

Visual Design and Fluid Navigation

User Experience Design

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Academic Year 2025/2026

Hall of Fame or Shame?



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.

Whitespace

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.

Hierarchy

Basic visual design involves ...

Text

Gracefully using whitespace helps separate out logical chunks of content.

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Layout

Colors

Alignment

BASIC VISUAL DESIGN

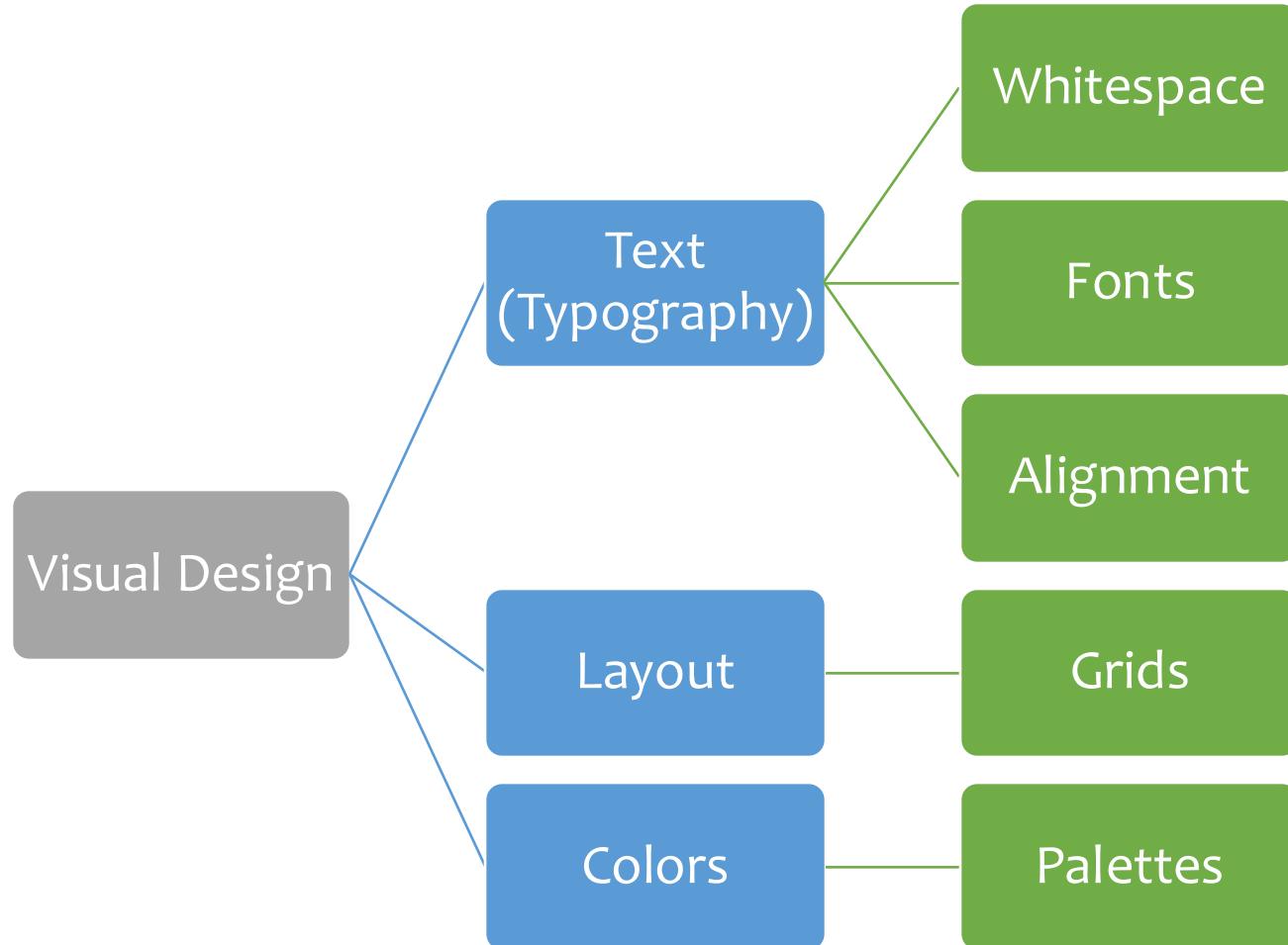
Text

- **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

CNN World US Politics Business Health Entertainment Style Travel Sports Videos Edition ▾

NEW PODCAST: Tug of war | COVID-19: Vaccination tracker | TRENDING: Elon Musk | Oldest surviving Miss America dies | SpaceX toilet problem | Queen |

Brazil has big green plans. But its track record is dismal



The Brazilian government is bringing ambitious promises to the UN climate summit, but can it be believed?

Queen Elizabeth II tells world leaders at COP26 there's 'room for hope' on climate

Biden apologizes to world leaders for Trump's climate actions

How the 'Venice of Africa' is impacted by climate change

DEVELOPING STORY

22-story building collapses in Lagos, Nigeria



Manchin issues warning to Democrats on Biden's economic package

Analysis: Tim Scott confirms he's on the Trump 2024 train

ANALYSIS

'Let's go Brandon,' explained

Two conservative justices seem open to arguments from abortion providers

Barclays CEO quits after investigation into links with Jeffrey Epstein

Missile attack on mosque and religious school kills and injures 29 Yemeni civilians

At least 12 people killed and 52 injured in Halloween weekend mass shootings in US

Reporter reveals what Lindsey Graham said during January 6 riot

Analysis: Trump escalates Jan. 6 cover-up

Tigrayan forces accused of killing 100 youths

News and buzz

Elon Musk offers to sell Tesla stock 'right now' if UN can show how \$6 billion would

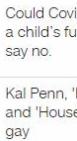


Featured

Spotlight



Man scheduled to be executed for murder he says he didn't commit seeks clemency

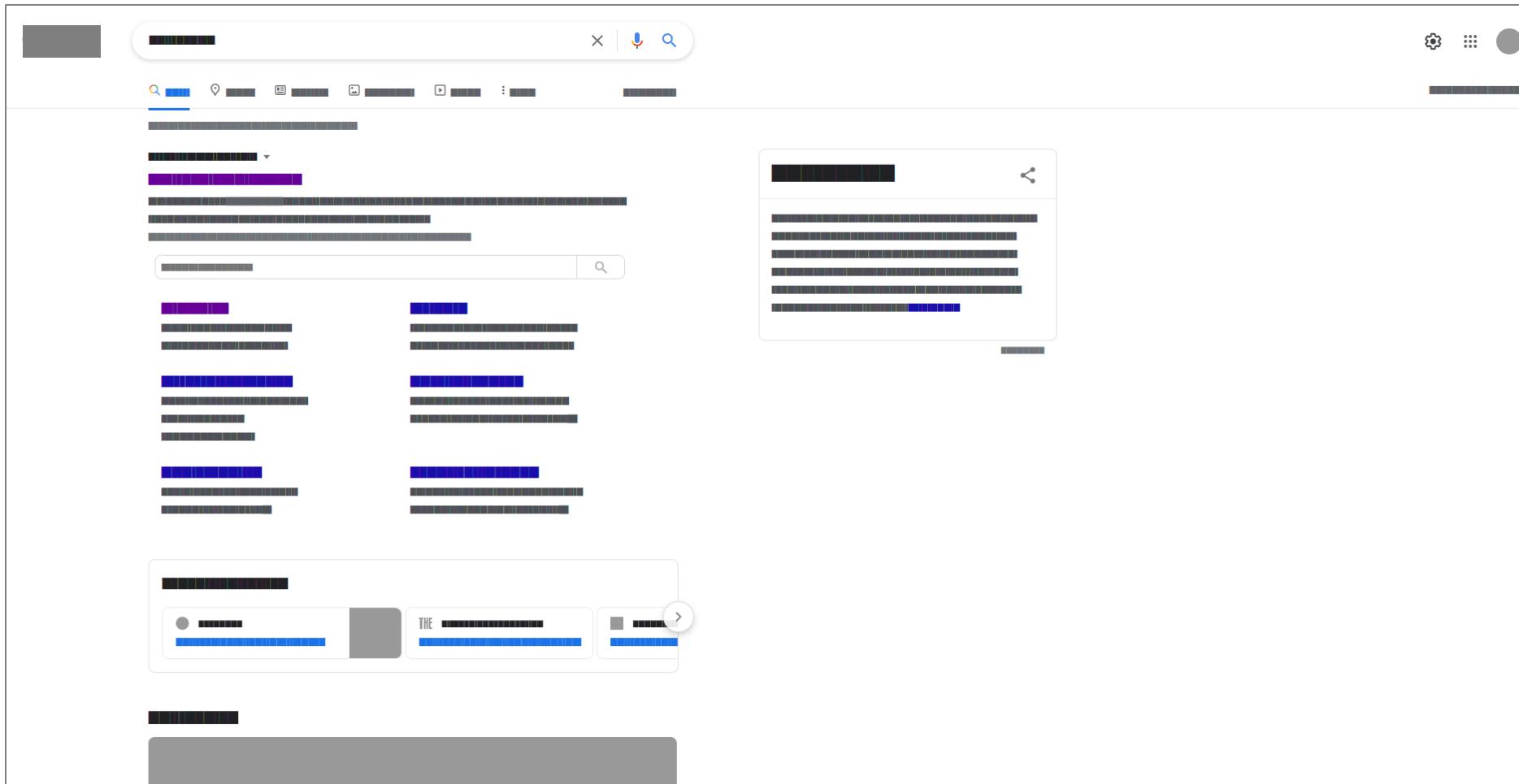


Could Covid-19 vaccines impair a child's future fertility? Officials say no.



Kal Penn, 'Harold and Kumar' and 'House' star, comes out as gay

Recognizable Page Structure



Recognizable Page Structure

The screenshot shows a Google search results page for the query "politecnico". The top navigation bar includes the Google logo, a search bar with the query "politecnico", and various search filters like "Tutti", "Maps", "Notizie", "Immagini", "Video", and "Altri". The search results indicate approximately 33 million results found in 0.71 seconds.

The first result is the official website of Politecnico di Torino, featuring a brief description of the institution's history and mission, along with links to "Didattica", "Offerta formativa", "Apply@polito", and "Scoprire l'Ateneo".

To the right of the main search results, there is a prominent "Politecnico" Knowledge Graph card. This card provides a definition of the term "Politecnico" and links to its Wikipedia page. It also includes a "Feedback" button.

Below the main search area, there is a "Trova risultati su" (Find results on) section, which lists social media links for Politecnico di Torino, including Facebook, Timeshighereducation, and Topuniv.

At the bottom of the page, there is a map showing the location of Politecnico di Torino in Milan, Italy, with nearby landmarks like Albertville, Bourg-Saint-Maurice, Biella, Novara, and Monza.

Recognizable Page Structure



Recognizable Page Structure

The screenshot shows the homepage of Stack Overflow. At the top, there is a navigation bar with links for "About", "Products", "For Teams", a search bar, and buttons for "Log in" and "Sign up". The main content area is titled "All Questions" and displays 21,855,928 questions. The questions are listed in a grid format, each with a title, a brief description, the number of votes and answers, tags, and the user who asked it. To the right of the main content, there are several sidebar sections: "The Overflow Blog" (with posts like "Podcast 388: Software for your second brain" and "Why SOLID principles are still the foundation for modern software architecture"), "Featured on Meta" (with posts like "Now live: A fully responsive profile" and "Please welcome Valued Associates #999 - Bella Blue & #1001 - Salmon of Wisdom"), "Collectives" (listing groups like "Go Language" with 13k members, "Google Cloud" with 11k members, and "GitLab" with 3k members), and "Related Tags" (listing tags like "javascript", "python", and "java"). On the left side, there is a sidebar with links for "Home", "PUBLIC Questions", "Tags", "Users", "COLLECTIVES Explore Collectives", "FIND A JOB Jobs", "Companies", and "TEAMS". The "TEAMS" section includes a "Stack Overflow for Teams" introduction, a "Create a free Team" button, and a "What is Teams?" link.

Recognizable Page Structure



Recognizable Page Structure

The screenshot shows the Tripadvisor website interface for searching hotels in New York City. At the top, there's a navigation bar with links for "New York City", "Hotel", "Cose da fare", "Ristoranti", "Voli", "Case vacanza", "Pacchetti vacanza", "Crociere", "Autonoleggio", and "Avvisi". Below the navigation is a map of New York City with a button labeled "Guarda la mappa". The main title "Hotel New York City e alloggi" is displayed above a search form for "Arrivo" (Arrival) and "Partenza" (Departure), and a guest count of "Ospiti 1 camera, 2 adulti, 0 bambini". A sidebar on the left contains filters for "COVID-19" (checkbox for "Strutture che adottano misure di sicurezza"), "Offerte" (checkboxes for "Cancellazione gratuita", "Prenota ora, paga quando soggiorni", and "Strutture con Offerte Speciali"), "Prezzo" (a range slider from 0 € to 623 € and a dropdown for "Prezzo + tasse e spese"), and "Molto richiesti" (checkboxes for "5 stelle", "Colazione inclusa", "4 stelle", and "3 stelle"). The main content area shows a list of 911 structures in New York City, ordered by "Qualità-prezzo". The first result is a sponsored listing for "Fairfield Inn & Suites New York Midtown Manhattan/Penn Station", featuring a large image of the hotel building, its price of 161 €, and a "Vedi l'offerta" button. To the right of the listing are details like "Info sull'hotel", "Visita il sito dell'hotel", "00 1212 563-0900", "Offerta Speciale", and icons for "Connessione Wi-Fi gratuita", "Bar/Lounge", "Centro fitness", and "Misure di sicurezza adottate".

Recognizable Page Structure

TBS Newsi Tokyo Broadcasting System, News Portal Site

リアルタイム経営こそ、IT戦略 FUTURE[®] Architect
経営とITをデザインする、フューチャーアーキテクト。

News10 アラフト元議員の骨からイロニウム検出。暗喩の可能性高まる 11/07 04:20 RSS/RDF配信 文字サイズ 中 大

社会 政治 経済 國際 スポーツ 列島 天気 連続動画 報道コラム ニュース検索 検索

注目キーワード: [メニュー表示問題] [みずほ基盤] [原発] [米超競争]

最終更新: 2013年11月7日(木) 04時34分

【NEW】「三越伊勢丹」も不適切表示、他の百貨店にも拡大

スティッパー ウゴン 家族の冒険 プロジェクト
ニッポン 家族冒険スポット
総選挙!
ドンドン投票してね!
HONDA

TBSニュース番組ダイジェスト配信中

TBS ニュースパート NEWS 23 NR3 JNN

台風情報 Smart News 地震情報 福島第一原発情報カメラ

NEW 日本人初の船長・若田さん、きょう宇宙へ
NEW 「特定秘密保護法案」きょうから国会審議
NEW 豚木議員、金正恩氏の従兄人・張成沢氏と会談
NEW 山西省連続爆発事件、共産党本部狙った計画的犯行か

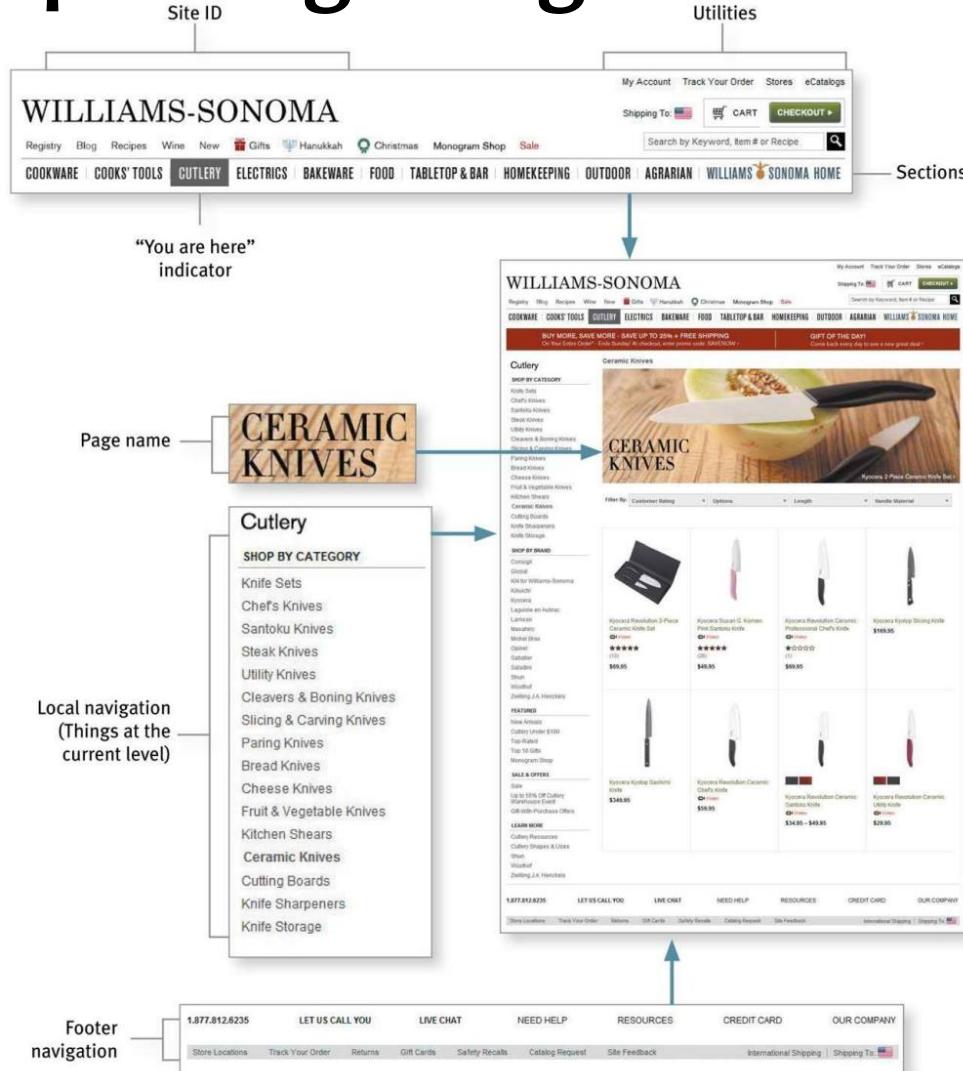
社会 政治 経済

NEW「特定秘密保護法案」きょうから国会審議
日本版NSC法案、衆院特別委で可決
自衛隊が離島防衛演習、沖縄・宮古島に地対艦ミサイル展開
岸田外相、中国・韓国との民間交流が重要という認識示す
「婚外子」遺産相続の民法改正案、自公が成立目指す
原発事故の対応見直し、国が積極的関与へ

NEW 表示適正化対策、消費者庁が業界3団体に要請文
「嵐」など芸能人の偽サイン板売、容疑の親子らを3人逮捕
大阪・川に少年突き落とし、遺体は下着姿
歌舞伎町のホスト要死、向死者が暴行か
NEW 小学校の4階から小6男児転落、意識不明の重体

関連リンク: TBS Newsi | TBSNEWS23 | 新連携案 | ウィキペディア | 特集別報 | 新連携案 | コラムカード | クローズドキャプション | リンククリック | TBS TOPページ | TBS報道番組一覧 | ニュース

Conventions Help Recognizing 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.

