

# Visual Design and Fluid Navigation

Introduzione all'usabilità nelle interfacce web

Fulvio Corno, Luigi De Russis

2021



POLITECNICO  
DI TORINO



# Visual Design

Aesthetics for helping users in understanding and navigating the UI

# Visual Design

- **Guiding:** conveying structure, relative importance, relationships
- **Pacing:** drawing people into your app, orienting them, and showing where to go, providing hooks to dive deeper
- **Messaging:** expressing meaning and style, breathing life into your content
- Both at the conscious and sub-conscious levels
  
- And also...
  - Making everything look aesthetically beautiful
  - (but this is not the goal)

# Visual Design vs. Art and Artistic Skills

- A.k.a. «Help, I'm not an artist!»
- Artistic skills help a bit but are neither necessary nor sufficient
- Art does not need to be practical; design does
- Real design skills take years to master
- Widely-accepted heuristics are a good and easy start



# The Basics of Visual Design

Basic visual design involves text, layout, and colors. First let's start with text. Gracefully using whitespace helps separate out logical chunks of content. Next, font size and style differences convey hierarchy. Finally, alignment is crucial for helping readers scan quickly.

# The Basics of Visual Design

Basic visual design involves text, layout, and colors. First let's start with text.

Gracefully using whitespace helps separate out logical chunks of content.

Next, font size and style differences convey hierarchy.

Finally, alignment is crucial for helping readers scan quickly.

# The Basics of Visual Design

Basic visual design involves ...

## **Text**

Gracefully using whitespace helps separate out logical chunks of content.

Next, font size and style differences convey hierarchy.

Finally, alignment is crucial for helping readers scan quickly.

## **Layout**

## **Colors**

# The Basics of Visual Design

BASIC VISUAL DESIGN

## Text

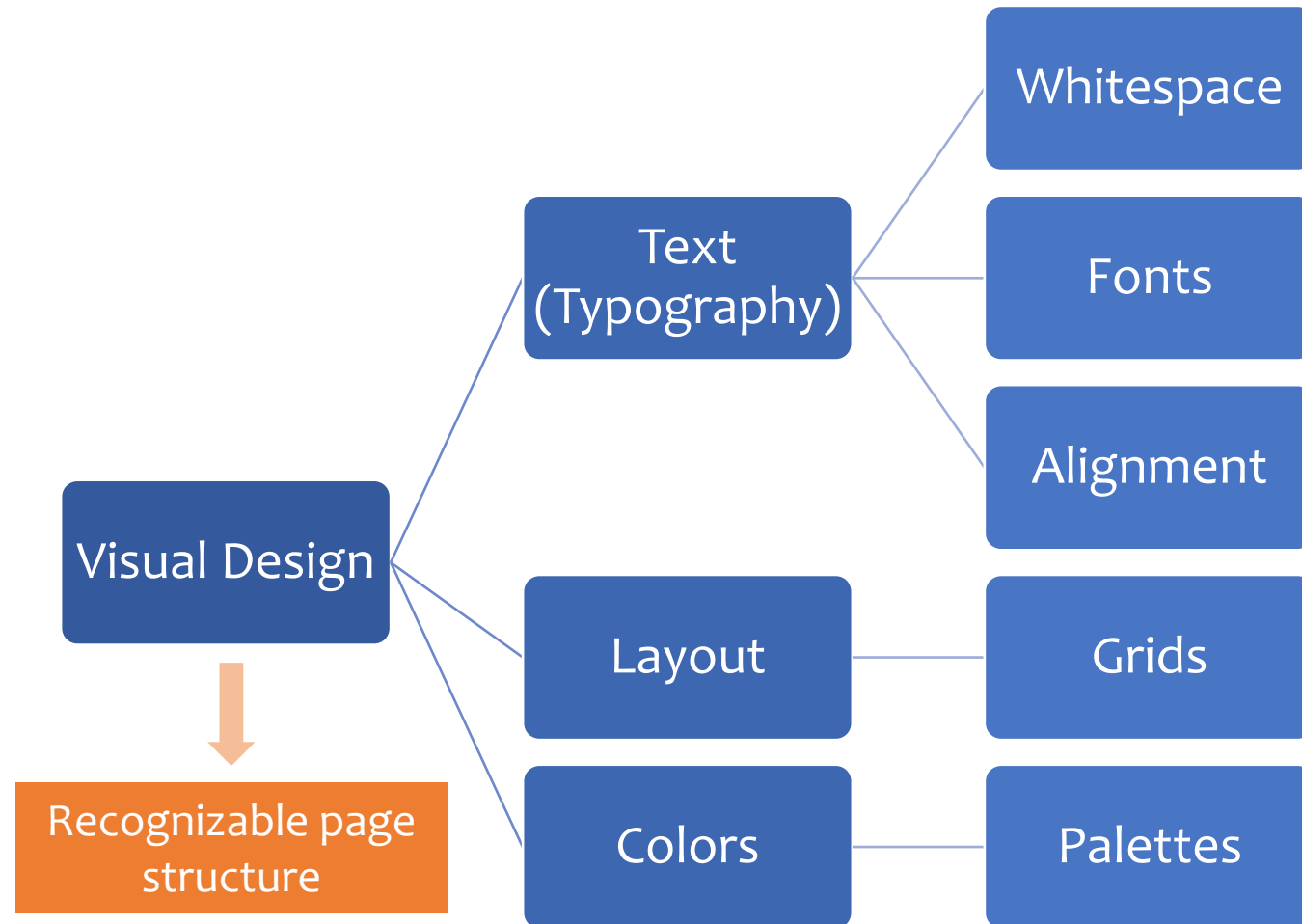
- **Whitespace**: helps separate out logical chunks of content
- **Font**: size and style differences convey hierarchy
- **Alignment**: crucial for helping readers scan quickly

## Layout

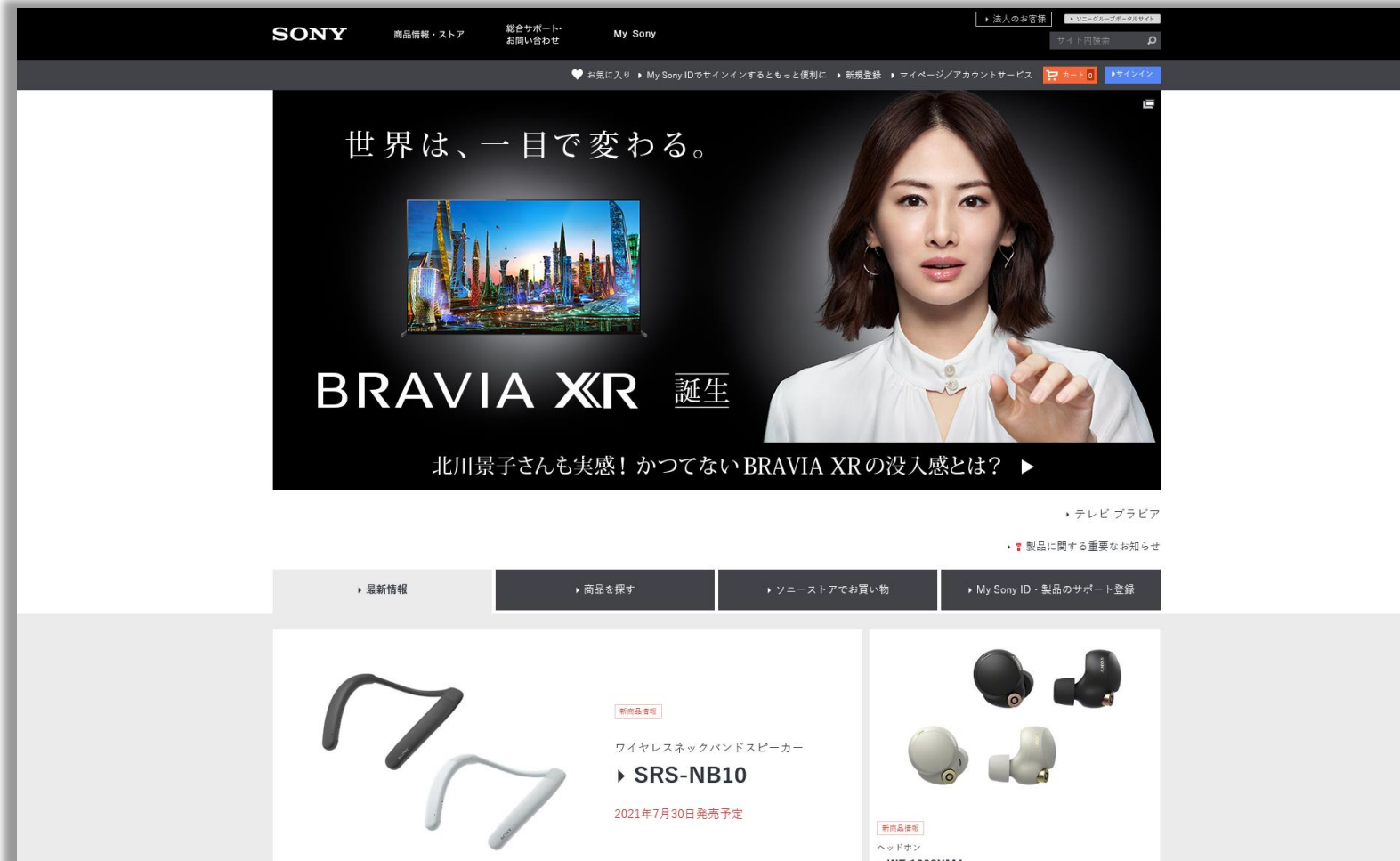
## Colors



# Key ingredients



# Recognizable page structure



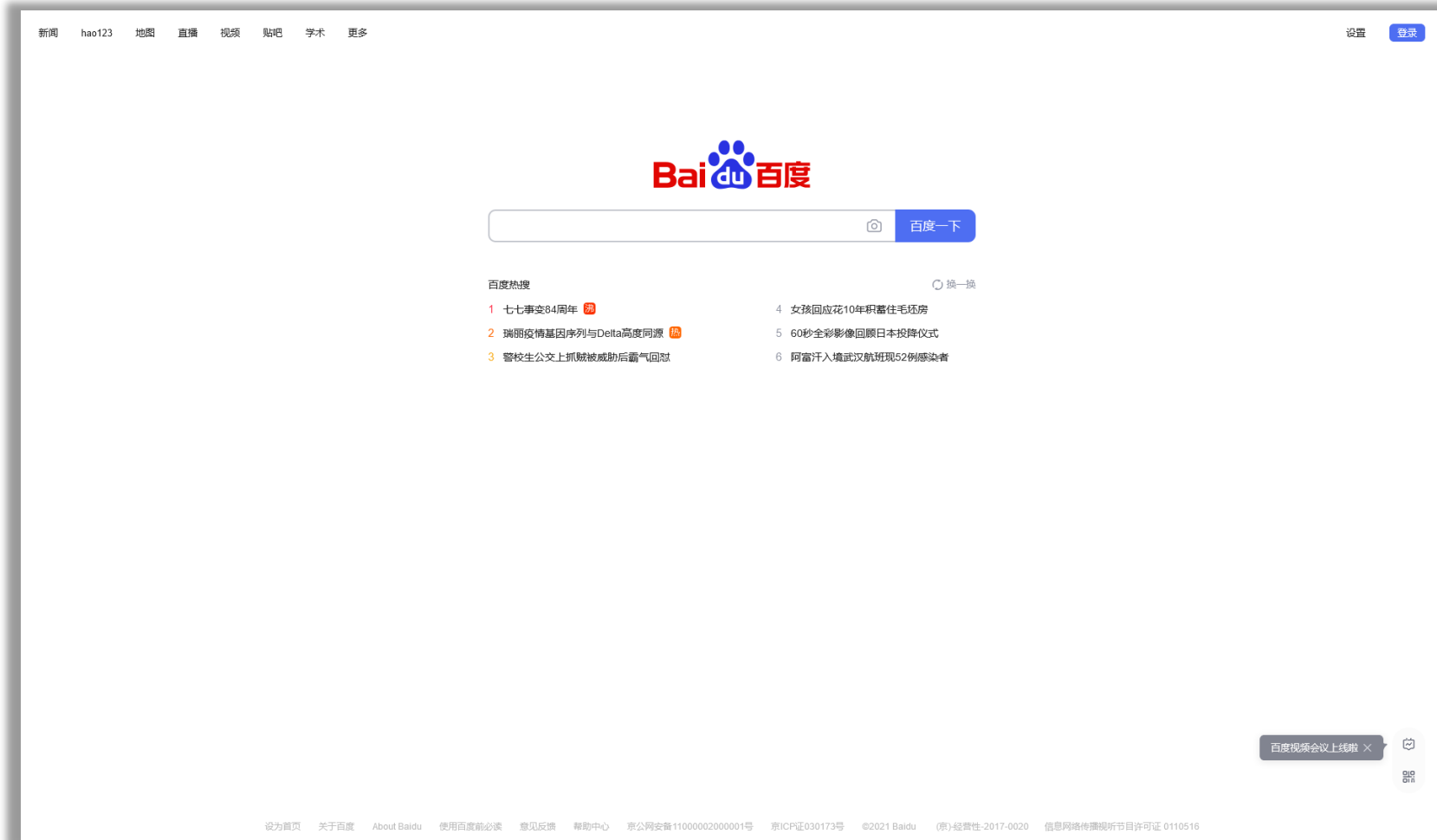
# Recognizable page structure

The screenshot displays a news website with a clear structure. At the top, there is a navigation bar with a search icon and a menu containing categories like 'سياسة' (Politics), 'اقتصاد' (Economy), 'ثقافة' (Culture), 'رياضة' (Sports), 'فن' (Art), 'تكنولوجيا' (Technology), 'تراث' (Heritage), 'ميدان' (Square), 'ريادة' (Entrepreneurship), 'البرامج' (Programs), and 'المزيد' (More). The main article is titled 'سد النهضة.. مشروع قرار عربي بمجلس الأمن وتحذير أميركي وأمني من تصعيد التوتر' (The Renaissance Dam.. Arab Council Decision on the Security Council and US and Security Warnings of Escalating Tension). The article text discusses the dam project and the international response. To the right of the article is a large image showing the dam under construction. Below the article, there are three short news snippets: 'أزمة سد النهضة تراوح مكانها.. مصر تلقي بورقة الهجرة غير الشرعية' (Renaissance Dam Crisis Reaches a Standstill.. Egypt Receives Illegal Migration Cards), 'إثيوبيا تبدأ المرحلة الثانية من ملء سد النهضة ومصر تحذر وترفض سياسة الأمر الواقع' (Ethiopia Starts the Second Phase of Filling the Renaissance Dam and Egypt Warns and Rejects the Policy of De Facto), and 'الإعلام المصري: بدء الملء الثاني لسد النهضة عدوان وإعلان حرب' (Egyptian Media: Start of the Second Filling of the Renaissance Dam, Aggression and Declaration of War). The sidebar on the left features a live broadcast section titled 'الجزيرة' (Al Jazeera) with a 'مباشر' (Live) indicator and a video player showing a man speaking. Below the live broadcast is a section titled 'الأكثر قراءة' (Most Read) with a link to 'السر الأكبر.. لم نشأت الحياة على الأرض دون غيرها من' (The Biggest Secret.. Life Did Not Originate on Earth Without Others). To the right of the sidebar, there is another article titled 'في اتصال مع أبي أحمد.. بلينكن يؤكد ضرورة الالتزام بوقف إطلاق النار ووصول آمن للمساعدات في تيغراي' (In Contact with Abi Ahmad.. Blinken Confirms the Need for Commitment to Ceasefire and Safe Access to Aid in Tigray). This article includes a photo of a truck and text stating that the US Secretary of State, Blinken, has spoken with Ethiopian Prime Minister Abi Ahmad and emphasized the need for a ceasefire and safe access to aid in Tigray.

