



Slideshow 5

# Design Principles (for frontend work)

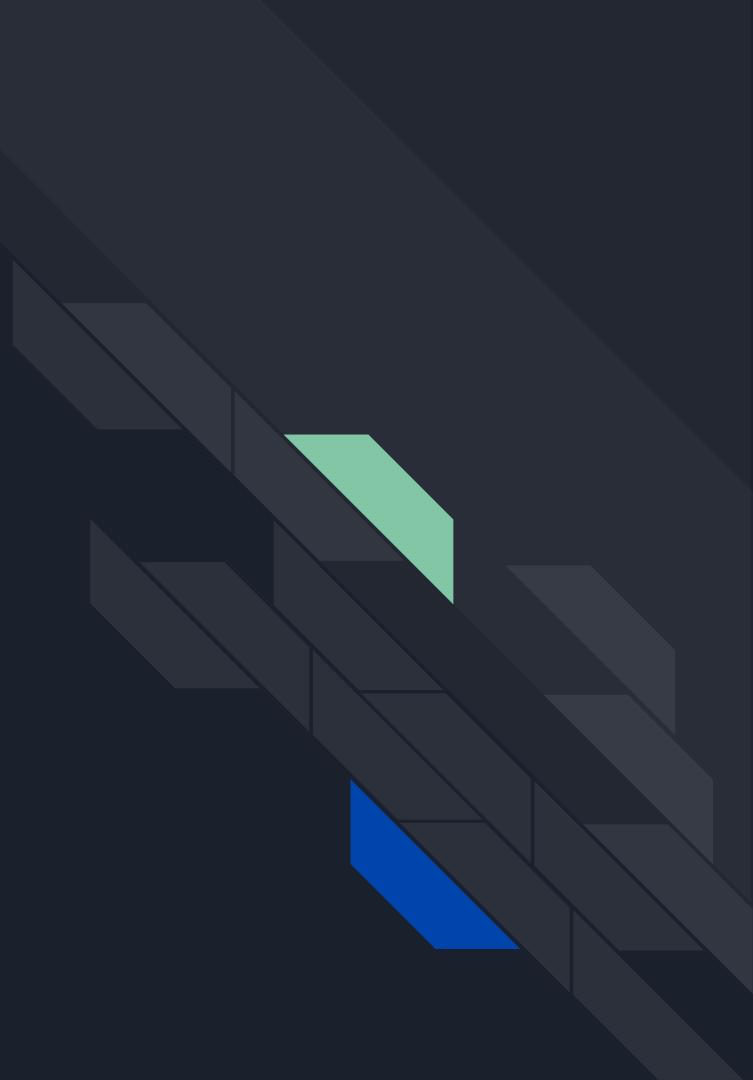
INFO 6150  
Fernando Augusto López Plascencia



# In this lesson:

- The web design process
  - High and low fidelity mockups
  - Responsive design and mobile-first
- What is graphic design
- Design principles
  - Creating layouts
    - Visual flow
    - Visual hierarchy
    - Grids and layout principles
  - High-definition design
    - Color theory and color palettes
    - Typography principles
- Putting it all together: an example

# Mockups





# The page mockup

Once you know how the website is distributed, you need to plan for the pages.

You do that through mockups.

These are just drawings of how the page will look like.

Two kinds:

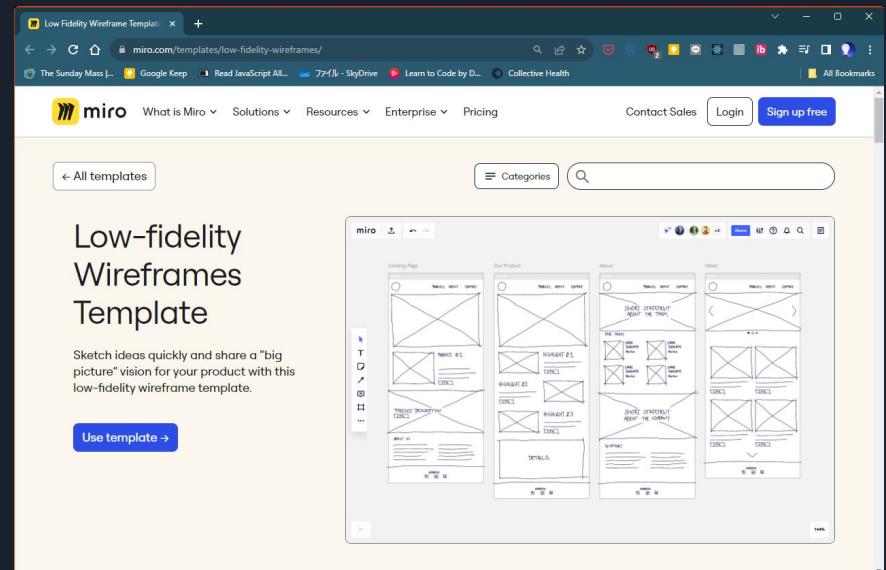
- Low fidelity: simple schemes; could be even crude drawings in a page
- High fidelity: highly accurate drawings, sometimes interactive

# Mockups

When creating your design, you will start with a rough drawing of your visual elements: a low-fidelity mockup (aka wireframe).

You can use special wireframing tools, or just draw on paper.

Use these to get feedback from clients on your initial iterations. Since it's rough, they won't think "the website is already done!" (it happens!).



Screenshot from [miro.com](https://miro.com)



# Low fidelity mockups

What to think of right now:

1. Model your information architecture: create your website page and/or screen diagram.
  - Is all information in there? Is there anything missing?
  - What goes in each page or screen?
  - Is the information logically distributed?



# Low fidelity mockups

## 2. For each page, create a mockup.

- What is the **visual flow**? What is seen first, second, third? Is this the right order?
- Does this consider all of my different user's needs?
  - If you used persona analysis, it can be helpful to think in terms of them

(We will explain these terms later in these slides.)

### Think about the UX:

- **Visual hierarchies**
- **Page layout**
  - If needed, layout within important, special or unclear sections
- **Navigational components**

### Do not think yet about specifics:

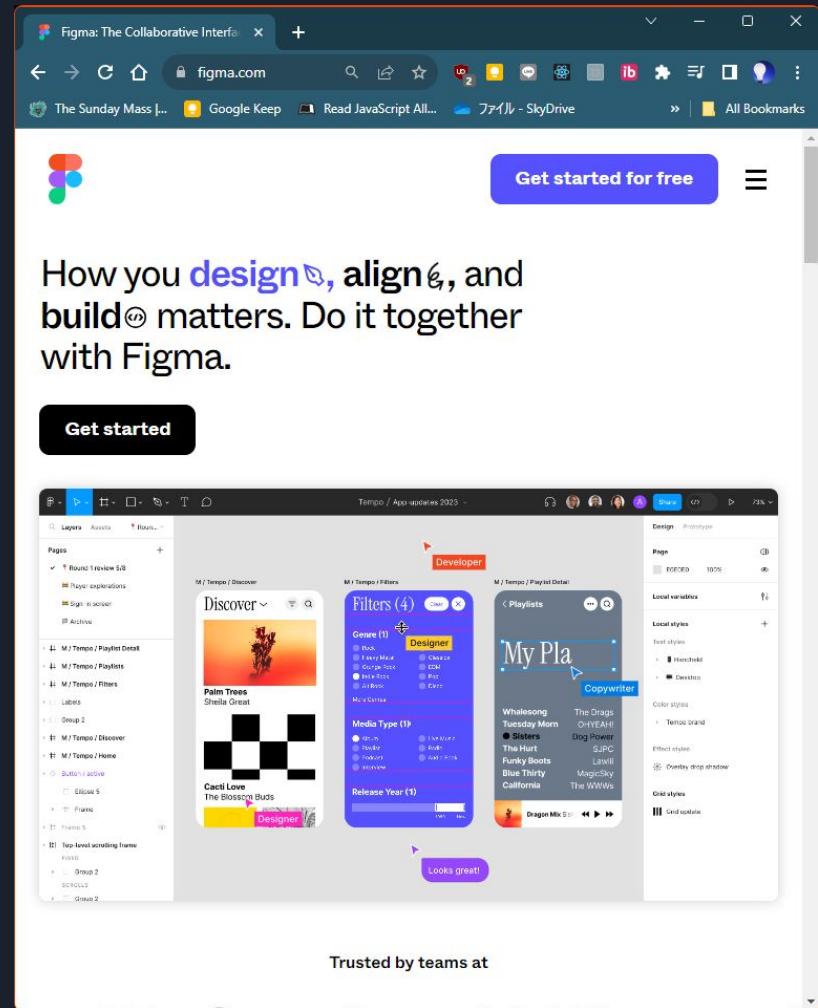
- Colors - these mocks should be grayscale
- Fonts, images, interactivity, etc.

# High fidelity mockups

When you have more confidence that you're in the right path, you'll transition into high fidelity mockups.

Here, the usage of tools such as Figma can be helpful in continuing the conversation. Figma supports collaboration, has presentation and annotation capabilities, and can even show some interactivity.

Alternatively you could use other diagramming software such as Photoshop, or jump into HTML/CSS directly.



Trusted by teams at



# High fidelity mockups

At this point, the page flow should be mostly stable.