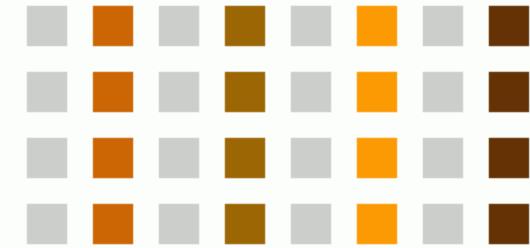
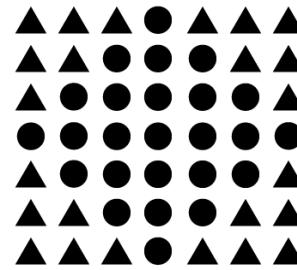
Examples: Figure-ground



The Basecamp 3 landing page features a central cartoon illustration of a character overwhelmed by multiple communication channels, including email, phone calls, and messages. The character is surrounded by speech bubbles containing text like "DID WE GET THAT DONE YET?", "WAIT, WHO MADE THAT DECISION?", "WHERE DO I PUT THAT?", "WHEN IS THIS DUE?", "WHO SENT THIS TO THE CLIENT?", and "NO ONE TOLD ME THAT! THIS IS EXHAUSTING!". Above the illustration, a banner reads "Working with other people? Struggling to keep everyone on the same page?". To the right of the illustration is a sign-up form with a button labeled "Sign up now for free below". Below the form, a message states "Just last week, 10,772 companies got started with Basecamp 3!". The form includes fields for "Your Name" (Jule Appleseed), "Your Email" (jule@widgetco.com), and "Company/Organization" (Widget, Co.).

The AngelList homepage has a dark background featuring a stylized image of Earth from space. At the top, there is a navigation bar with links for SYNDICATES, STARTUPS, FUNDS, STARTUP JOBS, RECRUITING, and MORE. On the right side, there is a search bar and links for JOIN and LOG IN. A prominent call-to-action button says "Find a Startup Job". To the right of the main content area, there is a sidebar with links for "Post a Job", "Raise Money Online", and "Invest in Startups".

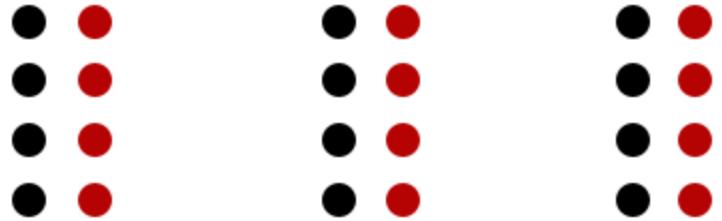
Examples: Similarity



The GitHub sign-up page features a dark background with white text and light-colored input fields. The main heading is "Where software is built". Below it, a subtext reads: "Powerful collaboration, code review, and code management for open source and private projects. Public projects are always free. Private plans start at \$7/mo." A large green "Sign up for GitHub" button is prominently displayed. The input fields for "Pick a username", "Your email", and "Create a password" are white with black text. A note below the email field specifies character limits. A small note at the bottom states: "By clicking 'Sign up for GitHub', you agree to our Terms of Service and Privacy Policy. We will send you account related emails occasionally." A "Sign up" button is located at the top right of the form.

The La Stampa news website homepage features a clean layout with a grid of news articles. At the top, there are navigation links for "GNN", "NEWSLETTER", social media icons, and "ABBONATI ACCEDI". The main title "LA STAMPA" is centered above the content. Below the title, there are sections for "LEGGI IL QUOTIDIANO", "TOP NEWS", and "TUTTO LIBRI". The main content area displays several news items with images, titles, and authors. One article features a video thumbnail. The overall design is modern and organized.

Examples: Proximity



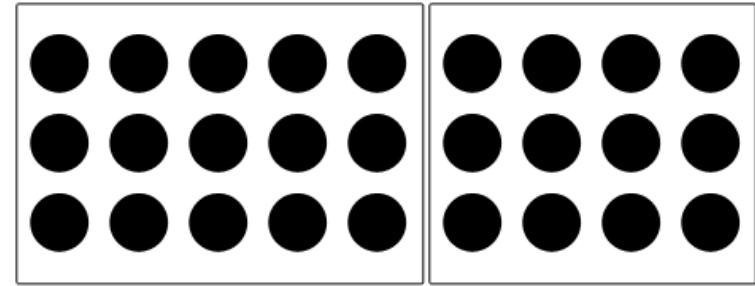
A screenshot of the Walmart website homepage. At the top, there's a navigation bar with links for 'Hello, Sign In' and 'My Account'. Below the header, a banner says 'Save big in every department'. The main content area features a grid of 18 product categories: Electronics (iPad), Home (coffee maker), Exercise & Fitness (woman on treadmill), Health (vitamin bottle), Clothing & Jewelry (pink top and skirt), Furniture (blue armchair), Cold Weather Prep (person in snow), Tax Preparation (TurboTax logo), Auto & Tires (tire), Office Supplies (black bin), Home Improvement (drill), and Outdoor Sports (tent). There are also smaller images for Jackson Hewitt Tax Services, H&R Block, and a baby in a high chair.

A screenshot of the Vice news website homepage. The top navigation includes 'WATCH', 'SECTIONS', 'PHOTOS', 'MAGAZINE', 'TOPICS', 'CITY GUIDES', 'ELECTION 2016', 'OPINION', and 'MORE'. Below the navigation, there are several news articles: 'Medical Marijuana Users in Canada Can Legally Grow Their Own Weed Now' (Feb 24, 2016) with a photo of a cannabis plant; 'The Women Who Love Ted Cruz' (Feb 24, 2016) with a photo of a woman kissing another woman; and 'How Donald Trump Won Nevada's Cliven Bundy Vote' (Feb 24, 2016) with a photo of a man in a cowboy hat. Other sections like 'STUFF' and 'MOTHERBOARD' are also visible.



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

Examples: Common Region



Pinterest search results for 'architecture' showing various architectural projects and designs.

Houzz Article: 11 Things You Didn't Think You Could Fit Into a Small Bedroom

Clever designers have found ways to fit storage, murals and even chandeliers into these tight sleeping spaces

WWW.HOUZZ.COM

Like 157 | Comment | Share

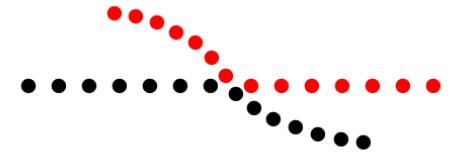
Top Comments

33 shares

Frankie Sez Really great ideas for the 'minimalist' in some of us...
Like · Reply · 2 · Yesterday at 5:42am

Country Mountain Homes Space for books is a must!
Like · Reply · Yesterday at 10:07am

View 2 more comments



Examples: Continuity

Customers Who Bought This Item Also Bought

The screenshot shows a grid of book covers and their details. The books are: 'CROSSING THE CHASM' by Geoffrey A. Moore, 'THE LEAN STARTUP' by Eric Ries, 'The Innovator's Dilemma' by Clayton M. Christensen, 'THE INNOVATOR'S SOLUTION' by Clayton M. Christensen, and 'How Will You Measure Your Life?' by Clayton M. Christensen.

Book Title	Author	Type	Rating	Price
CROSSING THE CHASM	Geoffrey A. Moore	Paperback	★★★★★ 72	\$12.35 ✓Prime
THE LEAN STARTUP	Eric Ries	Hardcover	★★★★★ 1,062	\$16.66 ✓Prime
The Innovator's Dilemma	Clayton M. Christensen	Paperback	★★★★★ 209	\$10.06 ✓Prime
THE INNOVATOR'S SOLUTION	Clayton M. Christensen	Paperback	★★★★★ 22	\$18.33 ✓Prime
How Will You Measure Your Life?	Clayton M. Christensen	Hardcover	★★★★★ 583	\$15.86 ✓Prime

Page 1 of 20



Step 1

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



Step 2

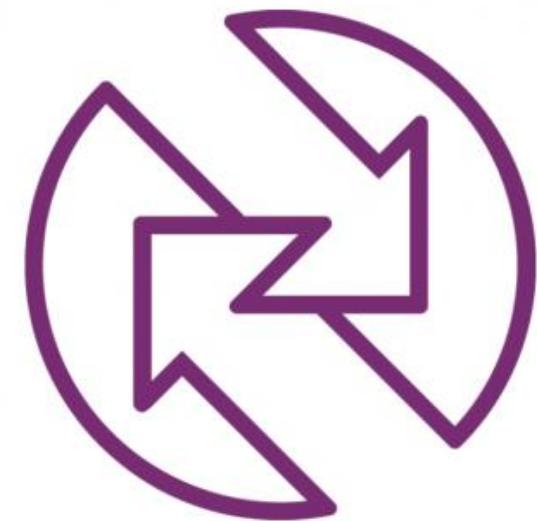
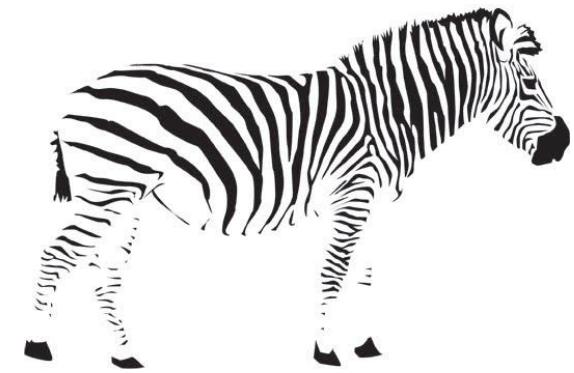
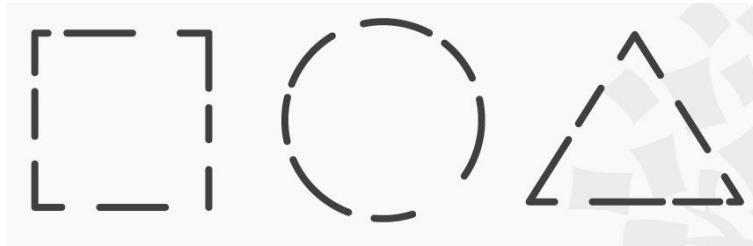
Our friendly servers organize your food for delivery - hot and ready to eat!



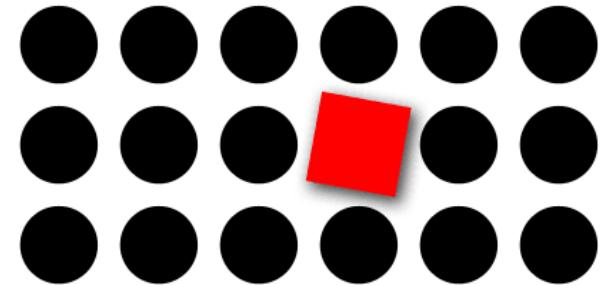
Step 3

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

Examples: Closure



Examples: Focal Point



The Twilio homepage features a dark background image of a busy street scene. At the top, the Twilio logo is on the left, followed by navigation links: PRODUCTS & PRICING, USE CASES, API & DOCS, NOT A DEVELOPER?, SIGN UP, and LOG IN. Below the navigation, a large white text area reads "BUILD APPS THAT COMMUNICATE WITH EVERYONE IN THE WORLD". Underneath this, smaller text says "A Messaging, Voice, Video and Authentication API for every application". At the bottom, there are two buttons: "See Use Cases" and "Get a free API key".

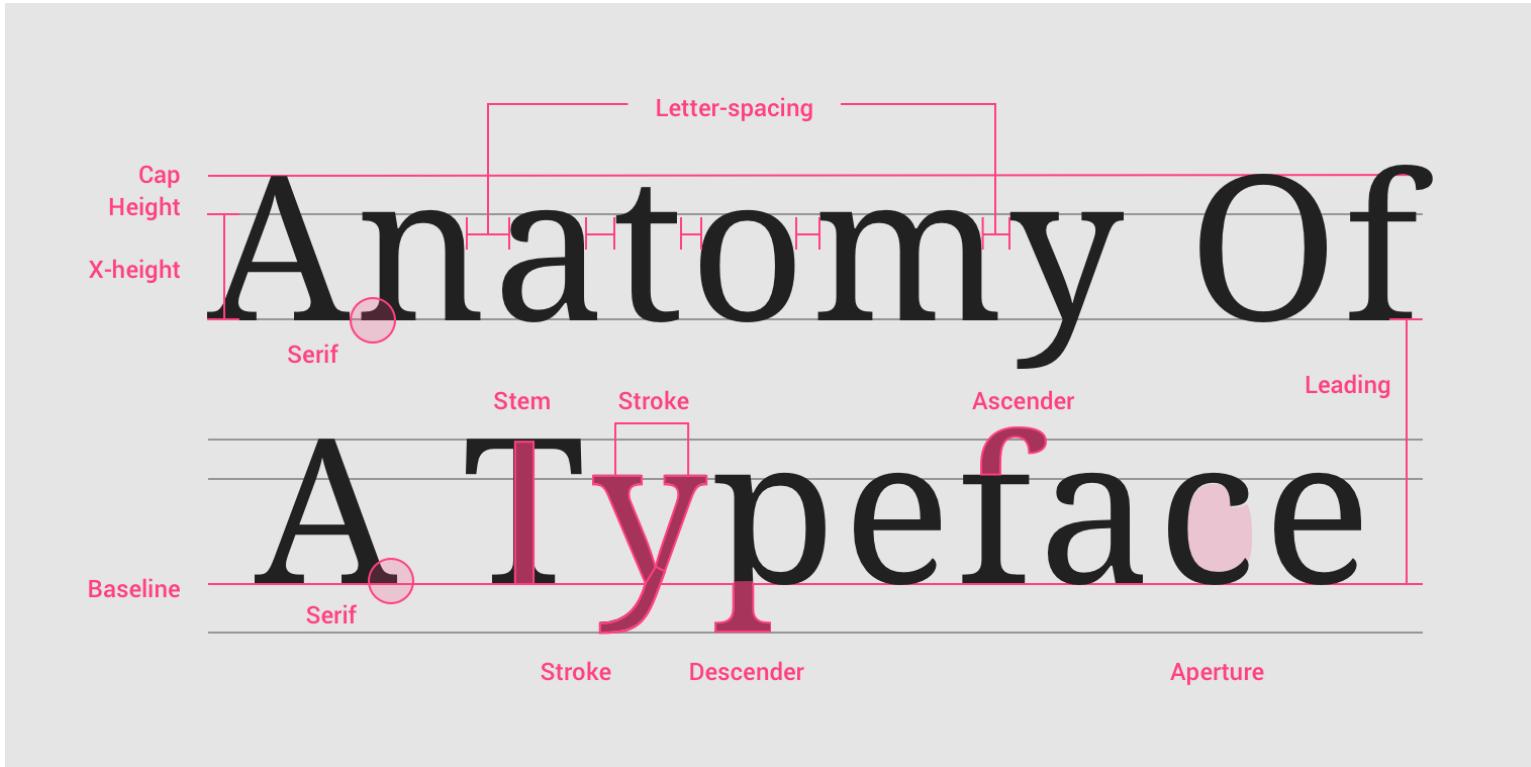
The Instacart homepage features a background image of a person holding a grocery bag filled with food items like a sandwich, chips, and vegetables. Overlaid on this is a white rectangular form. At the top of the form is the Instacart logo. Below it, the text "Groceries delivered in 1 hour" and "Enter your zip code to see your local stores". There is a text input field labeled "Enter Zip Code" and a green button labeled "Find Stores". At the bottom of the form, there is small text "Already have an account? Log in" and a note "FREE delivery on your first order*".

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>

Text

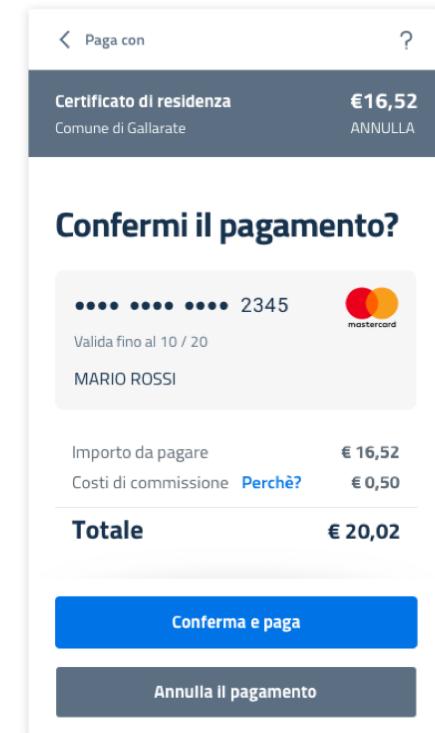
- Font size, color and spacing define a hierarchy of visibility and attention
- The visual hierarchy should match the relative importance of the information content



<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>

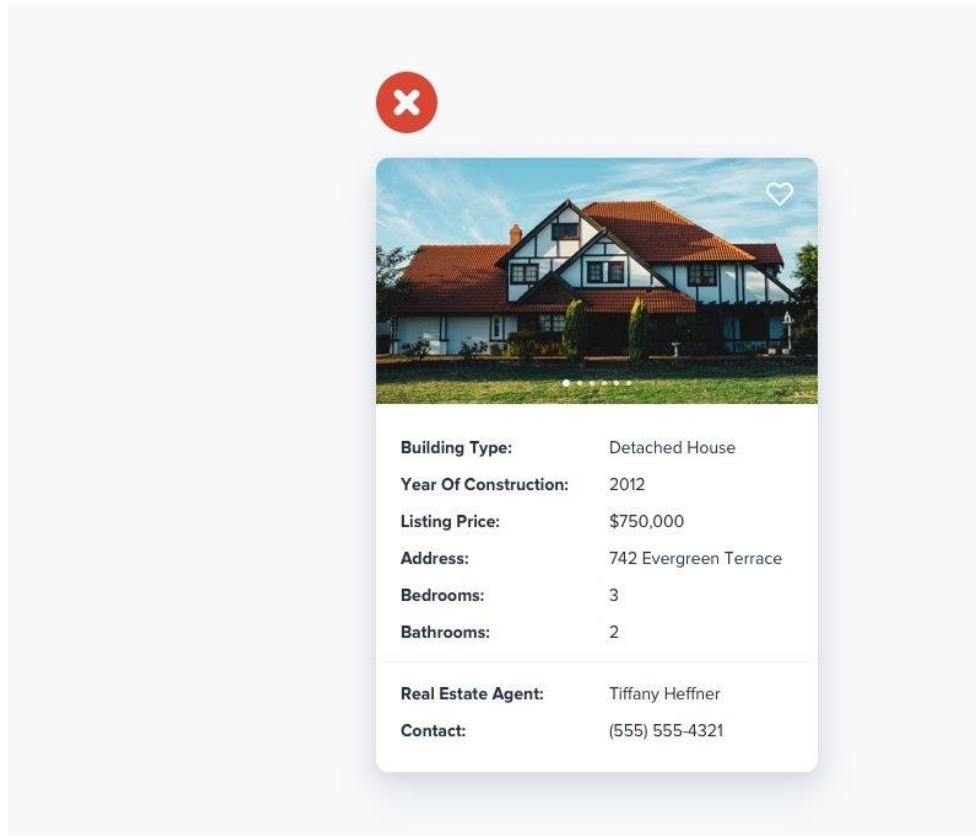
Text

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Exercise (~10 minutes)



- Redesign this UI to align with the text and layout principles we've discussed so far
 - You can redesign it in low fidelity, or by modifying the picture directly
- Text and layout convey meaning: what information are users most likely looking for?