# Recognizable page structure



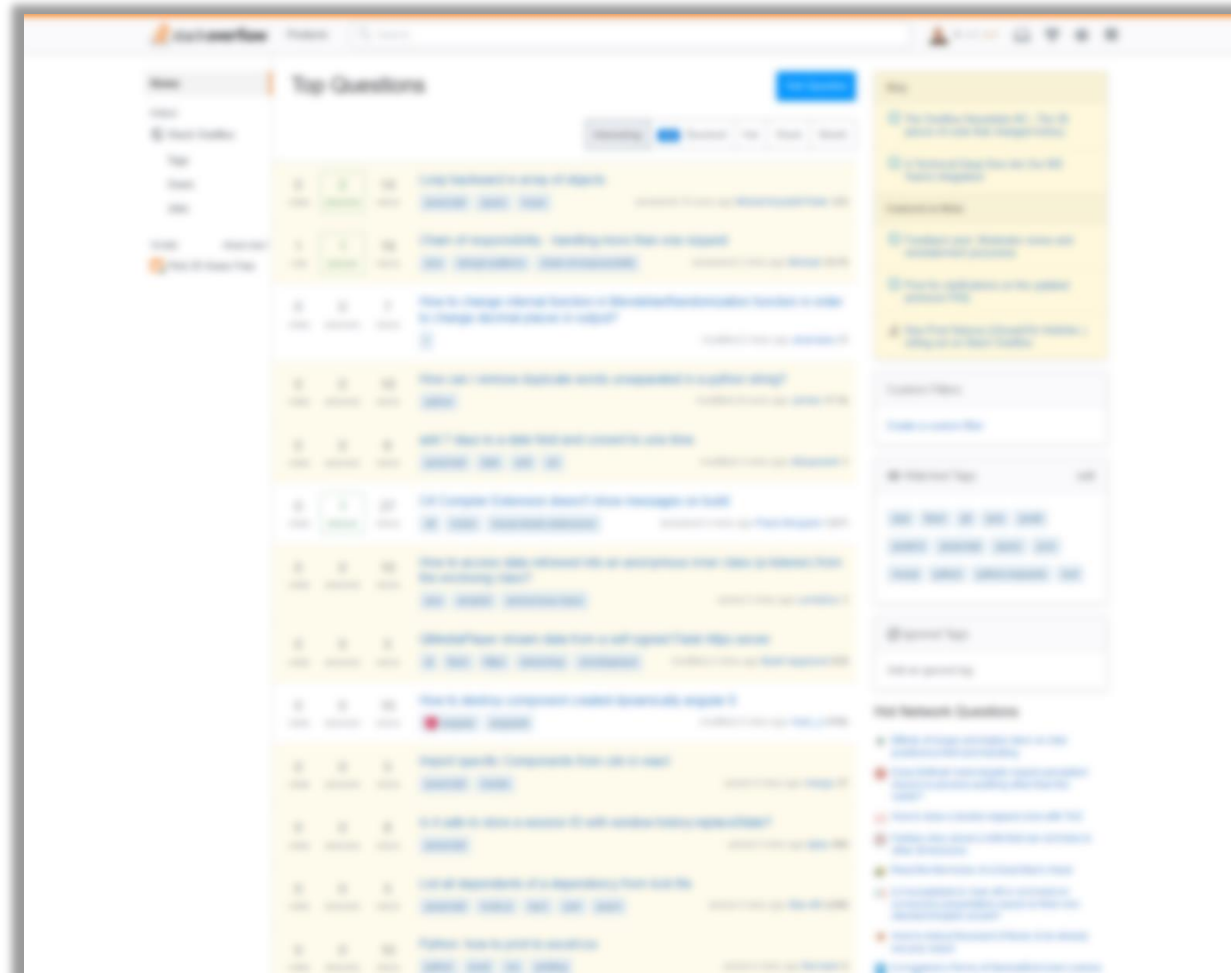
# Recognizable page structure



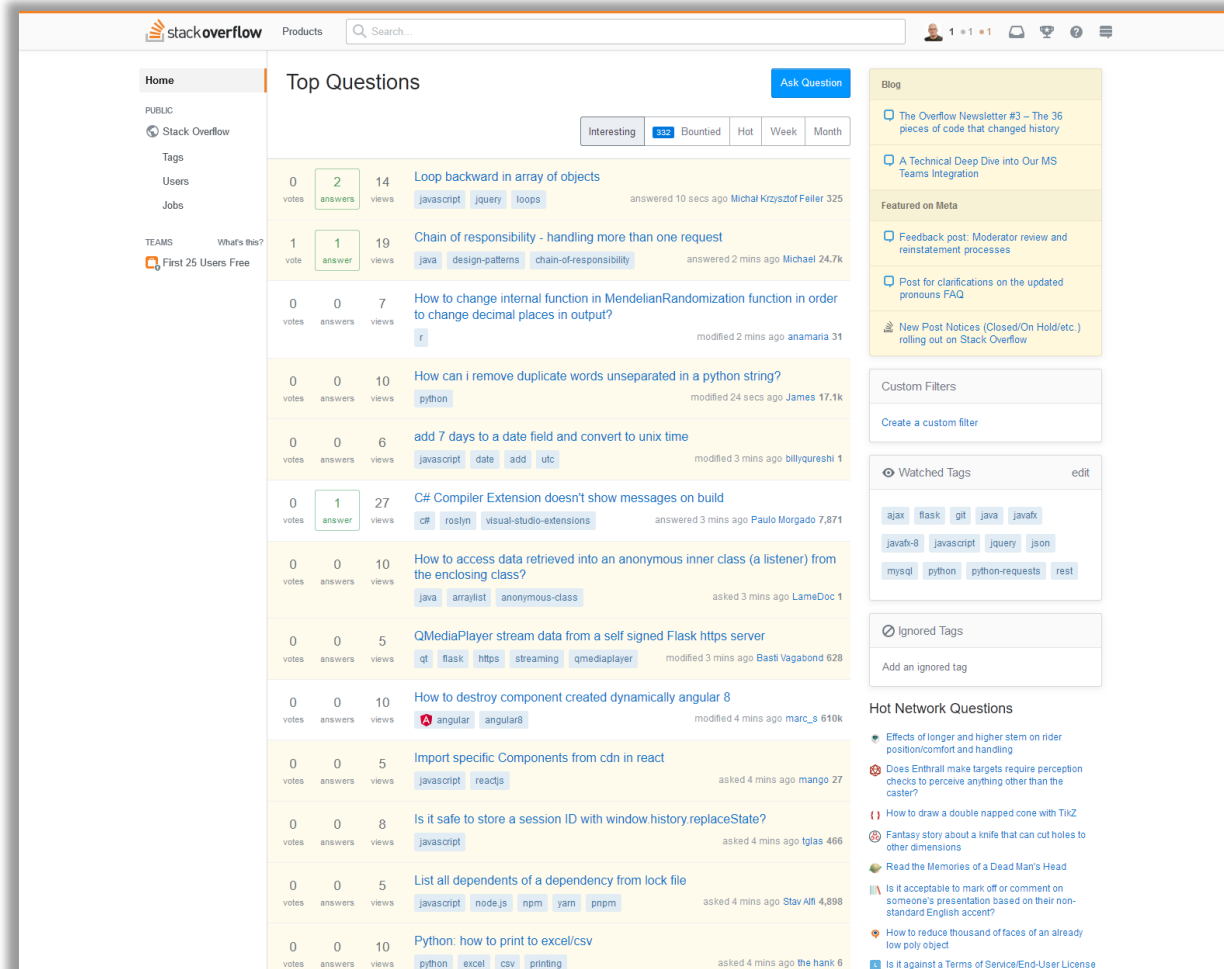
# Recognizable page structure



# Recognizable page structure



# Recognizable page structure

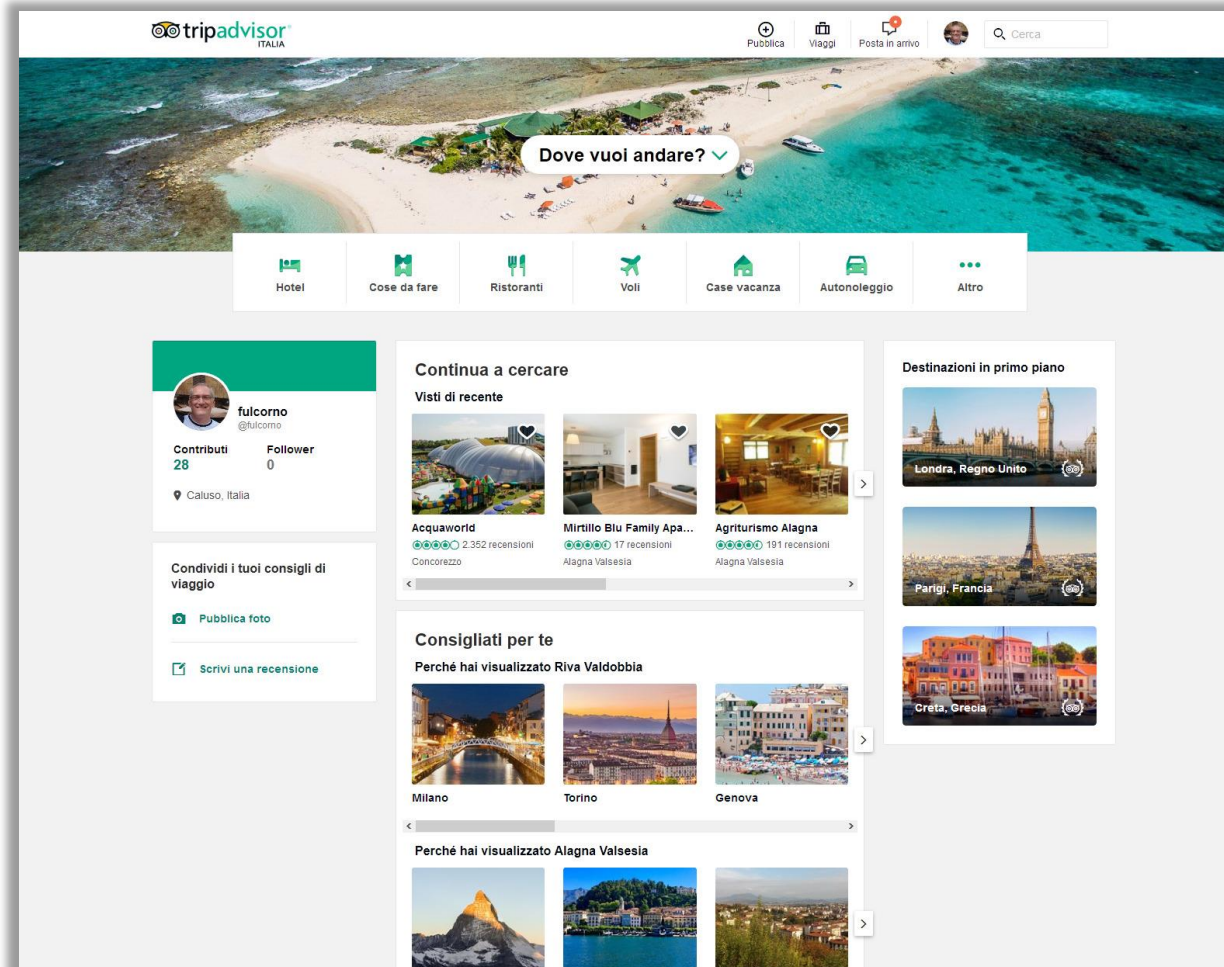




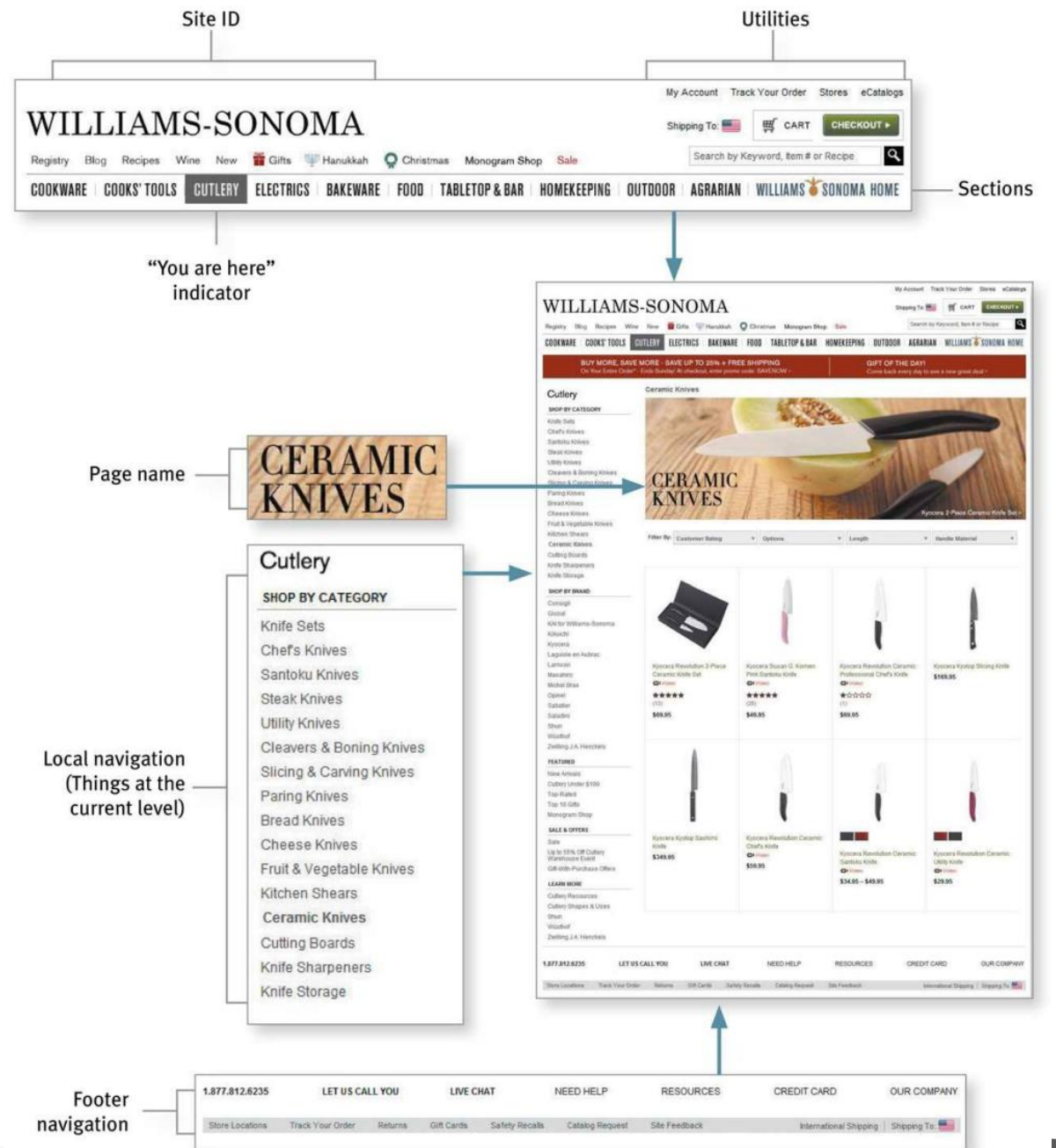
# Recognizable page structure



# Recognizable page structure



# Uses Conventions = Recognizable Structure



# 'Gestalt' principles

Hints from the psychology of Shapes and of Representation

# Gestalt principles

- Laws from 1920s' psychology: how humans typically see objects by grouping similar elements, recognizing patterns and simplifying complex images
- Designers use these to engage users via powerful -yet natural- “tricks” of perspective and best practice design standards
- *“The whole is other than the sum of the parts” - Kurt Koffka*



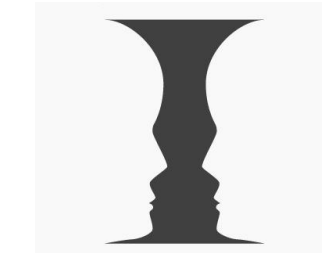
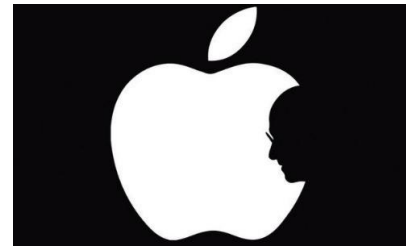
<https://www.interaction-design.org/literature/topics/gestalt-principles>

<https://www.usertesting.com/blog/gestalt-principles/>

# Some Gestalt principles

- **Figure/Ground:** Disliking uncertainty, we look for solid, stable items. Foreground catches the eye first
- **Closure:** Preferring complete shapes, we automatically fill in gaps to perceive a complete image; we see the whole first
- **Common Region:** We group elements that are in the same closed region
- **Element Connectedness:** We group elements linked by other elements
- **Continuation:** We follow and “flow with” lines
- **Proximity (Emergence):** We group closer-together elements, separating them from those farther apart.
- **Good Form:** We differentiate elements that are similar in color, form, pattern, etc. and cluster them together
- **Meaningfulness (Familiarity):** We group elements if they form a meaningful or personally relevant image.
- **Prägnanz:** We perceive complex images as simple ones.
- **Convexity:** We perceive convex shapes ahead of concave ones
- **Regularity:** Sorting items, we tend to group some into larger shapes, and connect elements that form a pattern.
- **Similarity (Invariance):** We seek differences and similarities in an image and link similar elements.
- **Symmetry:** We seek balance and order in designs, struggling to do so if they aren’t readily apparent.
- **Common Fate:** We group elements that move in the same direction
- **Synchrony:** We group static visual elements that appear at the same time.

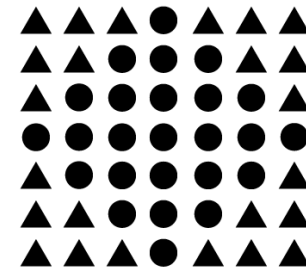
# Examples: figure-ground



A screenshot of the Basecamp 3 website. The main content area features a large white box with a cartoon illustration of a green mountain with a face. Below the illustration is the text "Working with other people? Struggling to keep everyone on the same page?". To the right of this box is a sign-up form. A black arrow points from the sign-up form to the white box, illustrating a figure-ground effect where the white box is the foreground and the sign-up form is the background.

A screenshot of the AngelList website. The main content area features a dark background with a white silhouette of a person's head in profile, facing right. The text "AngelList" is written in white, and "Where the world meets startups" is written in a smaller white font below it. To the right of this content is a navigation menu with several options: "Find a Startup Job", "Post a Job", "Raise Money Online", and "Invest in Startups".

# Examples: similarity



GitHub

Search GitHub

Explore Features Enterprise Pricing

Sign up Sign in

## Where software is built

Powerful collaboration, code review, and code management for open source and private projects. Public projects are always free. Private plans start at \$7/mo.

Pick a username

Your email

Create a password

Use at least one lowercase letter, one number, and three characters.

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our terms of service and privacy policy. We will send you account related emails occasionally.

Want to use GitHub on your servers?

GNN NEWSLETTER

ABBONATI ACCEDI

# LA STAMPA

MENU

LEGGI IL QUOTIDIANO TOP NEWS TUTTOLIBRI

Aggiornato alle 22:45 - 04 novembre

La caduta del Muro Serie A Siria Manovra

TORINO EDIZIONI LOCALI

I demoni di Hamilton: "Non è facile come sembra, per me è durissima" STEFANO MANCINI

Lavorare meno per rendere di più: la ricetta funziona davvero EMANUELA GRIGLIE

Reportage Trombe d'aria, pioggia e fiumi esondati: in Liguria torna l'incubo alluvione MARCO MENDOLINI

ArcelorMittal abbandona Taranto e l'ex Ilva. Scoppia la polemica. L'azienda: c'era il diritto di recesso PAOLO BARONI

LA STORIA DI GIOVANNI BELZONI IN UN LIBRO Da Abu Simbel a Giza, l'italiano che inventò l'egittologia MARCO ZATTERIN

Intervista - Calenda: sull'Ilva di Taranto distrutto il lavoro di anni PAOLO BARONI

ArcelorMittal si tira indietro sull'Ex Ilva, ecco quanto pesa la decisione su Taranto

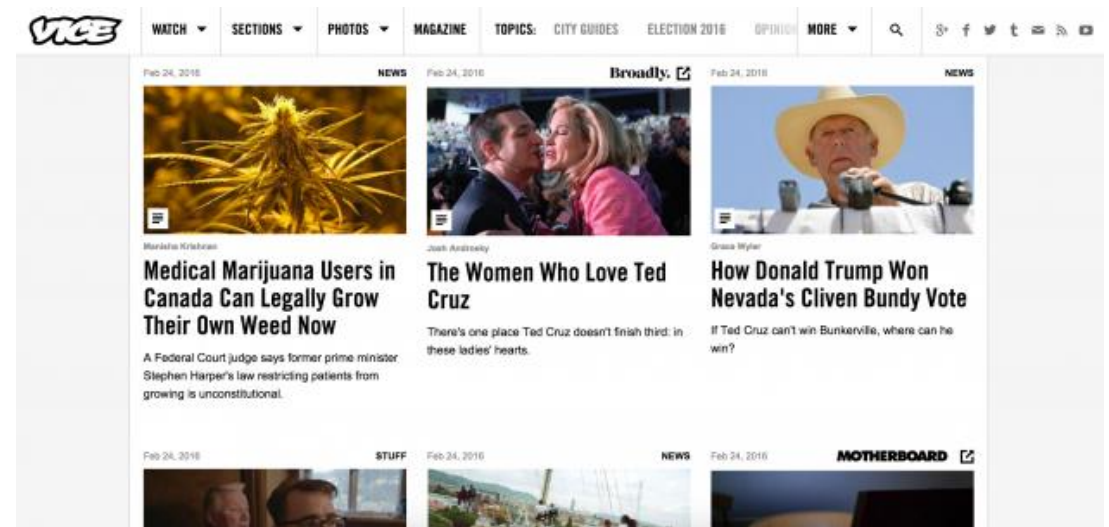
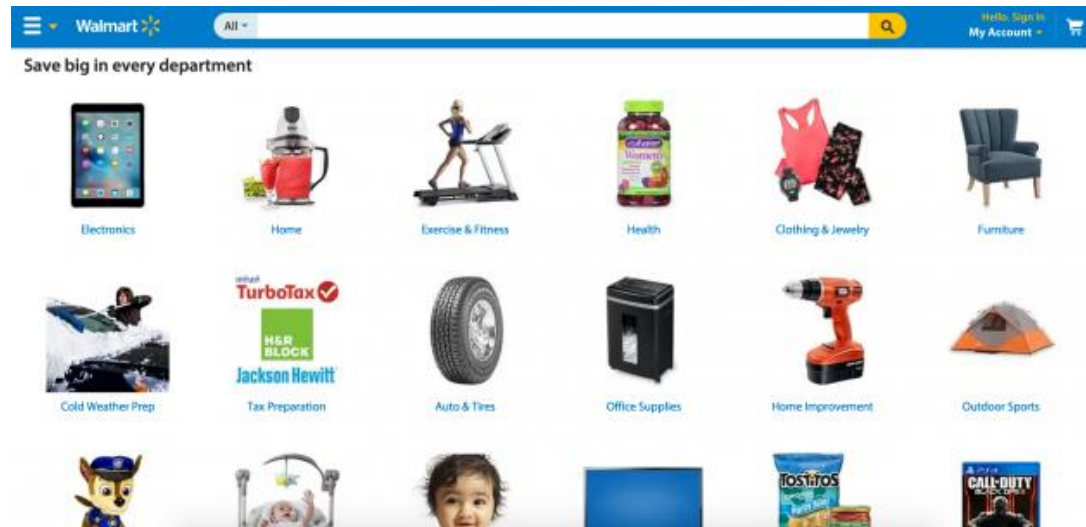
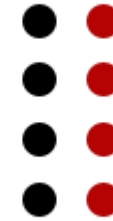
La storia dell'acciaieria più grande d'Europa. Ecco l'Ilva dal 2012 a oggi GIULIA CIANCAGLIURI

IL SURRISCALDAMENTO CLIMATICO È ARRIVATO NEL PROFONDO DELLE ALPI NICOLA PINNA

SECONDO NOI Sud svuotato e senza lavoro: lo Svinmez lancia l'allarme recessione MARCO SODANO

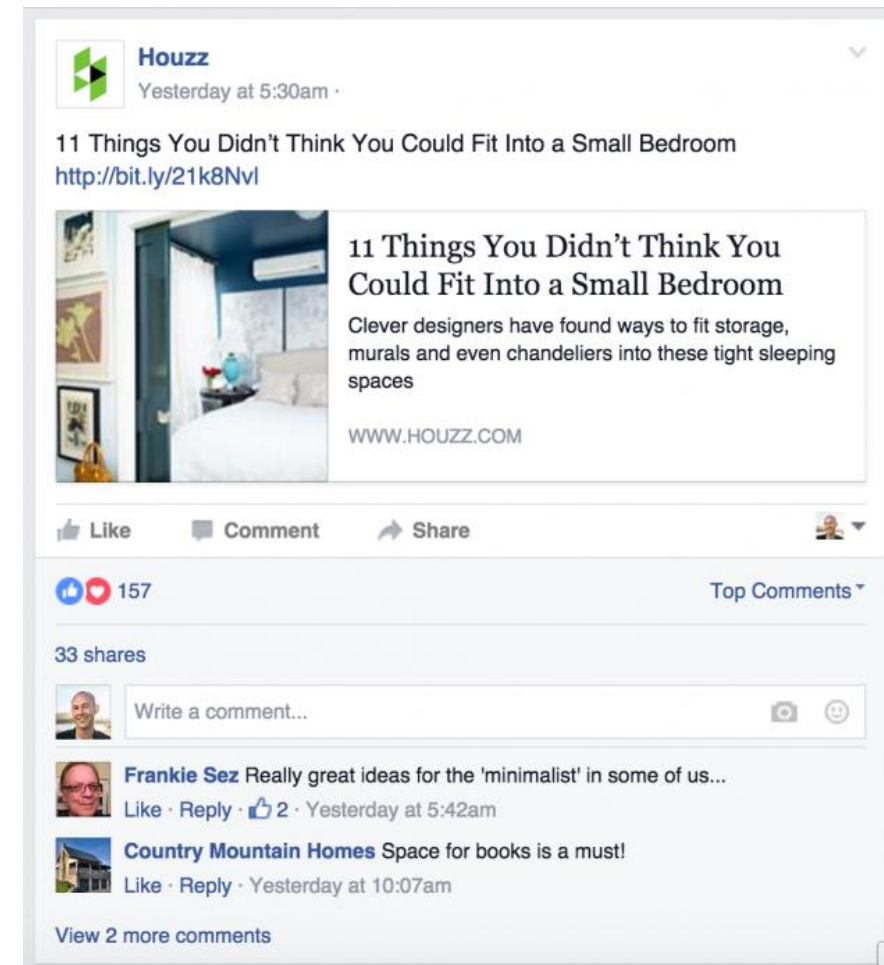
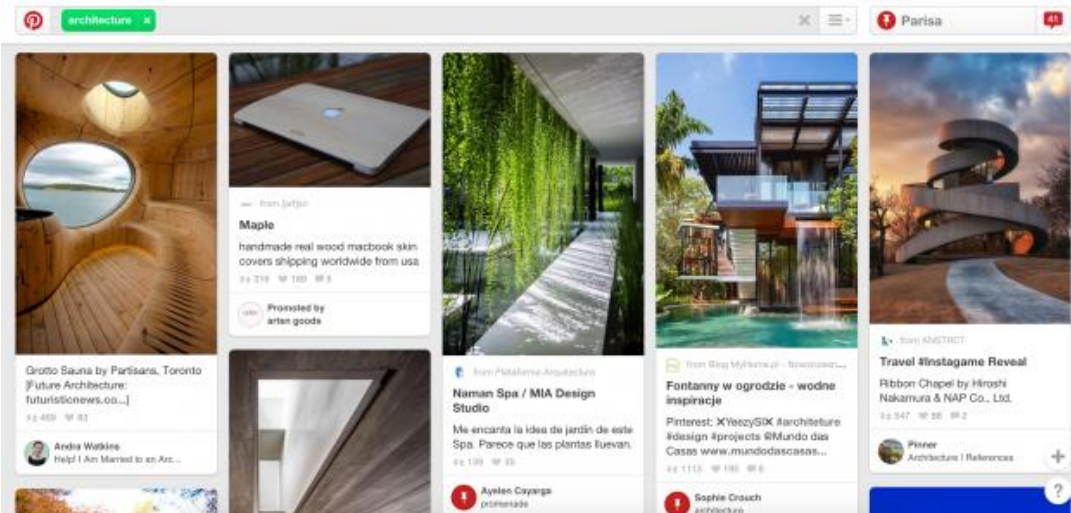
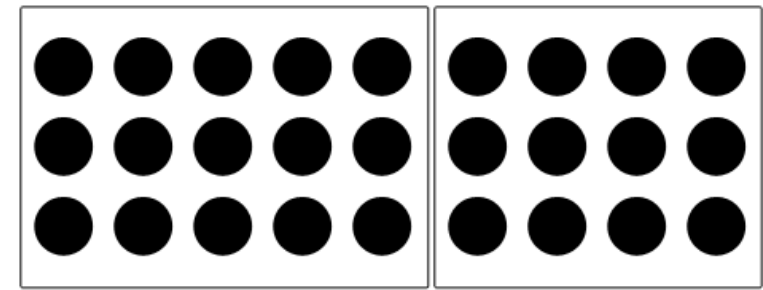


# Examples: proximity

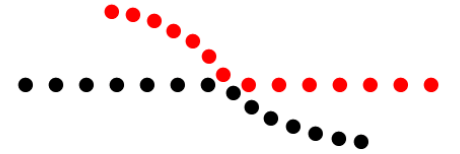


<https://www.usertesting.com/blog/gestalt-principles/>

# Examples: common region



# Examples: continuity



## Customers Who Bought This Item Also Bought

Page 1 of 20

Five book recommendations are displayed in a row, each with a cover image, title, author, and price. From left to right: 1. 'Crossing the Chasm, 3rd Edition: Marketing and Selling Disruptive Products' by Geoffrey A. Moore, Paperback, \$12.35. 2. 'The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to...' by Eric Ries, Hardcover, \$16.66. 3. 'The Innovator's Dilemma: The Revolutionary Book That Will Change the Way That Will Change the Way' by Clayton M. Christensen, Paperback, \$10.06. 4. 'The Innovator's Solution: Creating and Sustaining Successful Growth' by Clayton M. Christensen, Hardcover, \$18.33. 5. 'How Will You Measure Your Life?' by Clayton M. Christensen, Hardcover, \$15.06. Navigation arrows are visible on the left and right sides of the list.