- Small adjustments are still okay

What to consider here:

- Colors
- Typography
- Images and illustrations
  - Final product can have high-quality, professional images and custom icons, etc. Eventually should include those
- Interactivity, if required
  - Some tools allow creating “interactive slideshows” to show eg. the effect of a button

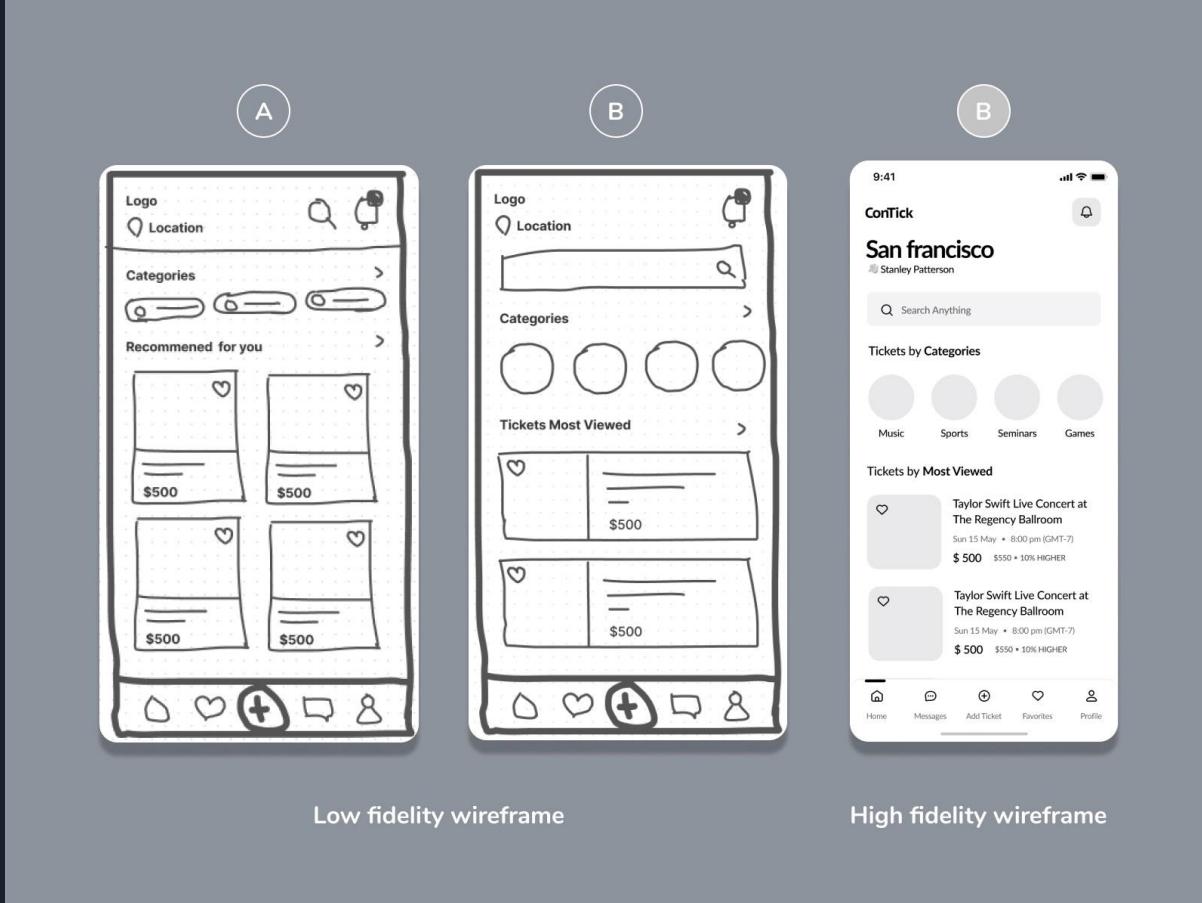


Image by [Jinal Shah](#)

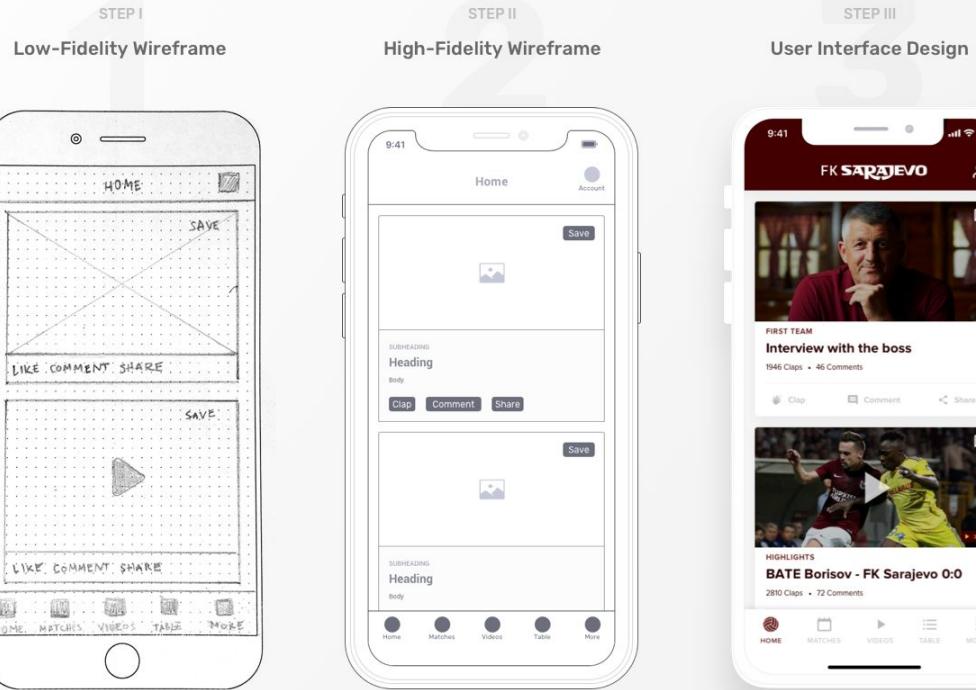


Image by [Armin Graca on dribbble](#)

# Responsive design and mobile-first

These are web design specific terms.

**Responsive design:** one that will adapt to different screen widths / window widths.

**Mobile first:** philosophy to design for the smallest window width first and then rearrange for the bigger ones, and not the other way around.



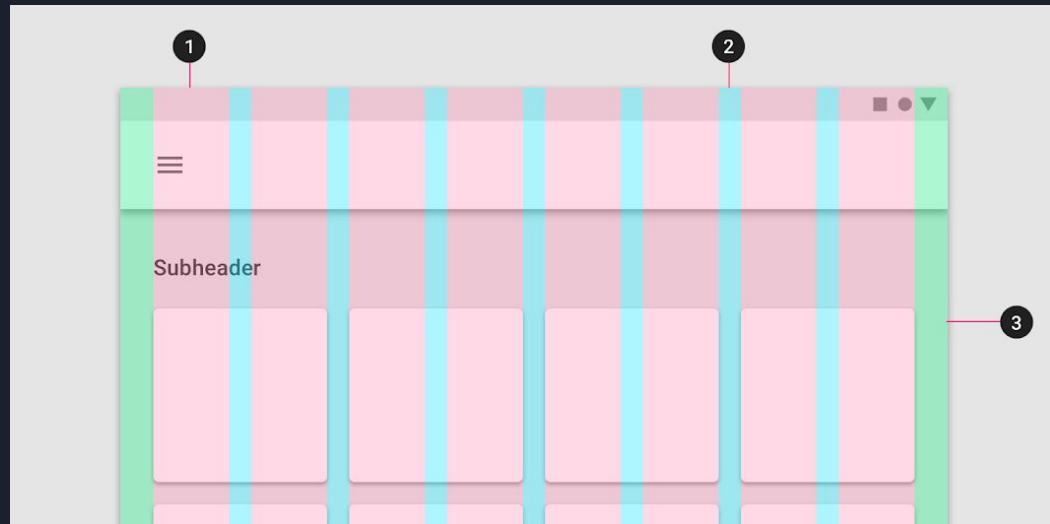
Source: the [Interaction Design Foundation](#)

# Grid systems and responsive grids

In web design, a grid system is a way to arrange page elements, usually including columns (1), gutters (2) and margins (3).

The grid has a maximum width: in a page wider than that, the grid remains centered.

This behavior is supported automatically by CSS frameworks such as Material and Bootstrap.

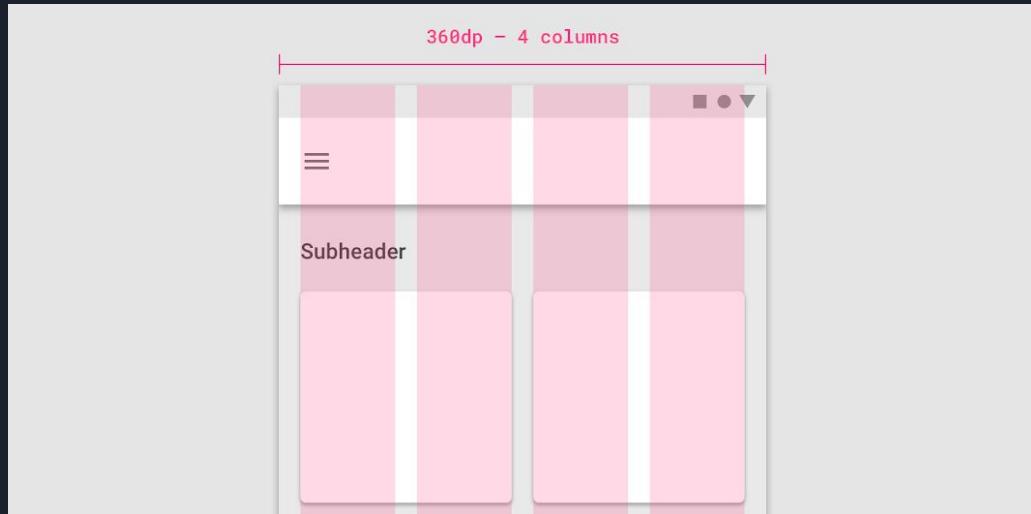


Source: [Material.io](https://material.io)

# Grid systems and responsive grids

If the grid is responsive, it will adapt to a smaller screen width by decreasing the number of columns and the gutters between them.

Doing mobile first, then, means creating your composition in this smaller number of columns first.