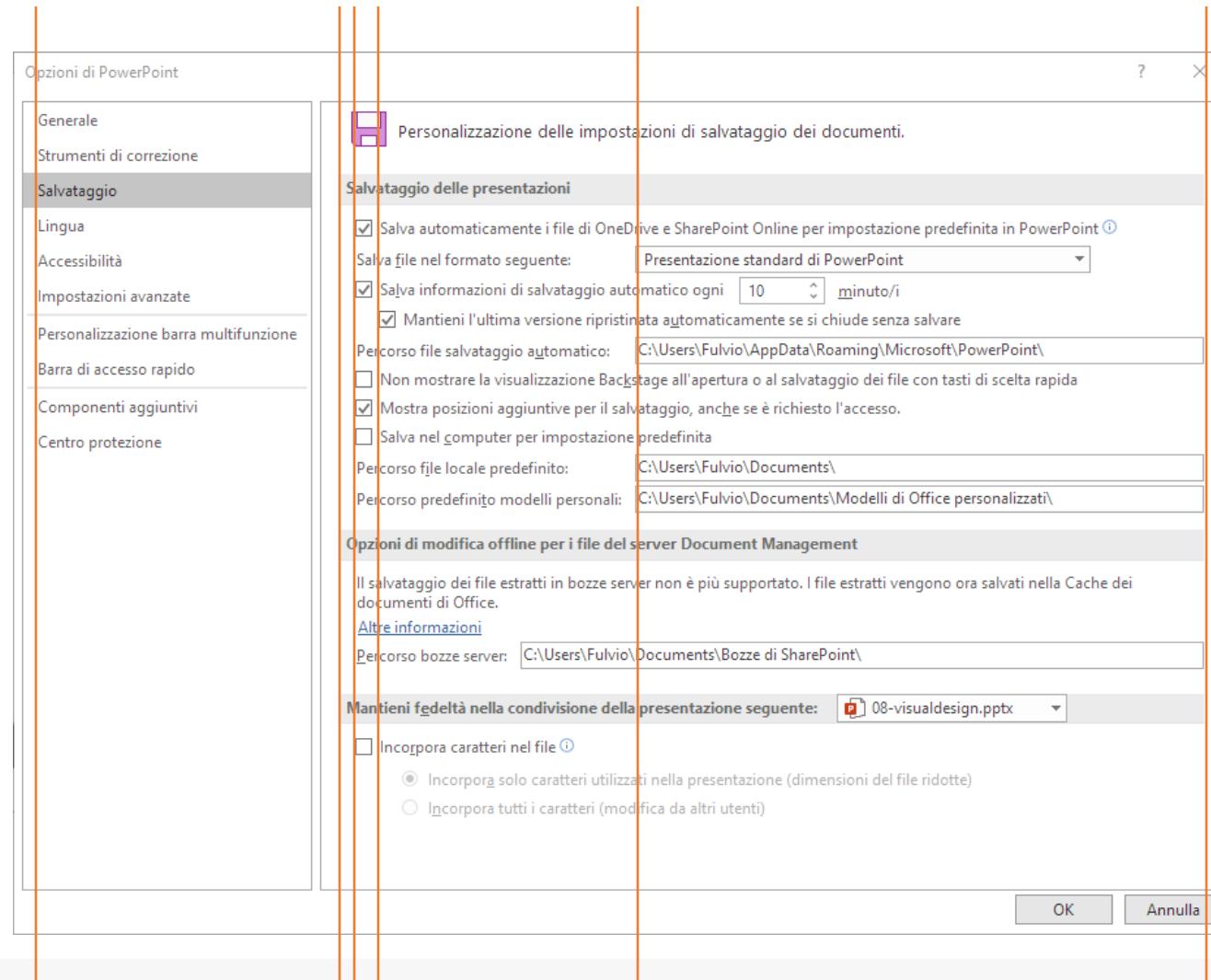
Grids and Alignment

Exploiting grouping and alignment to convey content, at different levels

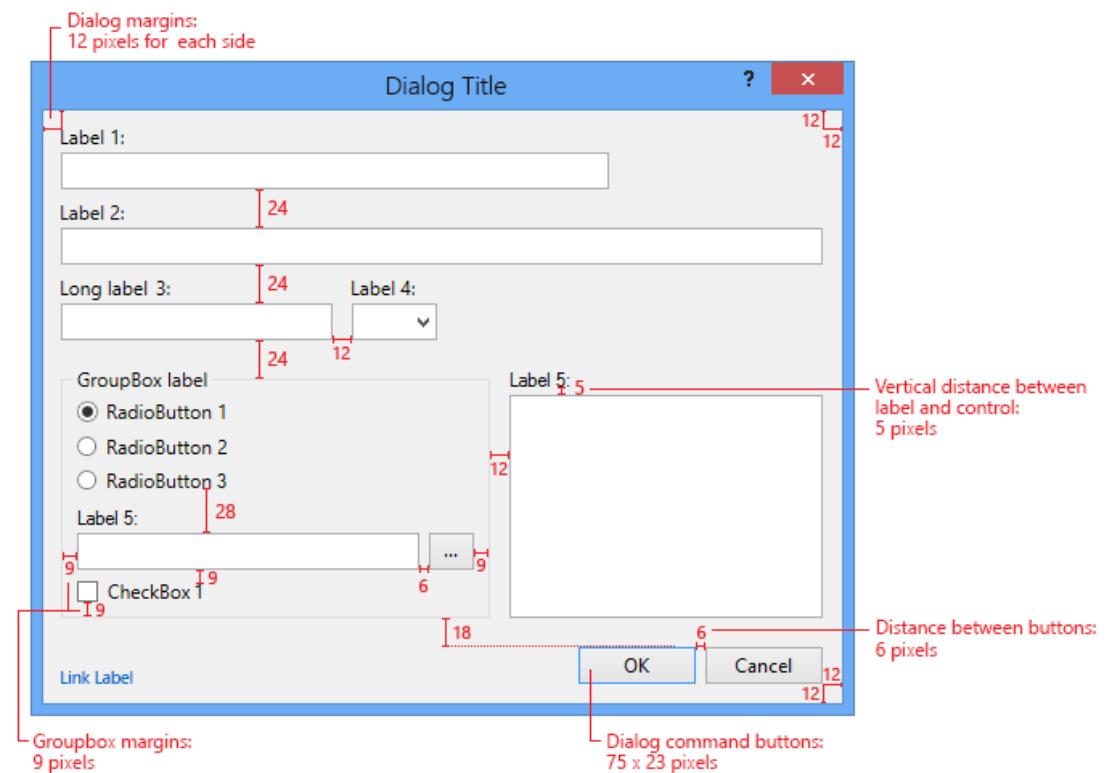
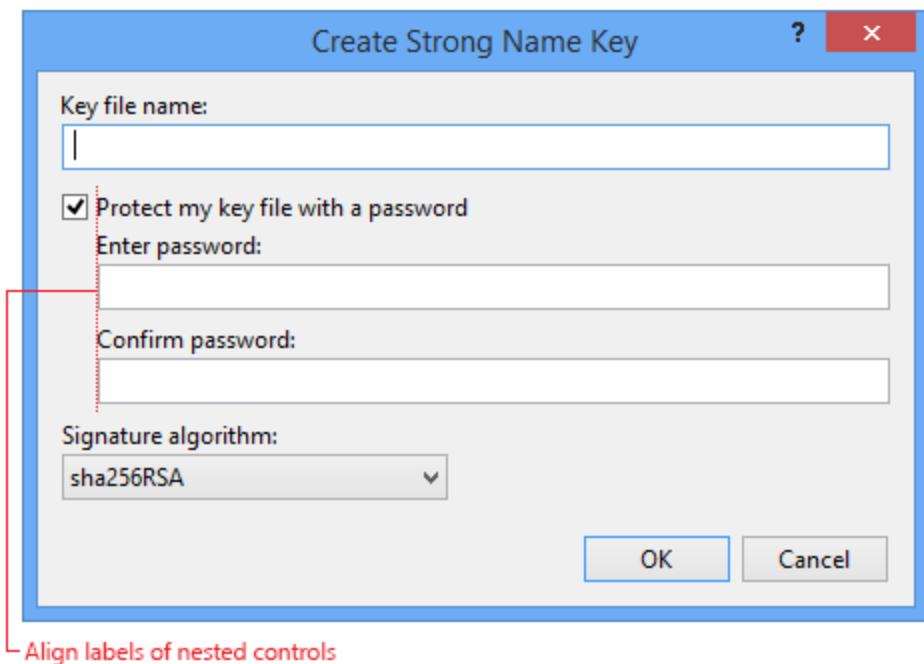
Alignment

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

Example

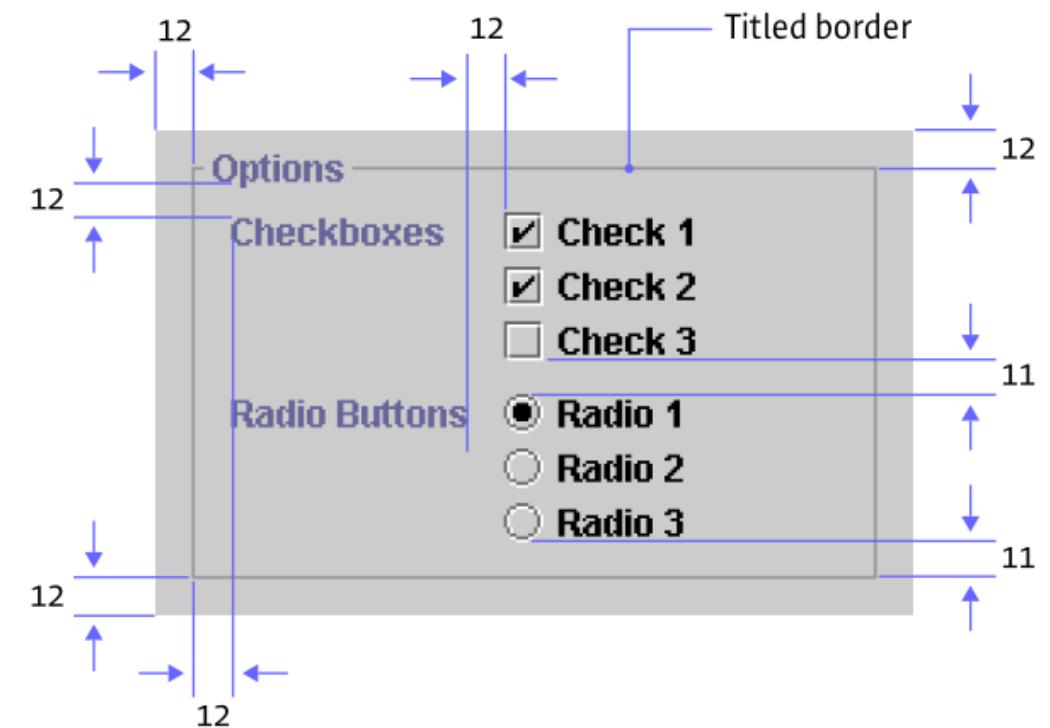
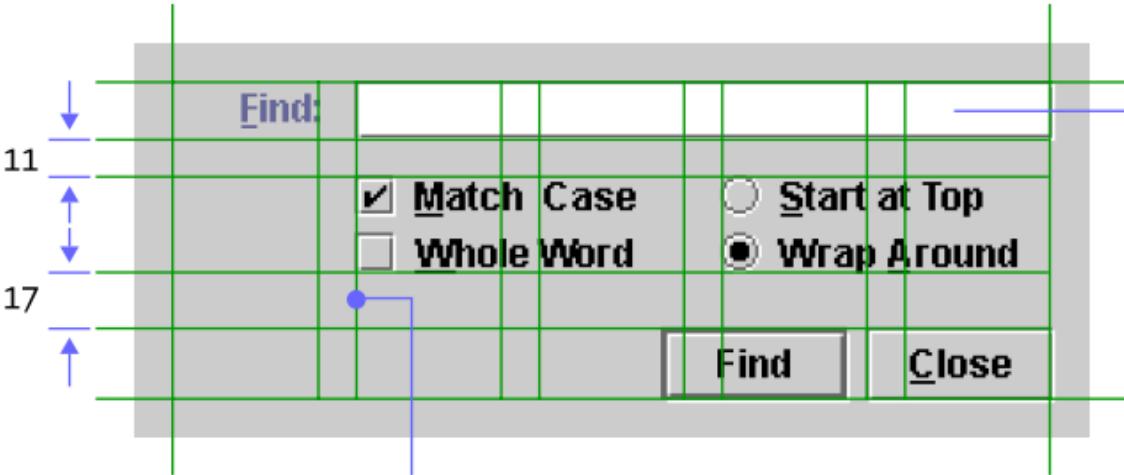


Examples



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

Examples

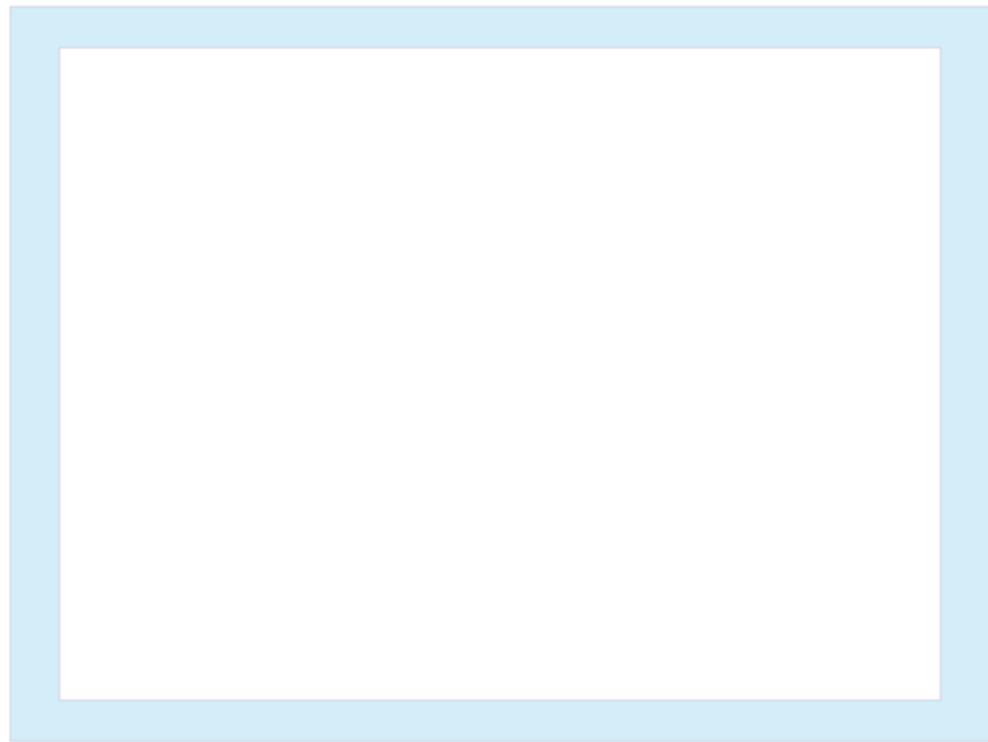


Grid Layout Ingredients

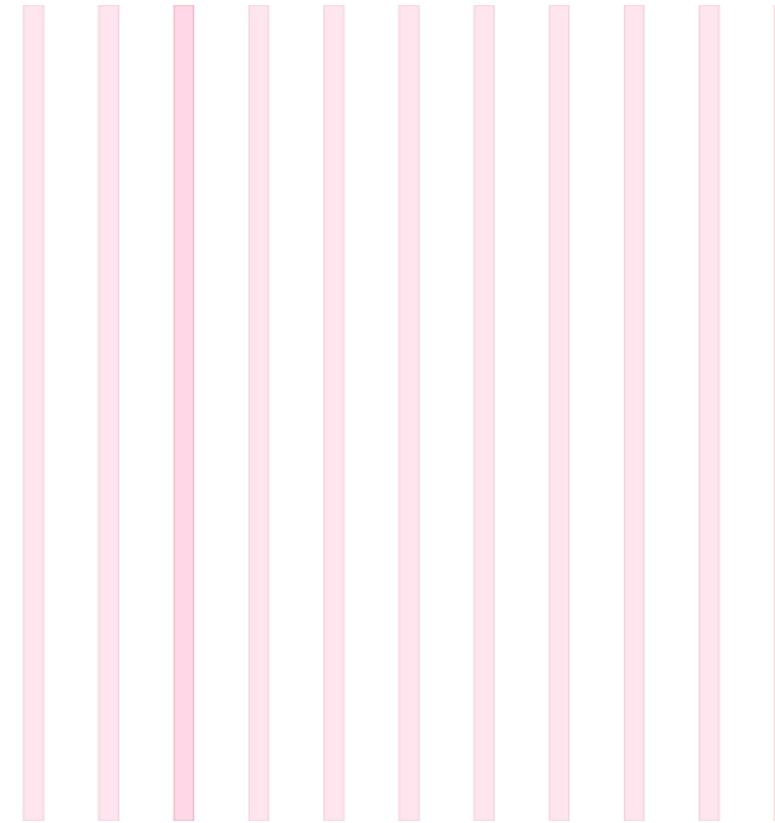
- **Guides:** The edge which you choose to align content with
- **Column:** A vertical division of content
- **Row:** A horizontal division of content
- **Margins:** The area surrounding your content
- **Gutters:** The margins between columns
- **Hang-line:** A horizontal guide to align content to hang 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