### Step 1

Choose your meals, drinks and treats from our daily rotating menu.



### Step 2

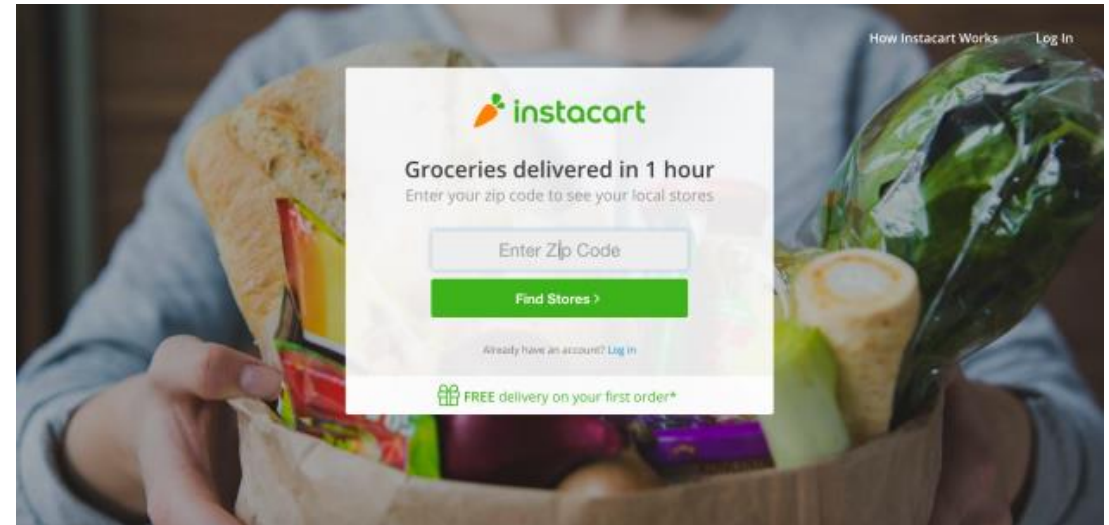
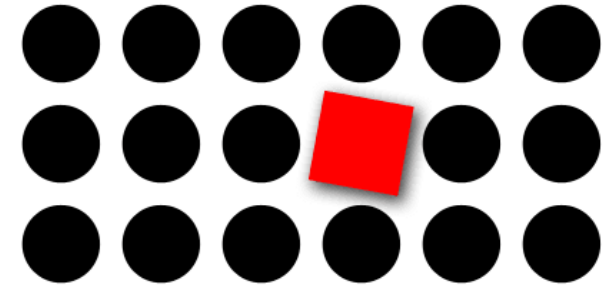
Our friendly servers organize your food for delivery - hot and ready to eat!



### Step 3

Your meal arrives in around 20 minutes - like a home-cooked meal without the effort!

# Examples: focal point

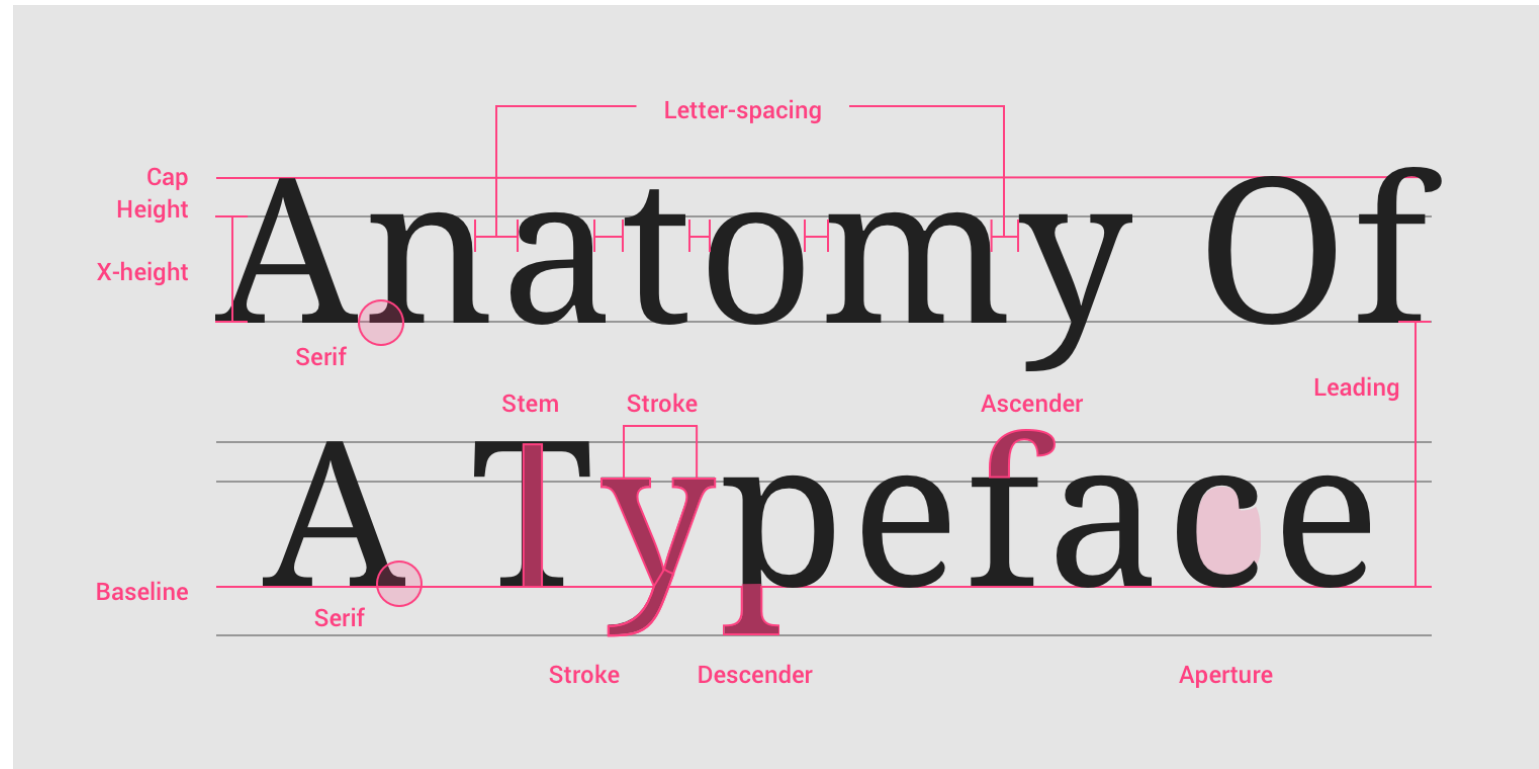


# Typography

Property of text

# Characteristics of text

- Point Size
- Leading
- Cap Height, x-height
- Ascenders, Descenders
- Weight
- Serifs



<https://material.io/design/typography/understanding-typography.html>

# Example: Material Design type scale

A combination of 13 styles that are supported by the type system

Reusable categories of text, each with an intended application and meaning

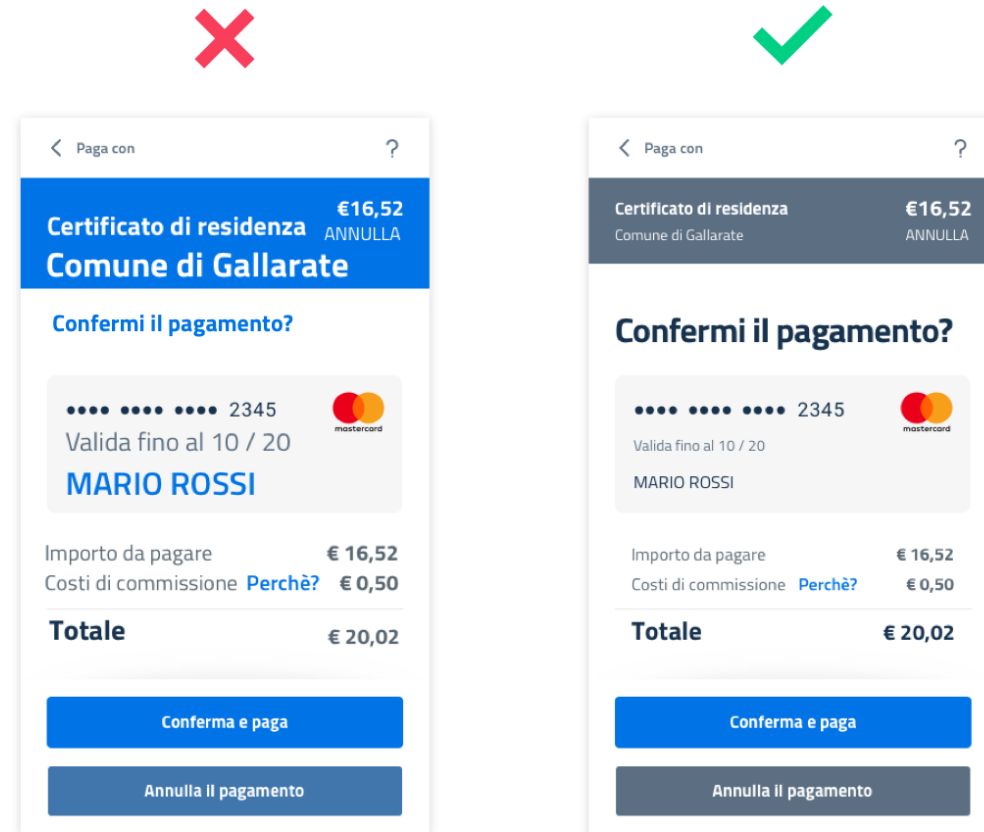
Scale Category	Typeface	Font	Size	Case	Letter spacing
H1	Roboto	Light	96	Sentence	-1.5
H2	Roboto	Light	60	Sentence	-0.5
H3	Roboto	Regular	48	Sentence	0
H4	Roboto	Regular	34	Sentence	0.25
H5	Roboto	Regular	24	Sentence	0
H6	Roboto	Medium	20	Sentence	0.15
Subtitle 1	Roboto	Regular	16	Sentence	0.15
Subtitle 2	Roboto	Medium	14	Sentence	0.1
Body 1	Roboto	Regular	16	Sentence	0.5
Body 2	Roboto	Regular	14	Sentence	0.25
BUTTON	Roboto	Medium	14	All caps	1.25
Caption	Roboto	Regular	12	Sentence	0.4
OVERLINE	Roboto	Regular	10	All caps	1.5

<https://material.io/design/typography/the-type-system.html#type-scale>

# Example: Text conveys hierarchy

Font size, color and spacing define a hierarchy of visibility and attention

The visual hierarchy should match the relative importance of the information content



<https://docs.italia.it/italia/designers-italia/design-linee-guida-docs/it/stabile/doc/user-interface/il-disegno-di-un-interfaccia-e-lo-ui-kit.html>



# Example: Text and Layout convey meaning

The image compares two real estate listing UI designs. The left design is marked with a red 'X' and the right with a green checkmark. The right design is annotated with callouts explaining its improvements.

**Left Design (Red X):** A table-like layout with labels on the left and values on the right.

Building Type:	Detached House
Year Of Construction:	2012
Listing Price:	\$750,000
Address:	742 Evergreen Terrace
Bedrooms:	3
Bathrooms:	2
Real Estate Agent:	Tiffany Heffner
Contact:	(555) 555-4321

**Right Design (Green Checkmark):** A more integrated layout with key information emphasized.

Annotations for the right design:

- Present data in a more useful way (pointing to "DETACHED HOUSE - 5Y OLD")
- Emphasize the most important content (pointing to "\$750,000")
- Combine labels and values into human-readable phrases (pointing to "3 Bedrooms" and "2 Bathrooms")

www.refactoringui.com

Refactoring UI

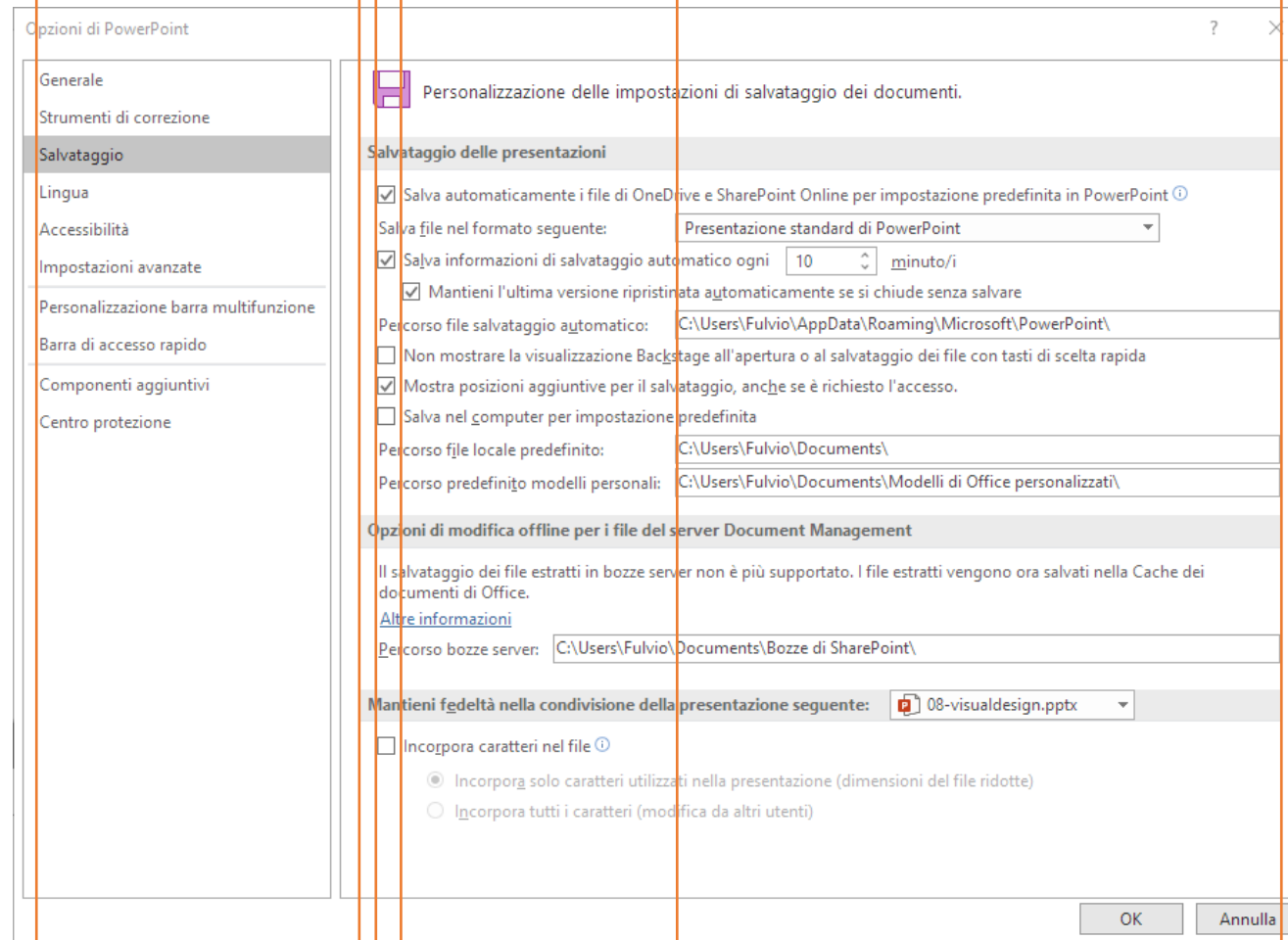
# Grids and Alignment

Exploiting grouping and alignment to convey content, at different levels

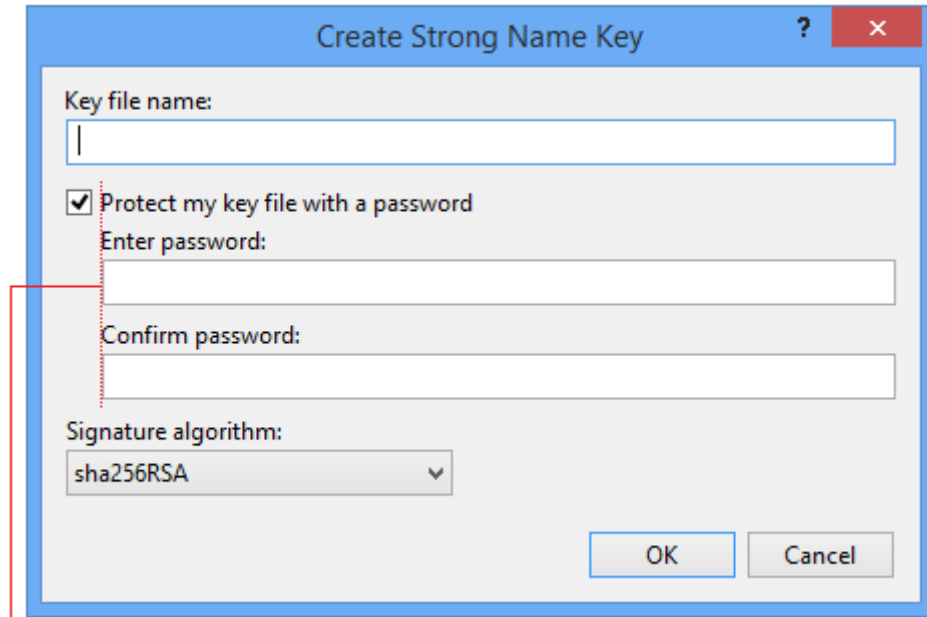
# Alignment

- Invisible lines that run through the interface and “attract” the left- or right-edge of a widget control
  - Vertical
  - Horizontal