Source: [Material.io](#)

# Breakpoints

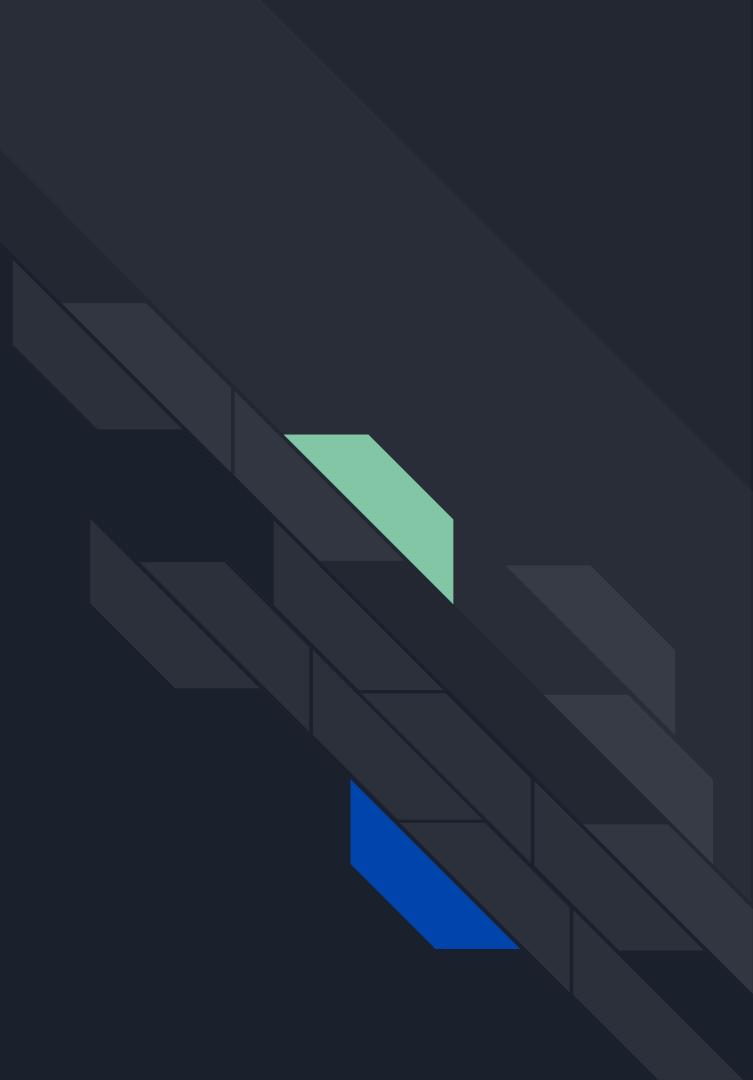
A breakpoint is the screen width at which the responsive layout will change.

At right: breakpoints as defined by the [Material Design framework](#).

(Note: dp is a type of pixel measurement.)

Screen size	Margin	Body	Layout columns
Extra-small (phone)			
0-599dp	16dp	Scaling	4
Small (tablet)			
600-904	32dp	Scaling	8
905-1239	Scaling	840dp	12
Medium (laptop)			
1240-1439	200dp	Scaling	12
Large (desktop)			
1440+	Scaling	1040	12

# **Understanding Design**





# Telling the right story

- Each page has a story to tell.
  - The user must understand that story as soon as they see the page.
  - You only have a few seconds of attention!
- We make each page tell that story in the right way using **graphic design**.



# Let's play a game.

- You will see a website for **three seconds**.
- You will try to answer a question about this website.



# Example 1

Website: Pacific Northwest X-Ray Inc.  
<https://www2.pnwx.com/>

Question:

**Does this company sell animal  
immobilizers?**

pnwx.com - Pacific Northwest X-Ray Inc.

www2.pnwx.com

 Pacific Northwest X-Ray Inc.  
Simply the best!

Search for X-Ray Products.   Go!

...Or select from some of our most popular....

 <a href="#">Fastest Shipping Lead Apparel.</a>	 <a href="#">Resolution Test Tools/Phantoms.</a>
 <a href="#">Most Comfortable Aprons.</a>	 <a href="#">X-Ray Merchant Boards.</a>
 <a href="#">Surgical Radiation Reducing Gloves.</a>	 <a href="#">ACR accredited Medium MRI Phantom.</a>
 <a href="#">Line-Pair Resolution Test Phantoms.</a>	 <a href="#">Small Animal Immobilizers.</a>
 <a href="#">Lead Glass.</a>	 <a href="#">Mobile Lead Barriers.</a>
 <a href="#">X-Ray Test Meters.</a>	 <a href="#">X-Ray Table Pads.</a>
 <a href="#">System Test Phantoms.</a>	 <a href="#">Silver Recovery Systems.</a>
 <a href="#">Lead Curtains.</a>	 <a href="#">X-Ray Grids.</a>

Pacific Northwest X-Ray Inc.  
P.O. Box 625 \* Gresham, OR 97030 U.S.A.  
503-667-3000 \* Toll Free U.S.A: 800-827-9729 \* Fax : 503-666-8855



# **What's your answer?**

# Correct answer: yes

A screenshot of a web browser displaying the website [www2.pnwx.com](http://www2.pnwx.com). The page features a blue background with a grid pattern. At the top center is the logo "Pacific Northwest X-Ray Inc." with the tagline "Simply the best!" Below the logo is a search bar with the placeholder "Search for X-Ray Products." followed by a large grey arrow pointing right, and a "Go!" button. The main content area includes a section titled "...Or select from some of our most popular...." with several product categories listed, each accompanied by a small skull icon.

Pacific Northwest X-Ray Inc.  
Simply the best!

Search for X-Ray Products. → Go!

...Or select from some of our most popular....

- [Fastest Shipping Lead Apparel.](#)
- [Resolution Test Tools/Phantoms.](#)
- [Most Comfortable Aprons.](#)
- [X-Ray Merchant Boards.](#)
- [Surgical Radiation Reducing Gloves.](#)
- [ACR accredited Medium MRI Phantom.](#)
- [Line-Pair Resolution Test Phantoms.](#)
- [Small Animal Immobilizers.](#)
- [Lead Glass.](#)
- [Mobile Lead Danners.](#)



## Example 2

Website: Arngren (<https://arngren.net/>)

Question:

**How much does the product “el-Jeep  
Willy-type” cost?**





# **What's your answer?**

# Correct answer: 39,998

ATV, drone, elbil, elsykkel, rc hel... arngren.net

**www.ARNGREN.net**

**el-Kjøretøy** Teknologi & Gadgets

Akvarium  
Alarm  
Alkotester  
**ATV (el.)**  
Bildefilser

**Bil el-bil**  
Bilbane  
Billardbord M/bor  
Digital-Kikkert

Disko-Lys  
DVD-Spiller  
**el-Bil-barn**  
**el-Bil-3-hjul**  
Elektronikk & DAB  
**el-Scooter & Bil**  
**el-Sykkel-1..2**

**el-fatbike** 750W  
6.998,-  
4WD Nyhet!  
12V 24V 48V  
**3-hjul el-Cargo-Bike**  
Biler til barn fra kr. 1.798,-

**EI-ATV** til Barn & Voksne, fra kr. 3998,-

**el-Sykkel** Nyhet! 1.599,-

**el-biler til barn** (Fra 07.11.2004) < Frithjof i sin Fly-Bil

Search el-retur Slik Betaler du

**el-Kjøretøy**

Bygg ditt eget 2-seters Heli kr. 398.000,-

**el-fatbike Sammenleggbar** 12.998,-  
750W/48V  
**el-sykkel**  
**el-scooter** 7.998,-  
**Fatbike-1500W**

**Elektriske-Kjøretøy**  
- Elektrisk-ATV - Roboter  
- el-biler til barn/ungdom  
- Solcelle-produkter  
- Forbruker Elektronikk  
- el-Sykkel & el-Moped  
- Batterier & Ladere, el-  
- RC-produkt - Rakete

**el-ATV**  
**el-Jeep Willy-type,** med 60V/1500w motor. 6 eller 40km/t kr. 39.998,-  
Stor 12V/24V med Gummihjul  
2-seters 4WD  
**Lithium eller Bly-Batteri**



## Example 3

Website: Goodreads  
<https://www.goodreads.com>

Question:

Where can I search for a book about  
renaissance art?

Goodreads | Meet your next fav

goodreads.com

# goodreads

## Summer Reading

Read more

Deciding what to read next?

You're in the right place. Tell us what titles or genres you've enjoyed in the past, and we'll give you surprisingly insightful recommendations.

What are your friends reading?

Chances are your friends are discussing their favorite (and least favorite) books on Goodreads.

What will you discover?

Because Meagan liked...

She discovered: Historical Fiction, Book Club

Because Deborah liked...

She discovered: Zombies, Post Apocalyptic, Dystopia, Urban Fantasy

Search and browse books

Discover & read more

[Continue with Amazon](#)

[Continue with Apple](#)

[Sign up with email](#)

By creating an account, you agree to the Goodreads Terms of Service and Privacy Policy.

Already a member? Sign In

News & Interviews

[48 Recent and New Retellings \(That Are Not Based on Greek Mythology\)](#)

109 likes · 26 comments

Love lists?

[Best for Book Clubs](#)  
12,947 books | 17,114 voters

[Best Crime & Mystery Books](#)  
7,119 books | 16,200 voters

[Best Books of the 20th Century](#)  
7,777 books | 51,120 voters

More book lists

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Cookbooks  
Crafts  
Education  
Fiction  
History  
Home  
Humor  
Literature  
Non-fiction  
Science  
Sports  
Technology  
Travel  
Young adult  
Ebooks  
Fantasy  
Mystery  
Science fiction  
Thriller  
Young adult  
Music  
Mystery  
Science fiction  
Thriller  
Young adult  
Self Help  
Sports



# **What's your answer?**

# Correct answer: down in the page

goodreads

## Summer Reading

[Read more](#)

### Deciding what to read next?

You're in the right place. Tell us what titles or genres you've enjoyed in the past, and we'll give you surprisingly insightful recommendations.

### What are your friends reading?

Chances are your friends are discussing their favorite (and least favorite) books on Goodreads.

#### What will you discover?

Because ♥Meagan♥ liked...



She discovered:



Because Deborah liked...



She discovered:



Search and browse books

 Title / Author / ISBN

Art  
Biography

Fiction  
Fantasy

Music  
Mystery

Self Help  
Sports

More book lists

Continue with Amazon

Continue with Apple

Sign up with email

By creating an account, you agree to the  
Goodreads [Terms of Service](#) and [Privacy Policy](#).