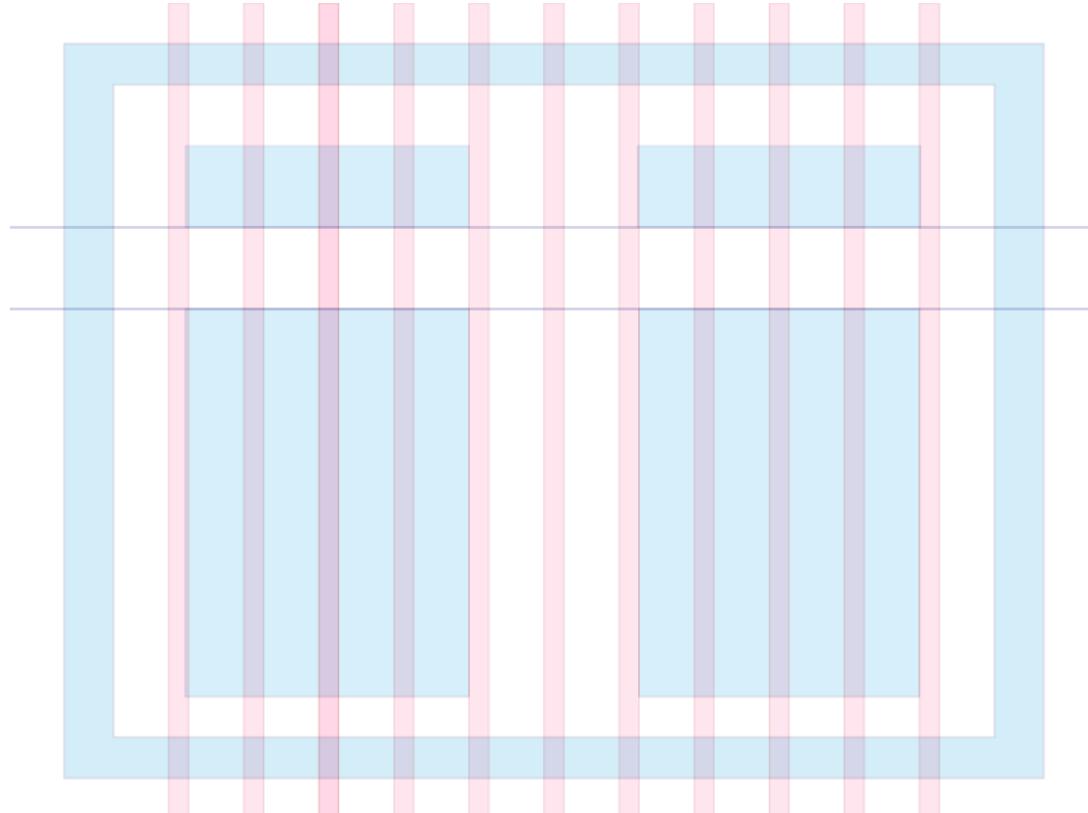


Columns & Gutters



Grid Layout Ingredients

Hanglines and Baselines

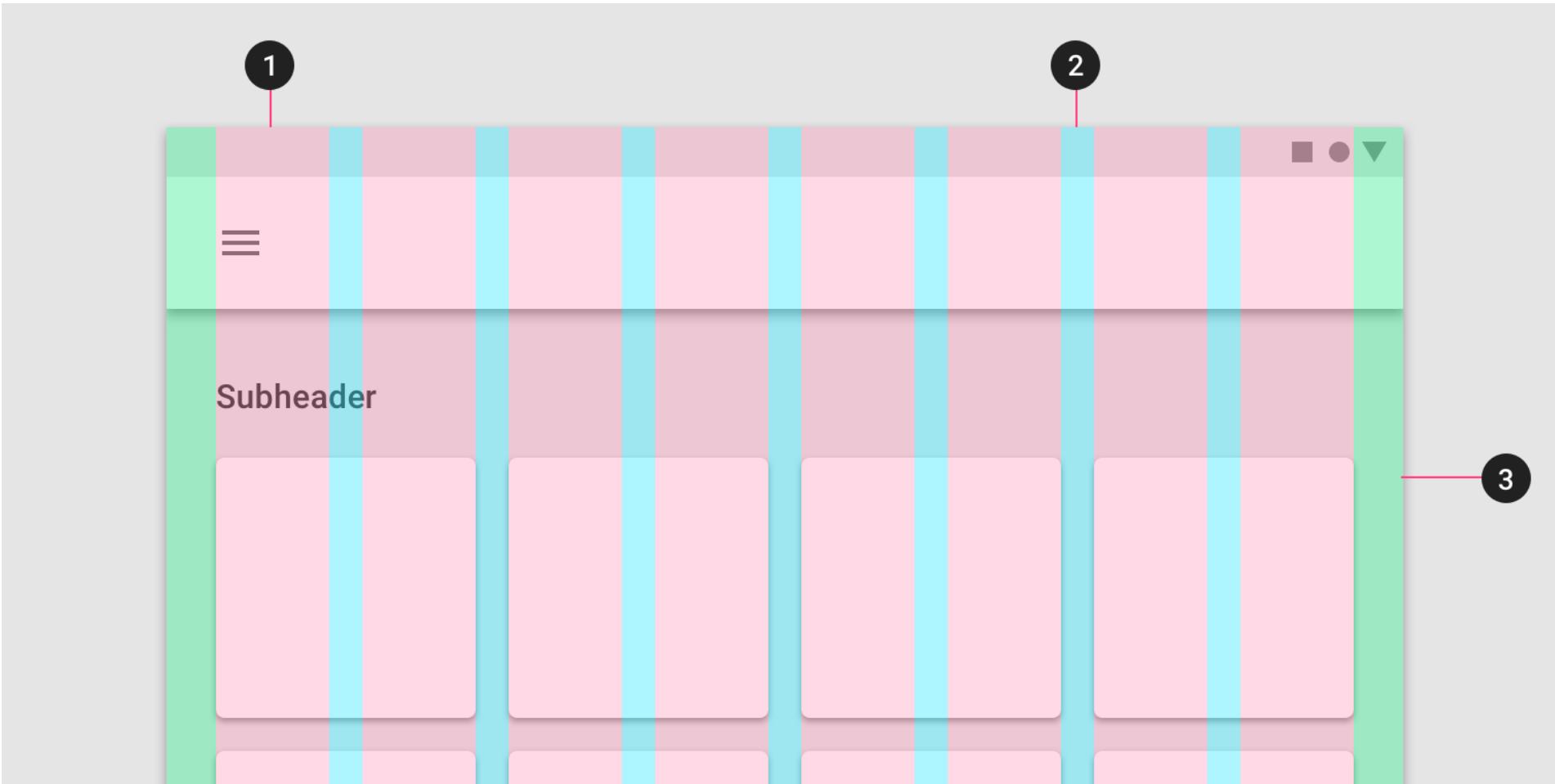


Baseline Grids



Example Grid-based layout

1. Columns
 2. Gutters
 3. Margins



<https://material.io/design/layout/responsive-layout-grid.html#columns-gutters-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

The image shows four screenshots of a website titled "Learn to Create Websites" from "Tutorial Republic". Each screenshot displays a different section of the site's content, illustrating how the responsive grid layout is applied across multiple columns and rows.

Screenshot 1 (Left): Shows the homepage with a main title and a "Get started today" button. Below it, there are six categories: HTML, CSS, JavaScript, Bootstrap, PHP, and SQL, each with a brief description and a "Learn More" button.

Screenshot 2 (Second from Left): Shows a detailed page for "HTML". It includes a main title, a "Get started today" button, and several sections: "HTML", "CSS", "JavaScript", "Bootstrap", "PHP", and "SQL", each with a "Learn More" button.

Screenshot 3 (Second from Right): Shows a detailed page for "CSS". It follows the same structure as Screenshot 2, with a main title, a "Get started today" button, and sections for "HTML", "CSS", "JavaScript", "Bootstrap", "PHP", and "SQL".

Screenshot 4 (Right): Shows a detailed page for "JavaScript". It follows the same structure as Screenshot 2 and Screenshot 3, with a main title, a "Get started today" button, and sections for "HTML", "CSS", "JavaScript", "Bootstrap", "PHP", and "SQL".