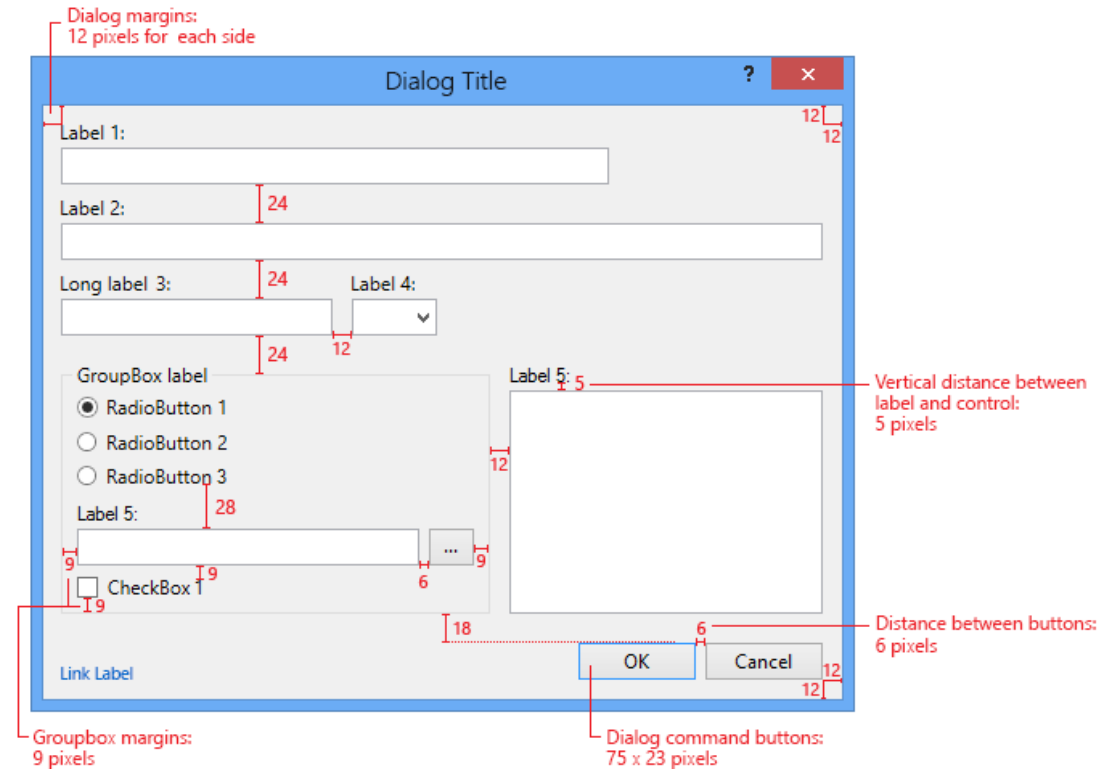
# Example



# Examples

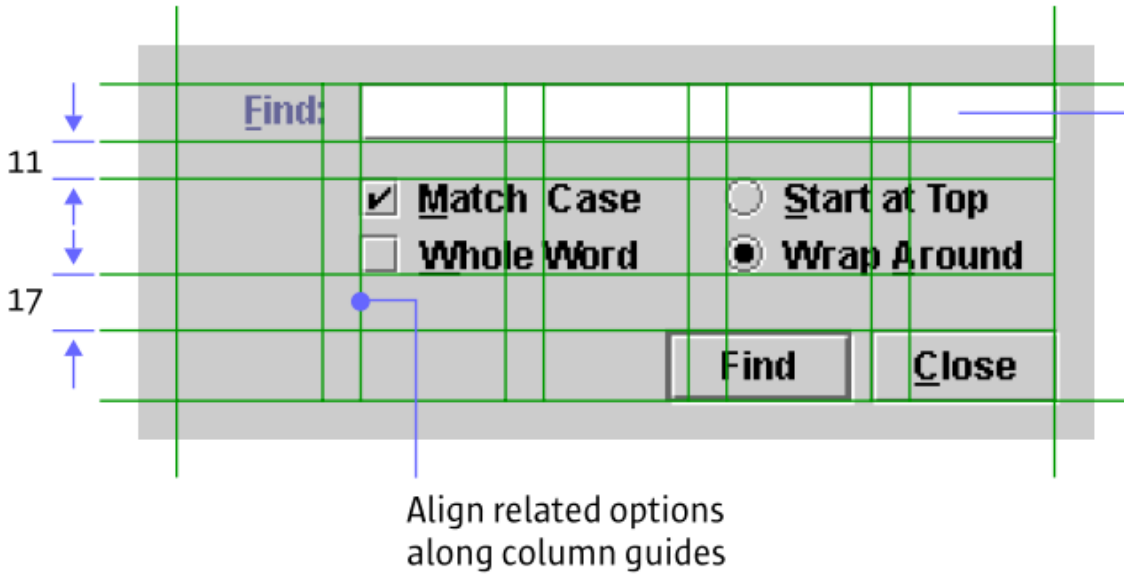


Align labels of nested controls

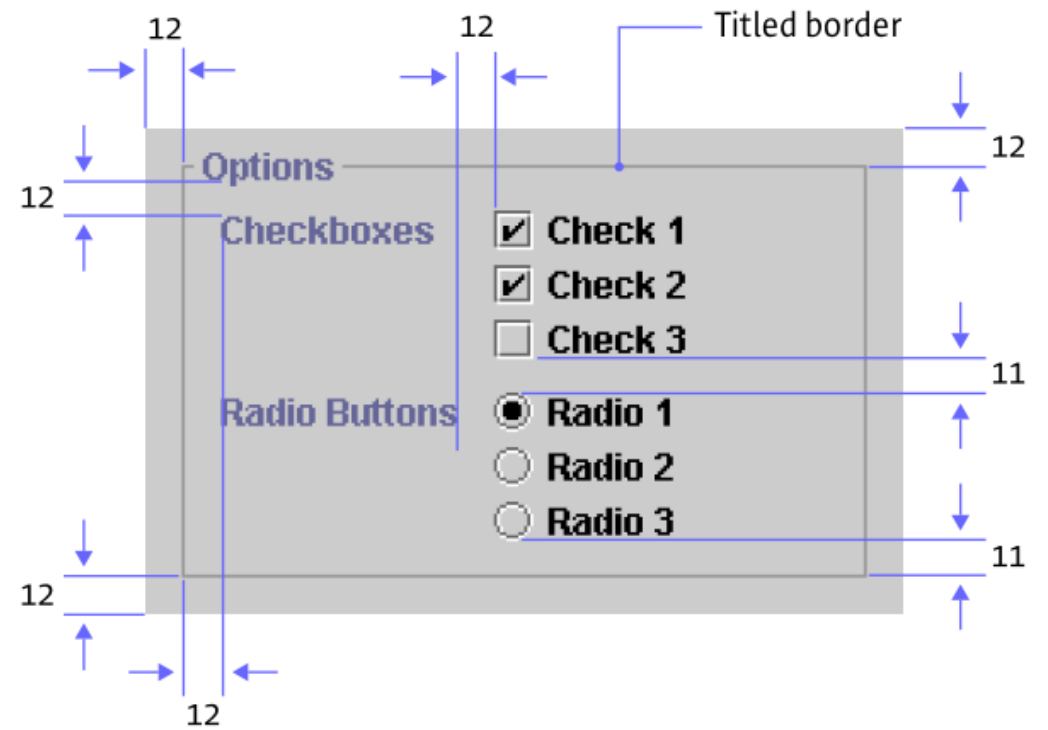


<https://docs.microsoft.com/en-us/visualstudio/extensibility/ux-guidelines/layout-for-visual-studio?view=vs-2019>

# Examples



Place most important option near the top

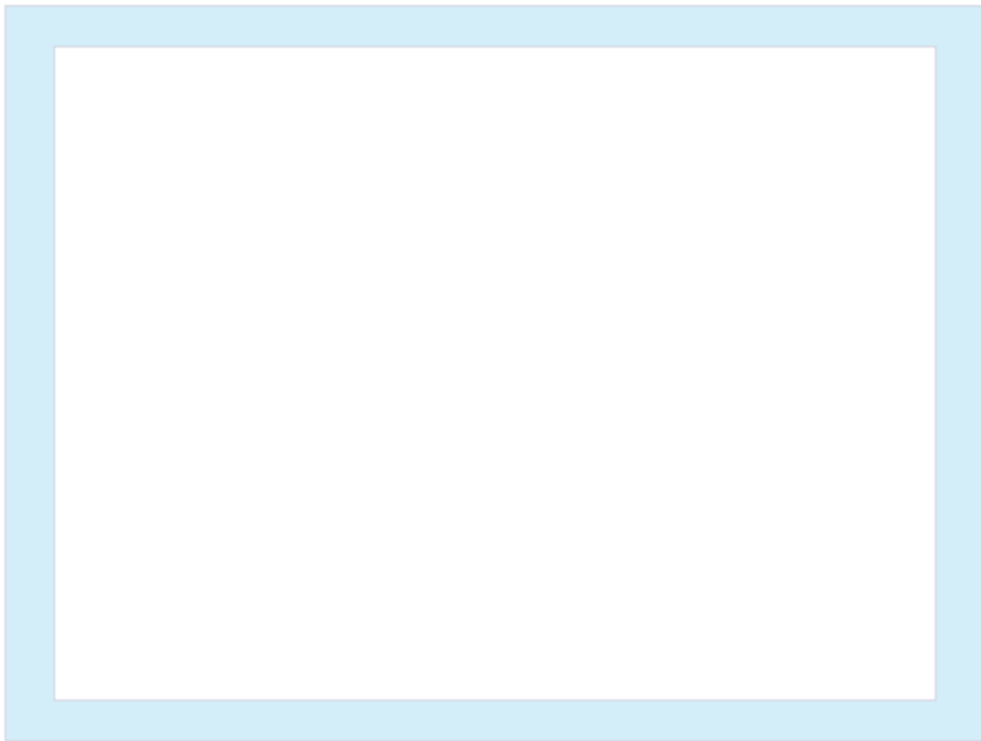


# Grid Layout Ingredients

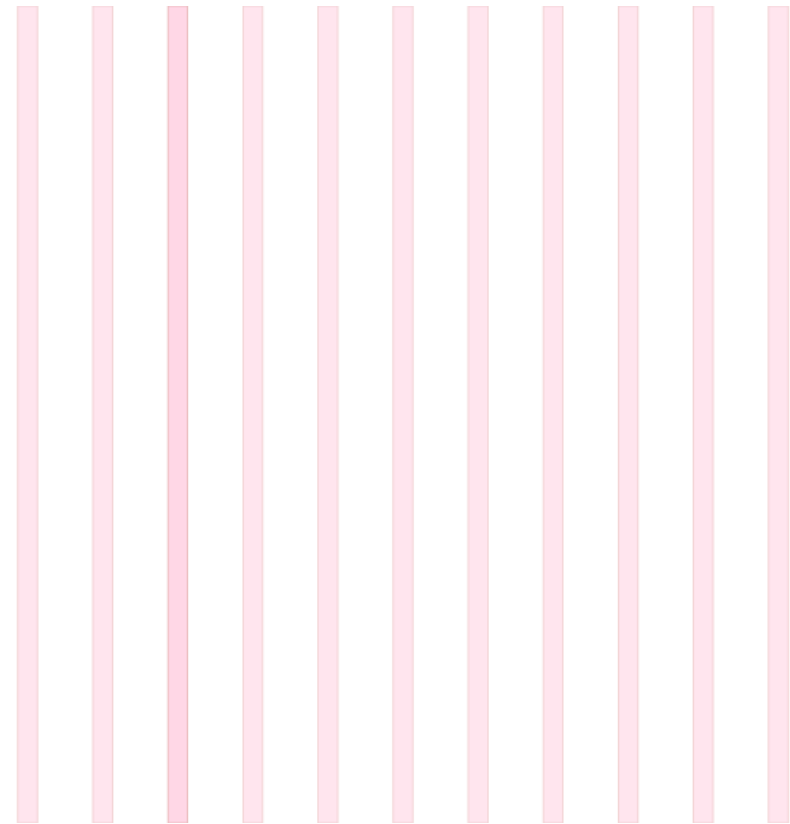
- **Guides:** The edge which you choose to align content with
- **Column:** A vertical division of content
- **Row:** A horizontal division of content
- **Margins:** The area surrounding your content
- **Gutters:** The margins between columns
- **Hang-line:** A horizontal guide to align content to hang off of
- **Baseline:** The horizontal guide for an element to sit on top of
- **Rhythm:** Proportion systems that can help define the sizing frequency and spacing of each of the above elements.

# Grid Layout Ingredients

## Margins



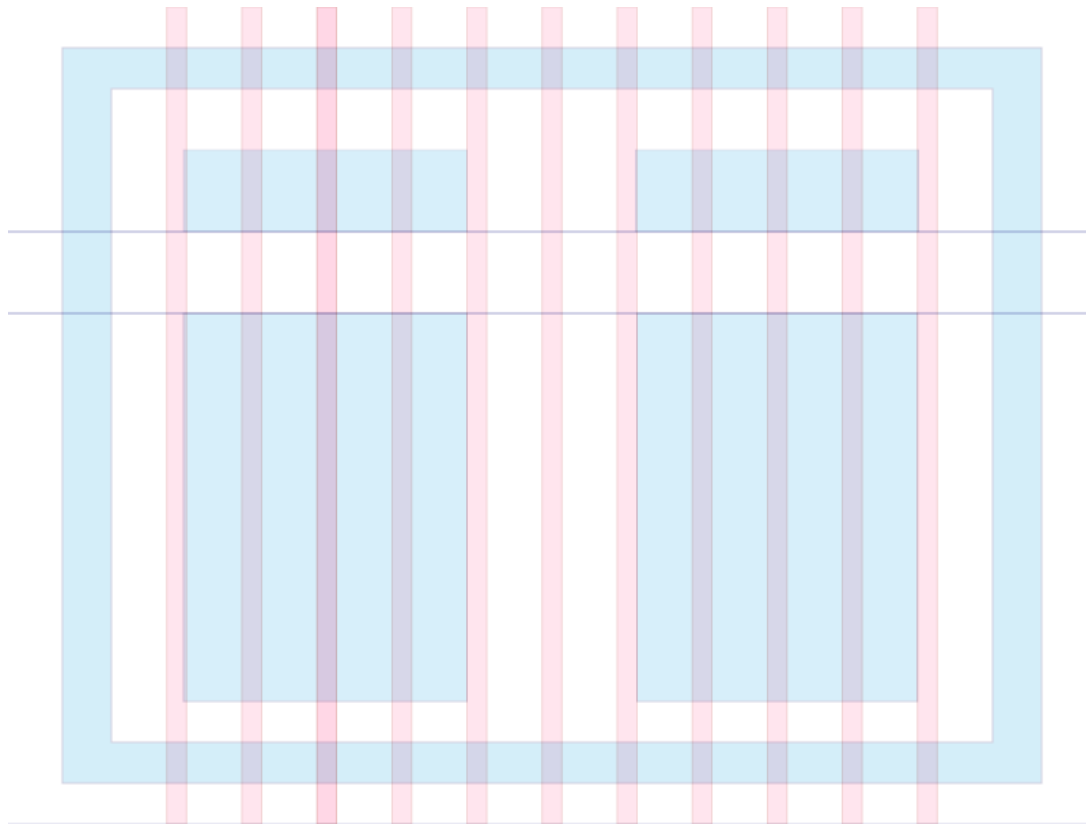
## Columns & Gutters





# Grid Layout Ingredients

## Hanglines and Baselines

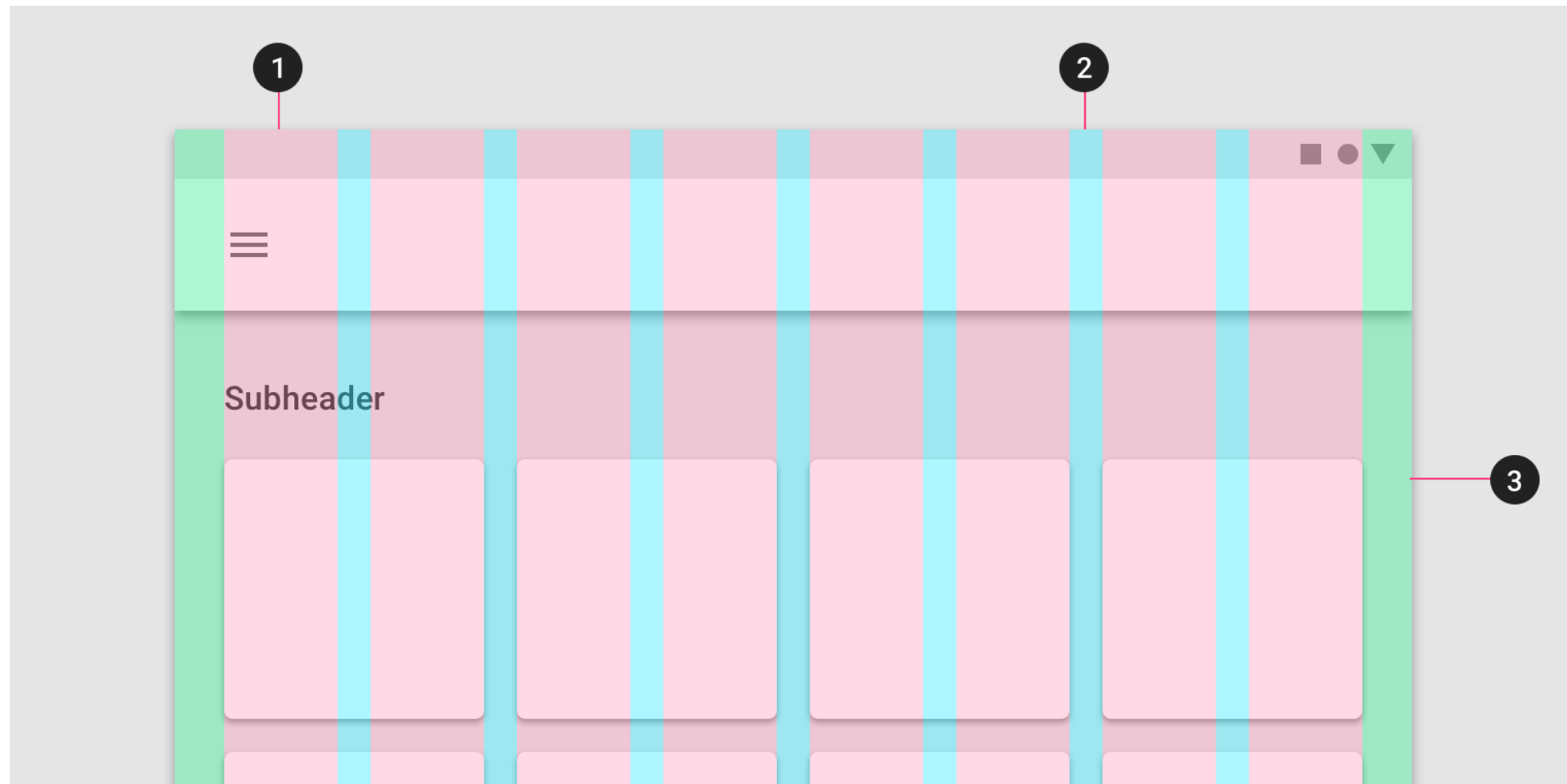


## Baseline Grids



# Example Grid-based layout

1. Columns
2. Gutters
3. Margins



# Example: Bootstrap grid

Always 12 columns in total

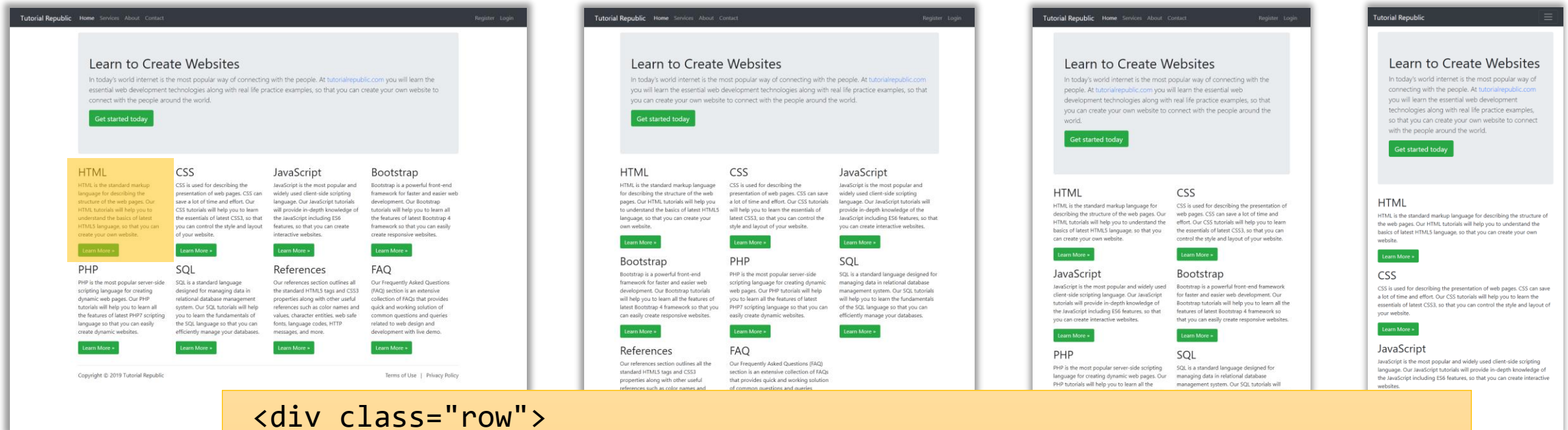
May choose to span a group of columns

Each column is tagged according to the screen size:

- xs (phones - <768px)
- sm (tablets - >=768px)
- md (small laptops - >=992px)
- lg (laptops and desktops - >1200px)

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

# Responsive grid layout



```
<div class="row">
  <div class="col-md-6 col-lg-4 col-xl-3">
    <h2>HTML</h2>
    <p>...</p>
    <p><a href="..." class="btn btn-success">...</a></p>
  </div>
```

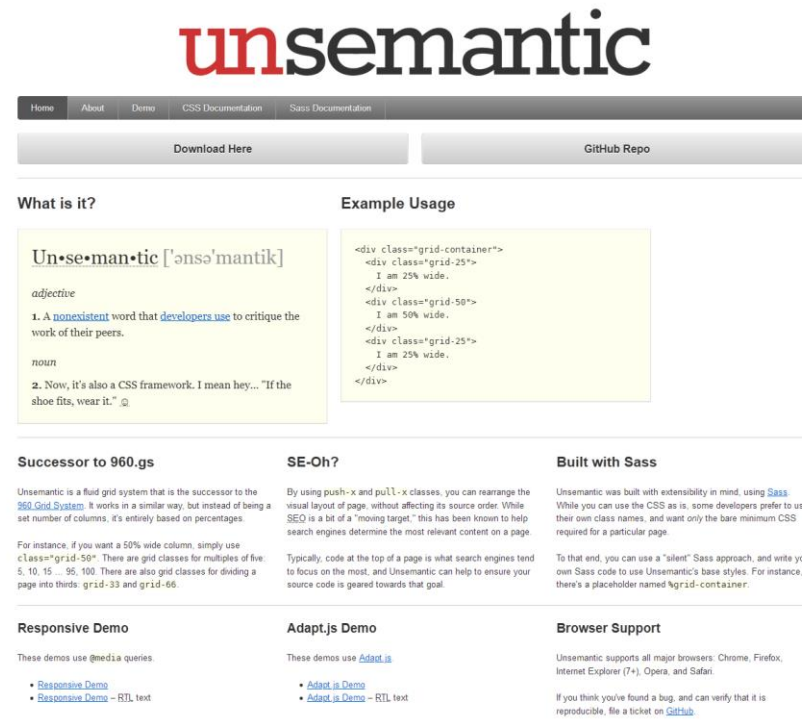
# Other grid systems

960 grid (fixed width, 12 or 16 col)

Unsemantic (responsive, based on %)