Already a member? [Sign In](#)



#### News & Interviews

[48 Recent and New Retellings \(That Are Not Based on Greek Mythology\)](#)



109 likes • 26 comments

#### Love lists?

[Best for Book Clubs](#)  
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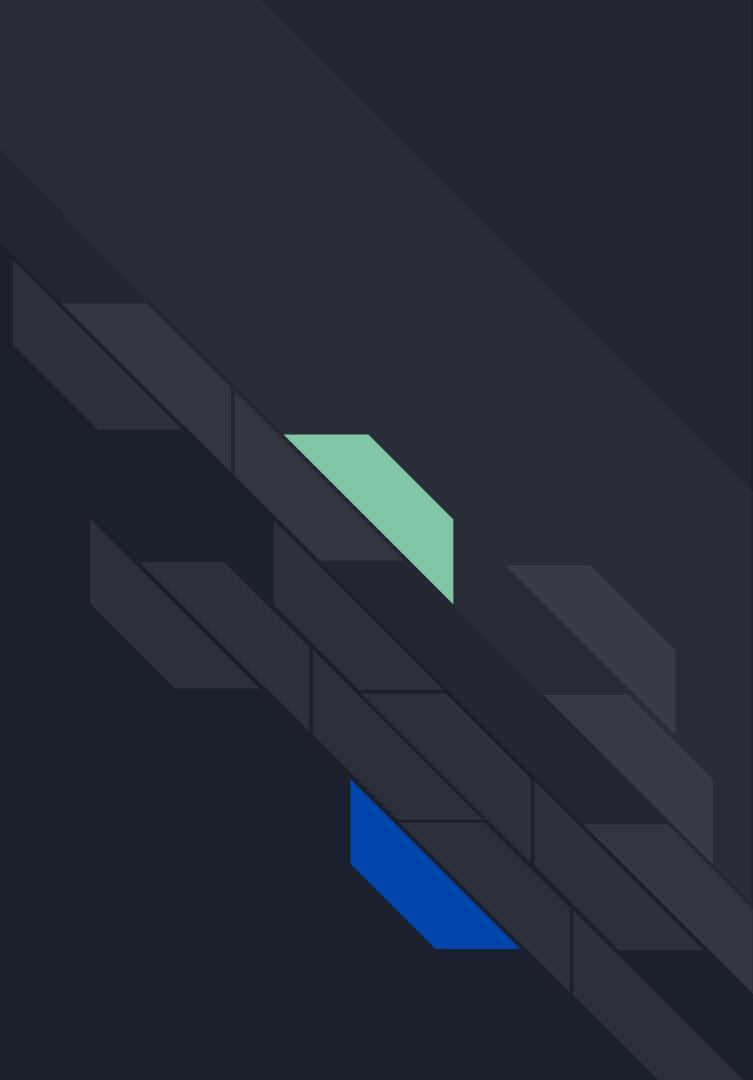




# Telling the right story

- All of these websites failed to follow one or more **design principles** in their design.
- A page that cannot be understood will not be used.

# **What is Graphic Design?**





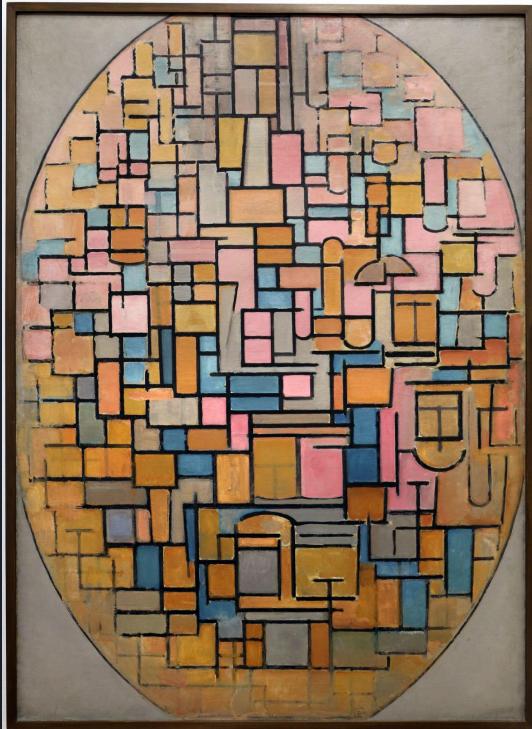
# What is graphic design?

“Graphic design is a craft where professionals create visual content to communicate messages.” (From the [Interaction Design Foundation](#)).

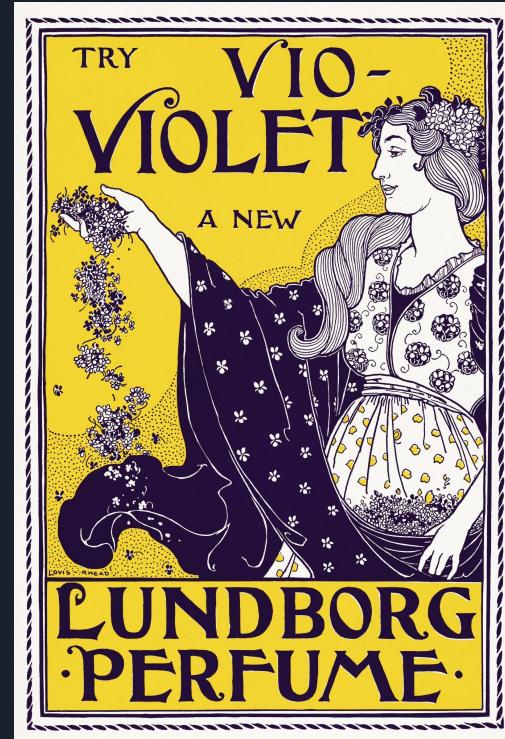
Graphic design uses artistic elements, but it is not art.

- Art exists to express the artist’s thoughts and feelings. Whether the viewer understands is not relevant.
- Graphic design exists to clearly convey a message to its viewers.

# Compare and contrast:



Piet Mondrian, Tableau III, Composizione In Ovale, 1914. From [Wikipedia](#)



Lundborg Perfume ad (1890-1900). Public domain. From [Rawpixel](#)



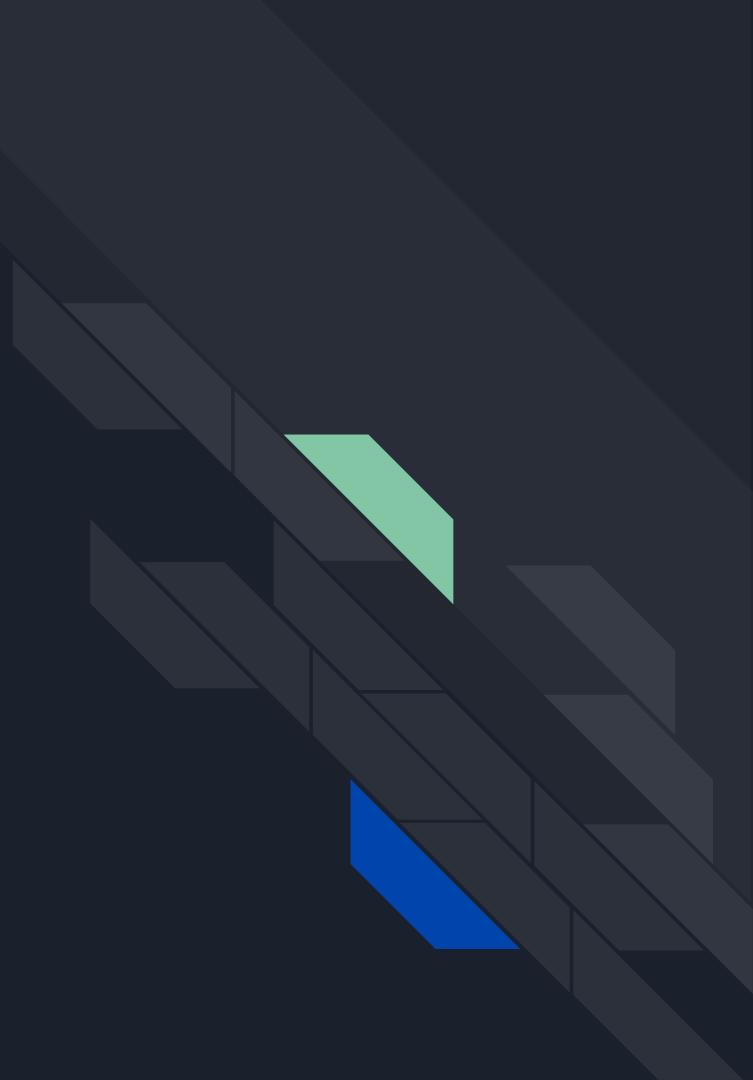
# **Graphic design in web design**

Within a page, web design starts with graphic design.

We aim to organize the contents of the page to make them not just “pretty”, but - more importantly - easy to understand and use.

We call this organization of visual elements the layout.

# Principles of design





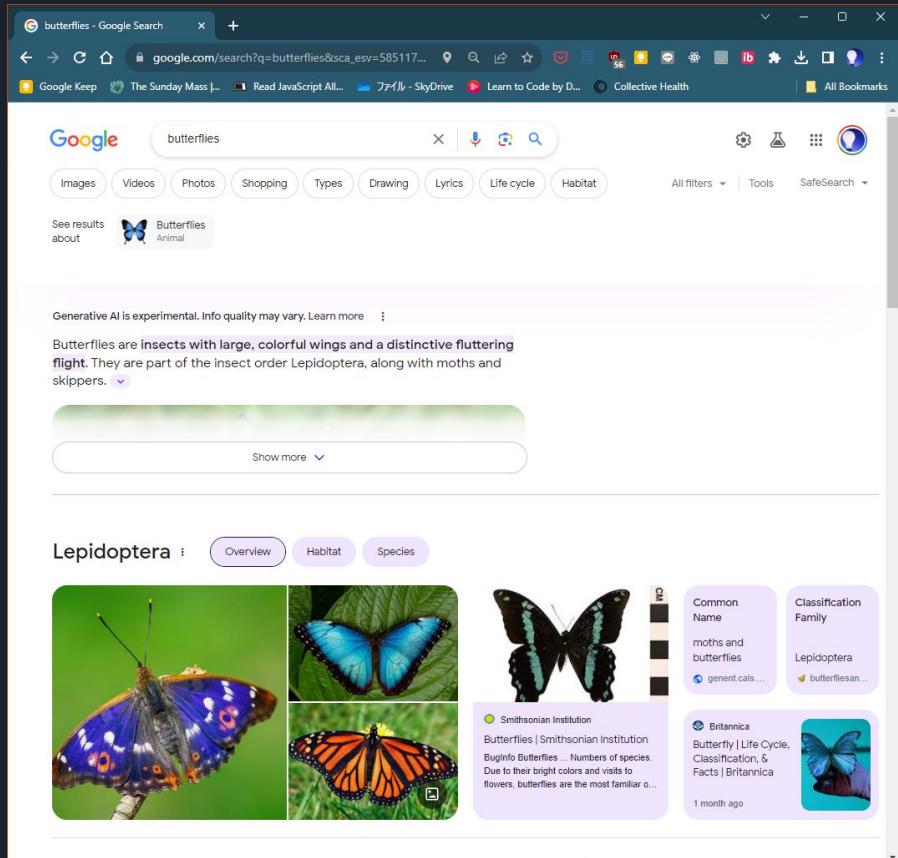
# **Some principles of graphic design**

- **Visual flow principles:** Directing the user's eye throughout the page
  - Hierarchy and Emphasis
  - Contrast
  - Scale and Proportion
  - White Space
  - Movement
- **Arrangement principles:** Classifying and harmonizing different page elements
  - Balance and Alignment
  - Unity and Variety
  - Repetition

# Creating visual flow

Use the following principles to create designs that will Intentionally move the viewer's attention in the desired order,

What do you see first in this screenshot? Where does your eye go afterwards?



