of a seal and a snippet of text: "When we think of design we think of Apple, Gucci, or Nike, but we don't think of government. Traditionally, the United States Departme...".
- Data visualization: formatting tips for transforming your dot plots** by Weronika Gawarska-Tywonek. This post provides tips for transforming dot plots into dumbbell charts. It includes a thumbnail image of a dumbbell chart and a snippet of text: "From dot plot to dumbbell chart. — One common method for visualizing numerical data is the dot plot, in which we can represent...".

On the right side of the page, there's a sidebar with the following sections:

- UX Collective**: A bio for the account, stating they believe designers are thinkers and makers, curate stories on UX, Visual & Product Design, and have 459K followers. Includes a polar bear profile picture and a "Follow" button.
- Connect with UX Collective**: Links to Twitter and Instagram.
- Editors**: Profiles for Fabricio Teixeira and Caio Braga, both of whom are designers at Work & Co. and editors at UX Collective. Each profile has a "Follow" button.
- Sign up for The UX Collective Newsletter**: A call-to-action to sign up for a weekly newsletter that helps designers stay in the know, be productive, and think more critically about their work. Includes a "Get this newsletter" button.

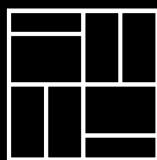
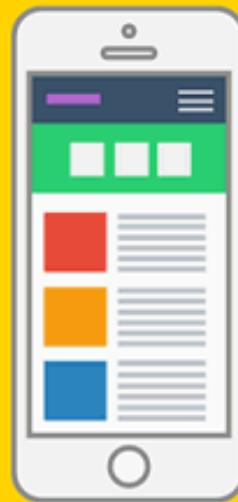
At the bottom of the page, there are links for Help, Status, Writers, Blog, Careers, Privacy, Terms, and About. The browser's address bar shows the URL as `div.bz.ca.l`.



Responsive grids

Breakpoints

- Um *breakpoint* é o limite do tamanho de ecrã determinado por requisitos de layout específicos
- num determinado intervalo de *breakpoint*, o layout ajusta-se para se adequar ao tamanho e à orientação do ecrã

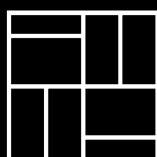


Responsive grids

Breakpoints

- *Breakpoints* são definidos como atributos de largura mínima
- todos os tamanhos de ecrã entre dois *breakpoints* definidos, herdarão todas as dimensões do *breakpoint* de tamanho menor

BREAKPOINT	RANGE	COLUMNS	GUTTER	MARGIN	BODY
XS	Below 360	4	8px	8px Fixed	Fluid
S	360px to 655px	4	8px	16px Fixed	Fluid
M	656px to 1023px	12	16px	40px Fixed	Fluid
L	1024px 1279px	12	16px	88px Fixed	Fluid
XL	1280px to 1440px	12	16px	88px Fixed	Fluid
XXL	1440px and up	12	16px	Fluid	1264px fixed, centered



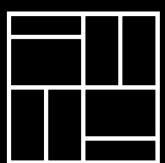
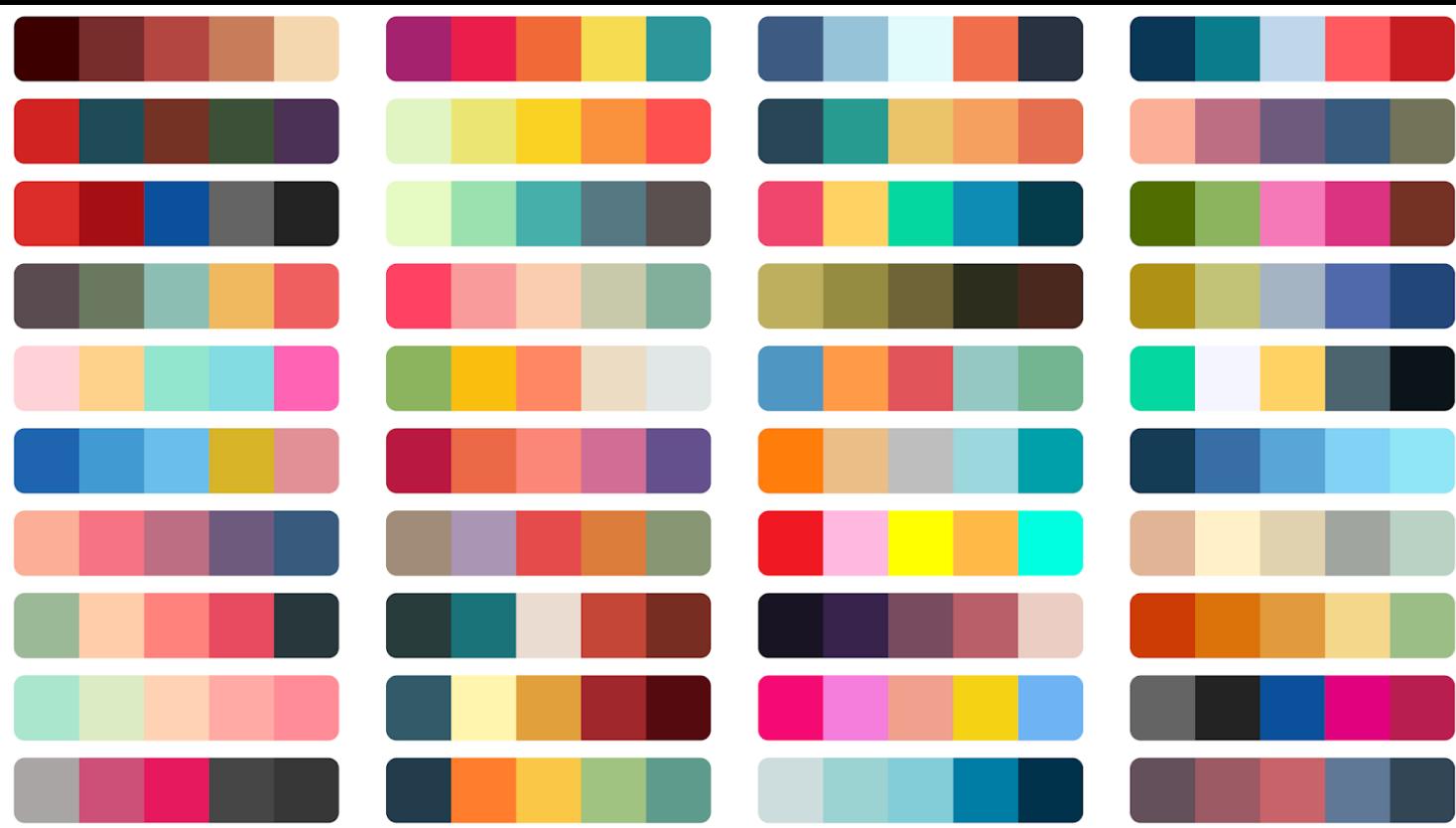
Core tipografia



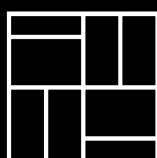
Cor e Tipografia

Cor

- Usada para expressar estilo e comunicar significado

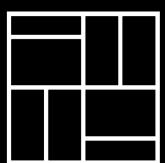
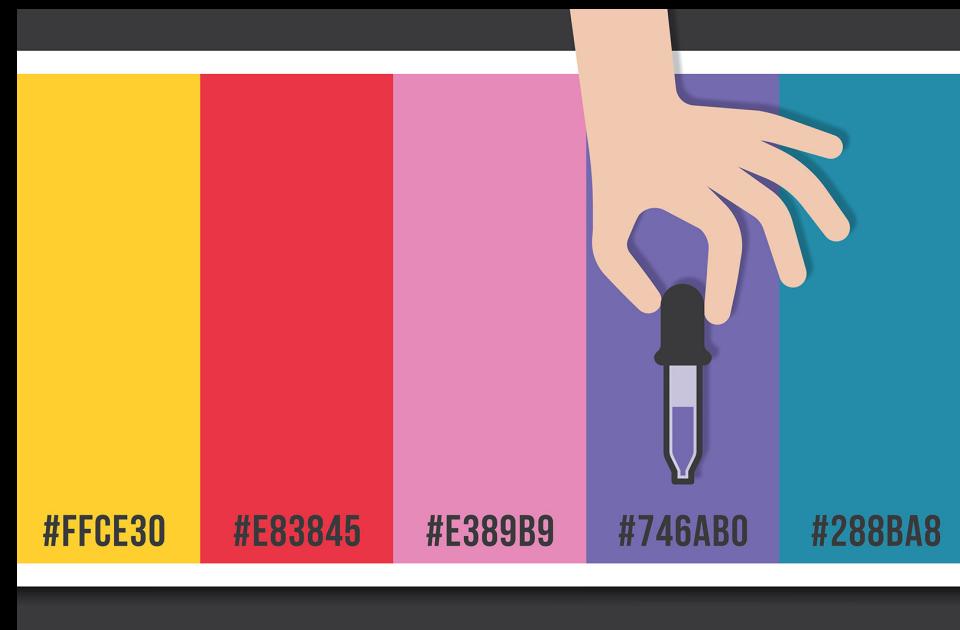


TRANQUILITY	LOVE	HEATH	CREATIVITY	NATURE
AUTHORITY	EXCITEMENT	HAPPINESS	FRIENDLINESS	GROWTH
WISDOM	WARMTH	FRIENDLINESS	CHEERFULNESS	PROSPERITY
STABILITY	ROMANCE	ENTHUSIASM	ENERGETIC	HEALTH
CLEANLINESS	PASSION	ENERGETIC	OPTIMISM	HOPE
FRESHNESS	SPEED	YOUTH	WARMTH	LUCK
FREEDOM	LUCK	FUN	JOY	LIFE
COLD	RAGE	RUIN	ILLNESS	ENVY
SADNESS	BLOOD	DANGER	DANGER	POISON
DEPRESSION	AGGRESSION	DESOLATION	MADNESS	CORRUPTION
ROMANTIC	LUXURY	LUXURY	LIGHT	STRENGHT
NURTURING	MYSTERY	DARKNESS	HOLINESS	CALMNESS
INNOCENT	SPIRITUALITY	SOPHISTICATION	CLLEANLINESS	TIMELESSNESS
DELICATE	ATTRACTION	AUTHORITY	SPIRITUALITY	NEUTRALITY
PLAYFUL	SCI-FI FUTURE	ELEGANCE	INNOCENCE	AUTHORITY
SWEET	ROYALTY	MYSTERY	PURITY	WISDOM
KIND	MAGIC	POWER	HOPE	STABILITY
IMMATURE	ILLUSION	FEAR	COLD	DULL
DECEPTIVE	DECEPTIVE	LONLINESS	ISOLATION	LIFELESS
MATERIALISTIC	DETACHED	HOPELESSNESS	EMPTINESS	ABANDONMENT