Yellow Box Overlay: A large yellow box is overlaid on the bottom-left portion of the screenshots, containing the following code snippet:

```
<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

Unsemantic (responsive, based on %)

The screenshot shows the Unsemantic website. At the top, there's a navigation bar with links for Home, About, Demo, CSS Documentation, and Sass Documentation. Below the navigation is a button labeled "Download Here" and a GitHub Repo link. The main content area has two sections: "What is it?" and "Example Usage". The "What is it?" section defines "Unsemantic" as an adjective and noun, noting it's a nonexistent word used by developers to critique peers. The "Example Usage" section shows a snippet of CSS code for a grid container with three columns of 25%, 50%, and 25% widths. Further down, there are sections for "Successor to 960.gs", "SE-Oh?", "Built with SASS", "Responsive Demo", "Adapt.js Demo", and "Browser Support". A note at the bottom states: "Note: If you reached this site by mistake, perhaps you are seeking Unsemantic's arch nemesis: Semantic.com". The footer includes links for GitHub and MIT license, and credits for Nathan Smith and Soroush.

<https://unsemantic.com>

tailwindcss (responsive, flexible)

The screenshot shows the TailwindCSS website. At the top, there's a navigation bar with links for Docs, Components, Blog, Showcase, and a search bar. The main headline reads "Rapidly build modern websites without ever leaving your HTML." Below the headline, a subtext states: "A utility-first CSS framework packed with classes like `flex`, `pt-4`, `text-center` and `rotate-90` that can be composed to build any design, directly in your markup." There's a "Get started" button and a search bar. On the right, there's a testimonial box featuring a portrait of Sarah Dayan, a Staff Engineer at Algolia, who says: "Tailwind CSS is the only framework that I've seen scale on large teams. It's easy to customize, adapts to any design, and the build size is tiny." Below the testimonial is a block of CSS code demonstrating Tailwind's utility classes.

<https://tailwindcss.com>

Grid Structure

Main body:
Mix of 2x and 3x
columns

Alternating row
types



Title area outside the grid

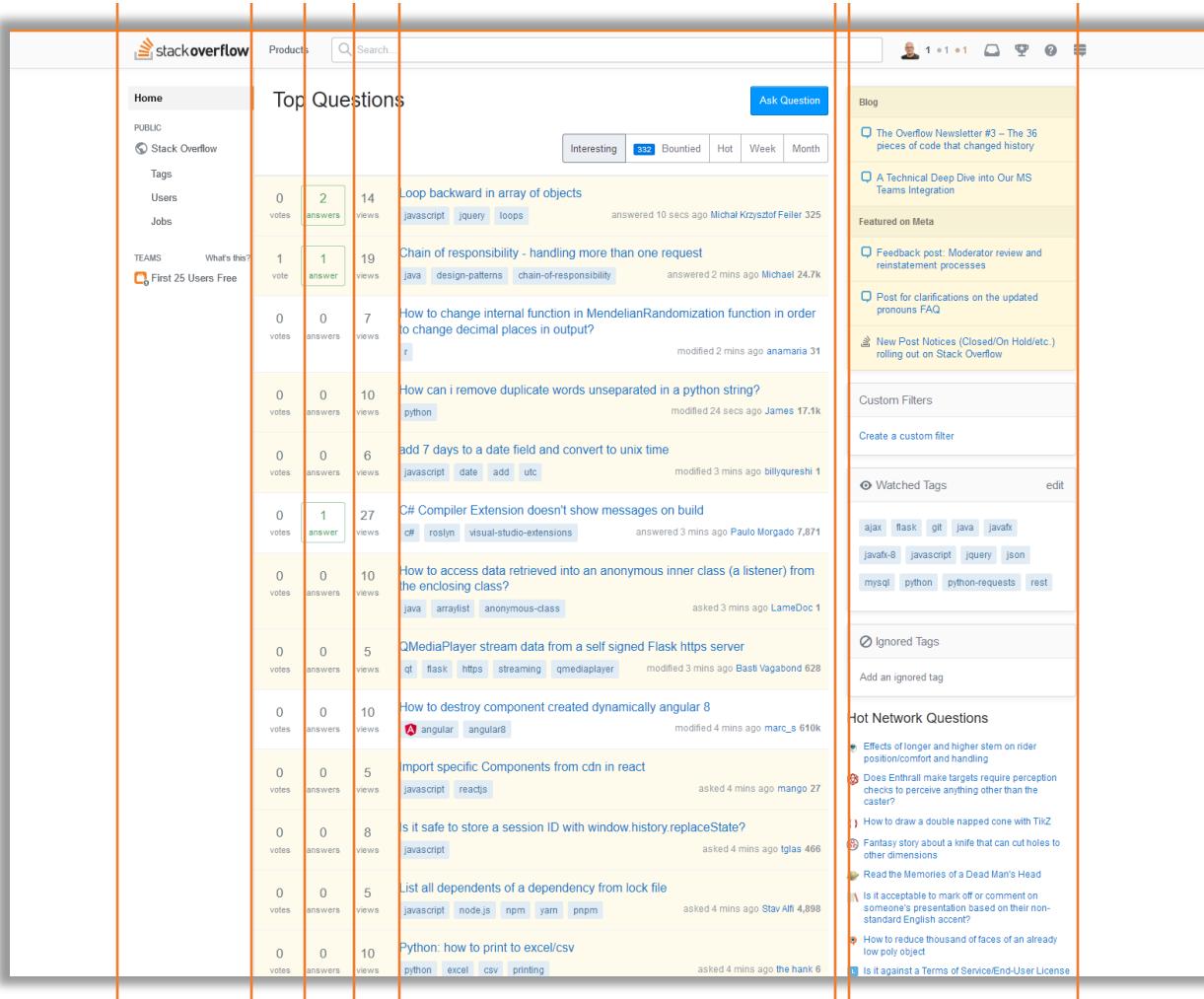
Right column for other types of articles

Grid Structure

Main content
(center, wide)

Navigation
(left, smaller)

Related content
(right, smaller)



Example (2015 vs. 2019)

Il tuo account > I tuoi indirizzi > **Nuovo indirizzo**

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:

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

Weekend Delivery:

Security Access Code:
For buildings or gated communities

Aggiungi un nuovo indirizzo

Ottura 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
Via e numero civico

Scala, piano, interno ecc. (Opzionale)

Città

Provincia

Codice postale

Numero di telefono
Può essere utilizzato per aiutare consegna

Aggiungi istruzioni di consegna

Consegna nel fine settimana

Some Best Practices

- 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

Example (2019)

Software								Top
1° anno								
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli	
1	01PDWOW	IT	Information systems ING-INF/05 (6) Oppure	6	M. Morisio	View		
1	02GOLOV	IT	Architetture dei sistemi di elaborazione ING-INF/05 (10) Oppure	10	P. Bernardi E. Sanchez Sanchez	View		
1	02LSEOV	IT	Computer architectures ING-INF/05 (10) Oppure	10	P. Montuschi	View		
1	01SQJ0V	IT	Data Science and Database Technology ING-INF/05 (6) Oppure	8	S. Chiusano	View		
1	01SQMOV	IT	Data Science e Tecnologie per le Basi di Dati ING-INF/05 (8) Oppure	8	E. Baralis	View		
1	01OTW0V	IT	Computer network technologies and services ING-INF/05 (6) Oppure	6	M. Baldi	View		
1	02KPN0V	IT	Tecnologie e servizi di rete ING-INF/05 (6) Oppure	6	G. Marchetto	View		
2	02JEU0V	IT	Formal languages and compilers ING-INF/05 (6) Oppure	6	R. Sisto	View		
2	05BIDOV	IT	Ingegneria del software ING-INF/05 (8) Oppure	8	G. Bruno	View		
2	04GSPOV	IT	Software engineering ING-INF/05 (8) Oppure	8	M. Morisio	View		
2	01UDFOV	IT	Applicazioni Web I ING-INF/05 (6) Oppure	6	E. Masala	View		
2	01TXY0V	IT	Web Applications I ING-INF/05 (6) Oppure	6	F. Corno	View		
2	02GRSOV	IT	Programmazione di sistema ING-INF/05 (10) Oppure	10	G. Cabodi	View		
2	01NYH0V	IT	System and device programming ING-INF/05 (10) Oppure	10	S. Quer	View		
2° anno								
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli	
1	01TYMOV	IT	Insegnamento a scelta 1 Information systems security ING-INF/05 (6) Oppure	6		View		
1	01UDUOV	IT	Sicurezza dei sistemi informativi ING-INF/05 (6) Oppure	6		View		
1	01SQNOV	IT	Software Engineering II ING-INF/05 (6) Crediti liberi	6		View		
1,2	29EBHOV		Tesi Insegnamento a scelta 2	30				
2				6				
Insegnamento a scelta 1								
Periodo	Codice	Lingua	Insegnamento	Crediti	Docente	Note	Vincoli	
1	01TYDOV	IT	Cloud Computing ING-INF/05 (6) Oppure	6		View		
1	01PDCOV	IT	Digital control technologies and architectures ING-INF/04 (6) Oppure	6		View		
1	01TXZ0V	IT	Distributed systems programming ING-INF/05 (6) Oppure	6		View	Si	
1	01NWPOV	IT	Elaborazione dell'audio digitale ING-INF/05 (6) Oppure	6		View		
1	01UDGOV	IT	Energy management for IoT ING-INF/05 (6) Oppure	6		View	Si	
1	02JSK0V	IT	Human Computer Interaction ING-INF/05 (6) Oppure	6		View		
1	01SQJ0V	IT	Machine Learning and Artificial Intelligence ING-INF/05 (6) Oppure	6		View		
1	01PDX0V	IT	Modern design of control systems ING-INF/04 (6) Oppure	6		View		
1	01OUUV0V	IT	Optimization methods and algorithms ING-INF/04 (6) Oppure	6		View		
1	0ACET0V	IT	MAT/09 (6) Oppure	6		View		

Example (same page in 2020)

Software

▼ 1° anno 2020/2021

Periodo	Codice	SSD	Insegnamento	Lingua	Crediti	Docente	Note	Orario
1	01PDW0V	ING-INF/05 (6)	Information systems	🇬🇧	6	M. Morisio (118 iscr.)	🕒	
1	02GOLOV	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	01SQJOV	ING-INF/05 (8)	Data Science and Database Technology	🇬🇧	8	S. Chiusano (172 iscr.)	🕒	
oppure								
1	01SQMOV	ING-INF/05 (8)	Data Science e Tecnologie per le Basi di Dati	🇮🇹	8	E. Baralis (254 iscr.)	🕒	
1	01OTW0V	ING-INF/05 (6)	Computer network technologies and services	🇬🇧	6	G. Marchetto (161 iscr.)	🕒	
oppure								
1	02KPN0V	ING-INF/05 (6)	Tecnologie e servizi di rete	🇮🇹	6	G. Marchetto (253 iscr.)	🕒	
2	02JEUOV	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	04GSPOV	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	01TXY0V	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	01NYH0V	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	01SQNOV	ING-INF/05 (6)	Software Engineering II	🇬🇧	6		🕒	
1,2			Crediti liberi		6			
1,2	29EBHOV		Tesi		30			
2			Insegnamento a scelta 2		6			

Colors

The most dangerous weapon in your toolset

I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

LINGS CARS .com

Leader of the Pack - The UK's favorite car leasing website!

Contract hire cars from Ling Valentine. LINGS CARS is the UK's favourite car leasing website - On 2016 I leased over £85 million in cars!

Stop

BETTY

PUBLIC PICCADILLY

Leader of the Pack

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

BREXIT RISK FREE! February 2017 **theguardian**

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?). 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! **NICOLE...PAPA!** **MEGA-HATCH!**

Car Leasing Online Service Response Times

75 CUSTOMERS IN 'PROPOSAL' **129 CUSTOMERS IN 'ORDER'**

0:03 07 **0:05 03**

CARS A-Z

ABARTH

ABARTH

ALFA ROMEO

AUDI

124 Spider Convertible
595 Convertible
595 Hatchback
695 Convertible

Giulia Saloon
Giulietta
Stelvio Estate

1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

RENT NEW
£127/mth
including VAT

3 year cheap car leasing

9+35

Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

RENT NEW
£152/mth
including VAT

3 year cheap car leasing

6+35

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

Ling replies in...

1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

2. 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

3. 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?). 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.

4. MY BEST SELLING CAR LEASING DEALS!