Screenshot from google.com.

# Hierarchy and Emphasis

Whatever is more important - what the user needs to know first - should be the first thing the viewer sees.

Create a hierarchy that controls the viewer's flow.



Image copyright by [Albert Bridge](#) and licensed for reuse under this [Creative Commons Licence](#). Image source

# Scale and Proportion

Refers to the size of an element relative to others.

You can draw something in scale to make it fit in your page.

It also refers to the screen sizes you will be designing for.



Photo by Fernando López.

# White space

White space (negative space) has a value. Do not feel like you must use all of the space available - that's not how it works.

Surround elements with white space to bring more attention to them.



Photo by Fernando López.

# White space

A lack of white space can create very dense designs. This is usually not desirable - the viewer gets lost.

However, this is also cultural. Japanese people are used to density due to how their language works, so this is expected by them.



Screenshot from [Yahoo! Japan](#)

# White space

Not an excuse for the US website though!

However, there is still some white space here. Can you notice it? What is its effect?

The screenshot shows the Yahoo homepage with a clean layout featuring white space. At the top, there's a navigation bar with links for News, Finance, Sports, More, Mail, and Sign in. Below the bar, a search bar is followed by a purple 'yahoo!' logo. The main content area includes several news stories with images and brief descriptions:

- Hamas frees 24 hostages in exchange for 39 Palestinian prisoners**: An image of people standing in a destroyed area, with a caption about the exchange.
- Mysterious cosmic ray in Utah**: An image of a bright light in the sky.
- 'Joy and pride' at Nicaragua's Miss Universe title win**: An image of a woman in a crown.
- The strange \$55 million saga of a Netflix series**: An image of a person playing a piano.
- Cruise line leaves passengers high and dry after canceling 3-year voyage**: An image of a large cruise ship.
- Multiple fatalities as millions take to the roads over holiday period**: An image of a city street at night.

Below these stories, there's a section titled "Stories for you" featuring images of Mary-Kate and Ashley Olsen and Detroit Lions' Jared Goff and Christen Harper.

On the right side of the page, there are three vertical columns: "Trending Now" (listing items like Bombas slippers, iPhone 15 Pro, etc.), "Weather" (showing forecasts for Kansas City), and "Scoreboard" (listing NFL game results).

Screenshot from [yahoo.com](https://www.yahoo.com)

# Movement

Designs with movement will naturally make the view move through an intentionally created flow, suggested by the elements.

How is your eye moving through this design?

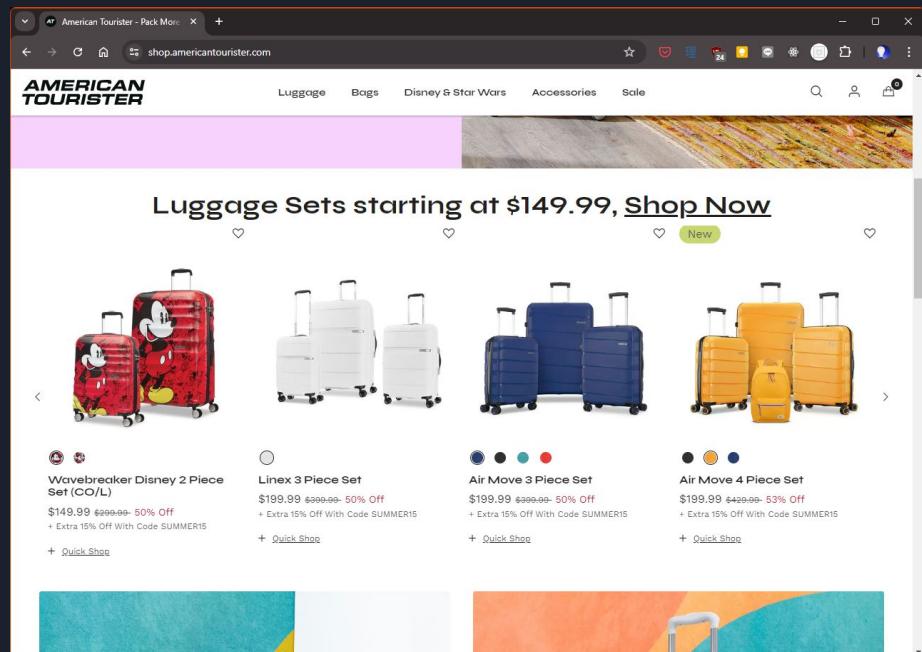
The screenshot shows a web browser window for the PBS LearningMedia website. The URL in the address bar is [ca.pbslearningmedia.org/subjects/the-arts/dance/?rank\\_by=1](https://ca.pbslearningmedia.org/subjects/the-arts/dance/?rank_by=1). The page title is "Dance | PBS LearningMedia". The top navigation bar includes links for "FOR TEACHERS", "KQED", "Search", "Sign in", and "Sign up". Below the navigation, there are links for "Subjects" and "Grades", and a "Student site" link. The main content area is titled "The Arts > Dance". A large circular image on the right shows a close-up of a dancer's legs in a split position. The main text describes the Dance category, encouraging participation, analysis, appreciation, and history of dance. It mentions students can create diagrams to compare different styles of dance, and teachers can plan interdisciplinary lessons like choreographing, graphing, and performing a figure for a square dance. It also notes that groups of students can explore cultures across the globe from the perspective of dance and present their findings to classmates. The history of dance, dance as a profession, and technology in dance are among the additional topics explored. On the left, there is a "Dance Topics" sidebar with links to "Appreciation and Analysis of Dance Works", "Dance Creation, Participation, and Performance", "Dance Forms", and "Dance History". On the right, there are filters for "Grade", "Resource Type", and "Sort by (Newest)", along with a link to "Advanced Search". Below these filters, it says "Dance includes 449 resources". There are two video thumbnail previews: one for "Dance: Margaret Jenkins" (Video, 10:29) and another for "Anna Halorin: Performance" (Video, 11:04).

Screenshot from [the PBS website](#).

# Arranging information

Use the following principles to bring a predictable, logical order to the information, making it easier to find and use.

Can you easily find what is being sold in this website, and what options do you have?



Screenshot from americantourister.com.

# Balance and alignment

Every element in the page has a visual “weight” (eg. how much it draws the eyes). Distribute it across the page.

Weight is given by:  
contrast, scale /  
proportion, and blank  
space.

Balance can be symmetric or asymmetrical.

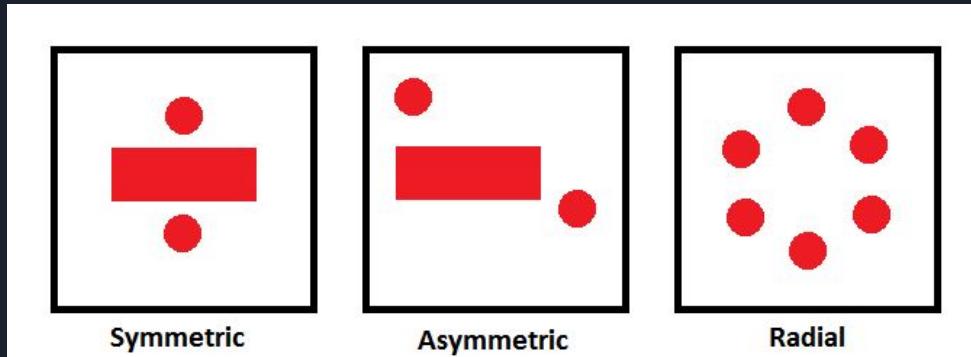


Image from [Wikimedia](#).

# Balance and alignment

An example of asymmetrical balance.

- The form at left is only one, but the background is of a dark gray color (contrast).
- The forms at right are smaller, but darker and cover most of the right side.

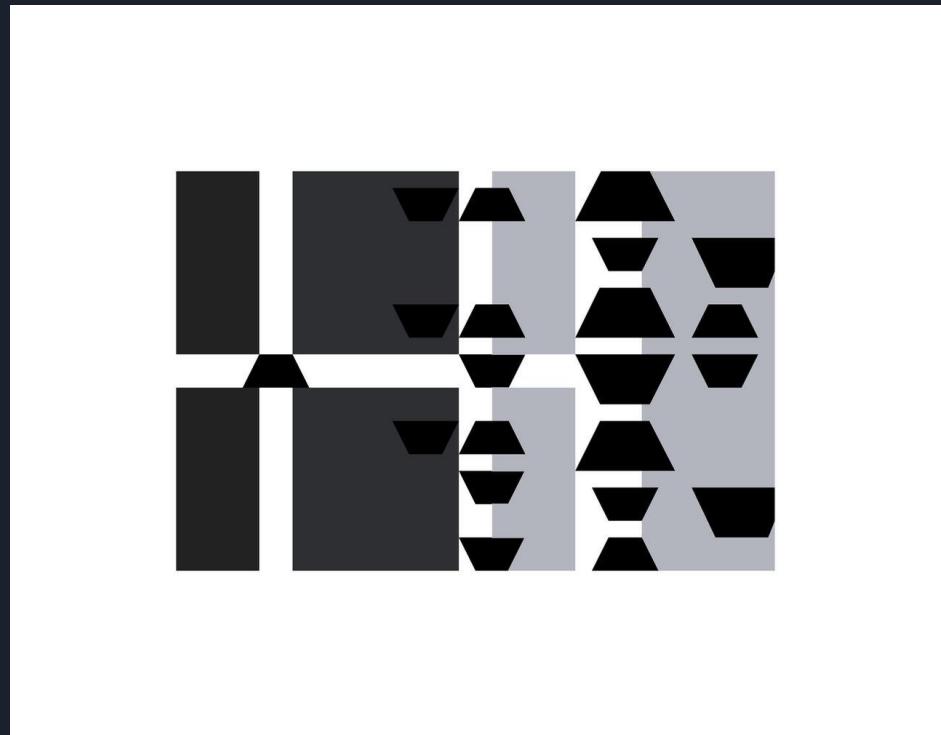


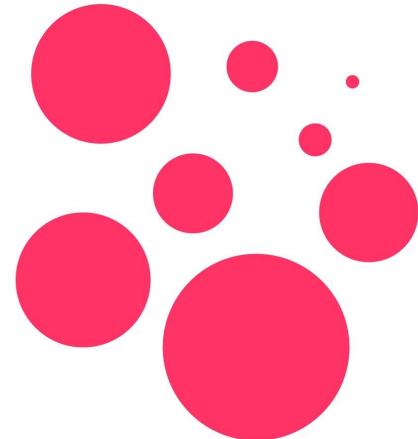
Image from [DeviantArt..](#)