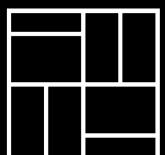
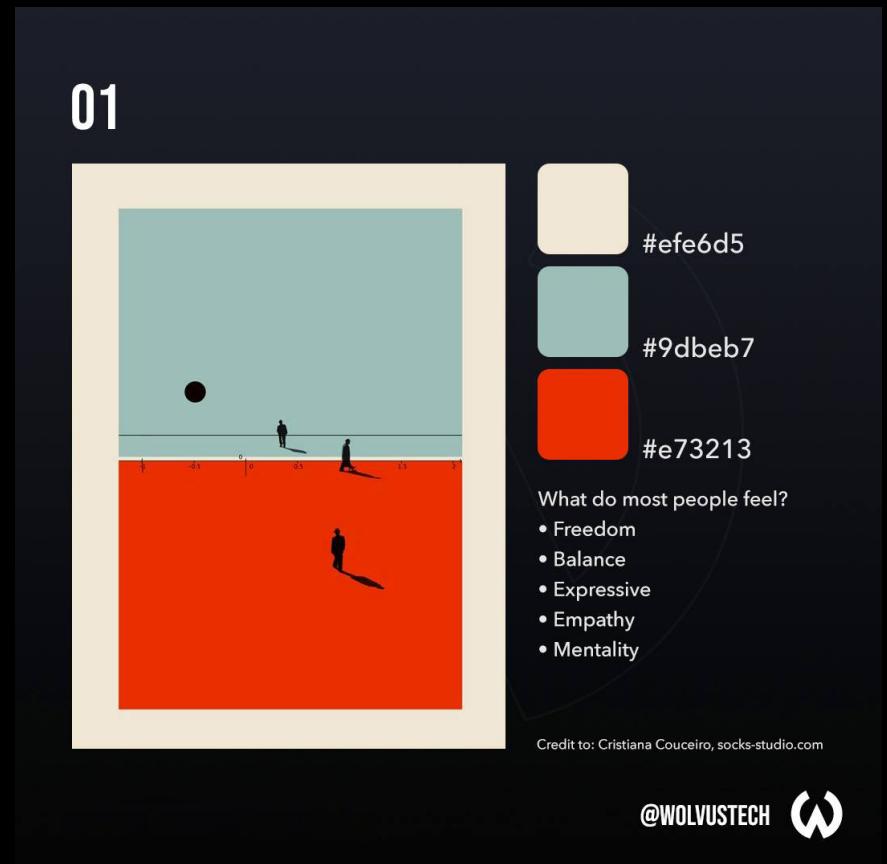
Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX



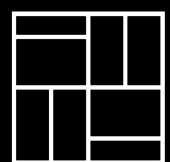
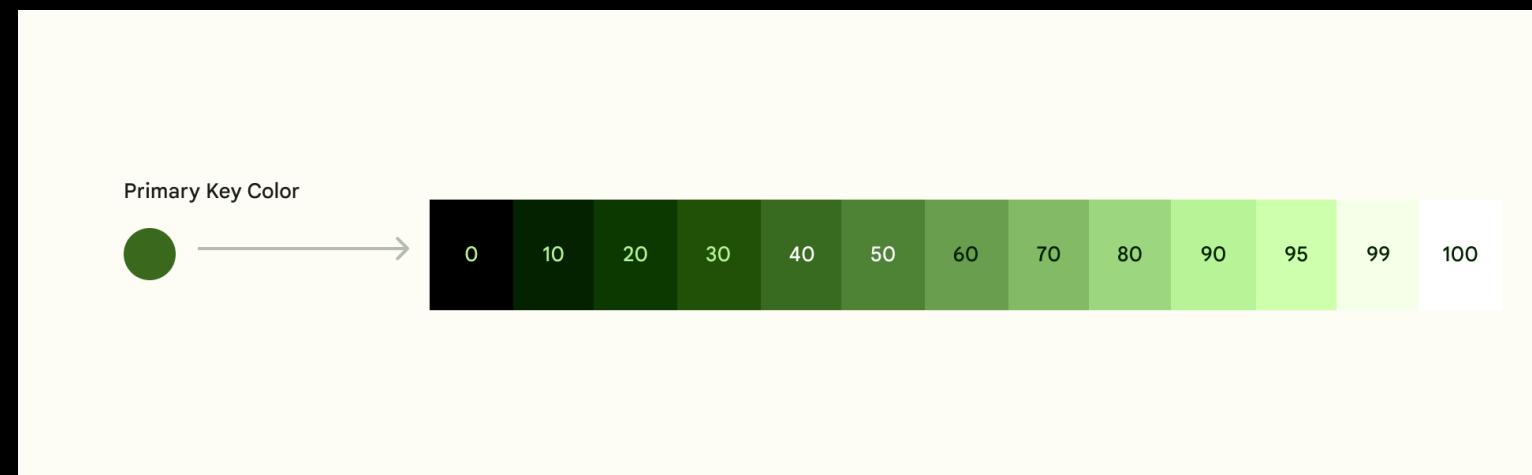
Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce



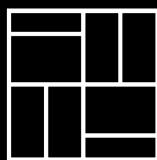
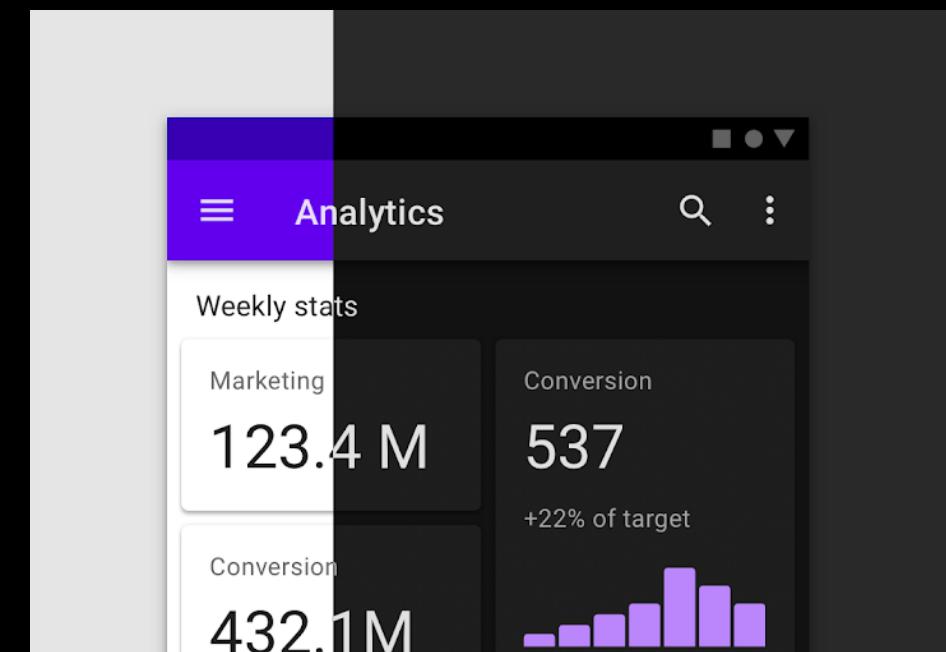
Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce
- Criar variações de cada uma das cores escolhidas (idealmente também de preto e branco)



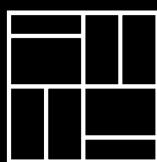
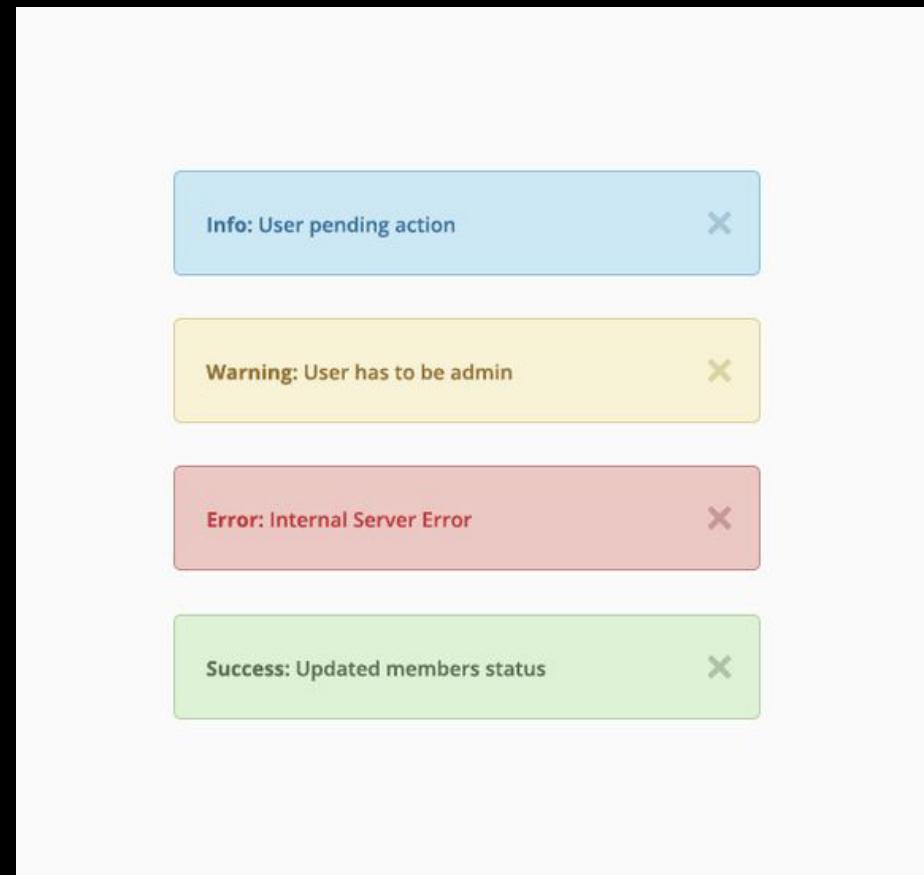
Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce
- Criar variações de cada uma das cores escolhidas (inclusive de cores neutras como o preto e branco)
- Considerar paleta cromática para ambientes *light* e *dark*



Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce
- Criar variações de cada uma das cores escolhidas (inclusive de cores neutras como o preto e branco)
- Considerar paleta cromática para ambientes *light* e *dark*
- Não esquecer das cores de alerta



Guidelines:

- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce
- Criar variações de cada uma das cores escolhidas (inclusive de cores neutras como o preto e branco)
- Considerar paleta cromática para ambientes *light* e *dark*
- Não esquecer das cores de alerta
- Cuidado com a acessibilidade!