<https://960.gs/>



<https://unsemantic.com/>

# Grid structure

Main body:  
Mix of 2x and 3x  
columns

Alternating row  
types



Title area outside the  
grid

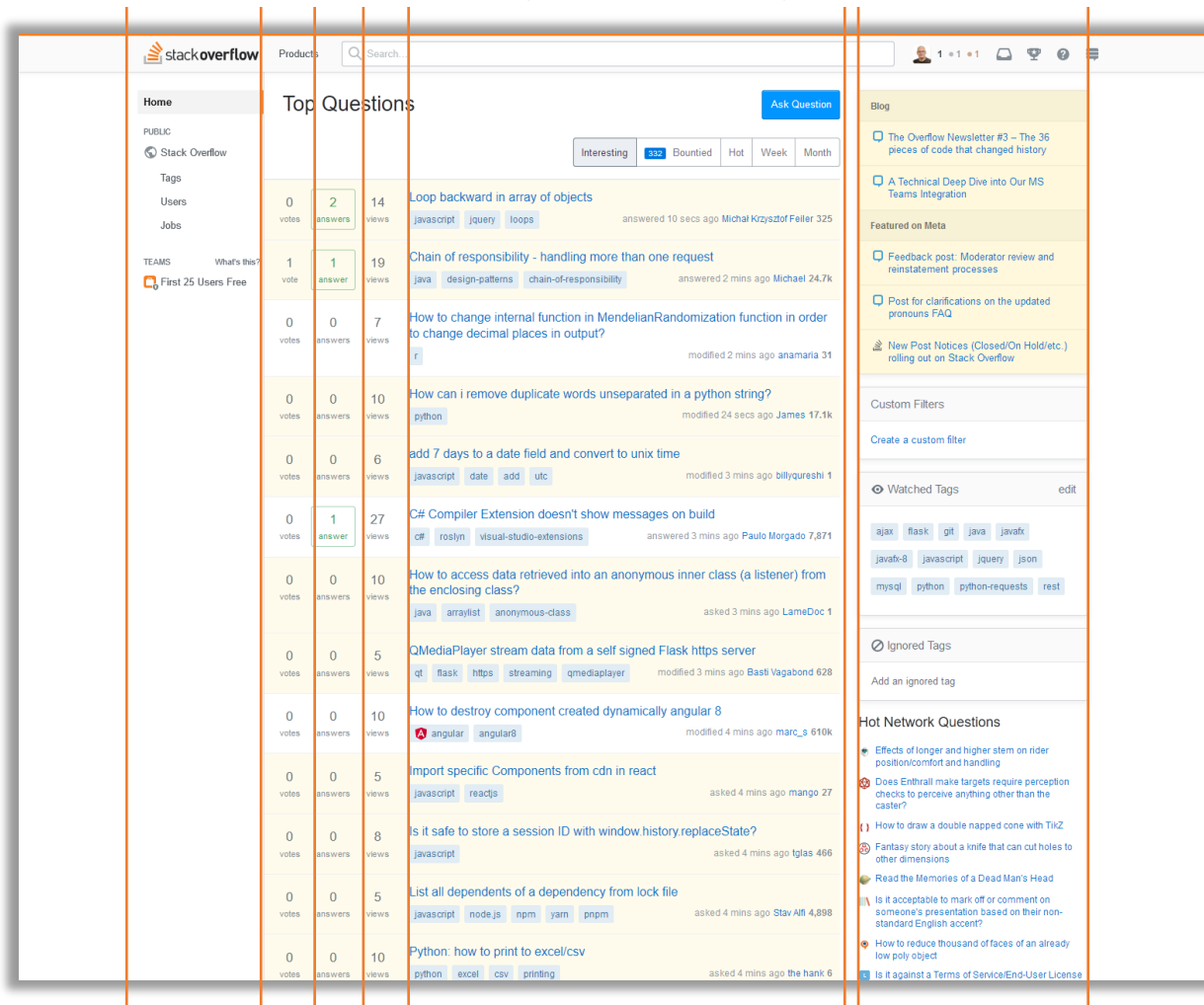
Right column for  
other types of  
articles

# Grid structure

Main content  
(center, wide)

Navigation  
(left, smaller)

Related content  
(right, smaller)



# Example (2019)

Software									
<b>1° anno</b>									
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli		
1	01PDWOV	EN	Information systems ING-INF/05 (6)	6	M. Morisio				
1	02GOLOV	IT	Architetture dei sistemi di elaborazione ING-INF/05 (10) Oppure	10	P. Bernardi E. Sanchez Sanchez				
1	02LSEOV	EN	Computer architectures ING-INF/05 (10)	10	P. Montuschi				
1	01SQJOV	EN	Data Science and Database Technology ING-INF/05 (8) Oppure	8	S. Chiusano				
1	01SQMOV	IT	Data Science e Tecnologie per le Basi di Dati ING-INF/05 (8)	8	E. Baralis				
1	01OTWOV	EN	Computer network technologies and services ING-INF/05 (6) Oppure	6	M. Baldi				
1	02KPNV	IT	Tecnologie e servizi di rete ING-INF/05 (6)	6	G. Marchetto				
2	02JEUOV	EN	Formal languages and compilers ING-INF/05 (6)	6	R. Sisto				
2	05BIDOV	IT	Ingegneria del software ING-INF/05 (8) Oppure	8	G. Bruno				
2	04GSPOV	EN	Software engineering ING-INF/05 (8)	8	M. Morisio				
2	01UDFOV	IT	Applicazioni Web I ING-INF/05 (6) Oppure	6	E. Masala				
2	01TXYOV	EN	Web Applications I ING-INF/05 (6)	6	F. Corno				
2	02GRSOV	IT	Programmazione di sistema ING-INF/05 (10) Oppure	10	G. Cabodi				
2	01NYHOV	EN	System and device programming ING-INF/05 (10)	10	S. Quer				
<b>2° anno</b>									
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli		
1			Insegnamento a scelta 1	6					
1	01TYMOV	EN	Information systems security ING-INF/05 (6) Oppure	6					
1	01UDUOV	IT	Sicurezza dei sistemi informativi ING-INF/05 (6)	6					
1	01SQNOV	EN	Software Engineering II ING-INF/05 (6)	6					
1,2			Crediti liberi	6					
1,2	29EBHOV		Tesi	30					
2			Insegnamento a scelta 2	6					
<b>Insegnamento a scelta 1</b>									
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli		
1	01TYDOV	EN	Cloud Computing ING-INF/05 (6)	6					
1	01PDCOV	EN	Digital control technologies and architectures ING-INF/04 (6)	6					
1	01TXZOV	EN	Distributed systems programming ING-INF/05 (6)	6					Si
1	01NWPOV	IT	Elaborazione dell'audio digitale ING-INF/05 (6)	6					
1	01UDGOV	EN	Energy management for IoT ING-INF/05 (6)	6					Si
1	02JSKOV	EN	Human Computer Interaction ING-INF/05 (6)	6		★			
1	01SQIOV	EN	Machine Learning and Artificial Intelligence ING-INF/05 (6)	6					
1	01PDXOV	EN	Modern design of control systems ING-INF/04 (6)	6					
1	01OUVOV	EN	Optimization methods and algorithms MAT/09 (6)	6					
1	04CFPOV	IT	...	6					



# Example (same page in 2020)

Software								
1° anno 2020/2021								
Periodo	Codice	SSD	Insegnamento	Lingua	Crediti	Docente	Note	Orario
1	01PDWVOV	ING-INF/05 (6)	Information systems	🇬🇧	6	M. Morisio (118 iscr.)	🟢	🕒
1	02GLOV	ING-INF/05 (10)	Architetture dei sistemi di elaborazione	🇮🇹	10	P. Bernardi (150 iscr.) E. Sanchez Sanchez (159 iscr.)	🟢 🟢	🕒
oppure								
1	02LSEOV	ING-INF/05 (10)	Computer architectures	🇬🇧	10	P. Montuschi (207 iscr.)	🟢 🟢	🕒
1	015QJOV	ING-INF/05 (8)	Data Science and Database Technology	🇬🇧	8	S. Chiusano (172 iscr.)	🟢 🟢	🕒
oppure								
1	015QMOV	ING-INF/05 (8)	Data Science e Tecnologie per le Basi di Dati	🇮🇹	8	E. Baralis (254 iscr.)	🟢 🟢	🕒
1	01OTWVOV	ING-INF/05 (6)	Computer network technologies and services	🇬🇧	6	G. Marchetto (161 iscr.)	🟢 🟢	🕒
oppure								
1	02KPNOV	ING-INF/05 (6)	Tecnologie e servizi di rete	🇮🇹	6	G. Marchetto (253 iscr.)	🟢 🟢	🕒
2	02EUOV	ING-INF/05 (6)	Formal languages and compilers	🇬🇧	6	R. Sisto (60 iscr.)	🟢 🟢	🕒
2	05BIDOV	ING-INF/05 (8)	Ingegneria del software	🇮🇹	8	G. Bruno (132 iscr.)	🟢 🟢	🕒
oppure								
2	04G5POV	ING-INF/05 (8)	Software engineering	🇬🇧	8	M. Morisio (202 iscr.)	🟢 🟢	🕒
2	01UDFOV	ING-INF/05 (6)	Applicazioni Web I	🇮🇹	6	E. Masala (91 iscr.) L. De Russis (57 iscr.)	🟢	🕒
oppure								
2	01TXYOV	ING-INF/05 (6)	Web Applications I	🇬🇧	6	F. Corno (185 iscr.)	🟢	🕒
2	02GRSOV	ING-INF/05 (10)	Programmazione di sistema	🇮🇹	10	G. Cabodi (100 iscr.) A. Savino (112 iscr.)	🟢 🟢	🕒
oppure								
2	01NYHOV	ING-INF/05 (10)	System and device programming	🇬🇧	10	S. Quer (108 iscr.)	🟢	🕒
2° anno 2021/2022								
Periodo	Codice	SSD	Insegnamento	Lingua	Crediti	Docente	Note	Orario
1			Insegnamento a scelta 1		6		🟢	
1	01TYMOV	ING-INF/05 (6)	Information systems security	🇬🇧	6		🟢	🕒
oppure								
1	01UDUOV	ING-INF/05 (6)	Sicurezza dei sistemi informativi	🇮🇹	6		🟢	🕒
1	015QNOV	ING-INF/05 (6)	Software Engineering II	🇬🇧	6		🟢	🕒
1,2			Crediti liberi		6		🟢	
1,2	29EBHOV		Tesi		30		🟢	
2			Insegnamento a scelta 2		6		🟢	

# Example (2015 vs 2019)

## Add an address

**Full Name:**

**Address Line 1:**   
Street address, P.O. box, company name, c/o

**Address line 2:**   
Apartment, suite, unit, building, floor, etc.

**City:**

**State/Province/Region:**

**ZIP:**

**Country:**

**Phone Number:**  [Learn more](#)

### Optional Delivery Preferences [\(What's this?\)](#)

**Weekend Delivery:**

**Security Access Code:**   
For buildings or gated communities

Save & Add Payment Method

Save & Continue

Il tuo account > I tuoi indirizzi > [Nuovo indirizzo](#)

## Aggiungi un nuovo indirizzo

Oppure ritira i tuoi colli quando desideri, presso i nostri punti self-service. Per aggiungere un punto di ritiro o un Amazon Locker, clicca [qui](#).

**Paese/Regione**

**Nome e cognome**

**Indirizzo**

**Città**

**Provincia**

**Codice postale**

**Numero di telefono**  
  
Può essere utilizzato per aiutare consegna

**Aggiungi istruzioni di consegna**  
**Consegna nel fine settimana**

Aggiungi indirizzo

# Some guidelines

- When designing a template, start from the longest block of text
- Left-aligned text is (usually) faster to skim
- Alignment guides the eye and reduces clutter
  - Avoid slight misalignments
  - Patterns and deviations are “automatically” detected
    - Deviate from a pattern for strategic reasons
  - Use visual proximity and scale to convey semantic information

# Colors

The most dangerous weapon in your toolset

# Colors...



**I AM LING YOU CAN TRUST ME**

**Menu**

- Home
- Cars
- Vans
- Customers
- About Ling
- Fun stuff
- Free stuff
- Live staff

**CARS A-Z**





**ABARTH**

124 Spider  
Convertible  
595 Convertible  
595 Hatchback  
695 Convertible



**ALFA ROMEO**

Giulia Saloon  
Giulietta  
Stelvio Estate



**AUDI**



# LINGSCARS.com

Leader of the Pack - The UK's favorite car leasing website!  
Contract hire cars from Ling Valentine. LINGSCARS is the UK's favourite car leasing website - On 2016 I leased over £85 million in cars.

**Stop**

"Believe it or not, this Gateshead-based website, featuring Mrs Ling jiggling on her motorbike, is one of the biggest online drivers of car sales in Great Britain" **25th July 2017**

 News

**Leader of the Pack**

"[Ling Valentine is] Britain's **BIGGEST** individual seller of new cars."

**BREXIT RISK FREE!** February 2017 

**LING'S BREXIT BORIS PROMISE:** If the UK leaves the EU with "no deal", tariffs may apply to EU built cars landing in the UK after Brexit day (31st Jan 7). If this is the case with YOUR car, and IF the price increases due to tariffs, YOU will be able to cancel the car order at **NO COST** to you. **YOU can order a new car from me, with NO BREXIT RISK.** - Ling

**MY BEST SELLING CAR LEASING DEALS!**

**500 IDEAS!**



**Fiat 500**

1.2 Pop 8v (69bhp) (4 seats)  
Hatchback 3dr 1242cc Petrol Manual (5 Speed)

**RENT NEW**  
**£127/mth** including VAT

3 year cheap car leasing **6+35**

**NICOLE...PAPA!**



**Renault Clio**

0.9 TCE Iconic 12v (90bhp)  
Hatchback 3dr 898cc Petrol Manual (5 Speed)

**RENT NEW**  
**£152/mth** including VAT

3 year cheap car leasing **6+35**

**MEGA-HATCH!**



**Citroen C3**

1.2 PureTech 12v (83bhp) Flair  
Hatchback 5dr Manual 1199cc

**RENT NEW**  
**£157/mth** including VAT

2 year cheap car leasing **6+23**

**1 DELIVERY TODAY**

Ford Ka+  
**Arthur**  
ATTLEBOROUGH, NR17

**21 DELIVERIES IN LAST WEEK**

Renault Captur  
**Cath**  
PONTEFRAC, WF81

Mercedes GLC Coupe  
**Bill**  
BEDLINGTON, NE22

BMW 2 Series Convert...  
**Pingu**  
DERBY, DE56

Nissan Qashqai  
**Arlene**  
GLASGOW, G11

Volvo XC60 Estate  
**Saif**  
MILTON KEYNES, MK8

Seat Leon  
**Ben**  
BARNSELY, S70

Skoda Kodiaq Estate  
**Hannah**  
HAY-ON-WYE, HR3

Renault Clio  
**Paul**  
MIDDLEBROUGH, TS7

Renault Clio  
**Paul**  
MIDDLEBROUGH, TS7

Seat Arona  
**Steve**  
LONDON, SE18

Seat Leon  
**Adam**  
HATFIELD, AL10

Audi A3 Sportback  
**Chris**  
WYMONDHAM, NR18

**Car Leasing Online Service Response Times**

Quote > Proposal > Order > Delivery

**75 CUSTOMERS IN 'PROPOSAL'**

Ling replies in... **0:03:07**

**129 CUSTOMERS IN 'ORDER'**

Ling replies... **0:05:03**

**Facebook** 

**Twitter** 

# Colors

- Be careful, don't exaggerate
- Design in grayscale, first
  - Ensure information is conveyed by text and layout
- When adding colors, try to conserve the same luminance of the grayscale design
- Assign meaning to color
- Use a limited and consistent palette and use slight variations

# Example

The screenshot shows the Stack Overflow homepage with the following elements:

- Header:** Stack Overflow logo, search bar, and user profile icons.
- Left Sidebar:** Home button, PUBLIC Stack Overflow, Tags, Users, Jobs, TEAMS, and First 25 Users Free.
- Main Content:** "Top Questions" section with a list of questions. Each question entry includes the number of votes, answers, and views, the question title, tags, and the user who answered it. The top question is "Loop backward in array of objects" with 2 answers and 14 views.
- Right Sidebar:** "Blog" section with a list of articles, "Featured on Meta" section with a list of posts, "Custom Filters" section, "Watched Tags" section with a list of tags like ajax, flask, git, java, and jquery, and "Ignored Tags" section.

This screenshot is identical to the one on the left, showing the Stack Overflow homepage with the same layout and content.

# Example

ITA | ENG | Login | argomenti o persona

SCOPRIRE L'ATENEO | DIDATTICA E STUDENTI | IL MONDO DELLA RICERCA | INNOVAZIONE PER LE IMPRESE | CAMPUS INTERNAZIONALE

## festival della TECNOLOGIA

TORINO, 7-10 NOV 2019

*Tecnologia è Umanità*

È online il programma del Festival della Tecnologia

**EVENTI** Tutti gli eventi

Dal 14.06	Walking Beyond: camminate urbane attraverso la città contemporanea <small>Giugno - Dicembre 2019</small>	Dal 23.10	The Polar oceans and global climate change <small>23 October - 18 November 2019</small>
Dal 04.11	Network dynamics in the social, economic and financial sciences <small>4-8 November 2019</small>	Dal 05.11	OptArch2019 <small>5 - 7 November 2019</small>

**AVVISI E SCADENZE** Tutti gli avvisi

<small>10 settembre 2019</small> Comitato Leonardo: nuovi bandi per i Premi di Laurea	<small>Scadenza presentazione abstract 15 novembre 2019</small> AI4CH - Artificial Intelligence in geomatics for cultural heritage
<small>Scadenza Call for participation: 15 novembre 2019</small> Progetti resilienti di natura in città in Francia e in Italia	<small>Deadline online registration: 18 November 2019</small> Wireless charging of vehicles (WCV2019)

**ACCESSO RAPIDO**

Apply@PolTo iscrizioni online

- Orientamento
- Corsi di studio
- Orario delle lezioni
- Tasse e riduzioni
- Dottorato di ricerca
- Dipartimenti
- Centri interdipartimentali
- Per le imprese
- Servizi web Amministrazione
- Sedi e mappe
- Concorsi e selezioni
- PoliToComunica
- Rassegna stampa
- Alumni

ITA | ENG | Login | argomenti o persona

SCOPRIRE L'ATENEO | DIDATTICA E STUDENTI | IL MONDO DELLA RICERCA | INNOVAZIONE PER LE IMPRESE | CAMPUS INTERNAZIONALE

## festival della TECNOLOGIA

TORINO, 7-10 NOV 2019

*Tecnologia è Umanità*

È online il programma del Festival della Tecnologia

**EVENTI** Tutti gli eventi

Dal 14.06	Walking Beyond: camminate urbane attraverso la città contemporanea <small>Giugno - Dicembre 2019</small>	Dal 23.10	The Polar oceans and global climate change <small>23 October - 18 November 2019</small>
Dal 04.11	Network dynamics in the social, economic and financial sciences <small>4-8 November 2019</small>	Dal 05.11	OptArch2019 <small>5 - 7 November 2019</small>

**AVVISI E SCADENZE** Tutti gli avvisi

<small>10 settembre 2019</small> Comitato Leonardo: nuovi bandi per i Premi di Laurea	<small>Scadenza presentazione abstract 15 novembre 2019</small> AI4CH - Artificial Intelligence in geomatics for cultural heritage
<small>Scadenza Call for participation: 15 novembre 2019</small> Progetti resilienti di natura in città in Francia e in Italia	<small>Deadline online registration: 18 November 2019</small> Wireless charging of vehicles (WCV2019)

**ACCESSO RAPIDO**

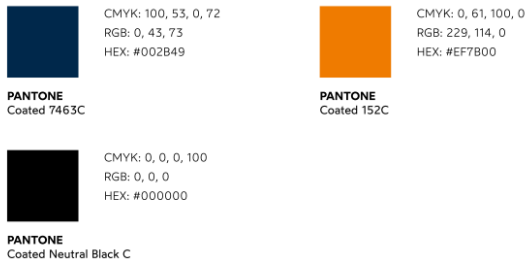
Apply@PolTo iscrizioni online

- Orientamento
- Corsi di studio
- Orario delle lezioni
- Tasse e riduzioni
- Dottorato di ricerca
- Dipartimenti
- Centri interdipartimentali
- Per le imprese
- Servizi web Amministrazione
- Sedi e mappe
- Concorsi e selezioni
- PoliToComunica
- Rassegna stampa
- Alumni



# Palettes

Manuale di identità visiva    Colori    5.6    Brand color palette primaria



CMYK: 100, 53, 0, 72  
RGB: 0, 43, 73  
HEX: #002B49

PANTONE  
Coated 7463C


CMYK: 0, 61, 100, 0  
RGB: 229, 114, 0  
HEX: #EF7B00

PANTONE  
Coated 152C

CMYK: 0, 0, 0, 100  
RGB: 0, 0, 0  
HEX: #000000

PANTONE  
Coated Neutral Black C

GERARCHIA COLORI

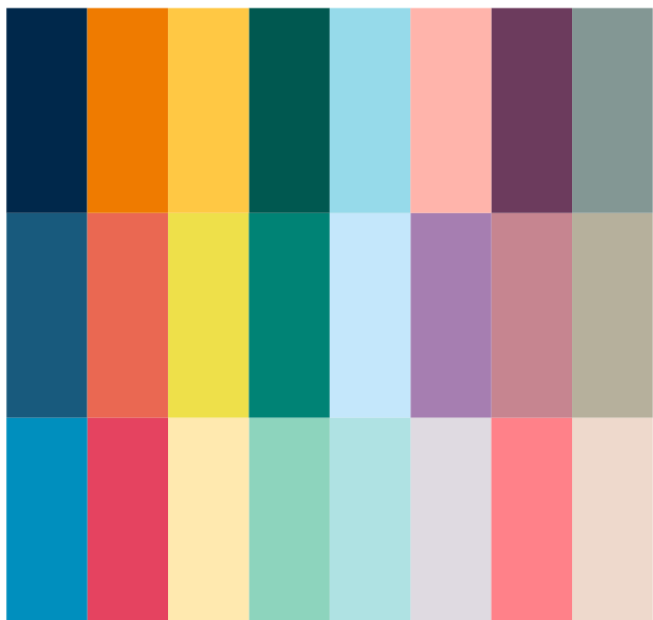


L'immagine del **Politecnico di Torino** si esprime prevalentemente con il suo colore primario: il **Blu di Prussia**.