# Unity and variety

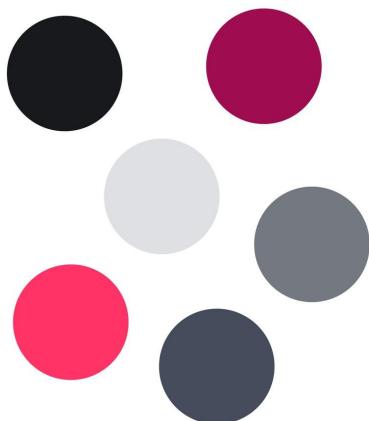
Use different elements to make the message visually interesting.

Use similarities between those different elements to bring unity to the message.

Unity & Variety



Unity = Same Color  
Variety = Different Sizes



Unity = Same Size  
Variety = Different Colors

# Unity and variety

Use different elements to make the message visually interesting.

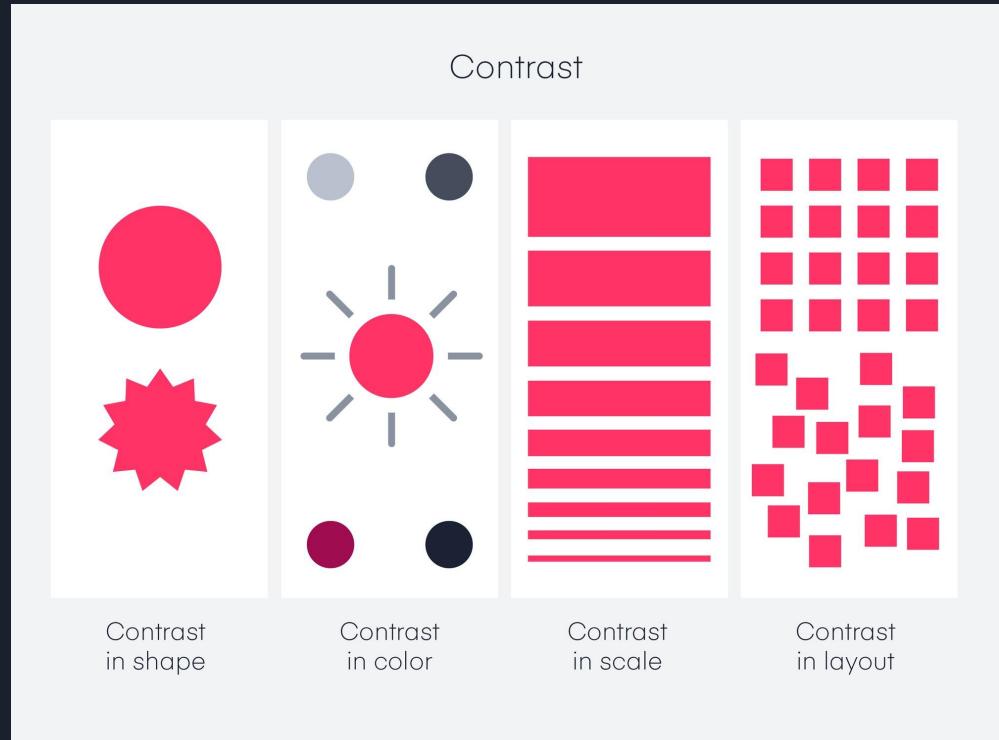
Use similarities between those different elements to bring unity to the message.



Image by Fernando López.

# Contrast

Refers to the difference between objects. More contrast means more visibility and readability (think black text on white background). Too much contrast, however, is aggressive and can be unpleasant.



# Contrast

Refers to the difference between objects. More contrast means more visibility and readability (think black text on white background). Too much contrast, however, is aggressive and can be unpleasant.



Image by Fernando López.

# Repetition

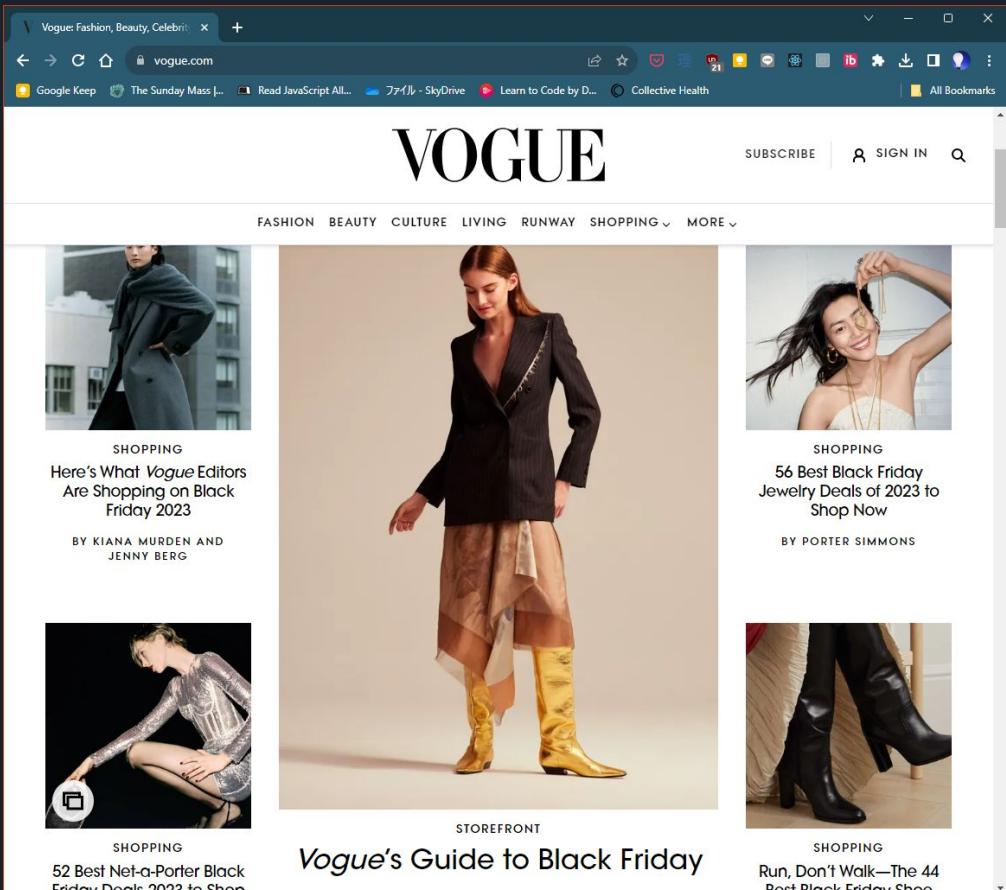
Use repetition to create a visual rhythm. We humans like patterns. It also helps create order in a layout.



Photo by Fernando López.

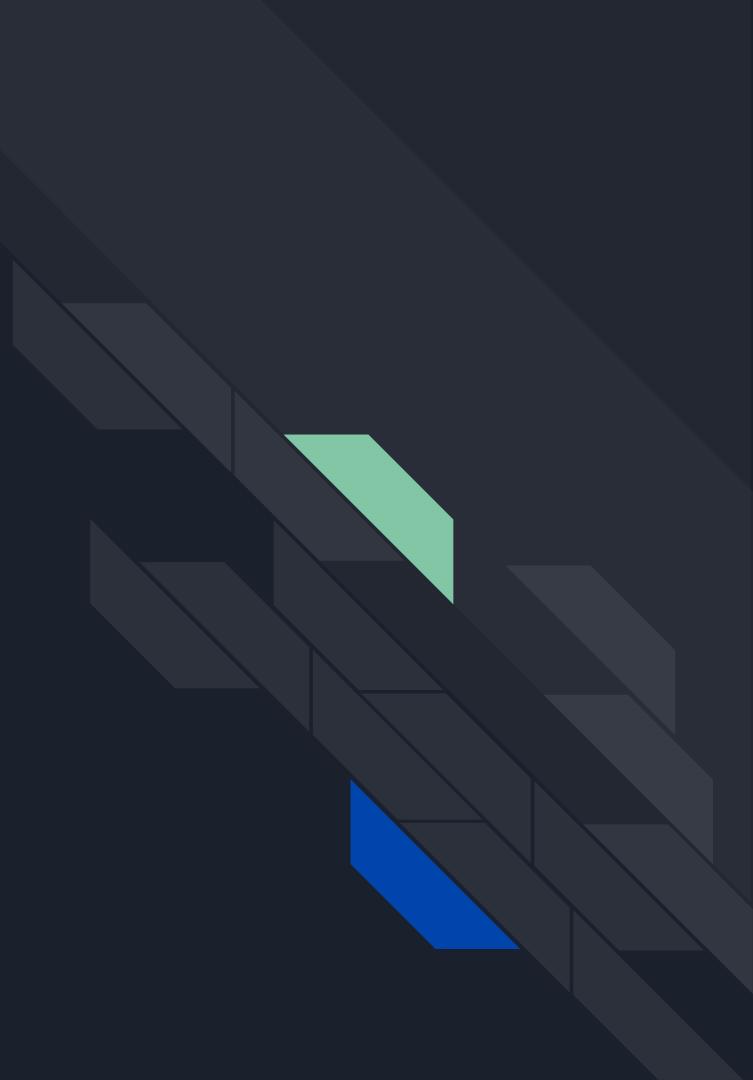
# Repetition

Repetition forms a pattern in this website.