Foreground Color
#0000FF
Lightness ↔
Background Color
#E10E0E
Lightness

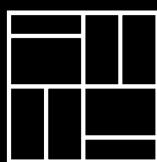
Contrast Ratio
1.74:1

[permalink](#)

Normal Text
WCAG AA: Fail
WCAG AAA: Fail

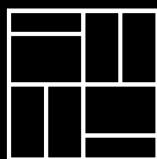
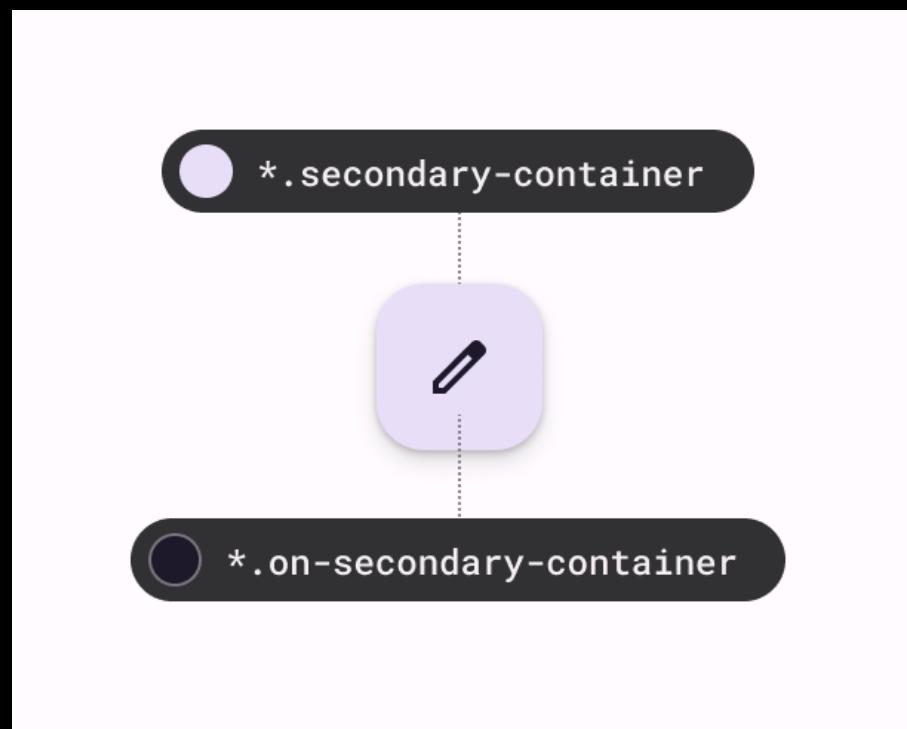
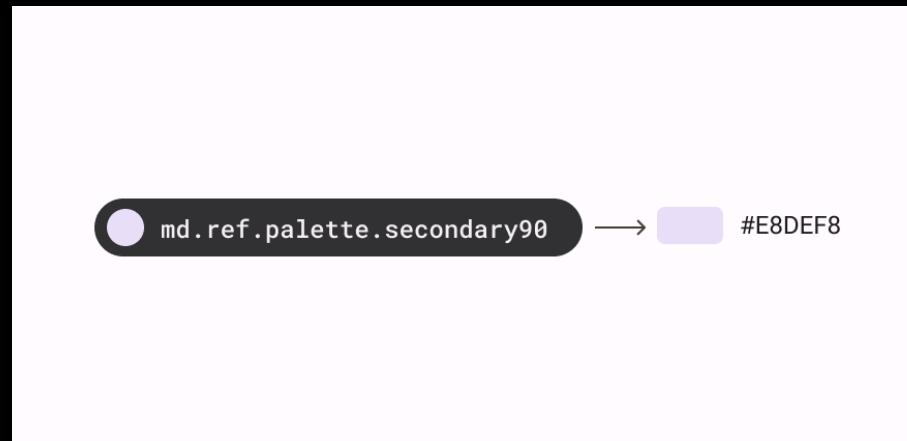
Large Text
WCAG AA: Fail
WCAG AAA: Fail

Graphical Objects and User Interface Components
WCAG AA: Fail



Guidelines:

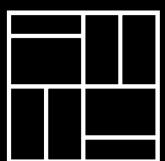
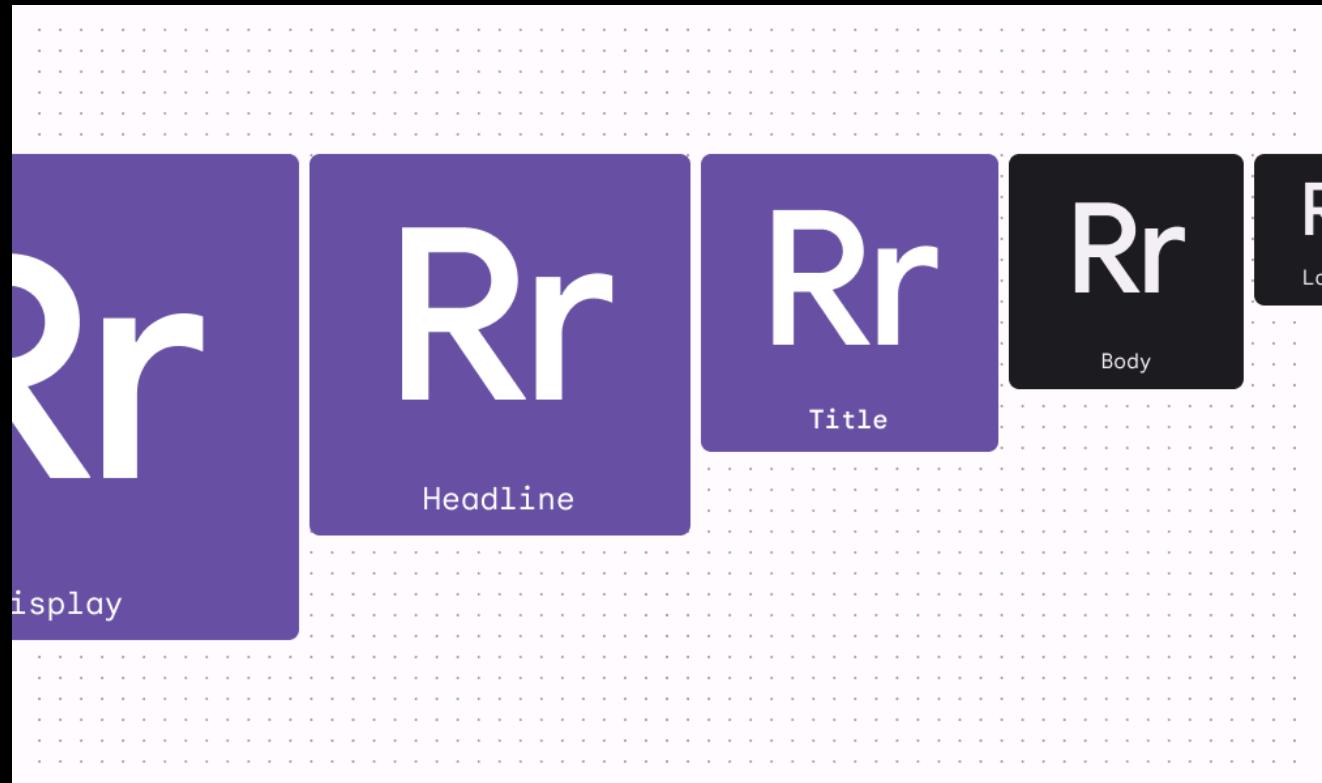
- Usar modo de cor RGB, idealmente representado por valores hexadecimais - HEX
- Escolher até 3 cores: primária, secundária e de realce
- Criar variações de cada uma das cores escolhidas (inclusive de cores neutras como o preto e branco)
- Considerar paleta cromática para ambientes *light* e *dark*
- Não esquecer das cores de alerta
- Cuidado com a acessibilidade!
- Usar *design tokens* para tornar o design consistente e escalável (se os *mockups* de um designer e a implementação de um *developer* referirem o mesmo *token*, o design e o desenvolvimento podem ter certeza de que a mesma cor será usada em ambos os lugares)



Cor e Tipografia

Tipografia

- usada para tornar o texto legível e agradável

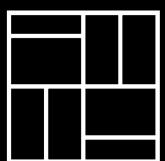


Guidelines:

- Usar até 3 tipos de letra distintos, tendo atenção à sua complementaridade

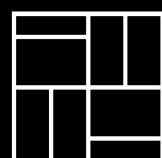
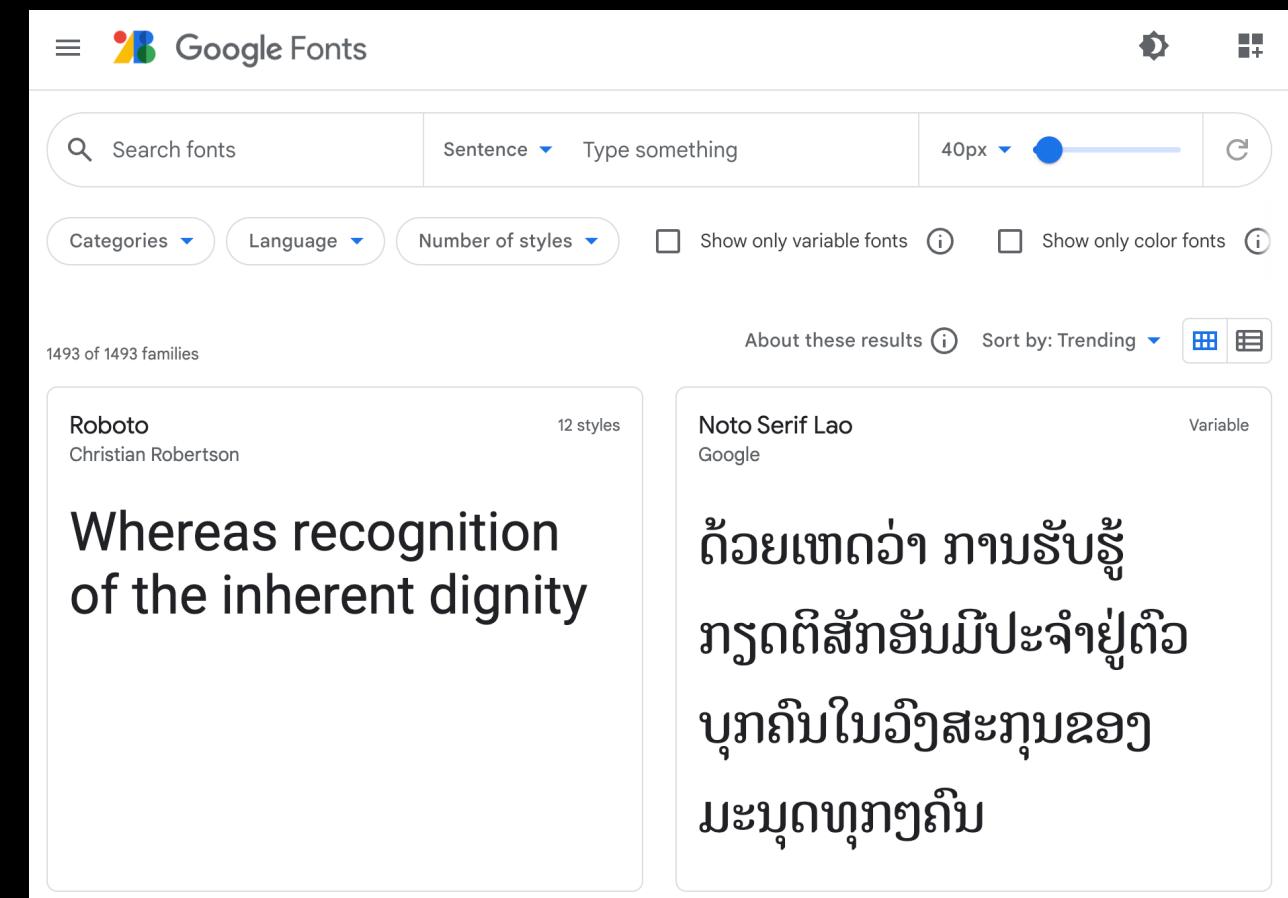
Oh dear