La palette colore primaria si completa con il **nero** e con l'**arancione**, due colori a sostegno del colore principale.

Politecnico di Torino    27

Manuale di identità visiva    Colori    5.7    Brand color palette secondaria



Con l'intento di rendere l'identità del **Politecnico di Torino** meno distaccata e fredda, si è scelto di affiancare la palette colore primaria a dei colori più soft e con **tonalità pastello**.

L'utilizzo di questa tipologia di cromie nei diversi tipi di comunicazione, sia offline che online, permetterà, con l'ausilio della tipografia e delle altre regole indicate in questo manuale, di creare **materiali coordinati che saranno la base per la riconoscibilità dell'identità visiva dell'Ateneo**.

Ogni qual volta sarà possibile, dunque, la scelta cromatica dovrà cadere su queste tonalità.

Politecnico di Torino    28

# ColourLovers



## Share Your Color Ideas & Inspiration.

COLOURLovers is a creative community where people from around the world create and share colors, palettes and patterns, discuss the latest trends and explore colorful articles... All in the spirit of love.

Join the Community!

CONNECT WITH COLOURLOVERS

Follow @COLOURLovers 1.59M followers

### LOVERS PEEK

- SadieSows on Vengeful 225**  
Really nice look, with this!
- MistryMoments on CoffeeBerries**  
I love your Template Design Style.. thanks
- renniecat on Cold Night**  
Beautiful!
- GoldenHuasinBlue on Golden Fall**  
Wow, very nice!
- TongrenGirl on Comfort**  
Wow...so beautiful!!!!
- TongrenGirl on Extraordinary**  
I love this!!!!
- TongrenGirl on Deep Waters**  
Ooooo, fantastic colors!!!!
- TongrenGirl on Race to Spring**  
Very nice!!!
- TongrenGirl on Race to Spring**  
Thanks so much for coloring my

ALL WEDDING HOME FASHION WEB PRINT CRAFT DIGITAL ART

### LATEST BLOG POSTS

View More >



Why Marketing Automation is Rocket-Fuel for Remote Workforce  
0 Comments



How to Become a Full-Time Creative and Do What You Love  
0 Comments



Colors, Human Growth Hormones, and Creativity  
0 Comments

### PALETTES

Create +



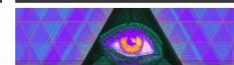
Nineteen  
by Júlia Freire 0



garden palette 2  
by macarver 0

### PATTERNS

Create +



try  
by Anomalin 0



PodCasting  
by 3sisters 0

### COLORS

Create +



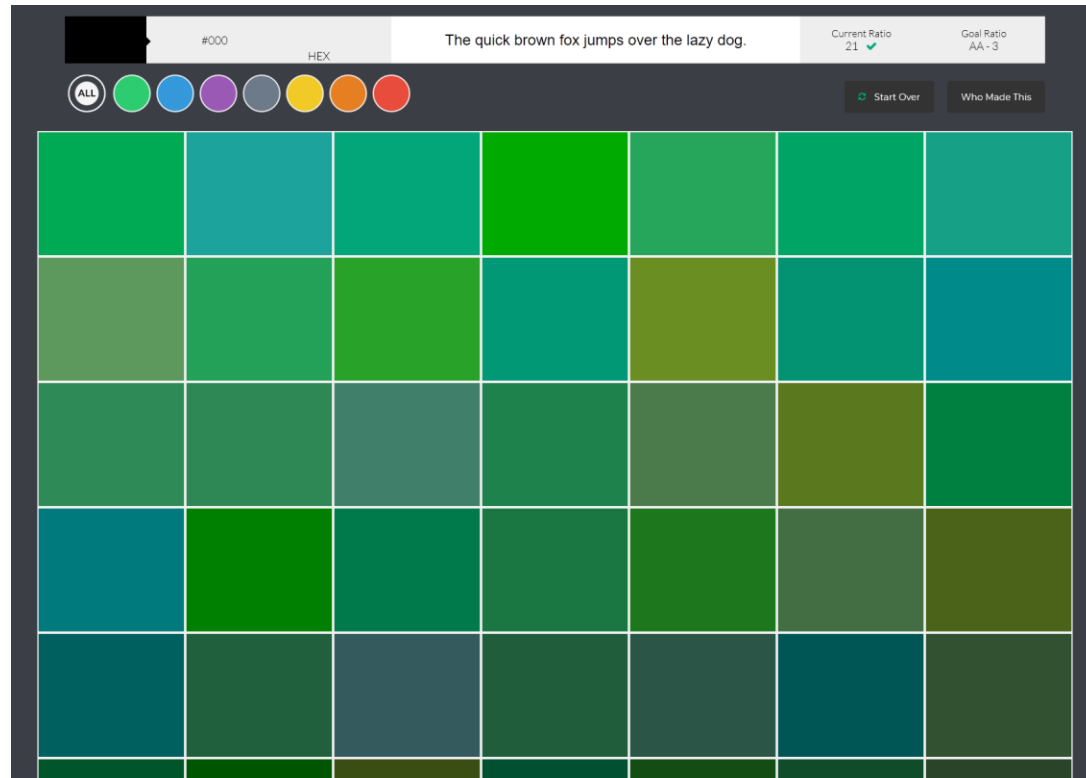
light gray purple  
by macarver 0



slate purple  
by macarver 0

<https://www.colourlovers.com/>

# Color contrast



<http://colorsafe.co/>

Default type color On light			Default type color On dark		
Primary	#000000	1a	Primary	#FFFFFF	1a
Secondary	#000000	0.54a	Secondary	#FFFFFF	0.54a
Disabled	#000000	0.26a	Disabled	#FFFFFF	0.26a
Link	#3367D6	1a	Link	#7BAAF7	1a
Positive	#0B8043	1a	Positive	#57BB8A	1a
Negative	#C53929	1a	Negative	#E67C73	1a
Warning	#EA6100	1a	Warning	#F7CB4D	1a

Google Chrome Palette

# Example

- Colors needing an explanation legend
- Time intervals are shaded with 2 different colors
  - “why is the first hour filled with a different color?”
- No indication of the “fill level”

**Turni disponibili - Aule Studio - Sala studio al Secondo Piano di C.so Castelfidardo 39**

Legenda turni prenotazione

Disponibile   Passato   Non prenotabile   Prenotazioni non attive   Turno al quale sei prenotato

Tutti gli orari sono da intendersi espressi secondo il fuso orario italiano

A partire da giorno 15 luglio 2020, è consentito l'uso della seguente Sala Studio della Sede Centrale:  
- Sala studio al Secondo Piano di C.so Castelfidardo 39, codice locale TO\_CIT11\_XP02\_001

Le sale studio sono aperte dalle ore 9.00 alle ore 18.00 dal lunedì al venerdì. L'accesso sarà consentito su due turnazioni orarie, dalle ore 9.00 alle 13.00 e dalle ore 14.00 alle ore 18.00

<< Oggi >> 21 Set 2020 - 27 Set 2020   1 giorno   3 giorni   Settimana lavorativa   **Settimana**

	Lunedì 21 Set 2020	Martedì 22 Set 2020	Mercoledì 23 Set 2020	Giovedì 24 Set 2020	Venerdì 25 Set 2020	Sabato 26 Set 2020	Domenica 27 Set 2020
09:00	09:00 - 13:00 - prenotazioni: 36/36	09:00 - 13:00 - prenotazioni: 36/36	09:00 - 13:00 - prenotazioni: 35/36	09:00 - 13:00 - prenotazioni: 36/36	09:00 - 13:00 - prenotazioni: 34/36		
10:00							
11:00							
12:00							
13:00							
14:00	14:00 - 18:00 - prenotazioni: 36/36	14:00 - 18:00 - prenotazioni: 36/36	14:00 - 18:00 - prenotazioni: 34/36	14:00 - 18:00 - prenotazioni: 34/36	14:00 - 18:00 - prenotazioni: 26/36		
15:00							
16:00							
17:00							

# Reading and Navigating

«Informavores» must quickly find the information they need

# Navigation

- Enables users to know where they are and to steer themselves to their intended destination
- Is about getting work done (or having fun) through a series of actions
- May consist of
  - **Task navigation**: successfully operating interactive applications, such as installing a mobile app, completing an on-line survey, or purchasing a ticket
  - **Web navigation**: finding information on a website or browsing social media
  - **Command menu navigation**: finding the action needed in a desktop application
- Has nothing to do with visual elegance / graphic shininess

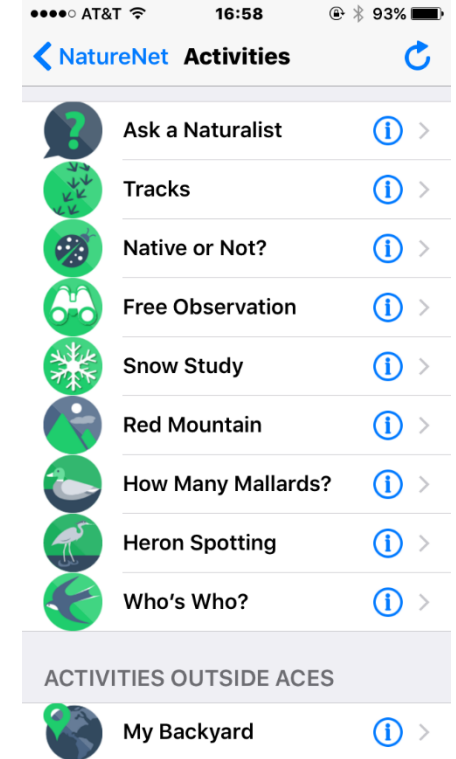
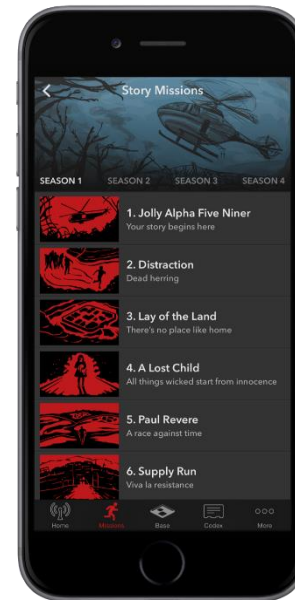
# Navigation by selection

- Menu bars, pop-up menus, toolbars, palettes and ribbons
- Shortcuts and gestures for rapid interaction
- Long lists
- Linear versus simultaneous presentation

For an extra \$5  
you can add a gift wrap  
selected from dozens of choices

Add gift wrap

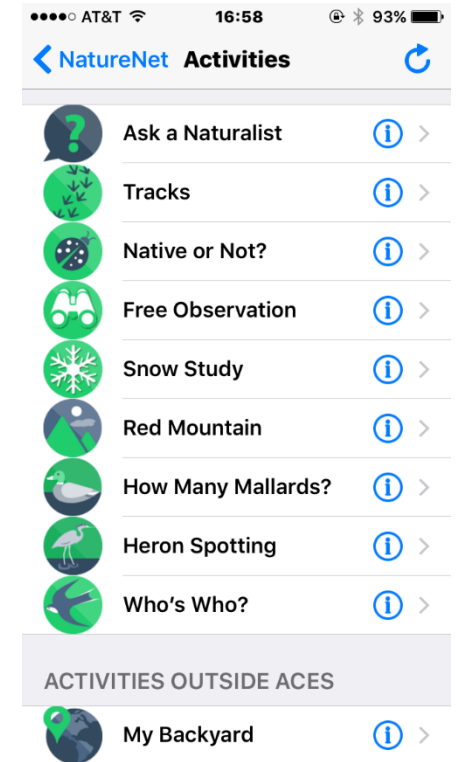
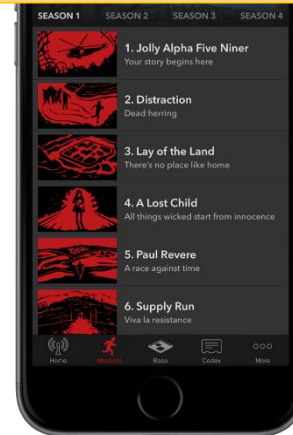
No thanks



# Navigation by selection

- Menu bars, pop-up menus, toolbars, palettes and ribbons
- **Shortcuts and gestures for rapid interaction**
- Long lists
- Linear versus simultaneous presentation

- Tap
- Long press
- Double tap
- Small swipe
- Large swipe
- Rapid swipe (fling)
- Pinch and spread
- 2-finger swipe
- ...





# Navigation by selection

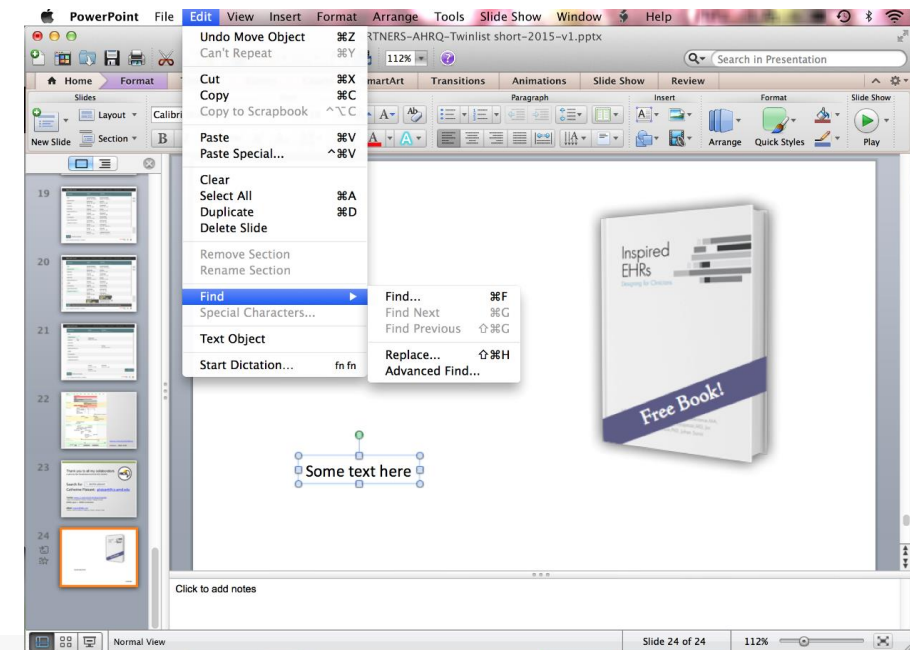
- Radio Buttons and Checkboxes
- Menu bars, pop-up menus, toolbars, palettes and ribbons

Does anyone in your household currently smoke?

- Yes, someone does
- No, no one does
- Not sure

What treatment would you like to discuss with a nurse?

- Surgery
- Physical therapy
- Medication
- Acupuncture (not available in your area)



# Menus

The screenshot shows the NASA website homepage. At the top, there is a navigation menu with links for Missions, Galleries, NASA TV, Follow NASA, Downloads, About, and NASA Audiences. Below this is a secondary menu with links for International Space Station, Journey to Mars, Earth, Technology, Aeronautics, Solar System and Beyond, Education, History, and Benefits to You. The main content area is a grid of news stories. The top-left story is titled "The Martian' Director Ridley Scott Discusses NASA's Journey to Mars" and features a play button icon. Below it is a story about a "Supermoon Eclipse". To the right is a "Tweets" section with a tweet about 3-D printed habitats. The bottom row includes stories about "Space Travel", "Fire and Smoke", "Real Martians Moment", and "SDO Solar Mission". At the bottom of the page, there is a footer with the NASA logo, the text "National Aeronautics and Space Administration", and the name "NASA Official: Brian Dunbar".

The screenshot shows the NASA TV website. At the top, there is a search bar and a navigation menu with links for Home, NASA TV, and a search icon. Below this is a video player showing a scene from the International Space Station. The video is titled "One-Year Crew Halfway There". Below the video player is a section titled "Tweets" with a tweet about 3-D printed habitats. At the bottom of the page, there is a footer with the NASA logo, the text "National Aeronautics and Space Administration", and the name "NASA Official: Brian Dunbar".

# Content organization

- Organizing menus in a meaningful structure results in faster selection time and higher user satisfaction
- Approaches:
  - Linear sequence (e.g. in a wizard or survey)
  - Hierarchical structure (tree) that is natural and comprehensible (e.g. a store split into departments)
  - Network structure when choices may be reachable by more than one path (e.g. websites)


# Tree-like content organization

The screenshot displays the REI website's navigation and product listing structure. At the top, there is a utility bar with links for Help, Wish List, Gift Registry, Classes & Events, Store Locator, and Checkout. Below this is the REI logo, a search bar, and a promotional message: "Welcome to REI! | Log In or Register" and "FREE SHIPPING With \$50 minimum purchase." The main navigation bar includes categories like SHOP REI, SHOP REI OUTLET, TRAVEL WITH REI, LEARN, BLOG, MEMBERSHIP, and STEWARDSHIP. A secondary navigation bar lists sub-categories such as Camp & Hike, Climb, Cycle, Fitness, Run, Paddle, Snow, Travel, Men, Women, Kids, Footwear, and More. The "Cycle" category is expanded, showing a tree-like structure with sub-sections: Bikes (Mountain Bikes, Road Bikes, Hybrid Bikes, Kids' Bikes), Bike Helmets (Road Helmets, Mountain Bike Helmets, Kids Helmets), Cycling Clothing (Jerseys, Jackets, Shorts, Tights and Pants, Accessories), Cycling Shoes (Road Shoes, Mountain Bike Shoes), Bike Accessories (Computers, Lights, Locks, Pumps, Racks, Trailers, Trainers, Messengers/Backpacks, Panniers/Bike Bags), and Bike Components (Brakes, Saddles/Seat Posts, Tires, Tubes and Wheels, Tools and Maintenance, Drivetrain Components, Pedals, Handlebars). A promotional banner for "GIVE THE GIFT OF GEAR ANYTIME, ANYWHERE" is also visible. Below the navigation, a list of products is shown with filters for Features (Moisture wicking, Quick drying, Sun-protective fabric, Waterproof, Insulated, Earflaps, Made in USA) and Brand (686). Three product cards are highlighted: REI Rainwall Rain Jacket - Girls' (5 stars, \$31.83 - \$64.50), REI Rainwall Rain Pants - Kids' (4.5 stars, \$49.50), and REI Sahara Convertible Pants - Girls' (5 stars, \$44.50). Each card includes a "Compare" button and a "ONLY AT REI" badge.

# Rules for tree-like organization

- Use **task semantics** to organize menus
- Limit the **number of levels** (i.e. prefer broad–shallow to narrow–deep)
- Create groups of **logically similar** items: e.g. Level 1: countries, Level 2: states, Level 3: cities
- Form groups that **cover all possibilities**: e.g. Age ranges: [0–9] [10–19] [20–29] and [ $\geq 30$ ]
- Make sure that items are **non-overlapping**: e.g. use “Concerts” and “Sports.” over “Entertainment” and “Events”
- Arrange items in each branch by **natural sequence** (not alphabetically) or **group** related items
- Keep **ordering** of items **fixed** (or possibly duplicate frequent items in dedicated section of the menu)

# Example

 **Tool Prenotazioni**  
 ⓘ Selezionare l'ambito per il quale ci si intende prenotare

**Ambiti per i quali è possibile effettuare una prenotazione**

- Aule Studio
- Biblioteca
- Segreteria generale studenti


 **Tool Prenotazioni**  
 ⓘ Selezionare l'ambito per il quale ci si intende prenotare

**Ambiti per i quali è possibile effettuare una prenotazione**

- Aule Studio
- Biblioteca
- Segreteria generale studenti

**Aule Studio - Seleziona Aula Studio**

- Sala studio al Secondo Piano di C.so Castelfidardo 39
- Sala studio sotto l'aula 7

 **Tool Prenotazioni**  
 ⓘ Selezionare l'ambito per il quale ci si intende prenotare

**Ambiti per i quali è possibile effettuare una prenotazione**

- Aule Studio
- Biblioteca
- Segreteria generale studenti

**Aule Studio - Seleziona Aula Studio**

- Sala studio al Secondo Piano di C.so Castelfidardo 39
- Sala studio sotto l'aula 7

**Turni disponibili - Aule Studio - Sala studio al Secondo Piano di C.so Castelfidardo 39**

Legenda turni prenotazione  
 Disponibile   Passato   Non prenotabile   Prenotazioni non attive   Turno al quale sei prenotato

Tutti gli orari sono da intendersi espressi secondo il fuso orario italiano

A partire da giorno 15 luglio 2020, è consentito l'uso della seguente Sala Studio della Sede Centrale:  
 - Sala studio al Secondo Piano di C.so Castelfidardo 39, codice locale TO\_CIT11\_XP02\_001

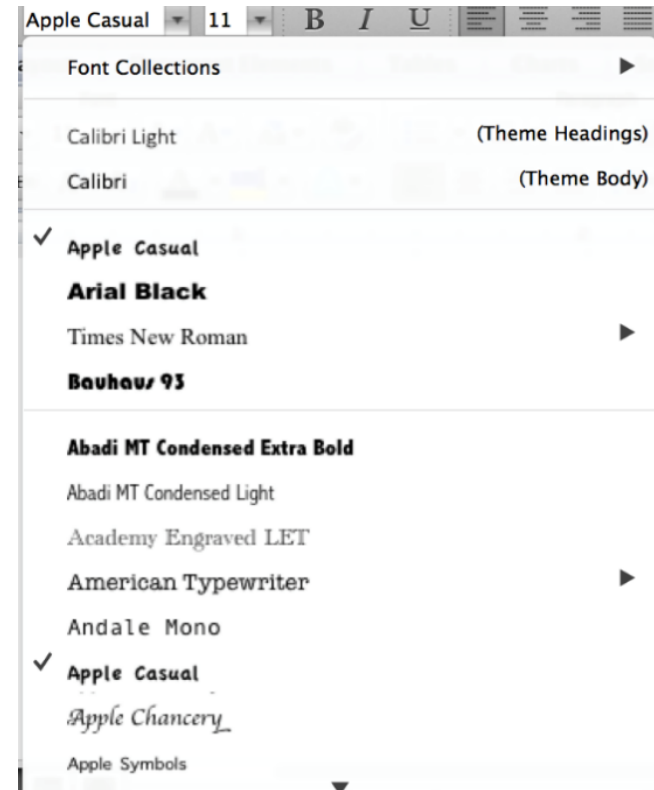
Le sale studio sono aperte dalle ore 9.00 alle ore 18.00 dal lunedì al venerdì. L'accesso sarà consentito su due turnazioni orarie, dalle ore 9.00 alle 13.00 e dalle ore 14.00 alle ore 18.00

<< Oggi >> **14 Set 2020 - 18 Set 2020**   1 giorno   3 giorni   **Settimana lavorativa**   Settimana

	Lunedì 14 Set 2020	Martedì 15 Set 2020	Mercoledì 16 Set 2020	Giovedì 17 Set 2020	Venerdì 18 Set 2020
09:00	09:00 - 13:00 - prenotazioni: 36/36	09:00 - 13:00 - prenotazioni: 33/36	09:00 - 13:00 - prenotazioni: 36/36	09:00 - 13:00 - prenotazioni: 32/36	09:00 - 13:00 - prenotazioni: 35/36
10:00					
11:00					
12:00					
13:00					

# Menu grouping (example)

- 3 groups
  - Template styles
  - Frequently used fonts
  - All fonts
- Alphabetical order within each group
  - Lack of a semantic ordering
- Preview for recognition
- Scrollable list



# Information scent

- Informavores orient themselves using *information scent*
- How can we figure out how to get the information we want?
- Do we realize what options are available to us?
- Web pages (and UIs general) provide *cues* to suggest where to find information
  - Icons, Menus, Breadcrumbs, Color coding, ...