5. CAR LEASING ONLINE SERVICE RESPONSE TIMES

6. 75 CUSTOMERS IN 'PROPOSAL'

7. 129 CUSTOMERS IN 'ORDER'

8. 0:03 07

9. 0:05 03

10. CARS A-Z

11. ABARTH

12. ABARTH

13. ALFA ROMEO

14. AUDI

15. 124 Spider Convertible
595 Convertible
595 Hatchback
695 Convertible

16. Giulia Saloon
Giulietta
Stelvio Estate

17. 1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

18. RENT NEW
£127/mth
including VAT

19. 3 year cheap car leasing

20. 9+35

21. Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

22. RENT NEW
£152/mth
including VAT

23. 3 year cheap car leasing

24. 6+35

25. Citroen C3
1.2 PureTech 12v (83bhp) Flair
Hatchback 5dr Manual 1199cc

26. RENT NEW
£157/mth
including VAT

27. 2 year cheap car leasing

28. 6+23

29. Ling replies in...

30. 0:03 07

31. 0:05 03

32. 1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

33. 2. 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

34. 3. 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?). 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.

35. 4. MY BEST SELLING CAR LEASING DEALS!

36. 5. CAR LEASING ONLINE SERVICE RESPONSE TIMES

37. 6. 75 CUSTOMERS IN 'PROPOSAL'

38. 7. 129 CUSTOMERS IN 'ORDER'

39. 8. 0:03 07

40. 9. 0:05 03

41. 10. CARS A-Z

42. 11. ABARTH

43. 12. ABARTH

44. 13. ALFA ROMEO

45. 14. AUDI

46. 15. 124 Spider Convertible
595 Convertible
595 Hatchback
695 Convertible

47. 16. Giulia Saloon
Giulietta
Stelvio Estate

48. 17. 1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

49. 18. RENT NEW
£127/mth
including VAT

50. 19. 3 year cheap car leasing

51. 20. 9+35

52. 21. Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

53. 22. RENT NEW
£152/mth
including VAT

54. 23. 3 year cheap car leasing

55. 24. 6+35

56. 25. Citroen C3
1.2 PureTech 12v (83bhp) Flair
Hatchback 5dr Manual 1199cc

57. 26. RENT NEW
£157/mth
including VAT

58. 27. 2 year cheap car leasing

59. 28. 6+23

60. 29. Ling replies in...

61. 30. 0:03 07

62. 31. 0:05 03

63. 32. 1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

64. 33. 2. 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

65. 34. 3. 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?). 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.

66. 35. 4. MY BEST SELLING CAR LEASING DEALS!

67. 36. 5. CAR LEASING ONLINE SERVICE RESPONSE TIMES

68. 37. 6. 75 CUSTOMERS IN 'PROPOSAL'

69. 38. 129 CUSTOMERS IN 'ORDER'

70. 39. 0:03 07

71. 40. 0:05 03

72. 41. 10. CARS A-Z

73. 42. 11. ABARTH

74. 43. 12. ABARTH

75. 44. 13. ALFA ROMEO

76. 45. 14. AUDI

77. 46. 15. 124 Spider Convertible
595 Convertible
595 Hatchback
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78. 47. 16. Giulia Saloon
Giulietta
Stelvio Estate

79. 48. 17. 1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

80. 49. 18. RENT NEW
£127/mth
including VAT

81. 50. 19. 3 year cheap car leasing

82. 51. 20. 9+35

83. 52. 21. Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

84. 53. 22. RENT NEW
£152/mth
including VAT

85. 54. 23. 3 year cheap car leasing

86. 55. 24. 6+35

87. 56. 25. Citroen C3
1.2 PureTech 12v (83bhp) Flair
Hatchback 5dr Manual 1199cc

88. 57. 26. RENT NEW
£157/mth
including VAT

89. 58. 27. 2 year cheap car leasing

90. 59. 28. 6+23

91. 60. 29. Ling replies in...

92. 61. 30. 0:03 07

93. 62. 31. 0:05 03

94. 63. 32. 1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

95. 64. 2. 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

96. 65. 3. 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?). 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.

97. 66. 4. MY BEST SELLING CAR LEASING DEALS!

98. 67. 5. CAR LEASING ONLINE SERVICE RESPONSE TIMES

99. 68. 6. 75 CUSTOMERS IN 'PROPOSAL'

100. 69. 129 CUSTOMERS IN 'ORDER'

101. 70. 0:03 07

102. 71. 0:05 03

103. 72. 10. CARS A-Z

104. 73. 11. ABARTH

105. 74. 12. ABARTH

106. 75. 13. ALFA ROMEO

107. 76. 14. AUDI

108. 77. 15. 124 Spider Convertible
595 Convertible
595 Hatchback
695 Convertible

109. 78. 16. Giulia Saloon
Giulietta
Stelvio Estate

110. 79. 17. 1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

111. 80. 18. RENT NEW
£127/mth
including VAT

112. 81. 19. 3 year cheap car leasing

113. 82. 20. 9+35

114. 83. 21. Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

115. 84. 22. RENT NEW
£152/mth
including VAT

116. 85. 23. 3 year cheap car leasing

117. 86. 24. 6+35

118. 87. 25. Citroen C3
1.2 PureTech 12v (83bhp) Flair
Hatchback 5dr Manual 1199cc

119. 88. 26. RENT NEW
£157/mth
including VAT

120. 89. 27. 2 year cheap car leasing

121. 90. 28. 6+23

122. 91. 29. Ling replies in...

123. 92. 30. 0:03 07

124. 93. 31. 0:05 03

125. 94. 32. 1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

126. 95. 2. 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

127. 96. 3. 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?). 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.

128. 97. 4. MY BEST SELLING CAR LEASING DEALS!

129. 98. 5. CAR LEASING ONLINE SERVICE RESPONSE TIMES

130. 99. 6. 75 CUSTOMERS IN 'PROPOSAL'

131. 100. 129 CUSTOMERS IN 'ORDER'

132. 101. 0:03 07

133. 102. 0:05 03

134. 103. 10. CARS A-Z

135. 104. 11. ABARTH

136. 105. 12. ABARTH

137. 106. 13. ALFA ROMEO

138. 107. 14. AUDI

139. 108. 15. 124 Spider Convertible
595 Convertible
595 Hatchback
695 Convertible

140. 109. 16. Giulia Saloon
Giulietta
Stelvio Estate

141. 110. 17. 1.2 Pop 16v (69bhp) (4 seats)
Hatchback 5dr 124cc Petrol Manual (5 Speed)

142. 111. 18. RENT NEW
£127/mth
including VAT

143. 112. 19. 3 year cheap car leasing

144. 113. 20. 9+35

145. 114. 21. Renault Clio
0.9 TCE Iconic 12v (90bhp)
Hatchback 5dr 899cc Petrol Manual (5 Speed)

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£152/mth
including VAT

147. 116. 23. 3 year cheap car leasing

148. 117. 24. 6+35

149. 118. 25. Citroen C3
1.2 PureTech 12v (83bhp) Flair
Hatchback 5dr Manual 1199cc

150. 119. 26. RENT NEW
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including VAT

151. 120. 27. 2 year cheap car leasing

152. 121. 28. 6+23

153. 122. 29. Ling replies in...

154. 123. 30. 0:03 07

155. 124. 31. 0:05 03

156. 125. 32. 1. I live inside my car leasing website all day Monday to Friday 9am-6pm. I lease the cheapest PCP and contract hire cars in the UK! - I am Ling, accept no substitutes

157. 126. 2. 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

158. 127. 3. 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?). 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.

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268. 239. 20.

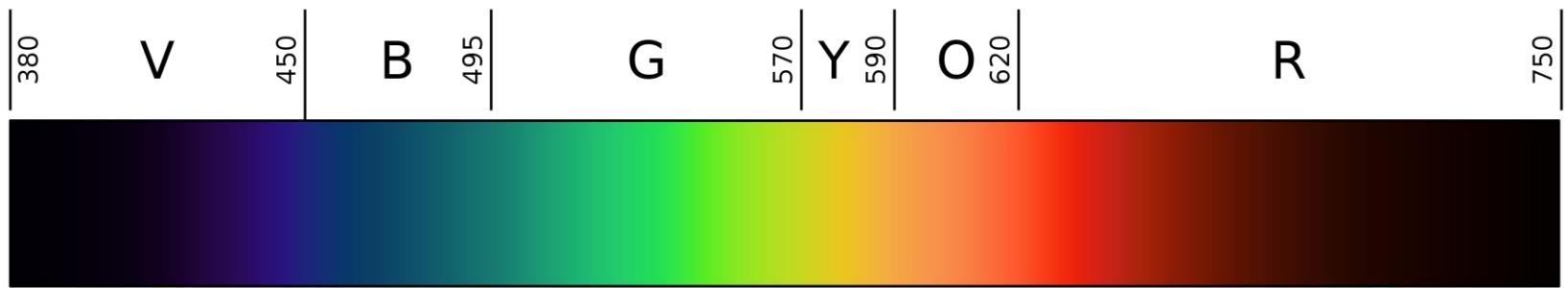
Colors

- A powerful tool to improve interfaces by communicating **key information**
- Inappropriate use of colors can severely **reduce the performance** of an interactive system

Colors: Suggestions

- Be careful, do not 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
- Avoid simultaneous display of pure (highly-saturated), spectrally extreme colors
 - e.g., no blue at the same time as red
 - desaturated combinations (pastels) are better

Visible Spectrum

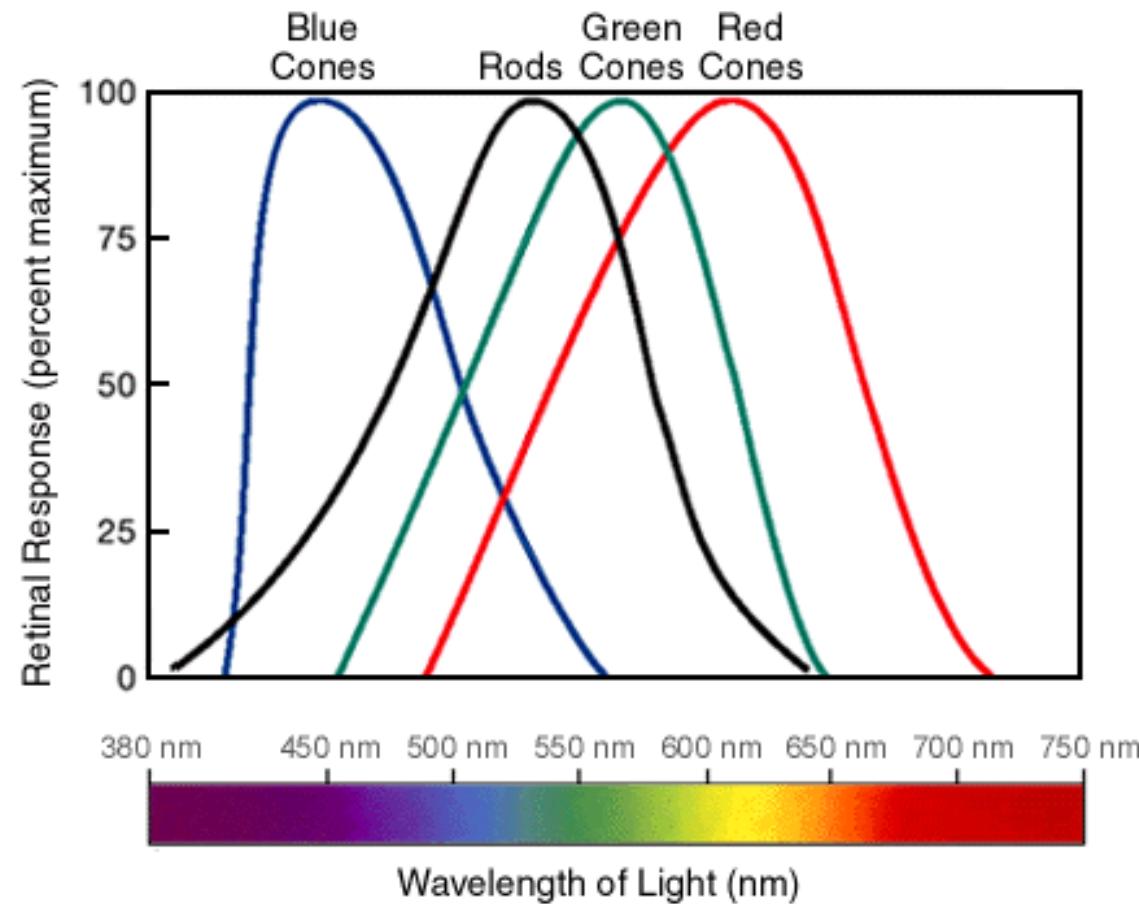


- UV spectrum ends on the left, IR starts on the right
- Wavelengths are in nm
- Source: https://commons.wikimedia.org/wiki/File:Linear_visible_spectrum.svg

Human Vision

- **Human vision:** a highly complex activity, often the main source of information about the world
- The **eye:** a mechanism for receiving light and transforming it into electrical energy
 - light reflected from objects in the world and their image is focused upside down on the back of the eye
 - then, the receptors in the eye transform it into electrical signal which are passed to the brain
 - the brain detects, finally, pattern and movements

Color Sensitivity of the Eyes



source: <https://askabiologist.asu.edu/rods-and-cones>

Example

The image displays two side-by-side screenshots of the Stack Overflow homepage, specifically focusing on the 'Top Questions' section. Both screenshots show the same list of questions, but the right one features a light gray overlay that highlights certain UI elements to illustrate a design modification.

- Left Screenshot (Standard View):**