*When you use **too many fonts**
see how they **all fight** for attention*



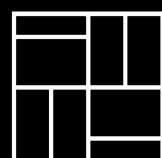
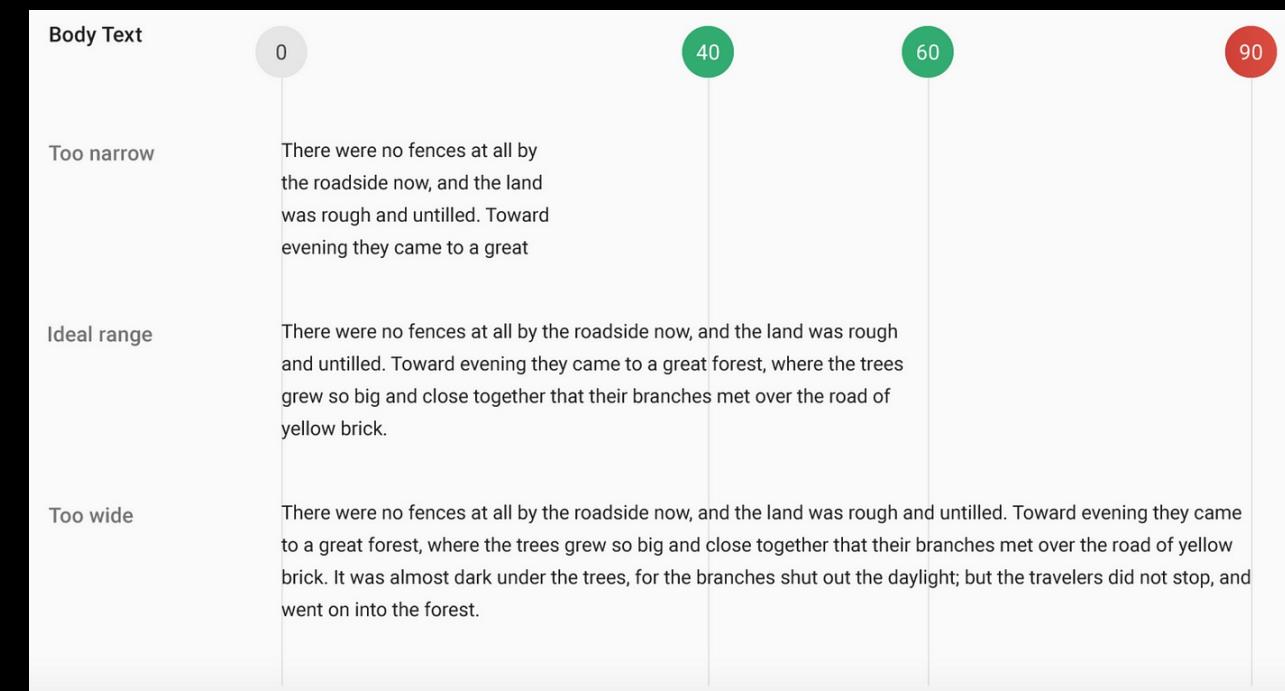
Guidelines:

- Usar até 3 tipos de letra distintos, tendo atenção à sua complementaridade
- Usar, sempre que possível, tipos de letra otimizados para web, idealmente de serviços de incorporação como Google Fonts ou Adobe Fonts



Guidelines:

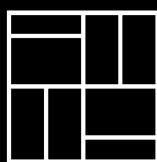
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- Usar, sempre que possível, tipos de letra otimizados para web, idealmente de serviços de incorporação como Google Fonts ou Adobe Fonts
- Ter a quantidade certa de caracteres por linha é fundamental para a legibilidade:
 - Mobile: 30 – 40 caracteres
 - Desktop: 50 – 75



Guidelines:

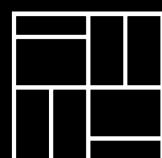
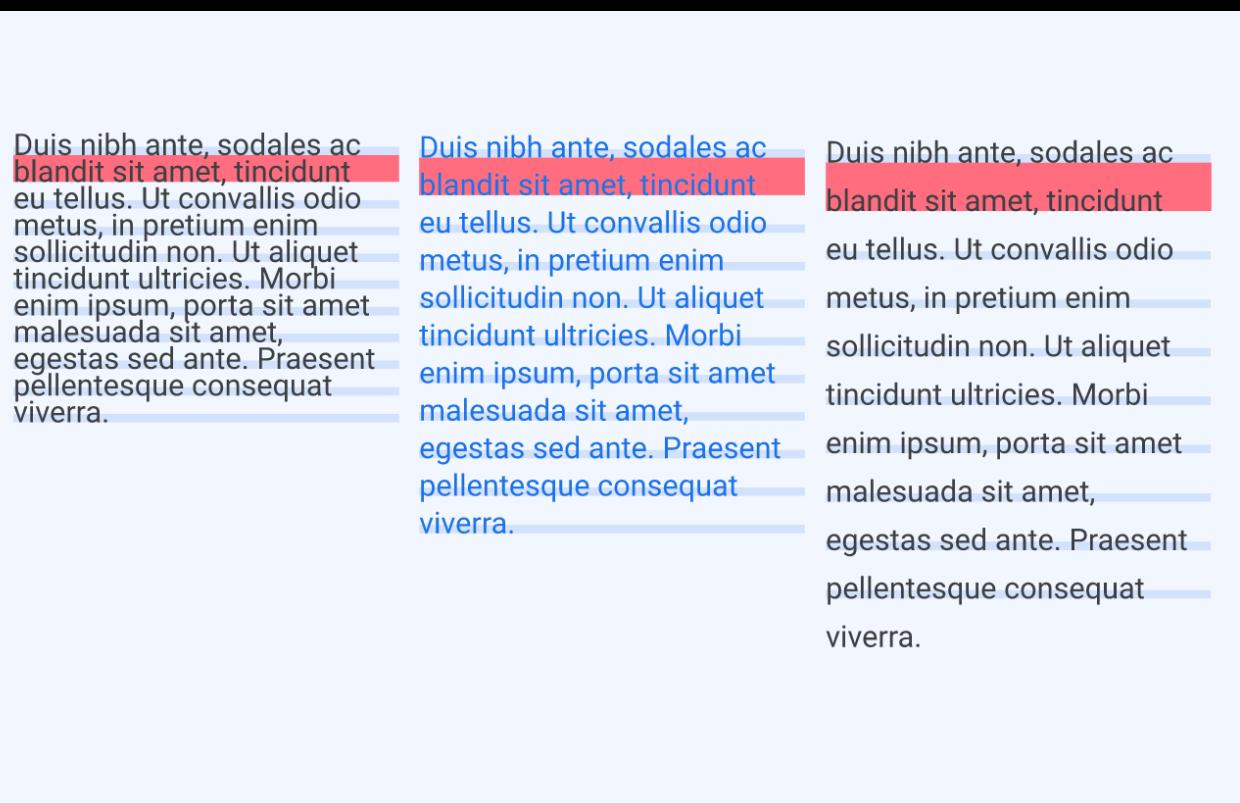
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- Usar, sempre que possível, tipos de letra otimizados para web, idealmente de serviços de incorporação como Google Fonts ou Adobe Fonts
- Ter a quantidade certa de caracteres por linha é fundamental para a legibilidade:
 - Mobile: 30 – 40 caracteres
 - Desktop: 50 – 75
- Escolher tipos de letra que funcionem bem em diversos tamanhos e pesos

Display 4	Light 112sp
Display 3	Regular 56sp
Display 2	Regular 45sp
Display 1	Regular 34sp
Headline	Regular 24sp
Title	Medium 20sp
Subheading	Regular 16sp (Device), Regular 15sp (Desktop)
Body 2	Medium 14sp (Device), Medium 13sp (Desktop)
Body 1	Regular 14sp (Device), Regular 13sp (Desktop)
Caption	Regular 12sp
Button	MEDIUM (ALL CAPS) 14sp



Guidelines:

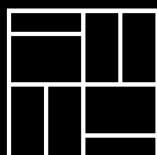
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- Ter a quantidade certa de caracteres por linha é fundamental para a legibilidade:
 - Mobile: 30 – 40 caracteres
 - Desktop: 50 – 75
- Escolher tipos de letra que funcionem bem em diversos tamanhos e pesos
- Ajustar a altura de linha consoante o tamanho da letra: entre 115% e 150% (1.15 e 1.5) é onde fica o valor ideal



Guidelines:

- Garantir contraste suficiente entre o texto e o fundo

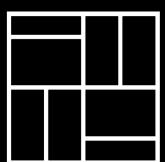
Knowing is not enough, we must apply



Guidelines:

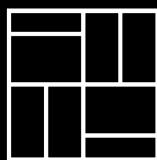
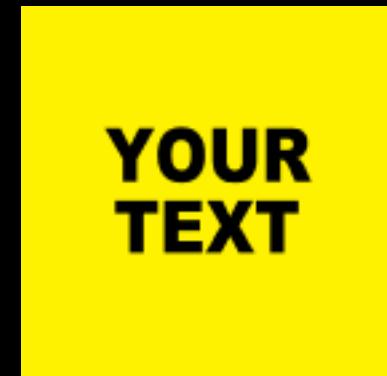
- Garantir contraste suficiente entre o texto e o fundo
- Evitar o *All Caps* (todo maiúsculas)

CAPITALIZING FULL PARAGRAPHS IS BAD.
**THIS IS EVEN HARDER TO READ WHEN
IT'S BOLDEN. ARE YOU HAVING FUN
READING THIS?**

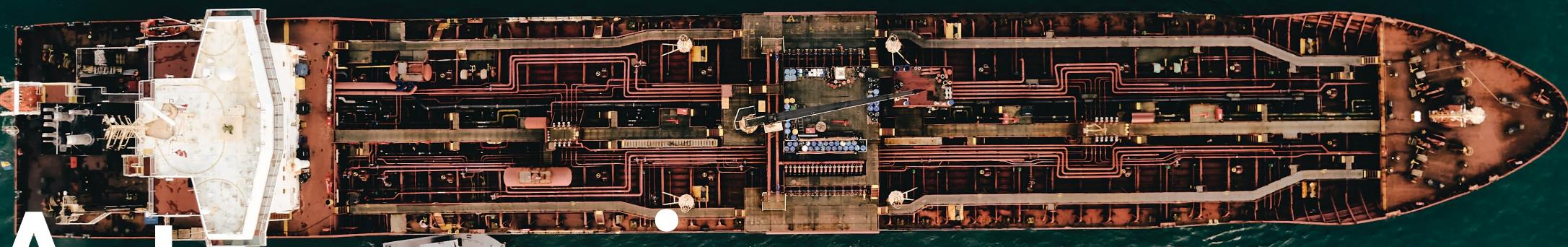


Guidelines:

- Garantir contraste suficiente entre o texto e o fundo
- Evitar o *All Caps* (todo maiúsculas)
- Evitar animar o texto, nomeadamente grandes blocos de texto