*Informavore*, an organism that consumes information



# Poor information scent

- Users flailing around...
  - Don't know where to go
- Low confidence
  - Users are not sure of their actions, both before executing it and after they see its effects
- Back button
  - When it's used too often...

# Example

The screenshot shows the 'Teaching portal' of the Politecnico di Torino. The header includes navigation links for 'The Politecnico', 'Teaching', 'Research', 'Business', and 'International Campus', along with language options 'ITA | ENG', a 'Login' button, and a search bar. The main content area is a grid of service tiles:

- Course catalogue**: Course catalogue, curricula, course syllabi. Special projects: Young Talent Project and Alta Scuola Politecnica.
- Student Guide**: Find the Student Guide of your degree programme.
- Student services**: Exam dates, course finder, lecture rooms, libraries, course timetables, Language Centre, thesis proposals, support services, cultural activities and much more.
- Notice board**: News and events from the Office of the University Registrar, the Office of Student Services and the various degree programmes.
- Apply@polito**: Politecnico di Torino online application service (all levels and programmes).
- Orientation**: Choosing your degree programme, application information and services for PoliTO and high school students.
- Fees, scholarships and prizes**: Tuition fees and reductions, IELTS payment policy, scholarships and financial aid, part-time on-campus jobs, university residences and much more.
- Study abroad**: International mobility for students, faculty and staff; calls for applications for study periods at foreign universities, thesis and internships abroad, teaching mobility, international.
- News - events - notices**: Includes a link for further information.
- Career service**: Internships and job placements for students and graduates, recruiting services for employers.
- Graduates**: State examination for professional practice, alumni, AlmaLaurea.
- Regulations / Student discipline**: Regulations, Disciplinary Board.
- Teaching Quality Assurance**: Teaching Quality Assurance, Joint Committee on Teaching, regional accreditation.

The footer contains contact information, logos for 'Ente Regionale per il Diritto alle Scienze Universitarie', 'Lezioni online demo', 'Osservatorio regionale', and 'PoliTO App', along with social media icons and the copyright notice: '© Politecnico di Torino Corso Duca degli Abruzzi, 24 - 10129 Torino, ITALY'.

# Example

Bachelor's degree programmes	Young Talent Project
Master's degree programmes	Alta Scuola Politecnica
Specializing Master's programmes and Lifelong Learning	Ph.D. programmes
Curricula and course syllabi of current and previous years	Postgraduate School
	Summer School

Welcome to Apply@polito - the online application service of the Politecnico di Torino

<b>Bachelor Italian students</b> Information about Bachelor of Science for students with Italian high school Diploma.	<b>M.S. Italian students</b> Information about Master of Science for students with Italian degree.	<b>Students with a foreign qualification</b> Information about Bachelor of Science and Master of Science for students with a foreign qualification.
<b>Ph. D.</b> Information about Ph. D.	<b>Specializing master</b> Information about 2nd level Specializing Master Programmes and Lifelong Learning courses.	<b>Exchange programmes</b> Online application for nominated Exchange students.
<b>State exams</b> Information about the state exam.		

News - Events

Online application form  
Privacy - Information  
Forgot your password?

**STUDENT GUIDE**  
(2019 - 2020)

All guides

Area Course

Architecture 1<sup>st</sup> level  
Bachelor's degree programme in ARCHITECTURE  
Location: Torino - Class: ARCHITECTURE

Architecture 1<sup>st</sup> level  
Bachelor's degree programme in ARCHITECTURE  
Location: Torino - Class: ARCHITECTURE

Architecture 1<sup>st</sup> level  
Bachelor's degree programme in DESIGN AND COMMUNICATION  
Location: Torino - Class: INDUSTRIAL DESIGN

Architecture 1<sup>st</sup> level  
Bachelor's degree programme in DESIGN AND VISUAL COMMUNICATION  
Location: Torino - Class: INDUSTRIAL DESIGN

Architecture 1<sup>st</sup> level  
Bachelor's degree programme in TERRITORIAL, URBAN, ENVIRONMENTAL AND LANDSCAPE PLANNING  
Location: Torino - Class: TOWN, REGIONAL AND ENVIRONMENTAL PLANNING

Architecture 2<sup>nd</sup> level  
Master's degree programme in ARCHITECTURE CONSTRUCTION CITY  
Location: Torino - Class: ARCHITECTURE AND ARCHITECTURAL ENGINEERING

Architecture 2<sup>nd</sup> level  
Master's degree programme in ARCHITECTURE FOR THE SUSTAINABILITY DESIGN  
Location: Torino - Class: ARCHITECTURE AND ARCHITECTURAL ENGINEERING

Architecture 2<sup>nd</sup> level  
Master's degree programme in ARCHITECTURE HERITAGE PRESERVATION AND ENHANCEMENT  
Location: Torino - Class: ARCHITECTURE AND ARCHITECTURAL ENGINEERING

Architecture 2<sup>nd</sup> level  
Master's degree programme in ECODESIGN  
Location: Torino - Class: DESIGN

Architecture 2<sup>nd</sup> level  
Master's degree programme in SYSTEMIC DESIGN  
Location: Torino - Class: DESIGN

Architecture 2<sup>nd</sup> level  
Master's degree programme in TERRITORIAL, URBAN, ENVIRONMENTAL AND LANDSCAPE PLANNING  
Location: Torino - Class: REGIONAL, URBAN AND ENVIRONMENTAL PLANNING

Engineering 3<sup>rd</sup> level  
Bachelor's degree programme in AEROSPACE ENGINEERING  
Location: Torino - Class: INDUSTRIAL ENGINEERING

## Teaching portal

Course catalogue  
Look up the courses, consult course syllabi.  
Special projects: Young Talent Project and Alta Scuola Politecnica.

Student Guide  
Find the Student Guide of your degree programme.

Student services  
Exam dates, course finder, lecture rooms, libraries, course timetables, Language Centre, thesis projects, support services, cultural activities and much more.

Notice board  
News and events from the Office of the University Registrar, the Office of Student Services and the various degree programmes.

Apply@polito  
Politecnico di Torino online application service (bachelors and programmes).

Orientation  
Choosing your degree programme, application information and services for postgraduate and high school students.

Fees, scholarships and prizes  
Tuition fees and reductions, IELTS payment policy, scholarships and financial aid, part-time courses, job university residences and much more.

Study abroad  
International mobility for students, faculty and staff: calls for applications for study periods at foreign universities, thesis and internships abroad, teaching mobility, international

News - events - notices  
For further information click here

Career service  
Internships and job placements for students and graduates, recruiting services for employers.

Graduates  
State examination for professional practice: Almagora, Almagora.

Regulations / Student discipline  
Regulations, Disciplinary Board.

Teaching Quality Assurance  
Teaching Quality Assurance, Joint Committee of Teaching, regional accreditation.

Exam dates	Course finder	C.I.A. Language Center	Course Timetables
Thesis proposals	Support services	Research Labs	Campus maps
Student teams	Register of student societies	Libraries	Study rooms
Student projects	Donations (5X1000)	University residences	Free room finder
Mobility and Cultural	Sports activities	Polito Wi-Fi	

Generale	Area dell'Architettura Corsi di Laurea di 1° livello	Area dell'Architettura Corsi di Laurea Magistrale
Studenti	Area dell'Ingegneria Corsi di Laurea di 1° livello	Area dell'Ingegneria Corsi di Laurea Magistrale

<b>Fees and Reductions</b> University fees, exemptions and reductions.	<b>Part-time Collaborations</b> part-time collaborations for remunerative activities supporting education and services.	<b>Halls of residence</b> Accommodation solutions, services, benefits.
<b>Researching activity announcements</b> Scholarships willing to work in the university and in the field of researching.	<b>Scholarships and prizes</b> Scholarships and prizes to help deserving students financially.	<b>External Institutions' announcements</b> Scholarships and prizes supported by external institutions addressed to students and graduates.
News - events - notices		

<b>Almaurea</b> Consorzio interuniversitario per l'Università e il mondo del lavoro.	<b>Esami di stato</b> Presso il Politecnico di Torino è possibile conseguire l'abilitazione all'esercizio delle professioni di Architetto e Ingegnere.	<b>Ex allievi</b> Associazione fondata nel 1908. Accumunati dalla formazione politecnica, dall'interesse per la cultura scientifica e l'innovazione tecnologica.	<b>Certificati e autocertificazioni</b> Le procedure per ottenere i certificati e presentare le autocertificazioni sono disponibili nell'omonima sezione della guida dello studente.
---	---	---	---

**STUDENTS & GRADUATES**  
Check all the opportunities to build your career.

**EMPLOYERS**  
Find out how to get in touch with our talents.

**EVENTS**

**HIGHLIGHTS:**

**TECH TALK VISHAY**  
L'evoluzione della E-Mobility  
07 Novembre 2019  
ore 17:30 - Aula 4P

**VIDEO GALLERY:**

LA BELLEZZA DI FARE IMPRESA  
Job Fair@PATO under 35 | La bellezza di fare impresa

Career Day 2019 | consigli delle aziende per il colloquio di lavoro

Career Day 2019 | L'importanza delle competenze trasversali

# Example

**Survey@Polito**

Administration -- Logged in as: **cornio**

Surveys: Smart Home Survey

Survey Smart Home Survey (ID:365355)

Question groups: Please choose...

**Title:** Smart Home Survey (ID 365355)

**Survey URL (English):** <https://survey.polito.it/365355/lang-en>

**Description:** This very short survey aims at exploring the future and expected user interaction between user and smart environments, in particular smart homes. The research goal is to update, and compare, the research findings of a similar survey held in year 2010 (5 years ago). The expected completion time for this survey is 5 minutes or less.

**Welcome:** Thank you for agreeing to take part in this survey. All the answers you give are anonymous, and the data-set will be released as open data after the survey ends. You may choose to reply in any of the supported languages, preferably your mother tongue.

**End message:** Thanks for completing the survey. The results will be available on the website <http://elite.polito.it> The paper describing the previous survey (in 2010) is available at: <http://porto.polito.it/2380988/>

**Administrator:** Fulvio Como ([fulvio.corno@polito.it](mailto:fulvio.corno@polito.it))

**Start date/time:** -

**Expiry date/time:** -

**Template:** default

**Base language:** English

**Additional languages:** French  
German  
Italian  
Portuguese  
Spanish

**End URL:** [e-Lite research group webpage](#)

**Number of questions/groups:** 11/3

**Survey currently active:** Yes

**Survey table name:** beta\_survey\_365355

**Hints:** Answers to this survey are anonymized.  
It is presented group by group.  
Participants can save partially finished surveys  
Basic email notification is sent to: [fulvio.corno@gmail.com](mailto:fulvio.corno@gmail.com)  
Regenerate question codes: [Straight] [By group]

LimeSurvey  
Version 1.92+ Build 120919

Like it? Donate to LimeSurvey

# Common Problems

- Unexpected categories
- Short links
- Hidden navigation
- Icons are too generic, or not easily recognizable

# Icons

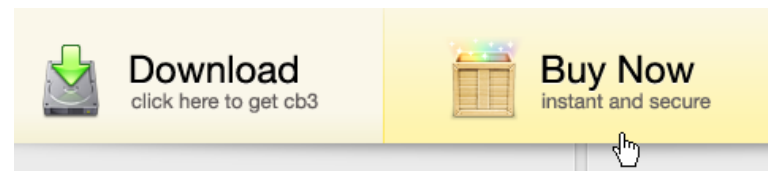
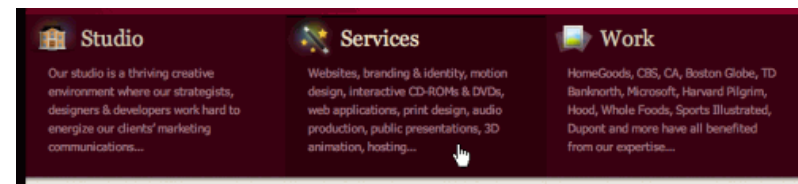
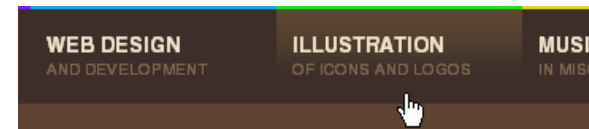
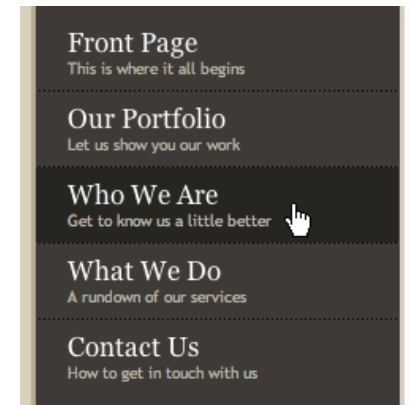
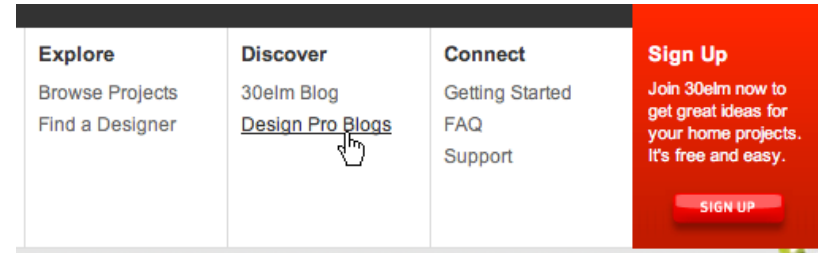
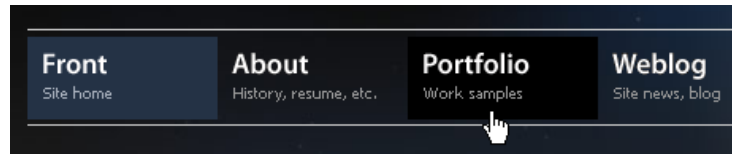
- Icons facilitate recognition over recall
  - When they are consistently used, and frequently visible
- Redundant coding helps recognition and memorization
  - Icon + Text + Tooltip + Context



# Links

- Always use multi-word links
  - Download the [next assignment template](#)
  - Assignment template: click [here](#)
- Straight language, not jargon
  - [Scor-o-matic](#) download
  - Download the [spreadsheet for computing scores](#)

# “Speaking” block navigation





# Forms

- Logical field grouping
  - Sections
    - Dividers
    - Columns (spacing)
  - Titles
- Real-time error checking and validation feedback
  - Suggestions for correction
- Explicit submit button

The screenshot displays a web form titled "Create an IEEE Account" with a help icon. The form is organized into two main columns. The left column, titled "Provide your personal information", contains three required text input fields: "Given/First name:" (filled with "Catherine"), "Middle name:" (empty), and "Last/Family/Surname:" (filled with "Plaisant"). The right column, titled "Enter e-mail address & password", includes a sub-header "The e-mail provided here will be the username of your account." and four required fields: "E-mail address:" (filled with "cplaisant@" and highlighted in red), "Re-enter e-mail address:" (empty), "Password:" (filled with "....." and highlighted in green), and "Confirm password:" (empty). A yellow warning box on the right states: "The e-mail address provided is not in a valid e-mail format (for example: j.doe@nomain.com). Please try again." Below this, a green success box says: "Your password is good" with a progress bar. A note below the password field reads: "Passwords must be between 8 and 64 characters, and include at least one number. More...". A section titled "Set security questions" follows, with a sub-header "For your security, IEEE Accounts are required to have two security questions and answers." It contains two sets of "Security question 1:" and "Security question 2:", each with a dropdown menu (filled with "Select") and a text input field for the answer. At the bottom left is a link for "Privacy & Opting Out of Cookies". At the bottom right is an orange button "Create Account and Continue Joining" and a blue link "Cancel".

# Form Elements and UI Elements

Text input fields let you input text

NonFederal (99)  
 Federal (57)

Yes  No

Find your state or...  Go

List boxes  
Are like dropdowns  
But they let  
You make  
Multiple selections  
Like checkboxes do

Settings menu:  
General Settings  
Your Profile  
Sign Out

SEP 18<sup>th</sup> 2010

22 JUN

Send Post Tweet

Navigation arrows

ON OFF

Calendar: Sep, 2010

JUN 22

Grid of icons

Mobile navigation icons

Menu Item Messages About Us

This is a box  
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce metus. Pellentesque sit amet velit. Phasellus non quam. Nulla diam purus, tristique quis, eleifend ac, molestie eu, sapien. Vestibulum ante ipsum primis.  
Vestibulum ante ipsum primis. [READ MORE](#)

Navigation menu with search and category filters

Progress indicators and step navigation

Horizontal carousel with arrows

Tags: Costs (72), Health Conditions (54), Improving Care (53), Prevention (50), Rights, Protections and Benefits (135), Insurance Coverage (141)

Page navigation: 1 2 3 4 5 6 7 8 9 10 next

Clean Fresh Modern Unique x +

<https://www.usability.gov/how-to-and-tools/methods/user-interface-elements.html>

# Example: redesign this

Attenzione, i seguenti insegnamenti sono in corso di spegnimento potranno essere sostenuti entro la sessione sotto indicata. Se terminata la sessione d'esame non risulteranno ancora superati, verranno sostituiti con l'insegnamento riportato in tabella.

Codice	Nome insegnamento	Crediti	Cod Ins Sostituto	Nome Ins Sostituto	Crediti sostituto	Scadenza esame
12BHDLZ	Informatica	8	14BHDLZ	Informatica	8	9/2021

Se non è ancora stato specificato un sostituto, il referente del corso provvederà in seguito a segnalare con quali esami sostituire gli spenti

# Reading content

Organizing text and content for maximum visibility

# Reading content

- How people read on-line?

- They don't

How Users Read on the Web

by Jakob Nielsen on September 30, 1997

<https://www.nngroup.com/articles/how-users-read-on-the-web/>

# Eye Tracking



- Observe eye movements
  - One or more cameras
  - Usually in infra-red
- Infer where the user was looking (on the screen)
- Record the positions where your gaze will go
- Combine observations from many users

# Location on the page

Eye tracking studies show where the users actually look on the page

Search “eye tracking heat map” and see the major patterns

Users “glance” and spend limited amount of time on each page.

F-shaped pattern

Google the new yorker hotel

The New Yorker Hotel NYC - 15% Off Exclusive Online Deal

Wyndham New Yorker Hotel - Official Site | wyndhamhotels.com

The New Yorker A Wyndham Hotel | Midtown Manhattan Hotel

The New Yorker A Wyndham Hotel (New York City) - UPDATED 2017...

The New Yorker A Wyndham Hotel | New York Hotels, NY 10001

Wyndham New Yorker Hotel - Wikipedia

Wyndham New Yorker Hotel, New York City, NY - Booking.com

Book Wyndham New Yorker, New York from \$95/night - Hotels.com

Wyndham New Yorker (New York, USA) | Expedia

The New Yorker - 191 Photos & 353 Reviews - Hotels - 481 8th Ave ...

Wyndham New Yorker Hotel, New York Hotels from \$126 - KAYAK

Images for the new yorker hotel

Searches related to the new yorker hotel

Wyndham New Yorker Hotel reviews wyndham midtown 45 new york, ny  
wyndham new yorker hotel bed bugs the new yorker hotel dooms  
new yorker hotel history new yorker hotel haunted  
new yorker hotel internet wyndham new yorker yelp

Googoooooooogle >

WIKIPEDIA The Free Encyclopedia

Eye tracking

From Wikipedia, the free encyclopedia

This article includes a list of references or external links, but its sources remain to be verified because it has insufficient inline citations. Please help to improve this article by adding more precise citations where appropriate.

Eye tracking is the process of measuring either the point of gaze ("where we are looking") or the motion of the eye tracker is a device for measuring eye positions and eye movements. Eye trackers are used in research psychology, in cognitive linguistics and in product design. There are a number of methods for measuring eye movement, but the most common is eye-tracking. Other methods use search coils or are

navigation

- Main page
- Contents
- Featured content
- Current events
- Random article

search

Go Search

interaction

- About Wikipedia
- Community portal
- Recent changes
- Contact Wikipedia

Contents [hide]

- History
- Tracker types
- Technologies and techniques
- Eye tracking vs. gaze tracking
- Eye tracking in practice
  - 5.1 Eye tracking while driving a car in a difficult situation
  - 5.2 Eye tracking of younger and elderly people in walking
- Discussion on eye tracker

Design for glanceability

Priority 1 Priority 2 Priority 3

The Paynter Institute www.paynter.org/events/eye-trch-2004

# Did anyone ever look at the product name?

LOOK AT ALL THAT SHINY SKIN.  
HOPE SHE CAN SWIM.