 - Header:** Shows the Stack Overflow logo, navigation links (Home, Products, Search), and user stats (1 user, 1 answer).
 - Section Headers:** 'Top Questions' and 'Hot Network Questions'.
 - Question Cards:** Each card includes a thumbnail, title, votes, answers, views, and a timestamp.
 - Side Panels:** Includes 'Blog' (with posts like 'The Overflow Newsletter #3'), 'Featured on Meta' (with posts like 'Feedback post: Moderator review and reinstatement processes'), 'Custom Filters' (with a 'Create a custom filter' button), 'Watched Tags' (with a 'Watched Tags' button), and 'Ignored Tags' (with a 'Ignored Tags' button).
- Right Screenshot (With Overlay):**
 - Header:** Same as the left screenshot.
 - Section Headers:** 'Top Questions' and 'Hot Network Questions'.
 - Question Cards:** The same list of questions as the left screenshot.
 - Side Panels:**
 - Blog:** Shows the same post as the left screenshot.
 - Featured on Meta:** Shows the same post as the left screenshot.
 - Custom Filters:** Shows the same button as the left screenshot.
 - Watched Tags:** Shows the same button as the left screenshot.
 - Ignored Tags:** Shows the same button as the left screenshot.
 - Hot Network Questions:** Shows the same list of questions as the left screenshot.

Example

The image displays two side-by-side screenshots of the Politecnico di Torino website. Both screenshots show the homepage with a prominent banner for the 'festival della TECNOLOGIA' scheduled for November 7-10, 2019, in Turin. The banner features a large graphic of the letter 'T' composed of many small vertical bars, with the text 'festival della TECNOLOGIA' and 'TORINO, 7-10 NOV 2019' above it, and 'Tecnologia è Umanità' below.

The left screenshot shows the original design, while the right screenshot shows the design after a user interaction. In the right screenshot, the entire header area has turned dark gray, and a red dashed rectangle highlights the 'festival della TECNOLOGIA' banner. The rest of the page content remains the same, including the navigation menu at the top and the event details below.

Left Screenshot (Original Design):

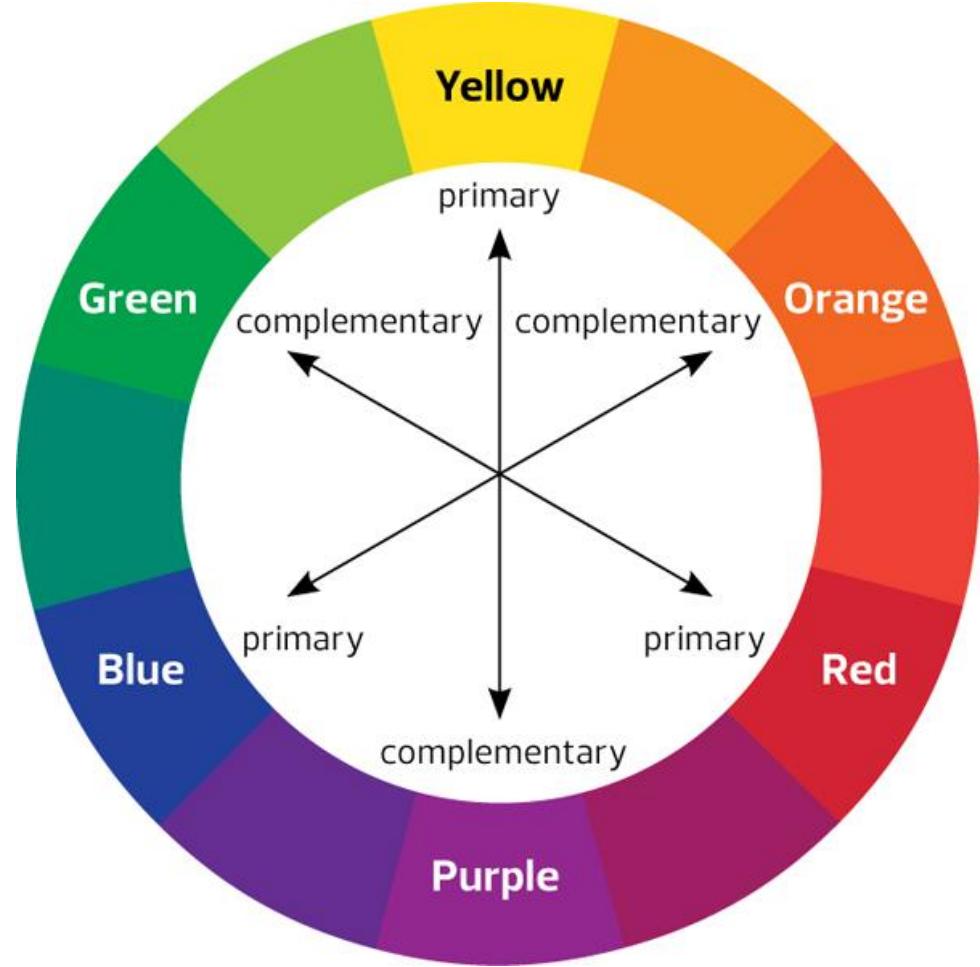
- Header:** Dark blue background with the Politecnico di Torino logo, 'POLITECNICO DI TORINO' text, and five navigation links: 'SCOPRIRE L'ATENEO', 'DIDATTICA E STUDENTI', 'IL MONDO DELLA RICERCA', 'INNOVAZIONE PER LE IMPRESE', and 'CAMPUS INTERNAZIONALE'.
- Banner:** Large 'festival della TECNOLOGIA' graphic and text.
- Content:** Event listing for 'Walking Beyond: camminate urbane attraverso la città contemporanea' (start: 14.06, end: 23.10) and 'Network dynamics in the social, economic and financial sciences' (start: 04.11, end: 05.11).
- Footer:** 'AVVISI E SCADENZE' section with various notices.

Right Screenshot (After Interaction):

- Header:** Dark gray background with the Politecnico di Torino logo, 'POLITECNICO DI TORINO' text, and five navigation links: 'SCOPRIRE L'ATENEO', 'DIDATTICA E STUDENTI', 'IL MONDO DELLA RICERCA', 'INNOVAZIONE PER LE IMPRESE', and 'CAMPUS INTERNAZIONALE'.
- Banner:** Large 'festival della TECNOLOGIA' graphic and text.
- Content:** Event listing for 'Walking Beyond: camminate urbane attraverso la città contemporanea' (start: 14.06, end: 23.10) and 'Network dynamics in the social, economic and financial sciences' (start: 04.11, end: 05.11).
- Footer:** 'AVVISI E SCADENZE' section with various notices.

The Color Wheel

- Aka the Hue Circle
- Pick non-adjacent colors
- Opponent colors go well together
 - Complementary colors
- Read more at
<https://www.canva.com/colors/color-wheel/>



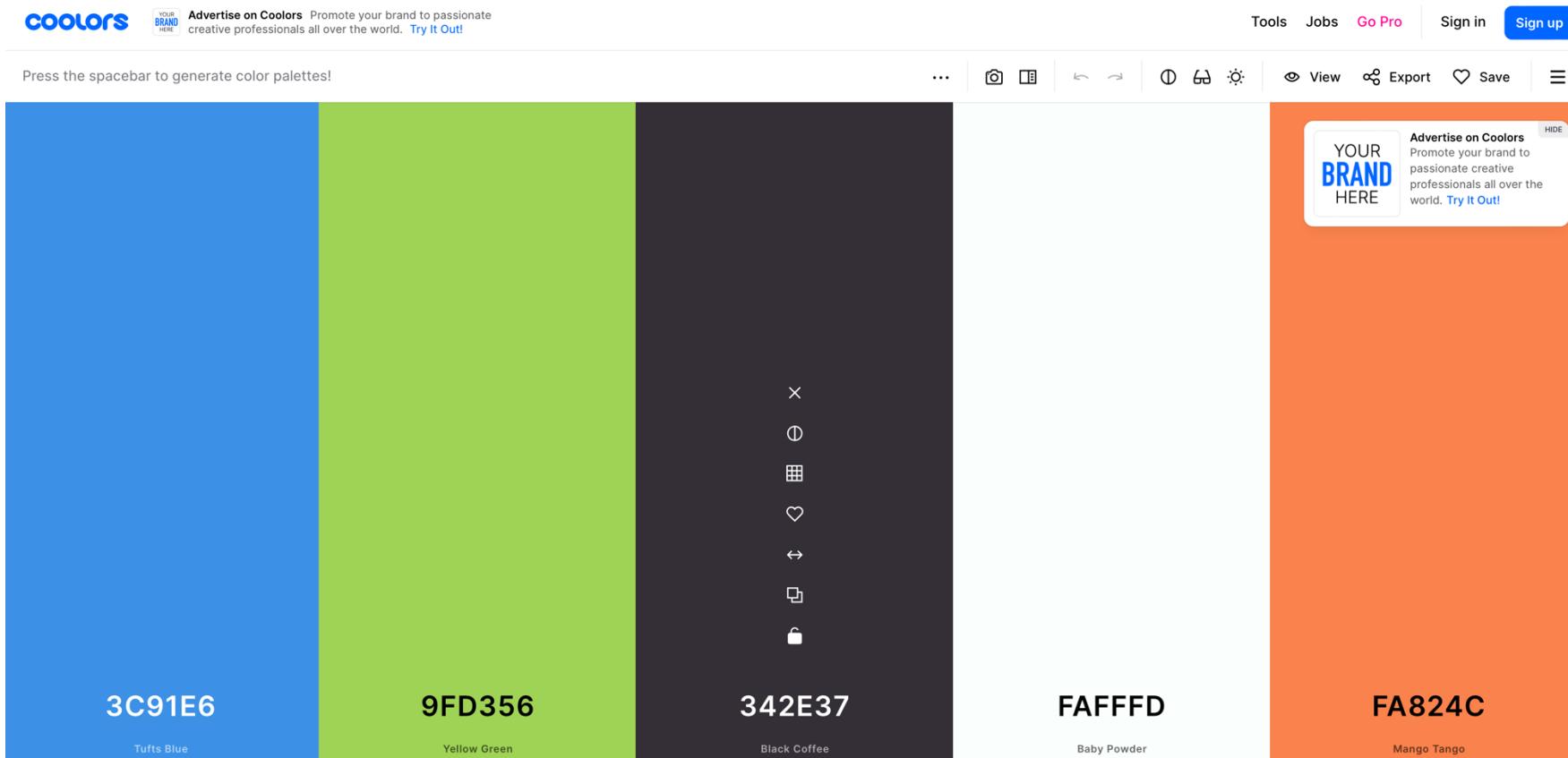
Palettes - PoliTo

GERARCHIA COLORI



https://www.politocomunica.polito.it/en/corporate_image/brand_and_visual_identity

Palettes Generator



<https://coolors.co>

ColourLovers

COLOURLovers Browse Community Channels Trends Tools

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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 PEAK

SadieSews on Vengeful 225
Really nice look, with this! (-

MisteryMoments on CoffeeBerries
I love your Template Design Style.. thanks

renniecat on Cold Night
Beautiful!

GoldenHuesinBlue 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

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

Colors, Human Growth Hormones, and Creativity 0 Comments

PALETTES Create + PATTERNS Create + COLORS Create +

Nineteen by Júlia Freire 0 try by Anomalin 0 light gray purple by macarver 0

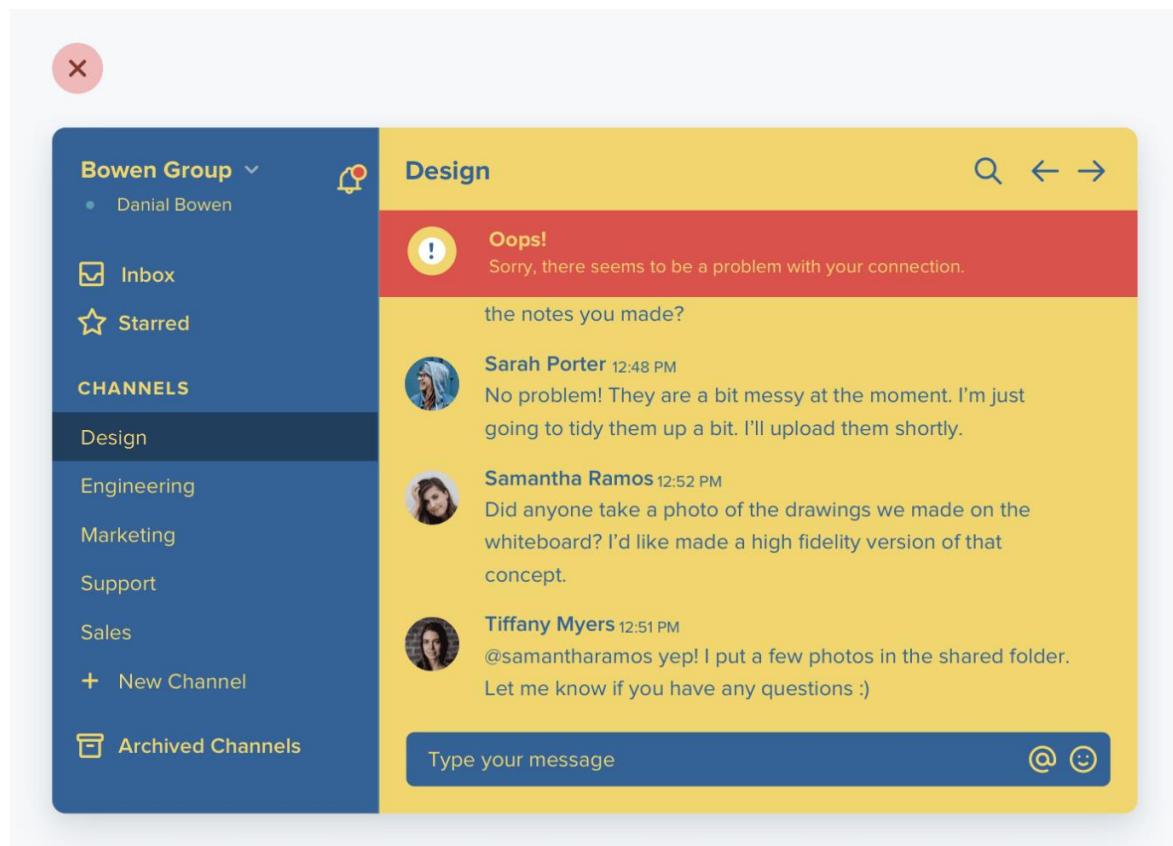
garden palette 2 by macarver 0 PodCasting by 3sisters 0 slate purple by macarver 0

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

Using Palettes

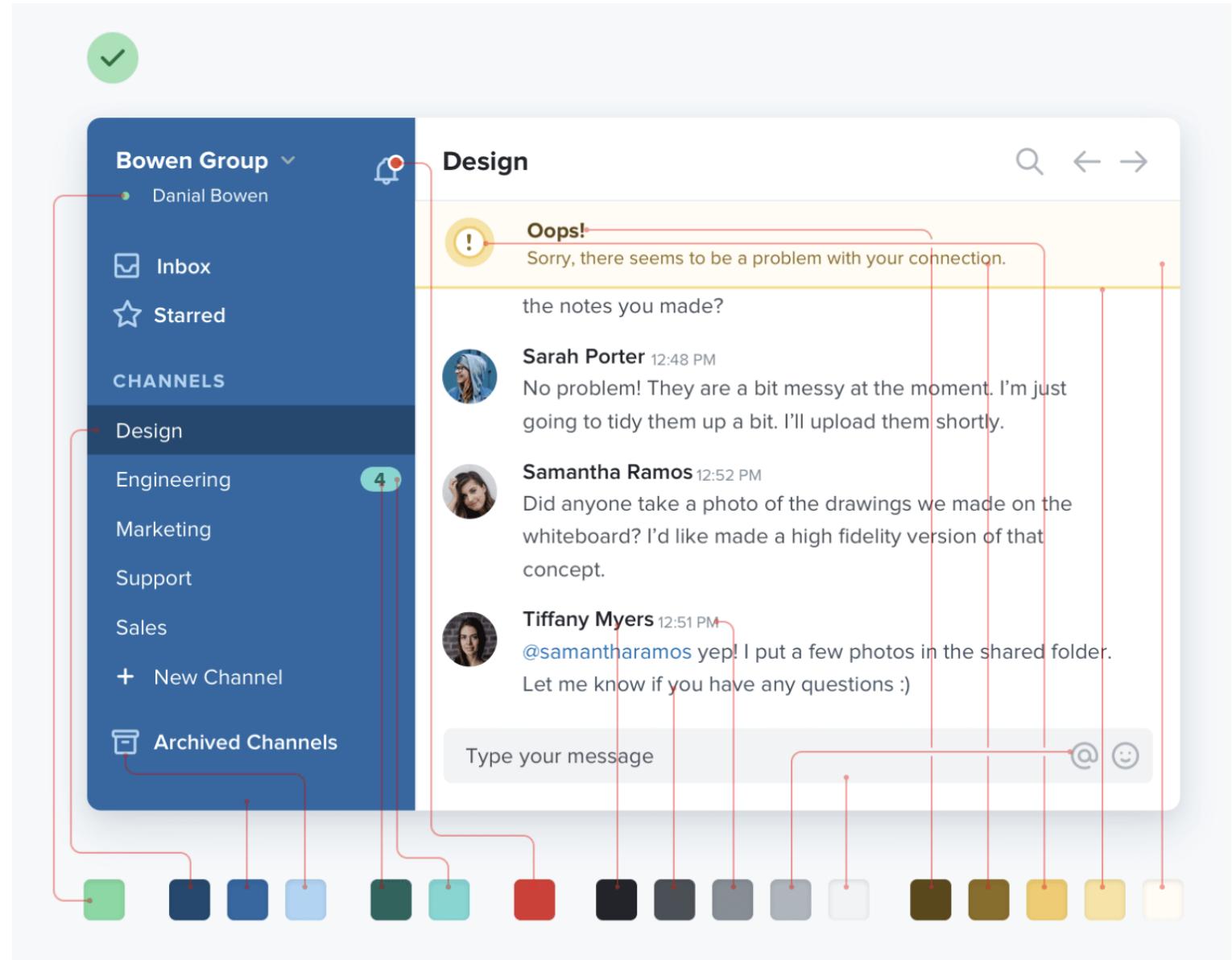


www.refactoringui.com

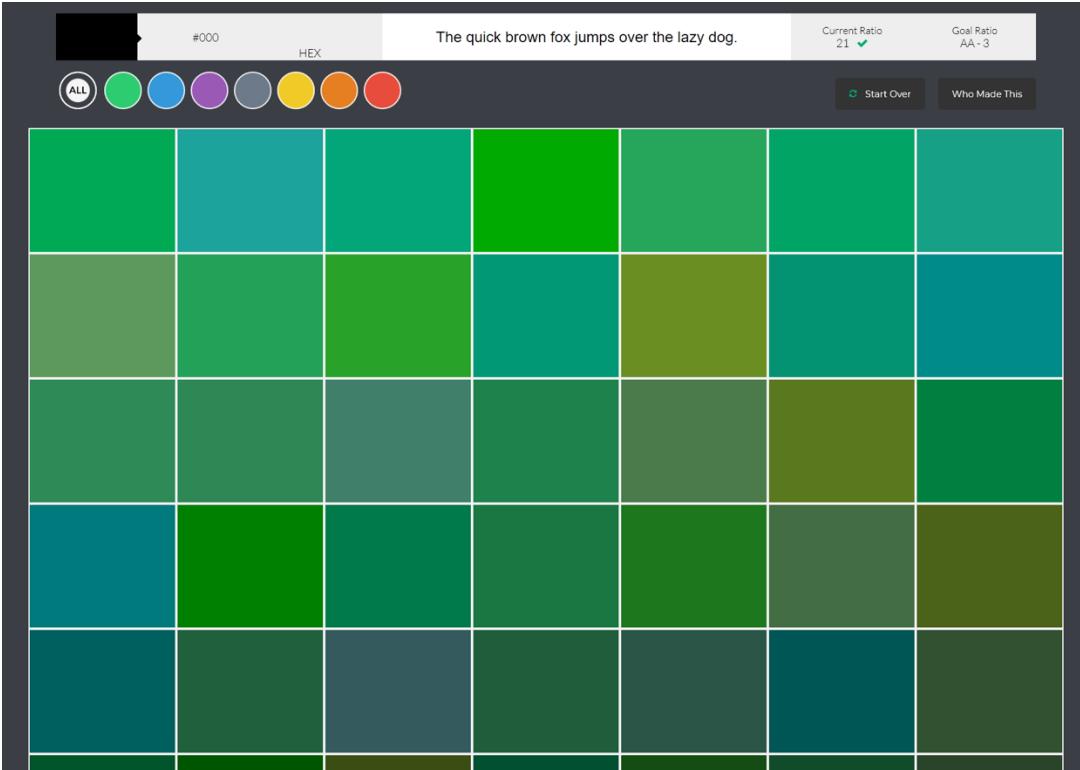


Using Palettes

www.refactoringui.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 two 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

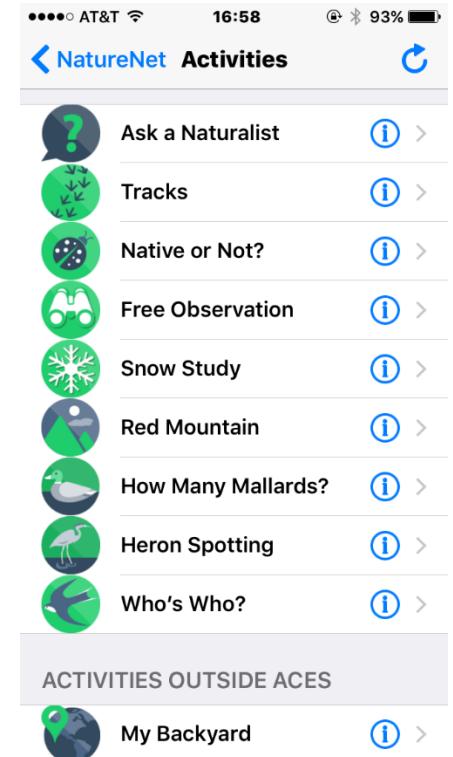
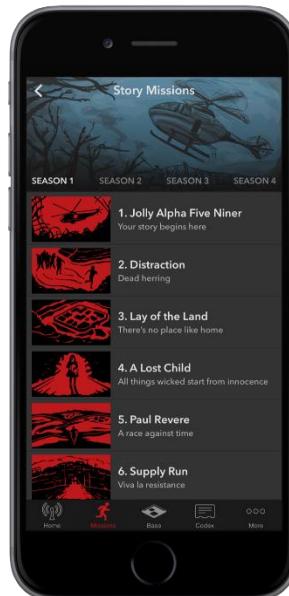
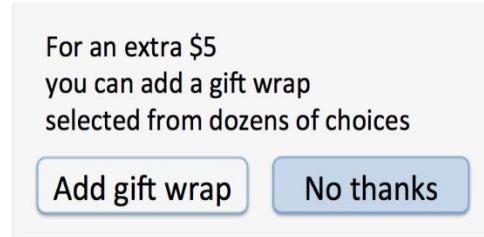
«Informavores» must quickly find the information they need

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

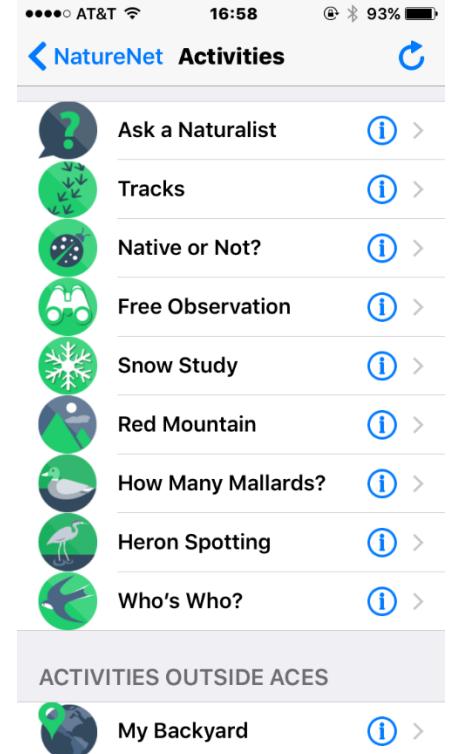
- Menu bars, pop-up menus, toolbars, palettes and ribbons
- Shortcuts and gestures for rapid interaction
- Long lists
- Linear versus simultaneous presentation



Navigation By Selection

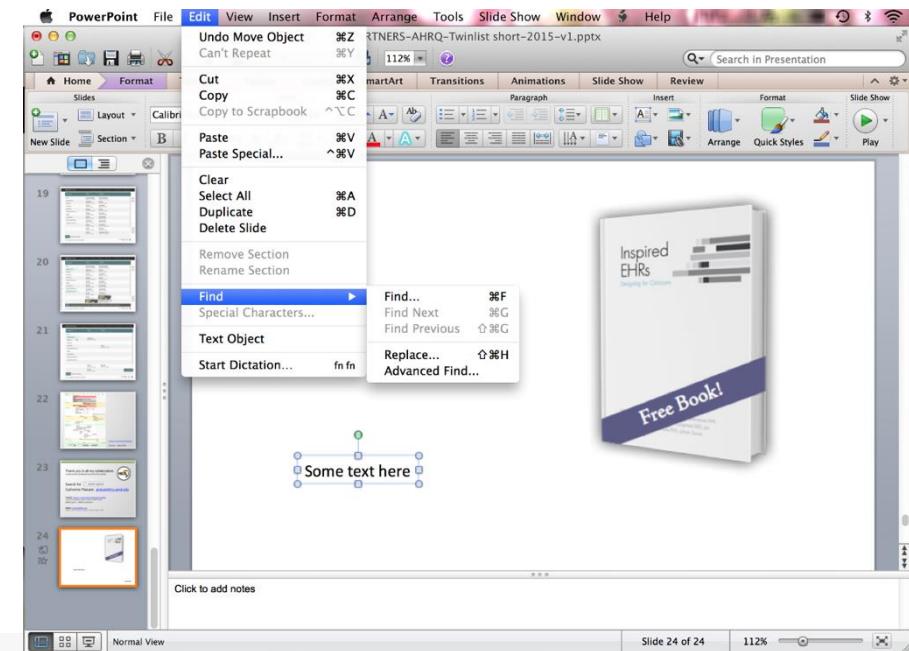
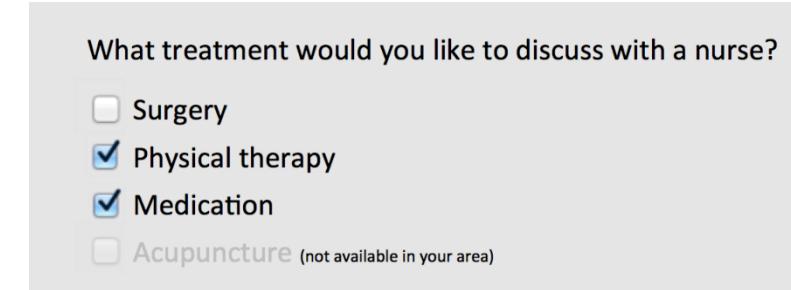
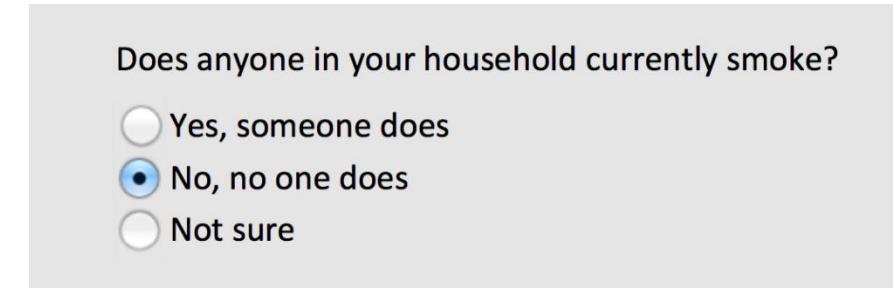
- Menu bars, pop-up menus, toolbars, palettes and ribbons
- **Shortcuts and gestures for rapid interaction**
- Long lists
- Linear versus simultaneous presentation

- 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



Menus

The screenshot shows the official NASA website homepage. At the top, there is a dark header with the NASA logo and several navigation links: Missions, Galleries, NASA TV, Follow NASA, Downloads, About, and NASA Audiences. Below the header is a search bar. The main content area features a large image of three astronauts in a space station module. To the right of the image is a video player showing a Mars landscape. Below the image are several news stories and images, including one about the "One-Year Crew" and another about a "Supermoon Eclipse". The bottom of the page has a "MORE STORIES" section and a footer with links to National Aeronautics and Space Administration information.

The screenshot shows the NASA TV website. The top navigation bar includes the NASA logo, a search bar, and a menu icon. The main content area is dominated by a large video player showing a scene from the International Space Station. Below the video player, there is a caption for the "One-Year Crew" and a link to "Halfway There". Further down the page, there is another smaller video player showing a group of people in a lab setting.

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

▼ Help Wish List Gift Registry Classes & Events Store Locator  Checkout

Welcome to REI! | [Log In](#) or [Register](#)

FREE SHIPPING With \$50 minimum purchase.

REI Find great gear and clothing 

SHOP REI **SHOP REI OUTLET** **TRAVEL WITH REI** **LEARN** **BLOG** **MEMBERSHIP** **STEWARDSHIP**

Camp & Hike Climb Cycle Fitness Run Paddle Snow Travel Men Women Kids Footwear More **Deals**

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
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Deals (31)

▼ Features

Moisture wicking (27)
 Quick drying (26)
 Sun-protective fabric (22)
 Waterproof (15)
 Insulated (11)
 Earflaps (6)
 Made in USA (5)

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▼ Brand

[Clear](#)
 686 (6)





 (1)
REI Rainwall Rain Jacket - Girls'
\$31.83 - \$64.50 [Compare](#)

 (1)
REI Rainwall Rain Pants - Kids'
\$49.50 [Compare](#)

 (9)
REI Sahara Convertible Pants - Girls'
\$44.50 [Compare](#)





ONLY AT REI

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 [≥ 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

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Aule Studio - Selezione 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

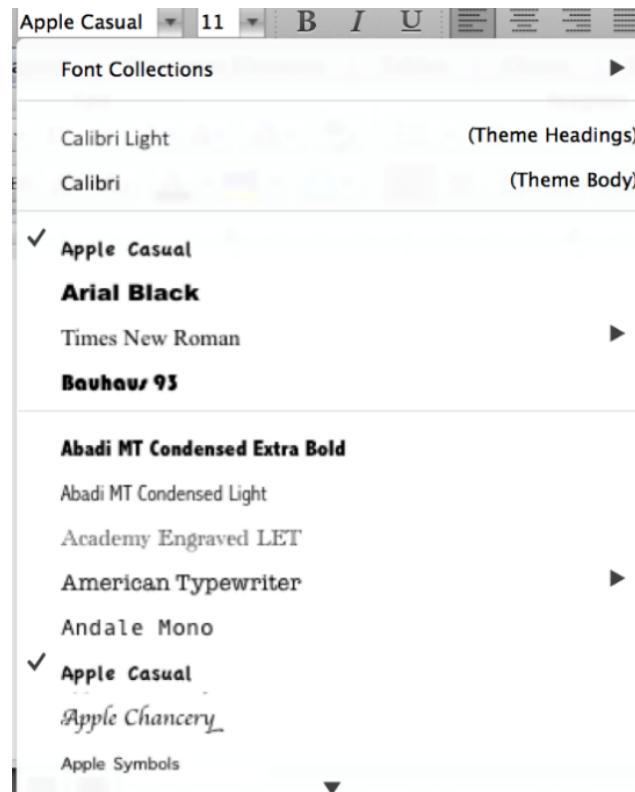