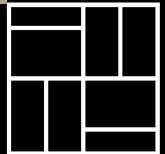


Atomic Design



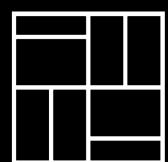
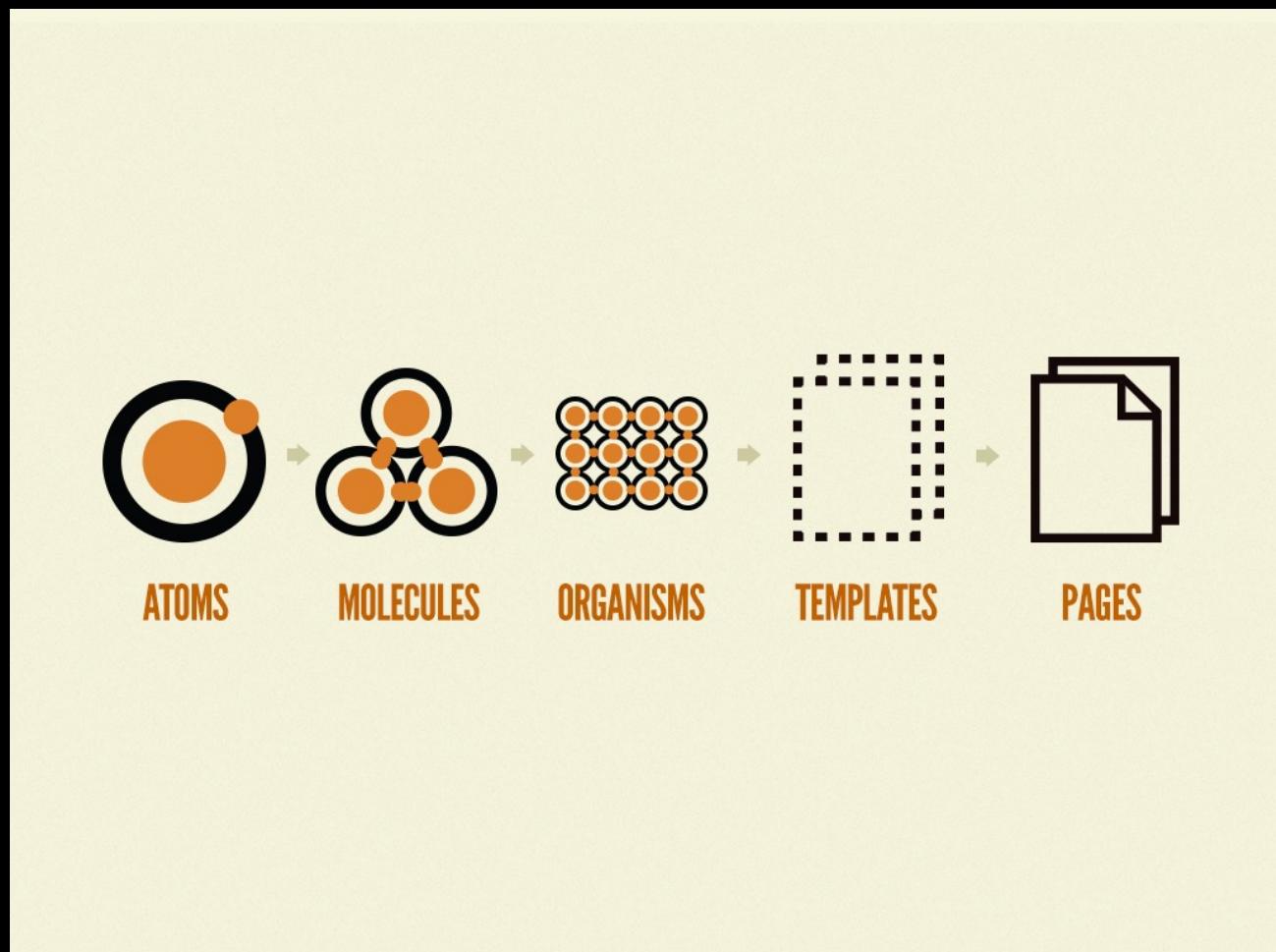
Porquê o barco?

Porque a sua construção, tal como em Web development, deve ser feita de forma modular



Atomic Design

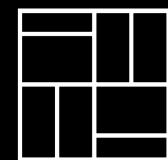
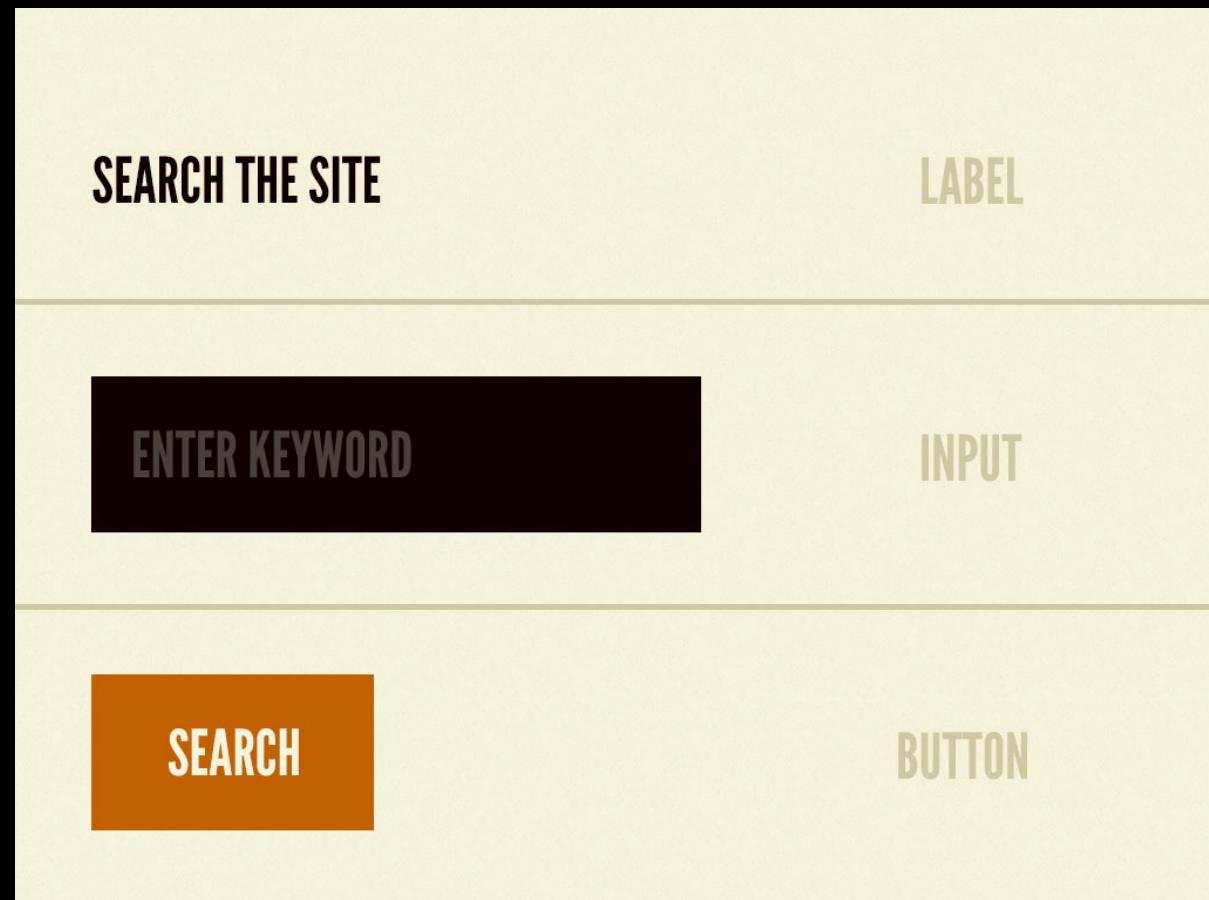
- metodologia para criar sistemas de design de forma metódica
- utiliza a analogia com a ciência para explicar como conseguimos repartir interfaces em pequenos blocos construtivos fundamentais



Atomic Design

Átomos

- Os átomos são os blocos de construção básicos da matéria
- Aplicados a interfaces web, os átomos são as tags HTML, como uma *label* de formulário, um *input* ou um botão
- Os átomos também podem incluir elementos mais abstratos, como paletas de cores, fonts e aspetos ainda mais invisíveis de uma interface, como animações.



Atomic Design

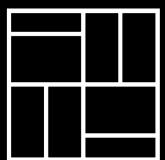
Moléculas

- combinações de átomos, relativamente simples

SEARCH THE SITE

ENTER KEYWORD

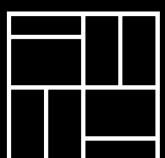
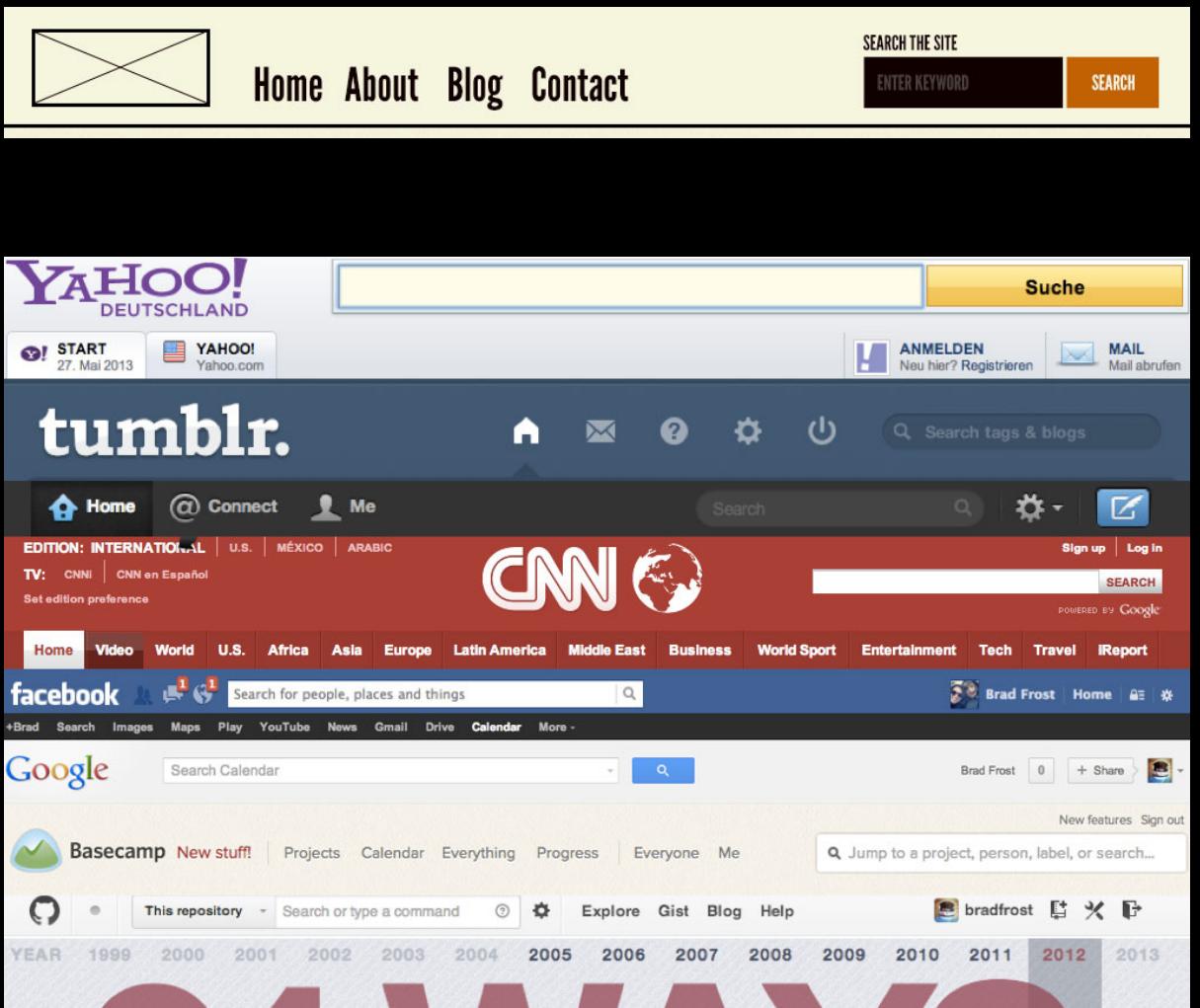
SEARCH