Screenshot from [vogue.com](https://www.vogue.com)

# Layout principles

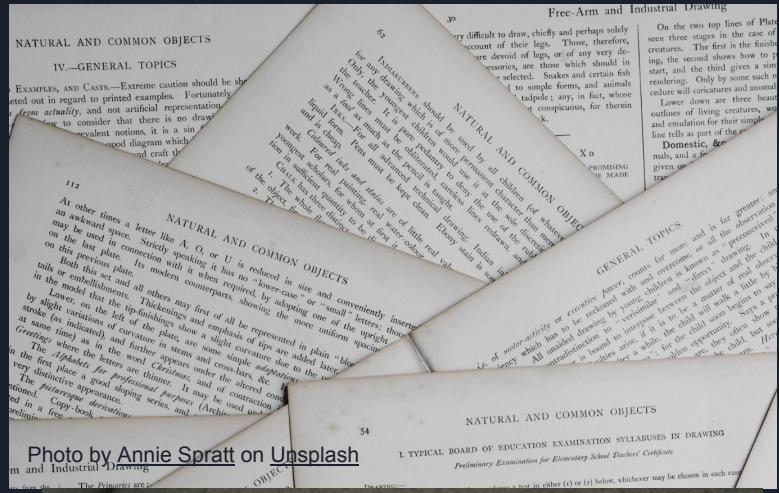


# Layouts

Layout: Where everything lands on a page, in a structured way.

This exists in all forms of graphic design.

Relates to composition in other visual arts and disciplines (eg. photography, paintings...) and follows similar principles.





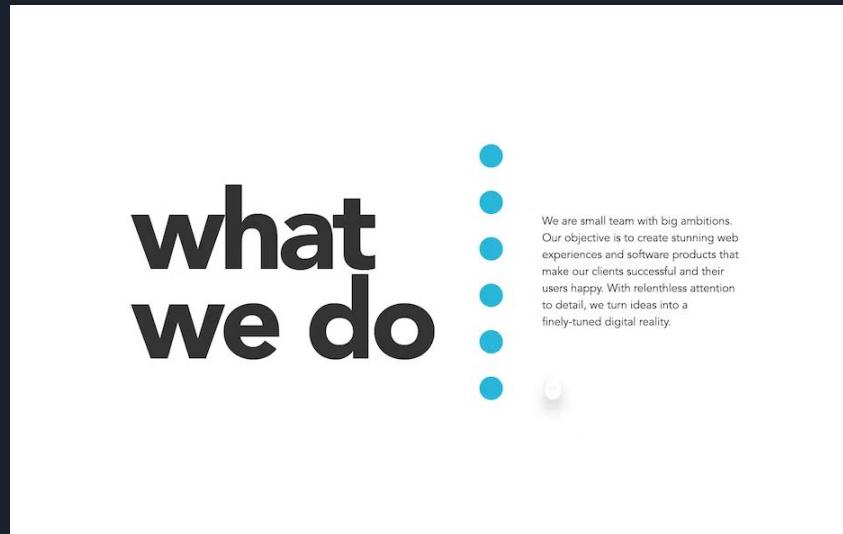
# Layout principles

- Balance, emphasis and scale
- The grid
- Rule of thirds
- Rule of odds

# Balance, emphasis and scale

Apply these principles (reviewed earlier) to the whole design.

- Use elements with different sizes to call attention to focal points.
- Provide enough white space.
- Consider each element's weight; don't put all weight elements in the same side.



[Source.](#)

# The grid

Use an invisible grid (rows and columns) to align the design elements with.

Grids create cleaner, simpler, more balanced compositions that will be easier to work with.

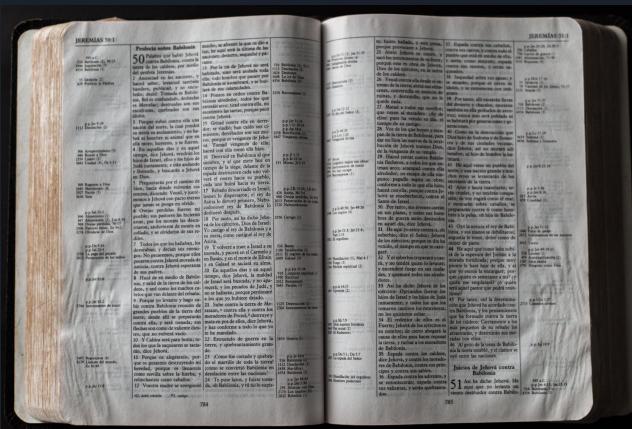
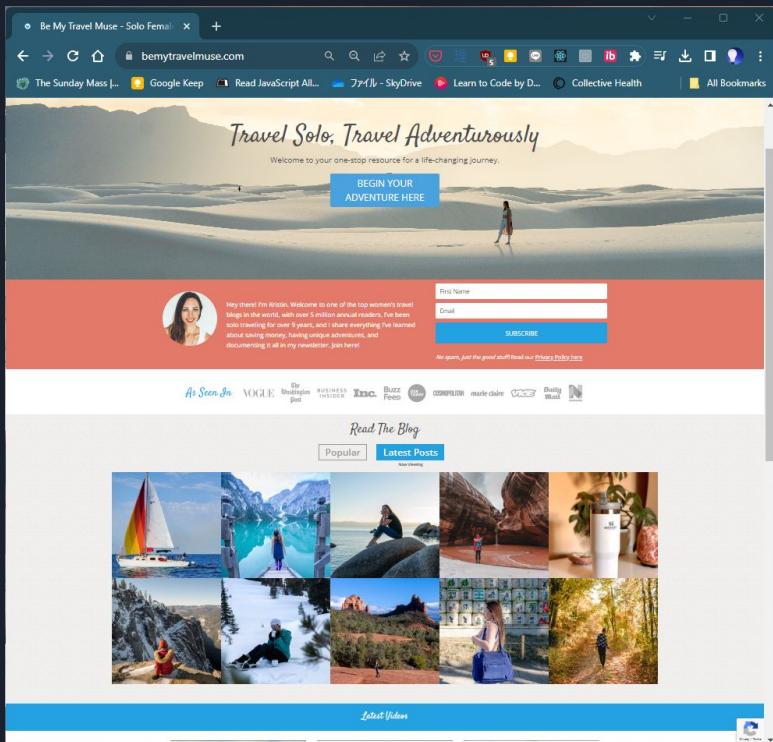


Photo by [Luis Quintero](#) on [Unsplash](#)

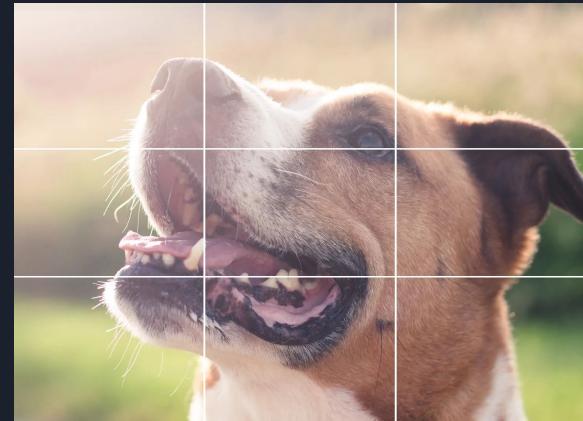


Screenshot from [bemytravelmuse.com](#)

# Rule of thirds

Divide your design into three rows and three columns. Use the lines - or their intersections - to place your design focal points.

This guideline can help you create a more balanced design and call the viewer's attention to what matters.



[Source.](#)



[Source.](#)

# Rule of odds

Place an odd number of elements together for a more pleasing composition.



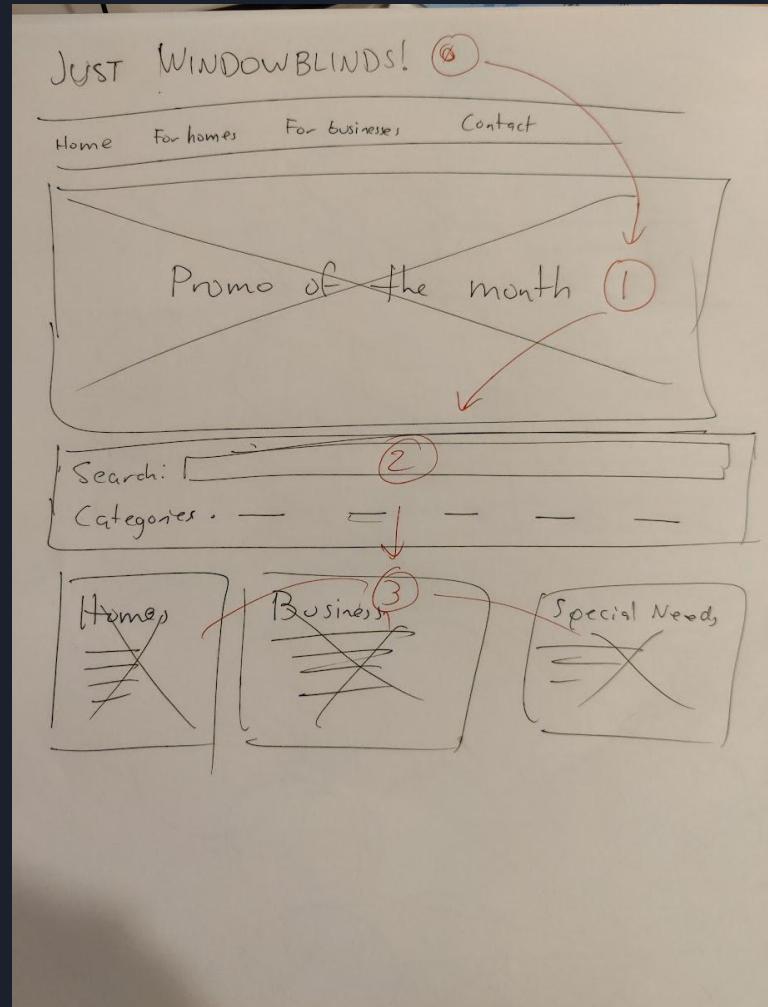
Photo by Melinda Young Stuart on [Flickr](#).