**BECAUSE YOU KNOW IT'S NOT ONLY  
THE SUN THAT THREATENS YOUR BOAT.**

303<sup>®</sup> products are scientifically formulated for superior protection. Like Aerospace Protectant, which not only provides the ultimate UV resistance against fading and cracking, it also prevents staining from dreaded sunscreen. Its no-residue finish repels dust, grime, salt and soiling to keep your boat looking newer, longer. Obsessively protective. Just like you.

303products.com      WE'VE GOT YOUR NUMBER<sup>™</sup>

**PAIN IS  
TEMPORARY.  
REEBOK IS  
FOREVER.**

At 2000, I began to notice I wasn't the same. At over 100 kg and struggling to get up stairs, I realized I needed Reebok Tough. I was determined to get back in shape and push my way through 1.6 miles of marathons, triathlons and everything in between. I went from 5-6 months to 3 months. I finally finished the race. I wanted to celebrate. I wanted to express what I had gone through. A big shoutout to my Reebok shoes. A thank you for my new life and a reminder that pain is temporary.

*Reebok*

Reebok

Read the full story at ReebokForever.com



# Scanning

## WHAT DESIGNERS BUILD...



**Join Biztravel.com Now!**

- ✈️ Book A Trip
- 🏠 Track My Miles
- 🏖️ Book A Vacation
- 📅 Plan A Meeting
- ✈️ Charter A Flight

- Fast, easy booking of flights, hotel rooms, & rental cars
- Automated Upgrades to help you fly First Class
- Flight status updates sent to your pager
- Exclusive travel deals for biztravel.com members
- Tracking of your points and miles

[Learn More](#) [Join Now!](#)

## WHAT USERS SEE...




**Join Biztravel.com Now!**

- ✈️ Book A Trip
- 🏠 Book A Vacation

- Fast, easy booking of flights, hotel rooms, & rental cars
- Exclusive travel deals for biztravel.com members



I want to buy a ticket.



**Track My Miles**

- Tracking of your points and miles



How do I check my frequent flyer miles?

# Experiment

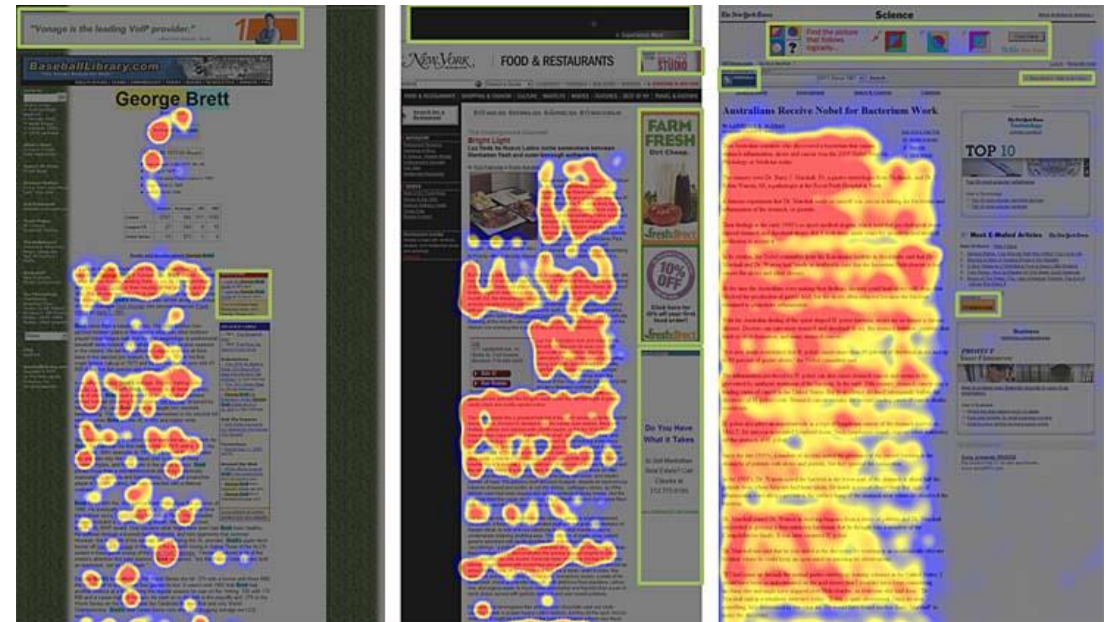
Site Version	Sample Paragraph	Usability Improvement (relative to control condition)
<b>Promotional writing (control condition)</b> using the "marketese" found on many commercial websites	Nebraska is filled with internationally recognized attractions that draw large crowds of people every year, without fail. In 1996, some of the most popular places were Fort Robinson State Park (355,000 visitors), Scotts Bluff National Monument (132,166), Arbor Lodge State Historical Park & Museum (100,000), Carhenge (86,598), Stuhr Museum of the Prairie Pioneer (60,002), and Buffalo Bill Ranch State Historical Park (28,446).	0% (baseline)
<b>Concise text</b> with about half the word count as the control condition	In 1996, six of the best-attended attractions in Nebraska were Fort Robinson State Park, Scotts Bluff National Monument, Arbor Lodge State Historical Park & Museum, Carhenge, Stuhr Museum of the Prairie Pioneer, and Buffalo Bill Ranch State Historical Park.	<b>+58%</b>
<b>Scannable layout</b> using the same text as the control condition in a layout that facilitated scanning	Nebraska is filled with internationally recognized attractions that draw large crowds of people every year, without fail. In 1996, some of the most popular places were: <ul style="list-style-type: none"> <li>•Fort Robinson State Park (355,000 visitors)</li> <li>•Scotts Bluff National Monument (132,166)</li> <li>•Arbor Lodge State Historical Park &amp; Museum (100,000)</li> <li>•Carhenge (86,598)</li> <li>•Stuhr Museum of the Prairie Pioneer (60,002)</li> <li>•Buffalo Bill Ranch State Historical Park (28,446).</li> </ul>	<b>+47%</b>
<b>Objective language</b> using neutral rather than subjective, boastful, or exaggerated language (otherwise the same as the control condition)	Nebraska has several attractions. In 1996, some of the most-visited places were Fort Robinson State Park (355,000 visitors), Scotts Bluff National Monument (132,166), Arbor Lodge State Historical Park & Museum (100,000), Carhenge (86,598), Stuhr Museum of the Prairie Pioneer (60,002), and Buffalo Bill Ranch State Historical Park (28,446).	<b>+27%</b>
<b>Combined version</b> using all three improvements in writing style together: concise, scannable, and objective	In 1996, six of the most-visited places in Nebraska were: <ul style="list-style-type: none"> <li>•Fort Robinson State Park</li> <li>•Scotts Bluff National Monument</li> <li>•Arbor Lodge State Historical Park &amp; Museum</li> <li>•Carhenge</li> <li>•Stuhr Museum of the Prairie Pioneer</li> <li>•Buffalo Bill Ranch State Historical Park</li> </ul>	<b>+124%</b>

# Best locations to put content

- Above the fold
  - Prioritize, don't cram
- Where people expect
  - Where other pages put similar content
  - **Not** where the ads usually go
- Users will scroll down if the first content is interesting

# Banner blindness

- The brain learns to avoid uninteresting content
- Banners and Advertisements are recognized subconsciously (by their appearance) and are never considered
  - Ads also “poison” adjacent elements
- Lesson learned: never create a message / title / warning / etc. that might look like an ad. (Faux ads)



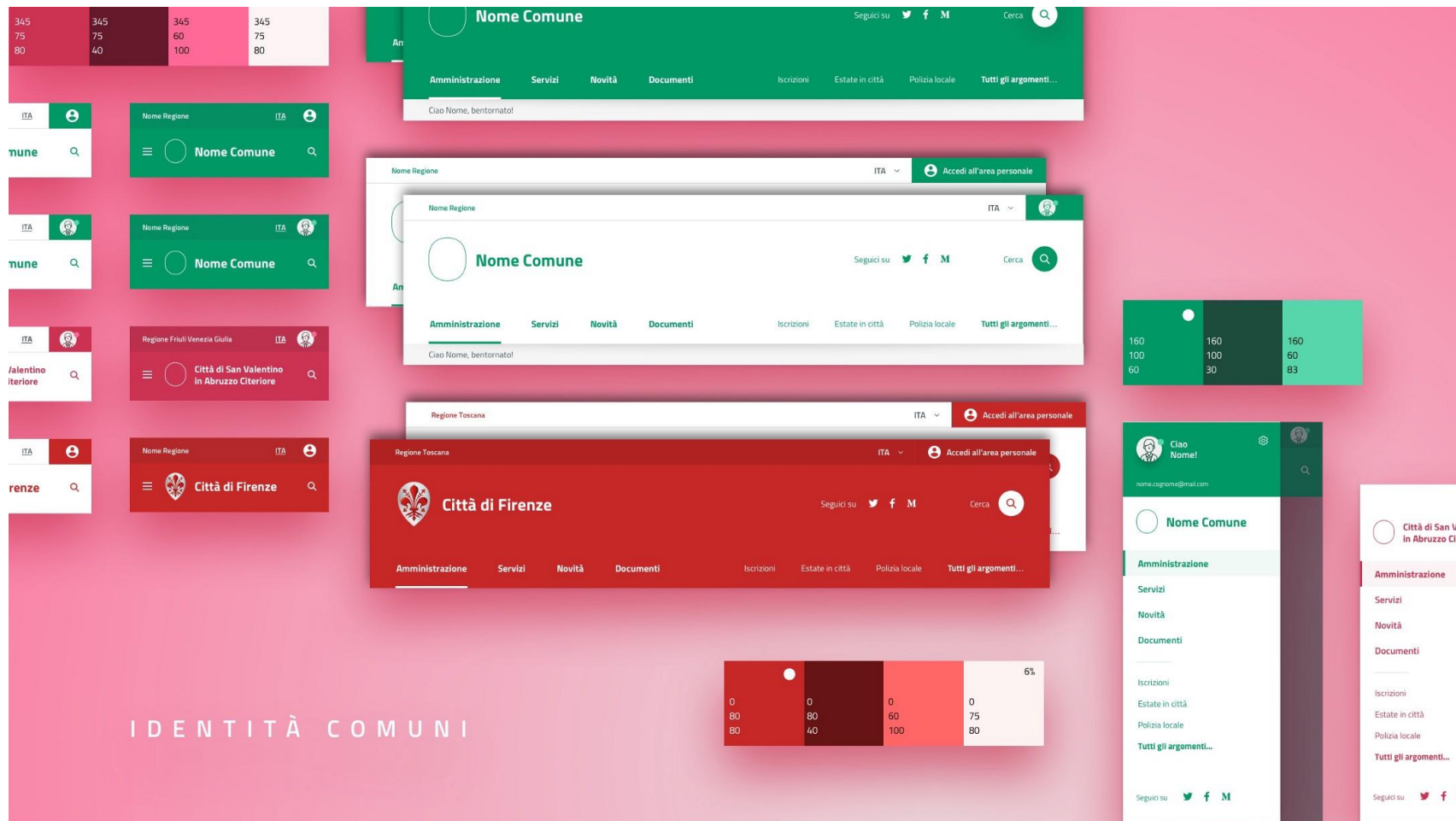
# The Design System of the Italian Public Administration

An example toolkit for visual design (targeted at Public Administration websites and services, mainly)

<https://designers.italia.it/>

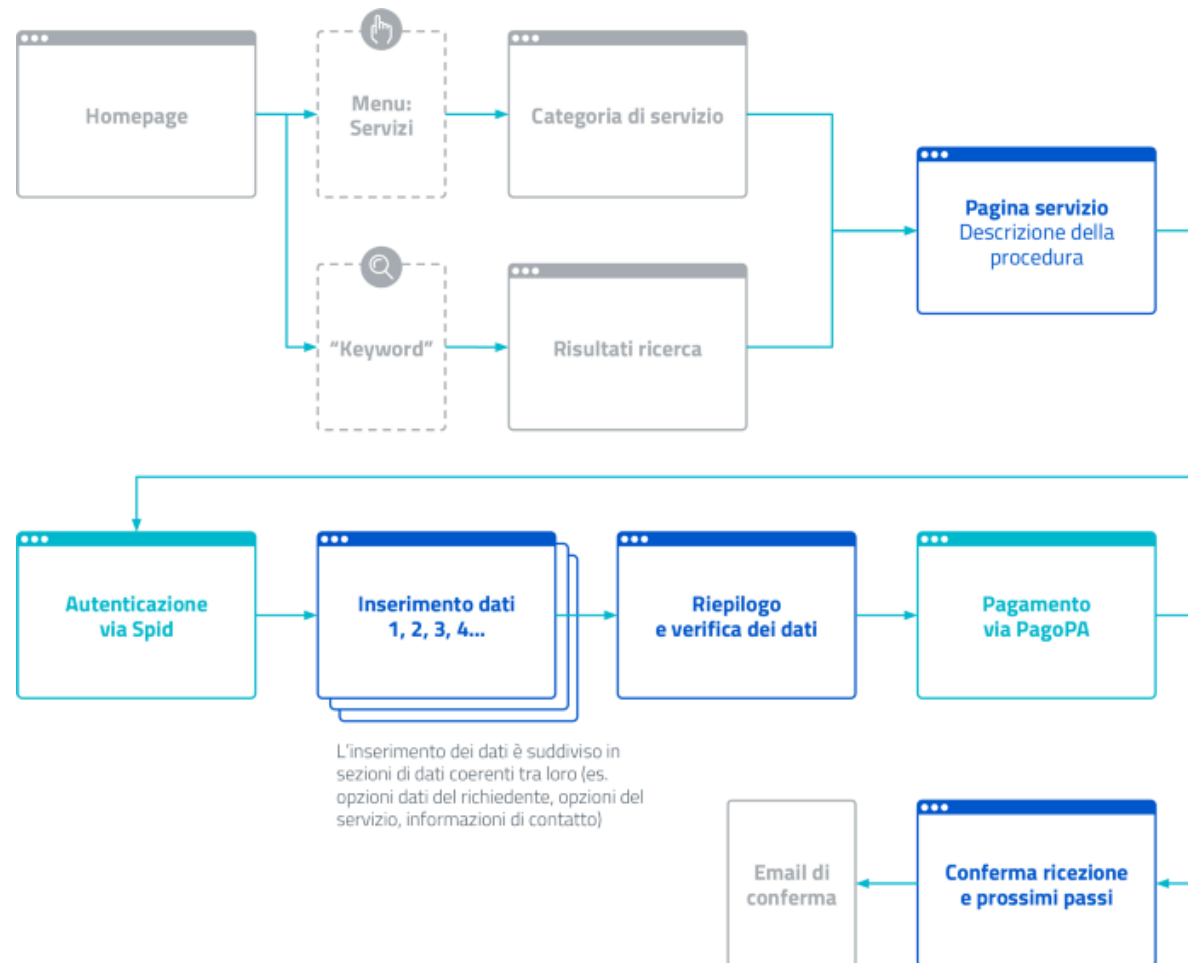
The screenshot shows the homepage of the website designers.italia.it. At the top, there is a blue navigation bar with links for 'AgID + Team Digitale', 'Piano Triennale', 'Developers', 'Designers', 'Forum', 'Docs', and 'GitHub'. Below this is a teal banner with the text 'The Design System of the Italian Public Administration' and a link to 'read on Speaker Deck'. The main header features the 'designers Italia' logo with the tagline 'dalla parte dei cittadini' and social media icons for Facebook, Twitter, and LinkedIn. A secondary navigation bar includes links for 'Home', 'Chi siamo', 'Le guide', 'I kit', 'I progetti', 'Le storie', 'La roadmap', and 'I contatti', along with 'Come lo uso' and 'Come partecipo'. The main content area is framed by a large blue L-shaped graphic. It contains the headline: 'Disegniamo servizi digitali semplici per risolvere i problemi dei cittadini e restituire il buonomore ;-)' and a paper airplane illustration. There are two call-to-action boxes: one for 'Iscriviti alla newsletter' with an email input field and an 'ISCRIVITI' button, and another for 'Approfondisci su Medium' with a 'LEGGI IL POST' button. A short paragraph describes the site as a reference point for public administration design, followed by a link 'per saperne di più >'. The footer is a solid grey bar.

# Application of the Design Kit: a City Website



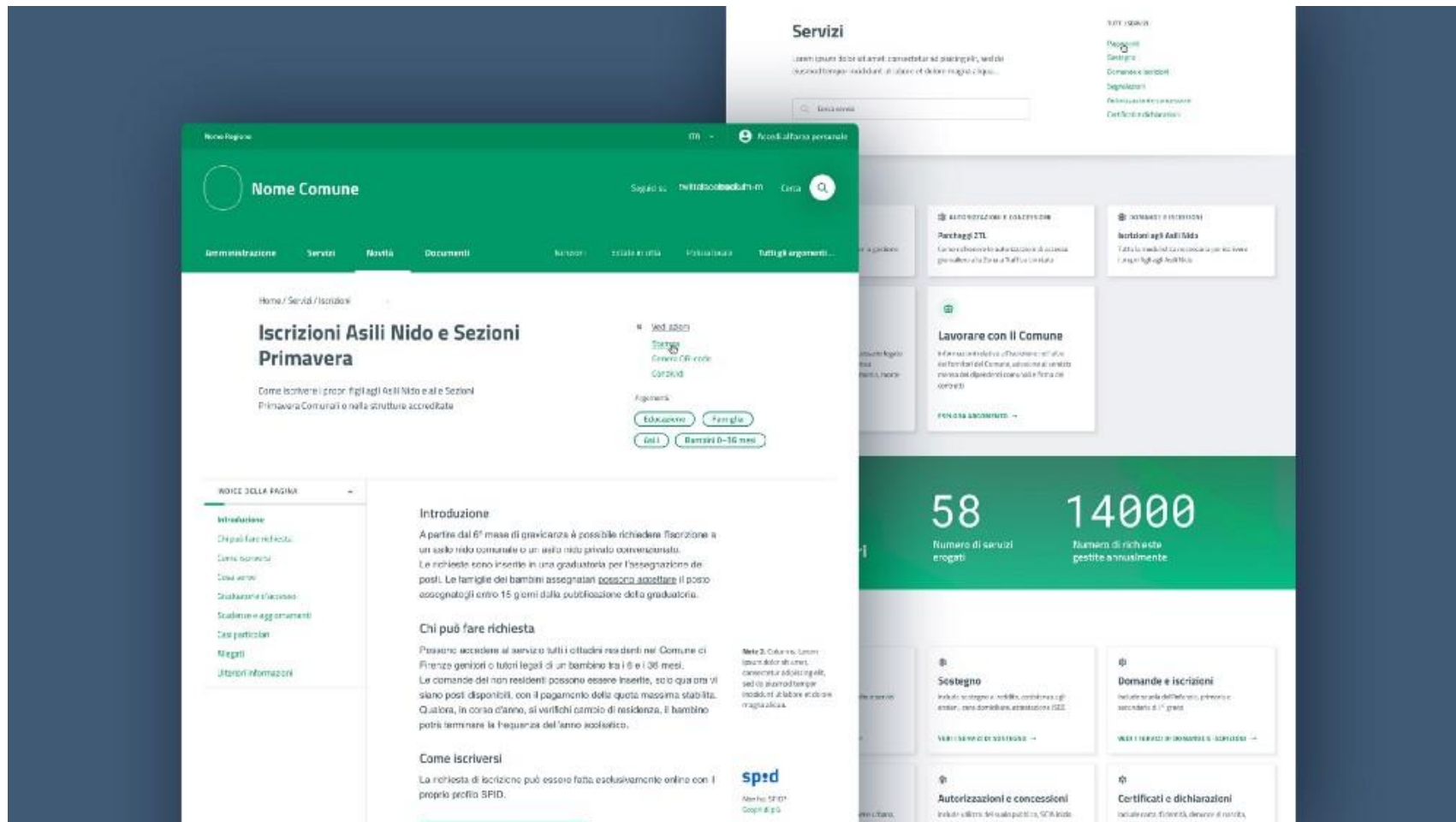
<https://medium.com/designers-italia/un-progetto-non-comune-175f1fe8cab5>

# A City Website: standard navigation path



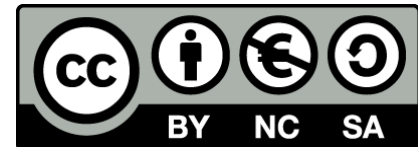


# A City Website: example page



# References

- Scott MacKenzie: Human-Computer Interaction - An Empirical Research Perspective, Morgan Kaufmann
  - Chapter 3: Interaction Elements
- Ben Shneiderman, Catherine Plaisant, Maxine S. Cohen, Steven M. Jacobs, and Niklas Elmqvist, Designing the User Interface: Strategies for Effective Human-Computer Interaction
  - Chapter 8: Fluid Navigation
- COGS120/CSE170: Human-Computer Interaction Design, videos by Scott Klemmer, [https://www.youtube.com/playlist?list=PLLsT5z\\_DsK\\_nusHL\\_Mjt87THSTlgrsyJ](https://www.youtube.com/playlist?list=PLLsT5z_DsK_nusHL_Mjt87THSTlgrsyJ)



# License

- These slides are distributed under a Creative Commons license “**Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)**”
- **You are free to:**
  - **Share** — copy and redistribute the material in any medium or format
  - **Adapt** — remix, transform, and build upon the material
  - The licensor cannot revoke these freedoms as long as you follow the license terms.
- **Under the following terms:**
  - **Attribution** — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
  - **NonCommercial** — You may not use the material for [commercial purposes](#).
  - **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the [same license](#) as the original.
  - **No additional restrictions** — You may not apply legal terms or [technological measures](#) that legally restrict others from doing anything the license permits.
- <https://creativecommons.org/licenses/by-nc-sa/4.0/>