A partire da giorno 15 luglio 2020, è consentito l'uso della seguente Sala Studio della Sede Centrale:
- Sala studio al Secondo Piano di C.so Castelfidardo 39, codice locale TO_CIT11_XP02_001

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

		14 Set 2020 - 18 Set 2020						
		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...
 - Do not 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...

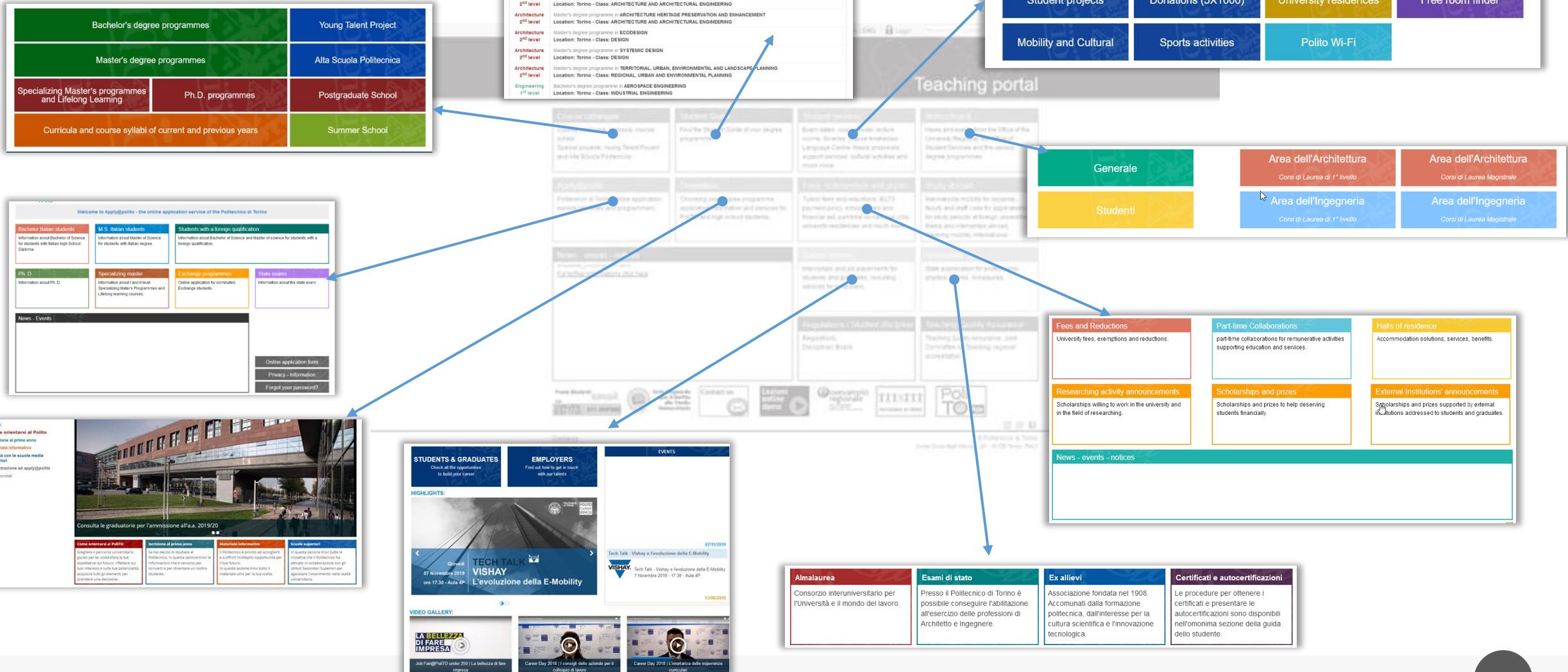
Example

The screenshot shows the homepage of the Politecnico di Torino Teaching portal. At the top, there is a navigation bar with links for 'The Politecnico' (selected), 'Teaching', 'Research', 'Business', and 'International Campus'. It also includes language links ('ITA | ENG'), a 'Login' button, and a search bar. The main header features the university's logo and the text 'POLITECNICO DI TORINO'. Below the header, a large blue banner reads 'Teaching portal'. The page is organized into several colored boxes containing links to various services:

- 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**: For further informations click here.
- 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.

At the bottom, there are links for 'Posta Studenti', 'email', 'Ente Regionale per il Diritto allo Studio Universitario', 'Contact us', 'Lezioni online demo', 'Osservatorio regionale', 'POLITECNICO DI TORINO', and 'PoliTO App'. There are also social media icons for YouTube, Facebook, and Twitter, along with a copyright notice: © Politecnico di Torino Corso Duca degli Abruzzi, 24 - 10129 Torino, ITALY.

Example



Common Problems

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

Icons

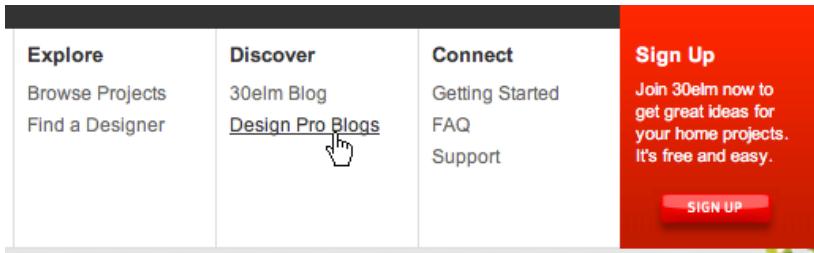
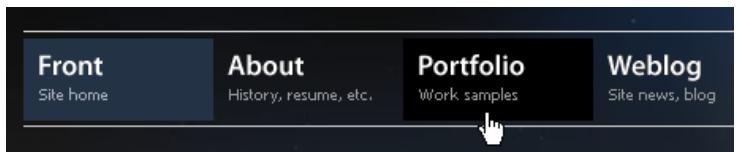
- Icons facilitate recognition over recall
 - When they are consistently used, and frequently visible
 - Redundant coding helps recognition and memorization
 - Icon + Text + Tooltip + Context



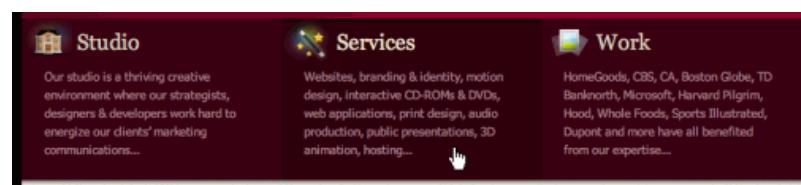
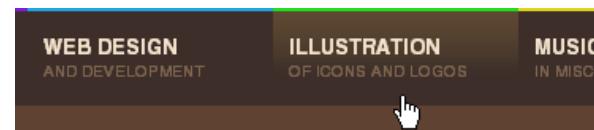
Links

- 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



A screenshot of a website with a sidebar. The sidebar includes sections like "Front Page", "Our Portfolio", "Who We Are", "What We Do", and "Contact Us". The "Who We Are" section is highlighted with a yellow background and a white border.



A screenshot of a website with a sidebar. The sidebar includes sections like "Newsletter", "Store", "Events", "Podcast", "Coaching", and "free resources". The "free resources" section is highlighted with a yellow background and a white border.

Forms

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

Create an IEEE Account [?](#) [X](#)

* Required field

Provide your personal information

* Given/First name: Catherine

Middle name:

* Last/Family/Surname: Plaisant

Enter e-mail address & password

The e-mail provided here will be the username of your account.

* E-mail address: cplaisant@

* Re-enter e-mail address:

⚠ The e-mail address provided is not in a valid e-mail format (for example: j.doe@nomail.com). Please try again.

* Password: **Your password is good**

Passwords must be between 8 and 64 characters, and include at least one number. [More...](#)

* Confirm password:

Set security questions

For your security, IEEE Accounts are required to have two security questions and answers.

* Security question 1:
Select

* Type your answer:

* Security question 2:
Select

* Type your answer:

[Privacy & Opting Out of Cookies](#)

[Create Account and Continue Joining](#) [Cancel](#)

Form Elements and UI Elements

The collage illustrates a variety of user interface elements:

- Text input fields:** Let you input text.
- Checkboxes:** NonFederal (99), Federal (57).
- Radio buttons:** Yes, No.
- Dropdowns:** Find your state or... Go.
- List boxes:** Are like dropdowns, But they let you make multiple selections, Like checkboxes do.
- General Settings:** General Settings, Your Profile, Sign Out.
- Date Pickers:** SEP 18th 2010, JUN 22.
- Social Sharing:** Send, Post, Tweet.
- Sliders:** ON OFF.
- Calendars:** Sep. 2010, JUN 22.
- File Icons:** Document, Image, Video, Contact, etc.
- Navigation Bar:** Menu Item, Messages 1, About Us.
- Tags:** Costs (72), Health Conditions (54), Improving Care (53), Prevention (50), Rights, Protections and Benefits (135), Insurance Coverage (141).
- Search Bar:** Enter Keywords, Search Option One, Search Option Two, Search Option Three.
- Search Filter:** Enter Keywords, Category, Search.
- Search Options:** Everything, Entries, Photos, Videos, Audio.
- Progress Bars:** A horizontal bar with five segments and numbered circles (1, 2, 3, 4, 5). Below it are three labels: 1. Skills, 2. Location, 3. Finish.
- Step Progress:** 1 Step Select your plan, 2 Step Select your plan, 3 Step Select your plan.
- Page Navigation:** Previous, Next, Page numbers (1-10, 246-247).
- Page Headers:** Home > Folder Index Page > Page You're On.
- Text Box:** 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.
- Page Footer:** https://www.usability.gov/how-to-and-tools/methods/user-interface-elements.html
- Page Number:** 93.

Exercise (~10 minutes)

- Open the Polito website: <https://www.polito.it/>
- Try to find this information:
 - ***“Deadline for passing all the exams for graduating in the Master Degree in Computer Engineering in the winter session”***
- Look for any problems related to navigation and information scent

Reading Content

Organizing text and content for maximum visibility

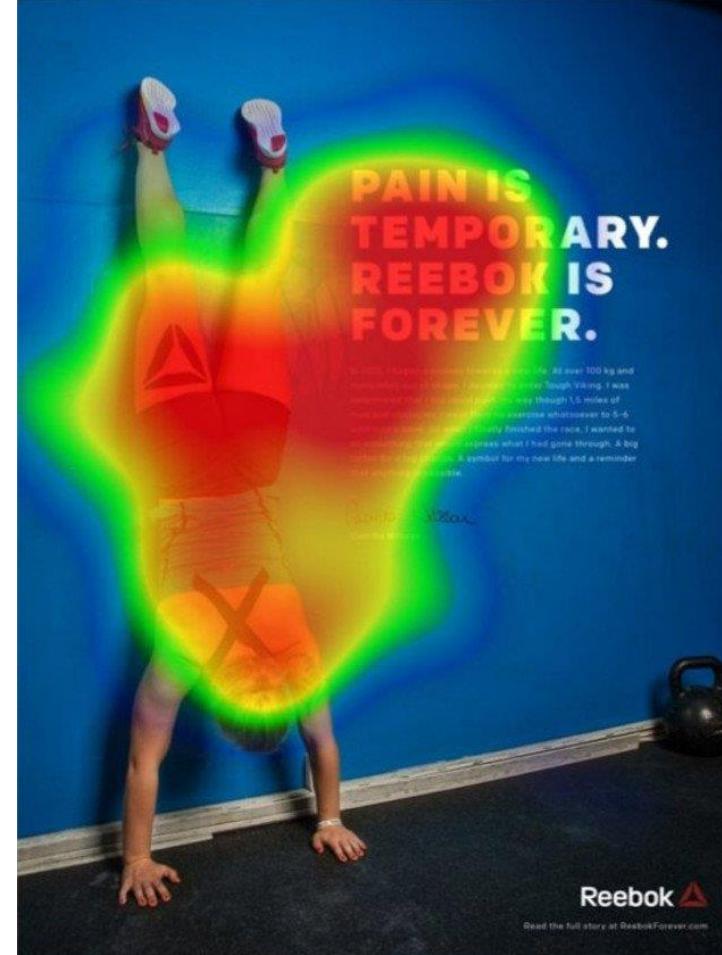
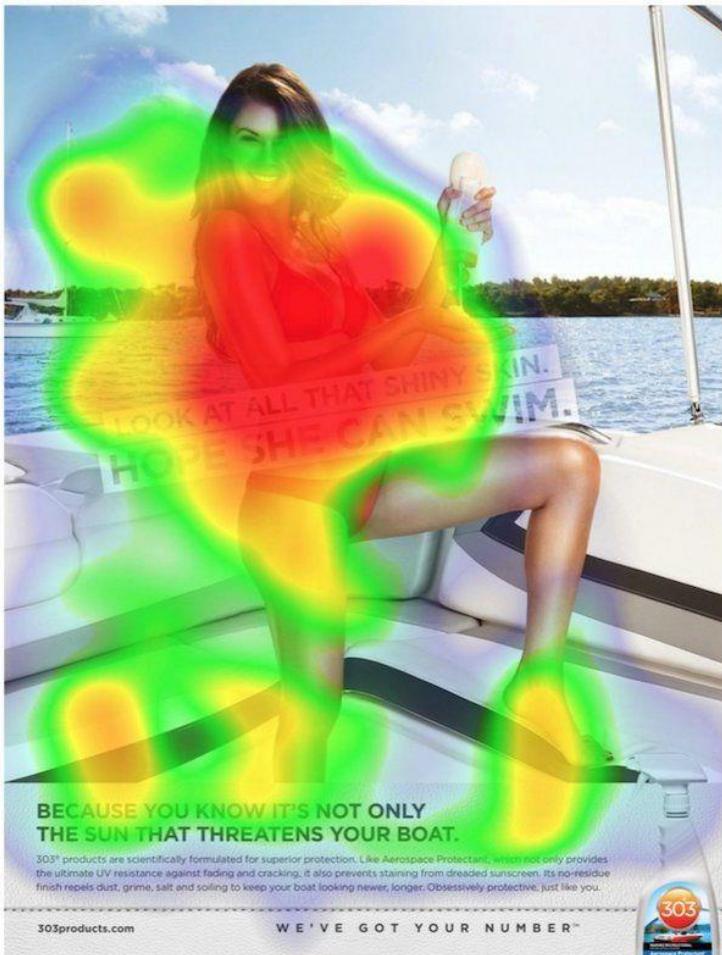
Reading Content

“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/>

Did Anyone Ever Look at the Product Name?



Eye Trackers



source: <https://www.tobii.com>

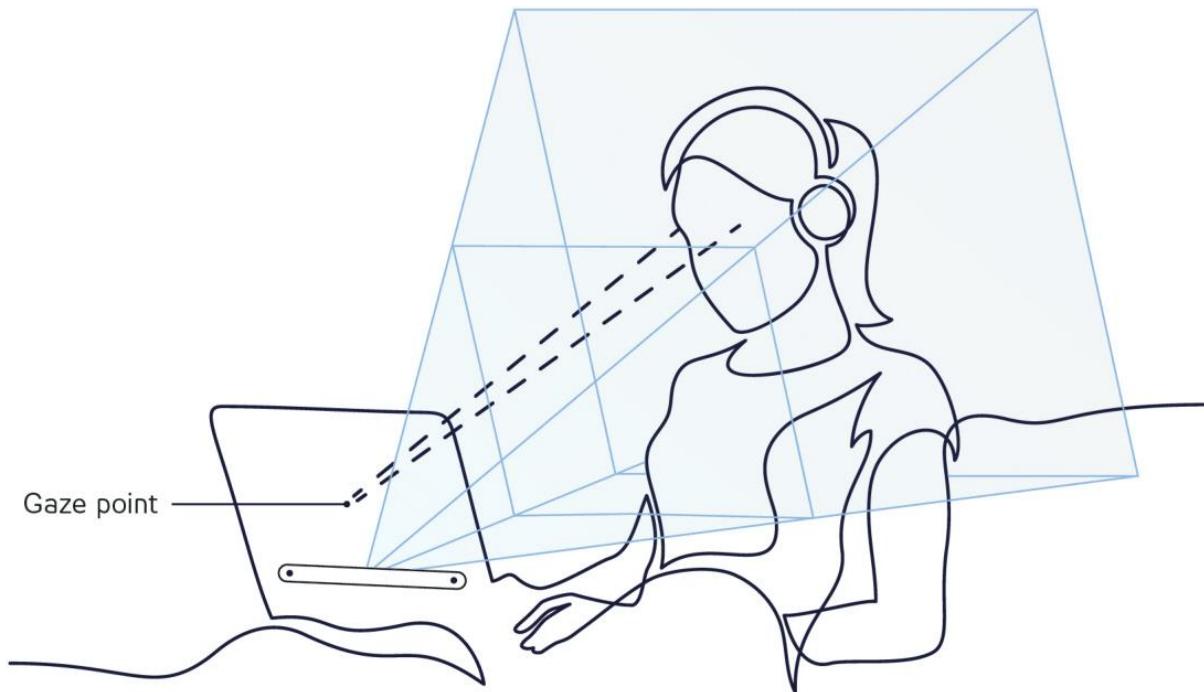
Eye Tracking



- 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

Eye Tracker: How It Works

- 1 An eye tracker consists of cameras, projectors and algorithms.
- 2 The projectors create a pattern of near-infrared light on the eyes.
- 3 The cameras take high-resolution images of the user's eyes and the pattern.
- 4 Machine learning, image processing and mathematical algorithms are used to determine the eyes' position and gaze point.

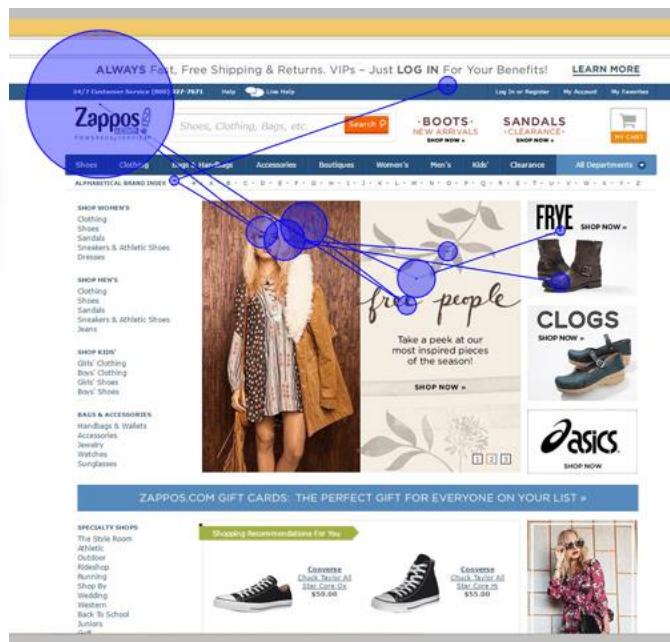


source: <https://www.tobii.com/group/about/this-is-eye-tracking/>

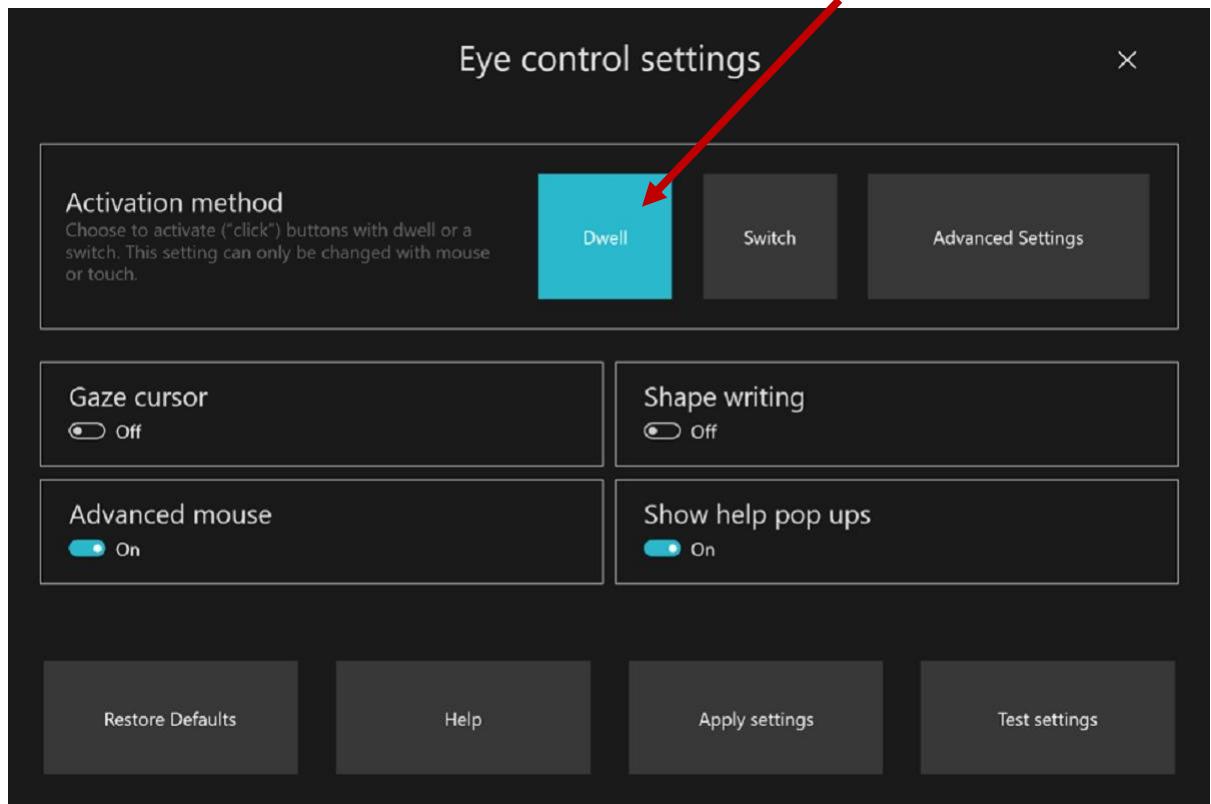
Eye Tracker: Examples



Heatmap and scan path analysis



Beware the Midas' Touch!



Windows 10 Eye Control Settings

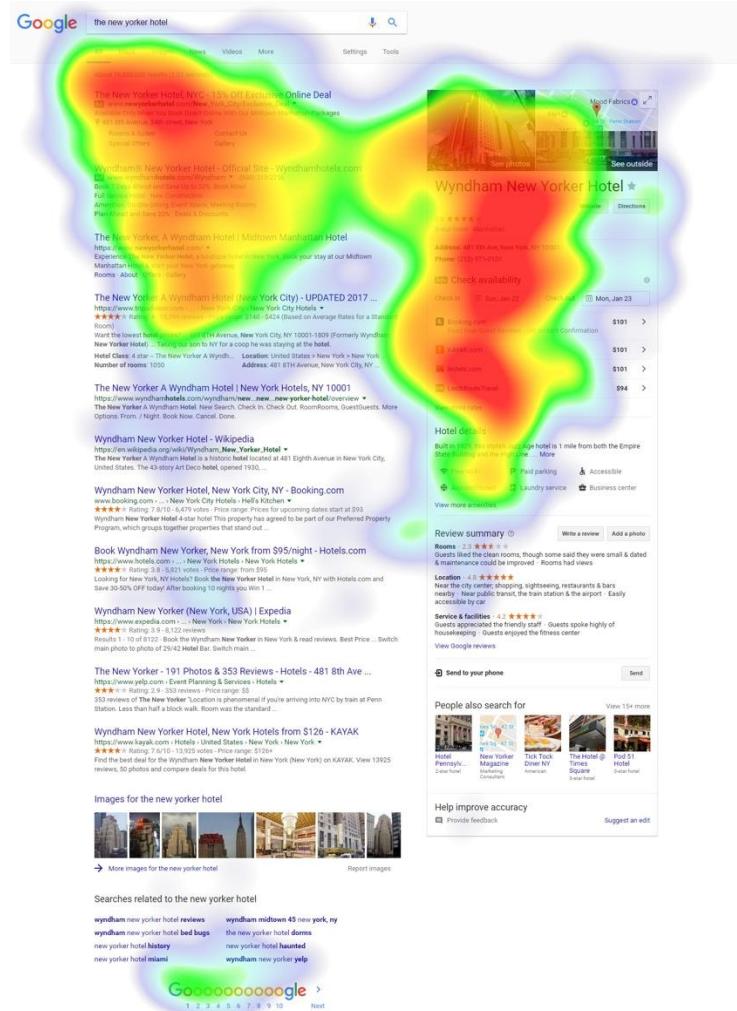
Location on the Page

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



Scanning

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Tracking of your points and miles



How do I check my frequent flyer miles?

Experiment

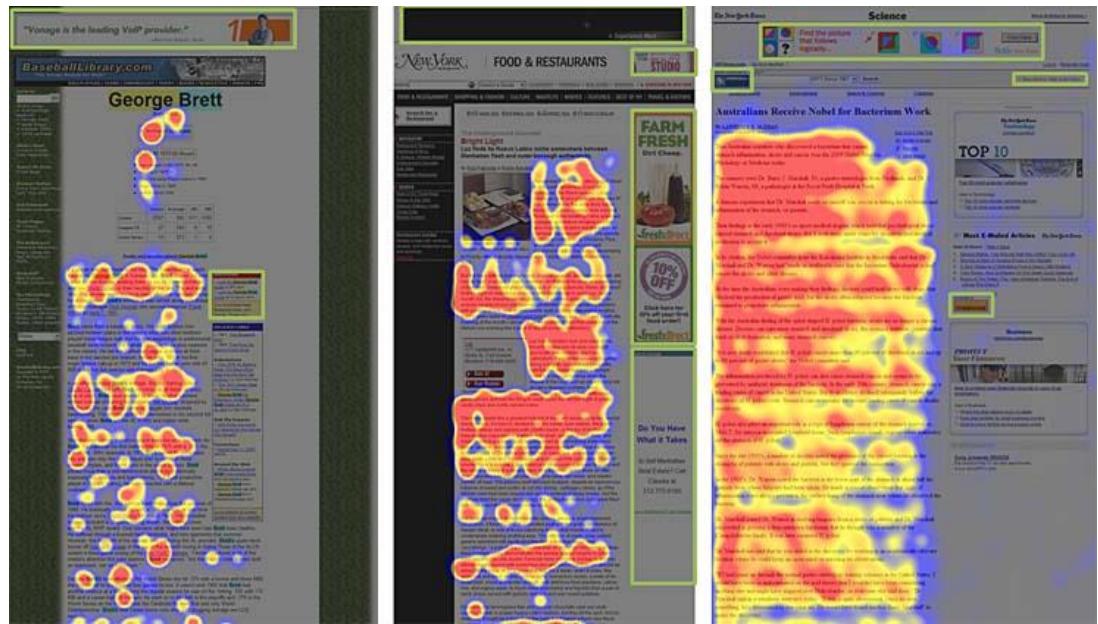
Site Version	Sample Paragraph	Usability Improvement (relative to control condition)
Promotional writing (control condition) using the "marketese" found on many commercial websites	Nebraska is filled with internationally recognized attractions that draw large crowds of people every year, without fail. 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)
Concise text 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.	+58%
Scannable layout 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"> •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) •Buffalo Bill Ranch State Historical Park (28,446). 	+47%
Objective language 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).	+27%
Combined version 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"> •Fort Robinson State Park •Scotts Bluff National Monument •Arbor Lodge State Historical Park & Museum •Carhenge •Stuhr Museum of the Prairie Pioneer •Buffalo Bill Ranch State Historical Park 	+124%

Best Locations to Put Content

- Above the fold
 - Prioritize, do not 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)



References and Acknowledgment

- 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 Elmquist, 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=PLLssT5z_DsK_nuHL_Mjt87THSTIgrsyJ
- Thanks to Fulvio Corno, past teacher of the course, for his work on some of these slides



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