Atomic Design

Organismos

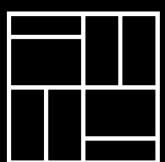
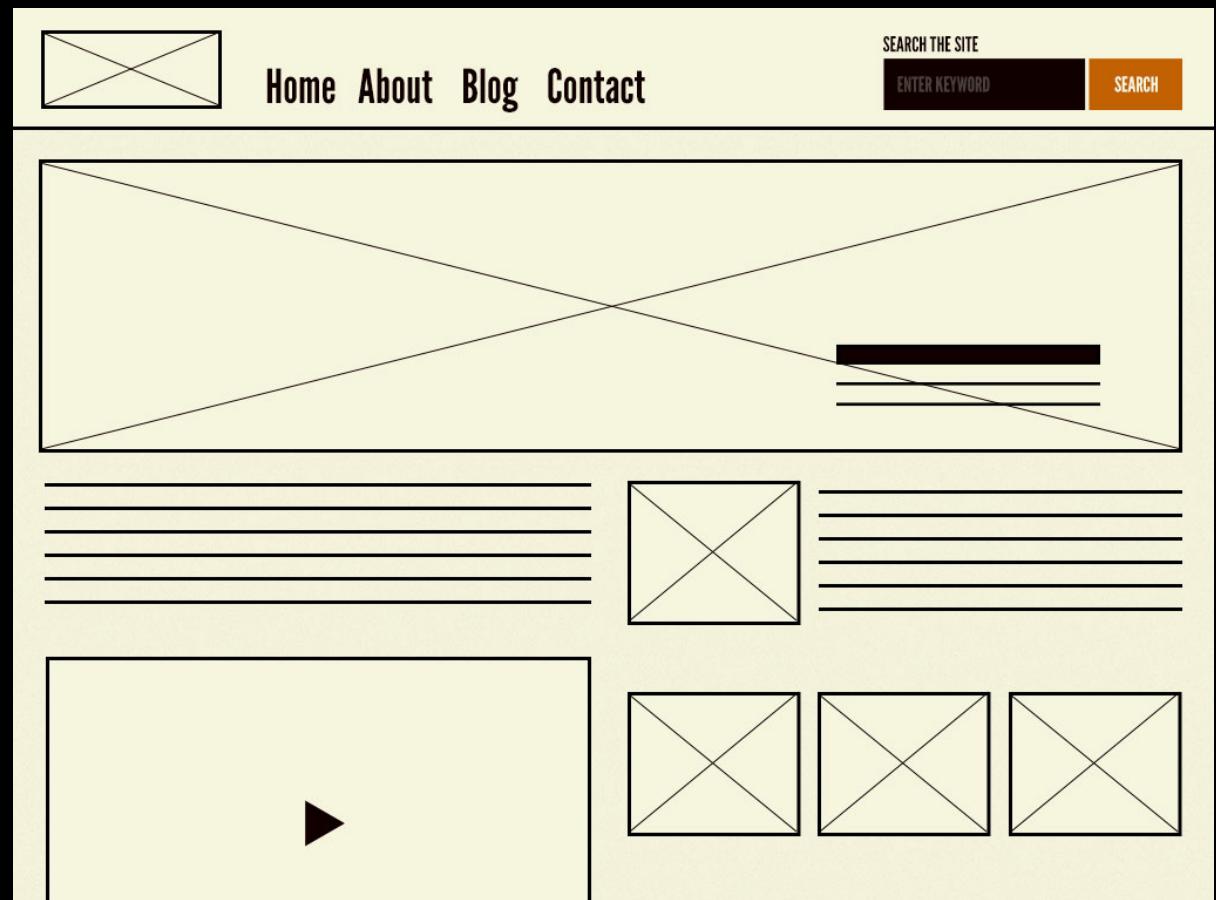
- grupos de moléculas unidas para formar uma secção relativamente complexa e distinta de uma interface



Atomic Design

Templates

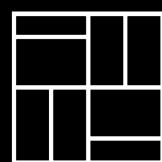
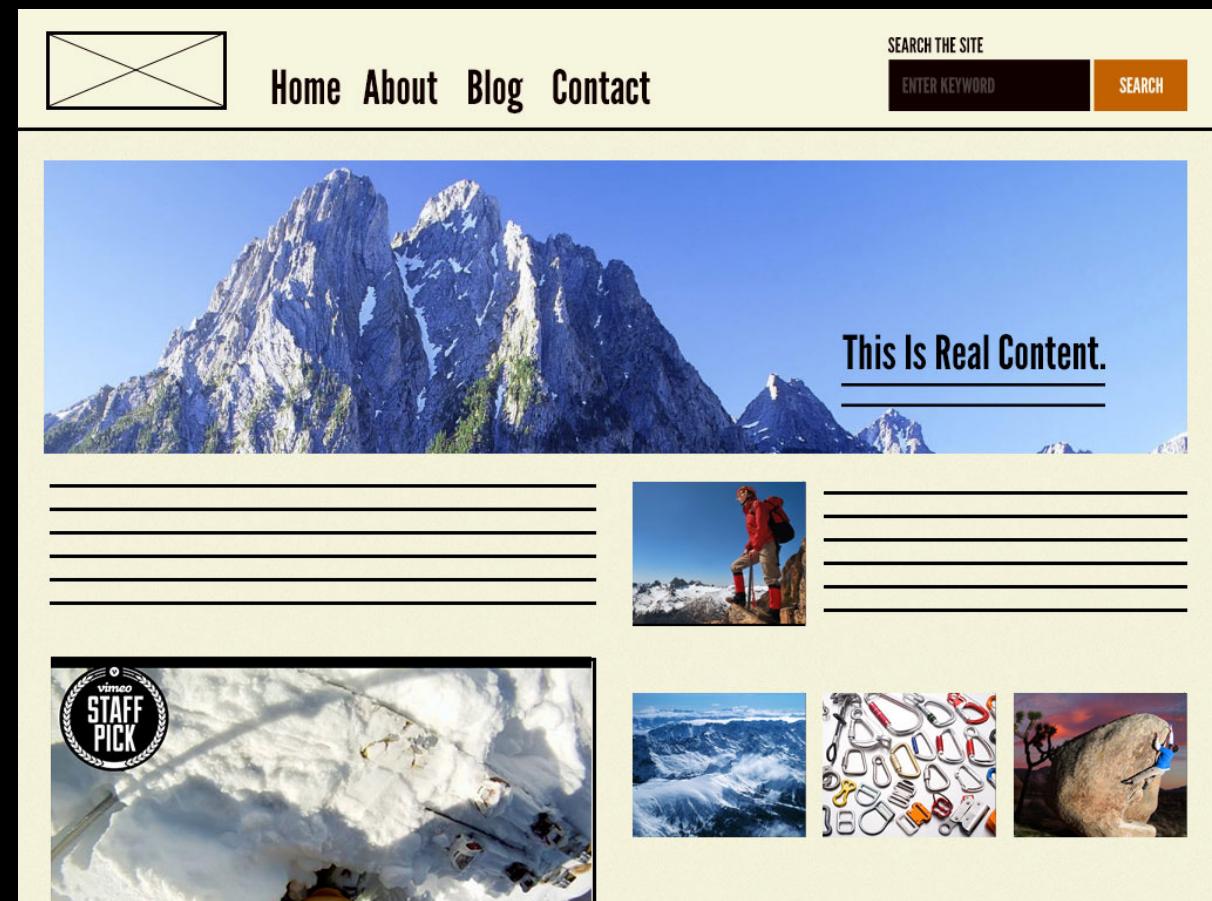
- Fase em que se quebra a analogia química para uma linguagem mais lógica para os clientes e output final
- consistem praticamente em grupos de organismos unidos para formar páginas

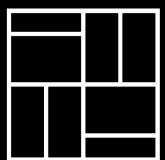
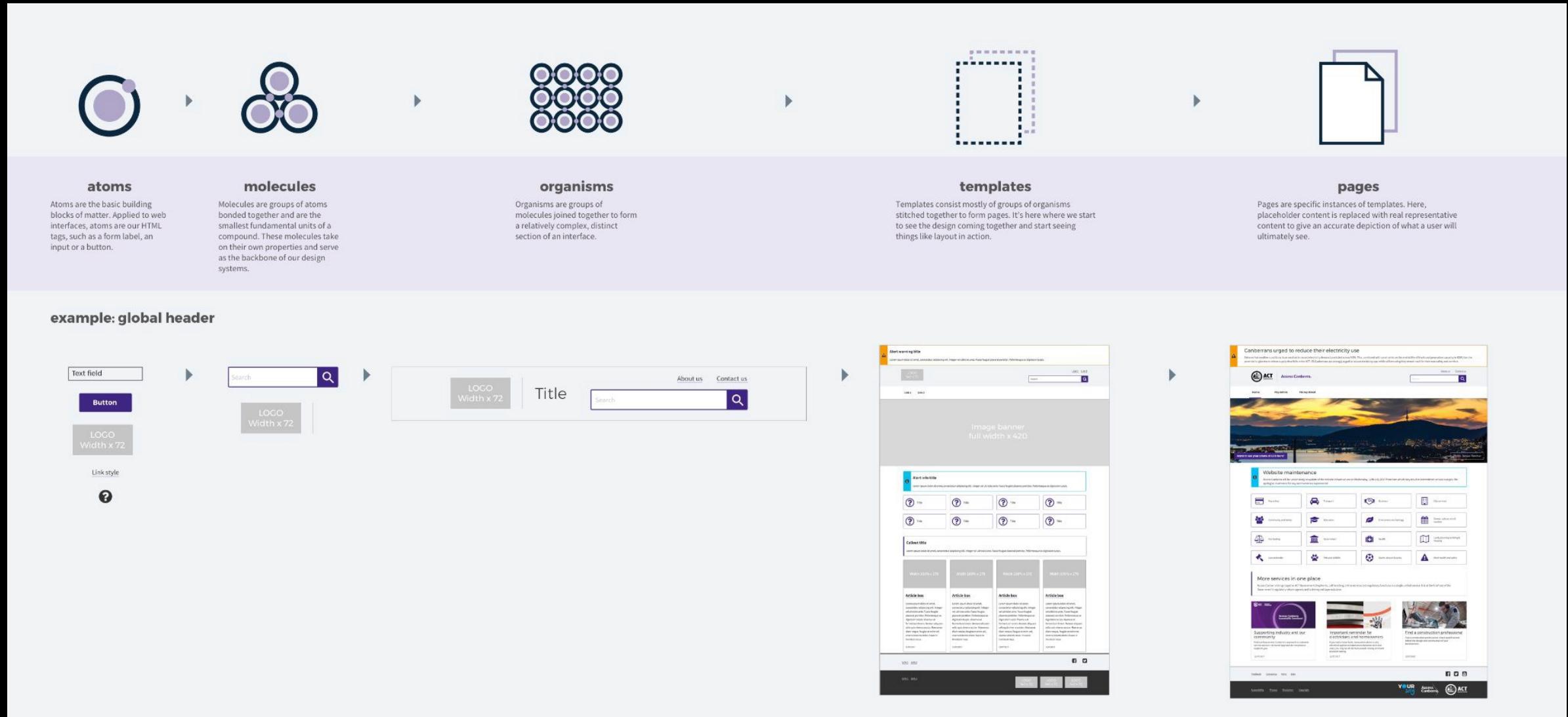


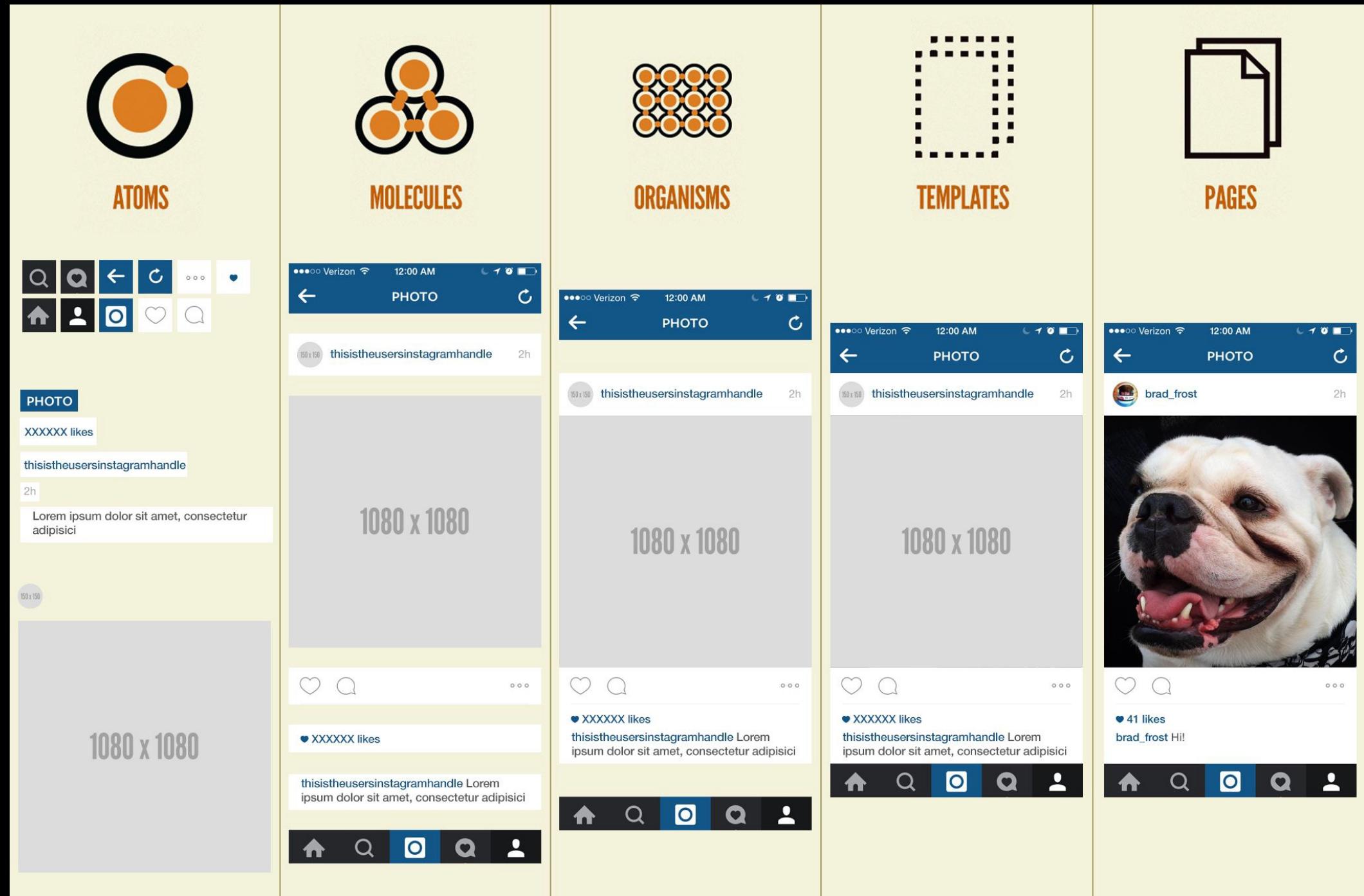
Atomic Design

Pages

- instâncias específicas de templates
- nas páginas, conteúdo de placeholder é substituído com representações reais de conteúdo para criar uma representação precisa do que o utilizador verá



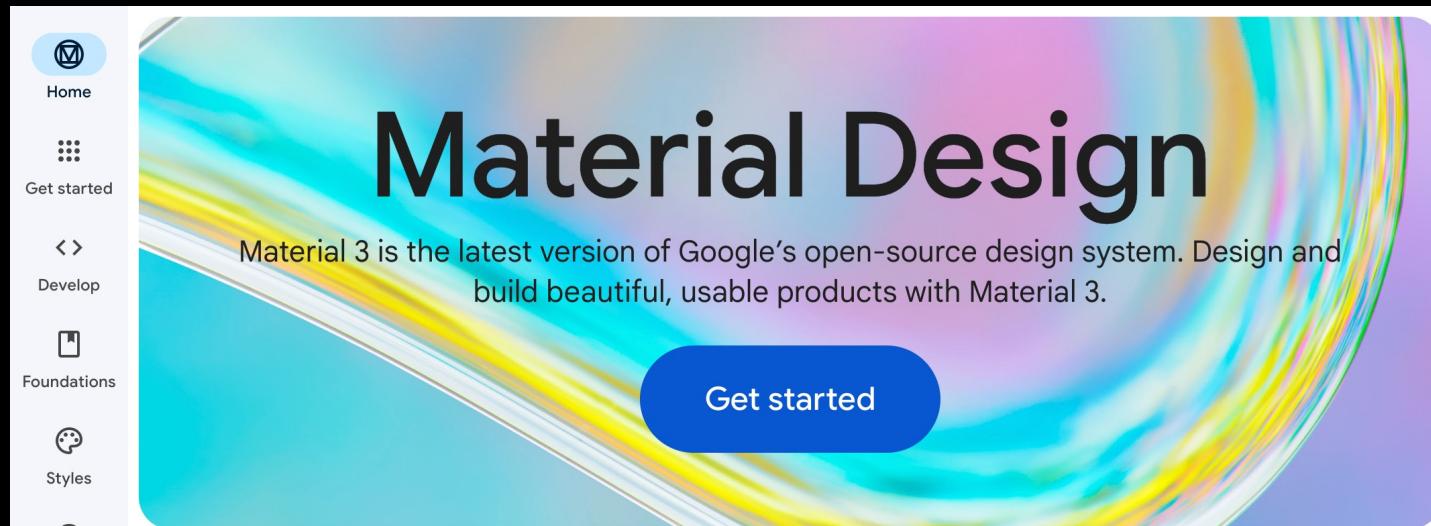




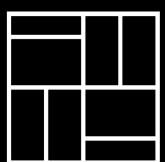
Atomic Design

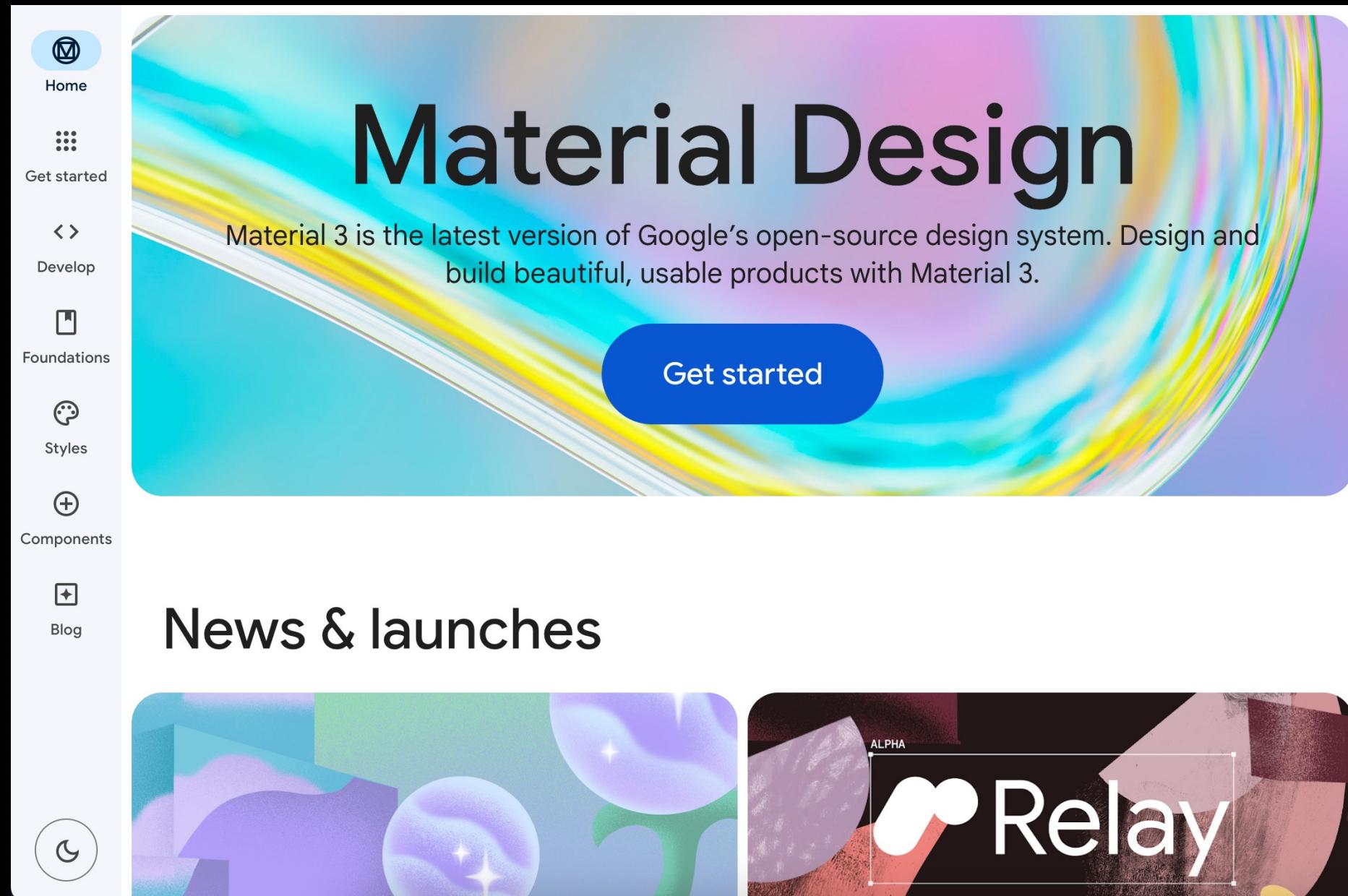
Design Systems

- um conjunto de padrões para gerir o design de forma escalável, reduzindo a redundância e criando uma linguagem partilhada e consistência visual em diferentes páginas e canais



The screenshot shows the Material Design website. On the left is a vertical navigation menu with icons and text: Home (selected), Get started, Develop, Foundations, Styles, Components, and Blog. The main content area has a colorful, abstract background with the title "Material Design" in large, bold, black font. Below the title is a subtitle: "Material 3 is the latest version of Google's open-source design system. Design and build beautiful, usable products with Material 3." A blue "Get started" button is at the bottom right of the main area. Below this section is a heading "News & launches" followed by two smaller images: one showing a purple and green abstract design, and another showing a dark background with a white "Relay" logo and a "RELAY" text overlay.





The image shows the Material Design website's landing page. On the left is a vertical navigation bar with icons and text links: Home (selected), Get started, Develop, Foundations, Styles, Components, and Blog. The main content area features a large, colorful background image of a smartphone screen displaying a vibrant, multi-layered abstract design. Overlaid on this is the title "Material Design" in a large, bold, black sans-serif font. Below the title is a subtitle: "Material 3 is the latest version of Google's open-source design system. Design and build beautiful, usable products with Material 3." A prominent blue button with white text says "Get started". At the bottom of the page, there's a section titled "News & launches" with two images: one showing a colorful abstract pattern and another showing a close-up of a "Relay" logo with a white frame and the word "ALPHA" above it. In the bottom right corner, there's a small icon consisting of a grid of nine squares.

The screenshot shows the BBC GEL website interface. At the top, there's a navigation bar with the BBC logo, a sign-in link, and categories like Home, News, Sport, Reel, Worklife, Travel, Future, and a search icon. Below this is the GEL logo with the subtitle "Global Experience Language". A secondary navigation bar includes links for Home, Guidelines (which is currently selected), Articles, Playbooks, About UX&D, and BBC Staff. A dark banner below this contains links for Foundations, Design Patterns, and How-tos. The main content area features a large heading "Foundations" and a subtext "These areas of design are the foundations on which the BBC online is built." To the left of the main content is a light gray sidebar containing several BBC icons: a person, a download arrow, a heart, a speaker, and a smiley face. To the right of the main content is a section titled "GEL Icons: Reith Suite" with a description: "This guideline displays the Reith suite of BBC icons and contains guidance on their recommended use." Below this is a "Updates" section with a timestamp of "4 Aug 2021". At the bottom, there's a "Grid" section with a visual representation of a grid layout.

Foundations

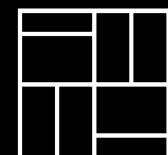
These areas of design are the foundations on which the BBC online is built.

GEL Icons: Reith Suite

This guideline displays the Reith suite of BBC icons and contains guidance on their recommended use.

□ [Updates](#) ○ 4 Aug 2021

Grid



Done exploring? Return to the classic Carbon web experience.

Go to classic website →

Carbon Design System

- About Carbon
- Designing
- Developing
- Contributing
- Migrating
- Elements
- Guidelines

- Catalogs

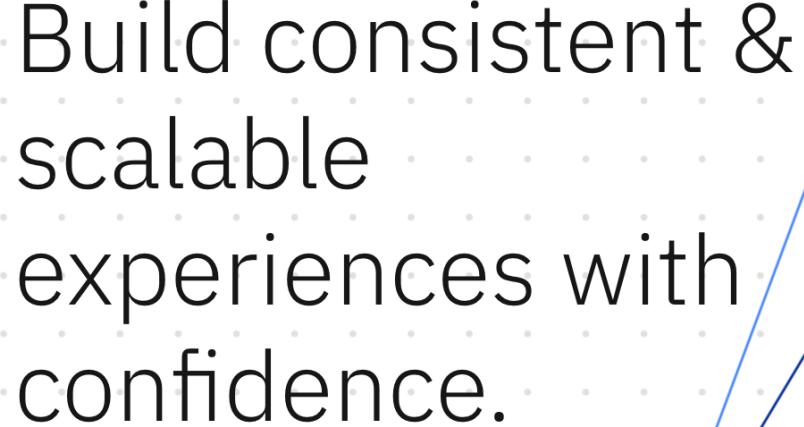
- Assets

- Design kits

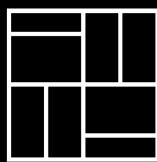
- Libraries

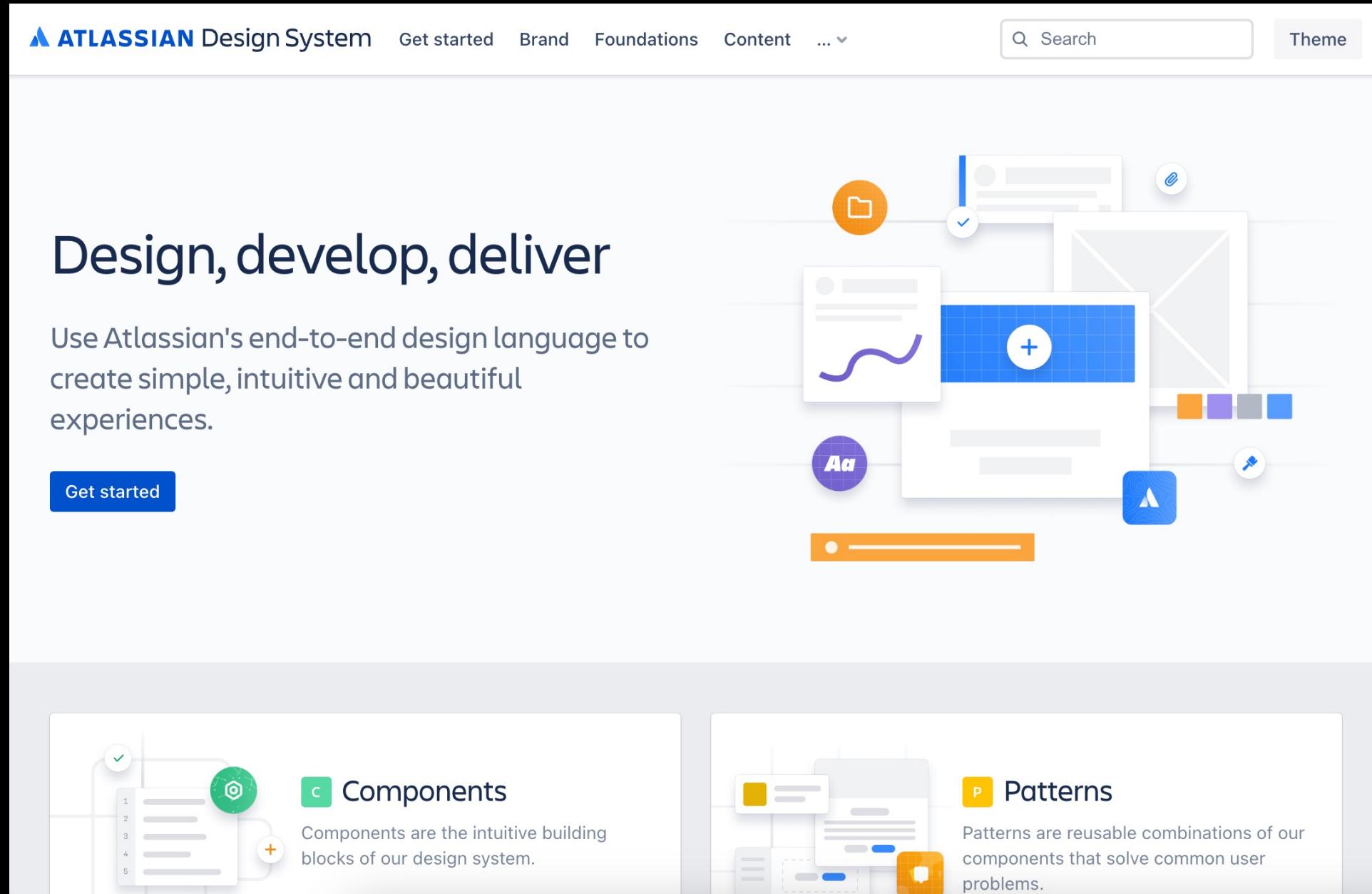
- Collections

- Data visualization



Build consistent & scalable experiences with confidence.





The image shows the homepage of the Atlassian Design System. The header features the Atlassian logo and navigation links for 'Get started', 'Brand', 'Foundations', 'Content', and a search bar. The main section has a large heading 'Design, develop, deliver' and a subtext: 'Use Atlassian's end-to-end design language to create simple, intuitive and beautiful experiences.' A 'Get started' button is present. To the right is a graphic of various design elements like a folder, a person icon, a chart, a plus sign, a color palette, and text. Below this are two cards: 'Components' (with a list icon) and 'Patterns' (with a grid icon). A small icon of a grid is in the bottom right corner.

ATLASSIAN Design System

Get started Brand Foundations Content ...

Search

Theme

Design, develop, deliver

Use Atlassian's end-to-end design language to create simple, intuitive and beautiful experiences.

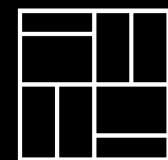
Get started

c Components

Components are the intuitive building blocks of our design system.

P Patterns

Patterns are reusable combinations of our components that solve common user problems.



Bibliografia

1/2

- <https://www.nngroup.com/articles/ten-usability-heuristics/>
- <https://bradfrost.com/blog/post/atomic-web-design/>
- <https://atomicdesign.bradfrost.com/chapter-2/>
- <https://www.nngroup.com/articles/design-systems-101/>
- <https://m3.material.io/>
- <https://www.bbc.co.uk/gel/guidelines/category/foundations>
- <https://next.carbondesignsystem.com/>
- <https://atlassian.design/>
- <https://m3.material.io/styles/color/overview>
- <https://m3.material.io-foundations/design-tokens/overview>

Bibliografia

2/2

- <https://m3.material.io/styles/typography/overview>
- https://fonts.google.com/knowledge/using_type/choosing_a_suitable_line_height
- <https://uxplanet.org/10-tips-on-typography-in-web-design-13a378f4aa0d>

Links úteis

- <https://getbootstrap.com/docs/4.0/layout/grid/>
- <https://spectrum.adobe.com/page/responsive-grid/>
- <https://material.io/design/layout/understanding-layout.html#composition>
- <https://www.carbondesignsystem.com/guidelines/2x-grid/overview/>
- <https://webaim.org/resources/contrastchecker/>
- <https://fonts.googleapis.com/>
- <https://fonts.adobe.com/>