# Putting everything together: lo-fi mocks

- Prioritize the information in a page. What do you want the users to see first, second, third?
  - This depends on what they want /need
- Then, use the principles to create a layout that makes the user's eyes follow that order...
- ...and make it easier to identify and select from sets of information.

You are ready to create **low-resolution mockups**.

- Create one per type of page





# What's next?

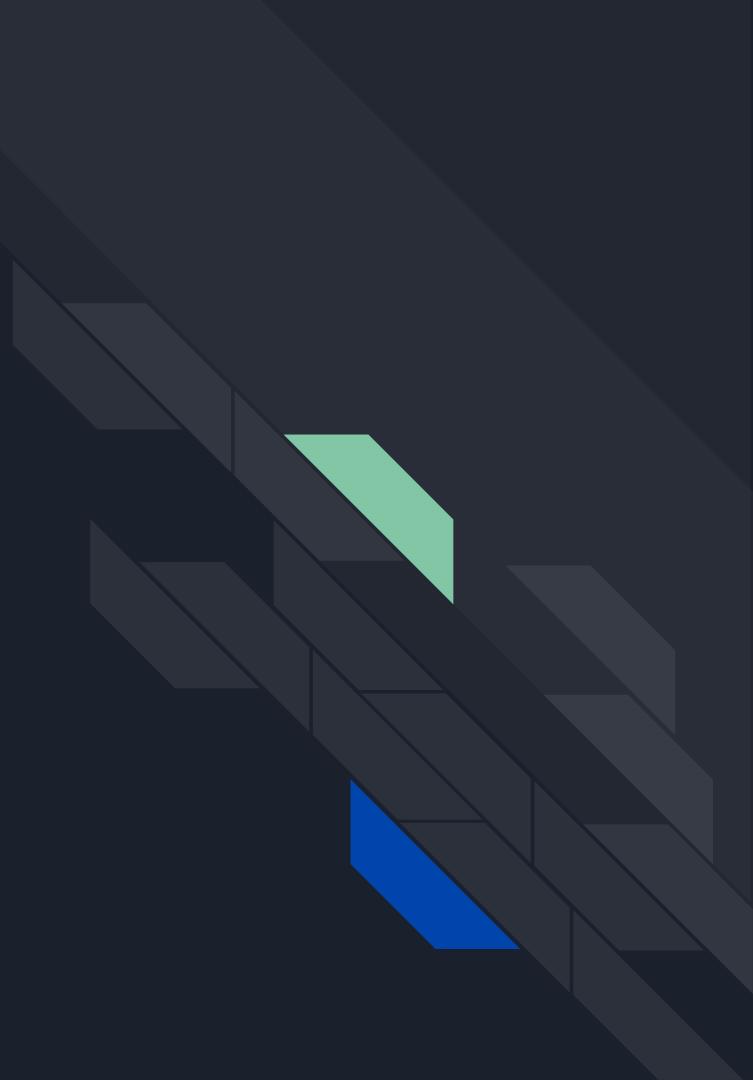
Once you're mostly certain of the **layout** of the page, you will go into the **details**:

- Colors
- Typography

We will now explore these now.

Applying these to your layout, you will end up with **high-resolution mockups**.

# Color





# Color theory fundamentals

## Why is this important?

- Color usage can influence people's attention, mood, and also transmits information.
  - Some of these effects are generic; others are culture-dependant.
- Color can convey information in itself
- Ultimately, color can, and will, affect the usability and readability of your message



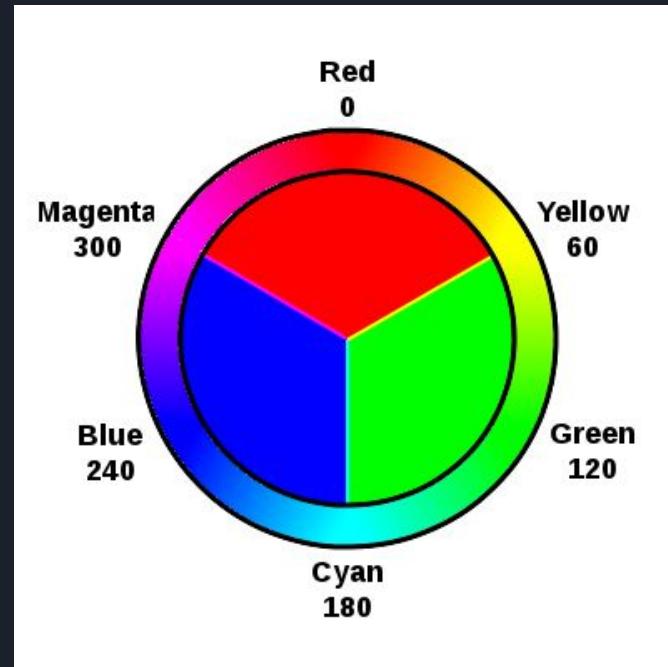
# Color theory fundamentals

- You want to use a consistent color palette for your composition.
  - In most cases, you should first design elements without color, then choose and apply the palette
  - Palettes consist of a few colors that are used throughout the design.
  - You can use online tools to create palettes for you.
    - However, be wary of what effect the colors will have in your users!

# Color theory fundamentals

The color wheel:

- Primary colors are equidistant, forming a triangle
- Secondary colors are also equidistant, and in the middle of each primary color



# Color theory fundamentals

The color wheel:

- Primary colors are equidistant, forming a triangle
- Secondary colors are also equidistant, and in the middle of each primary color
- Warm colors are in one side; cool colors in the other.



# Color theory fundamentals

The color wheel:

- Complementary colors are at opposite sides of the wheel.
  - Complementary colors create the maximum amount of contrast by hue
- Create color harmonies by using colors equally distant from each other

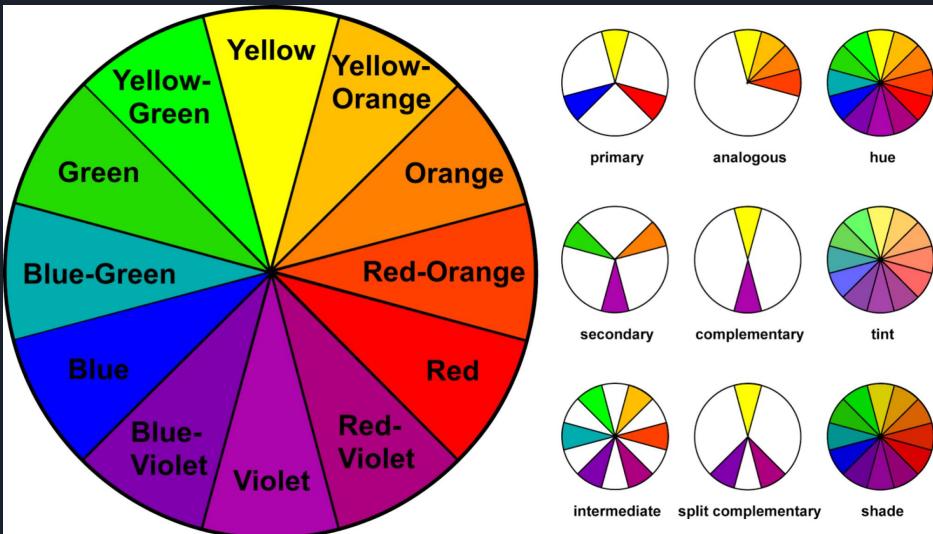


Image from [Lifehacker](#)

# Color theory fundamentals

Colors on the wheel are “hues” - “pure” colors.

Add white to create “tints”, and black to create “shades”.

In practice, you may choose a couple of colors and their tints to create your palette.

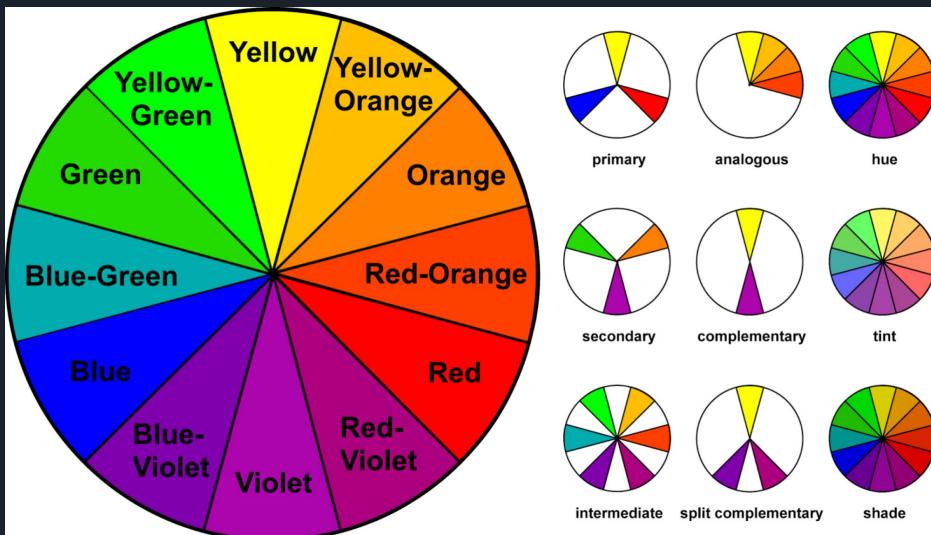


Image from [Lifehacker](#)

# Some color effects

Warm colors (red, orange, yellow) are energetic: they can convey excitedness, either positive (happiness) or negative (rage, warning).

They also are associated with hunger.



Fast-food restaurant. Photo from [Wikipedia](#).



Warning signs around the world. From [Wikipedia](#).



From [Wikipedia](#).



Signs for a coffee brand. Photo by Fernando López.

# Some color effects

Cold colors (purple, blue, green) are low-energy: they suggest calmness, either positive (relaxation) or negative (lethargy).

They are also associated with safety, cleanliness, and health.



Nature. Photo by Fernando López



Interior of a hospital. From [Wikipedia](#).



Cleaning utensils. From [freeimageslive](#)



"A Study in Emotions: Sadness" by Skorble on [Deviantart](#)

# Some color effects

Red can convey a sense of urgency.

Used excessively, it creates aggressive compositions.

In the Chinese culture, red is the color of happiness - an auspicious color.



From [Flickr](#)



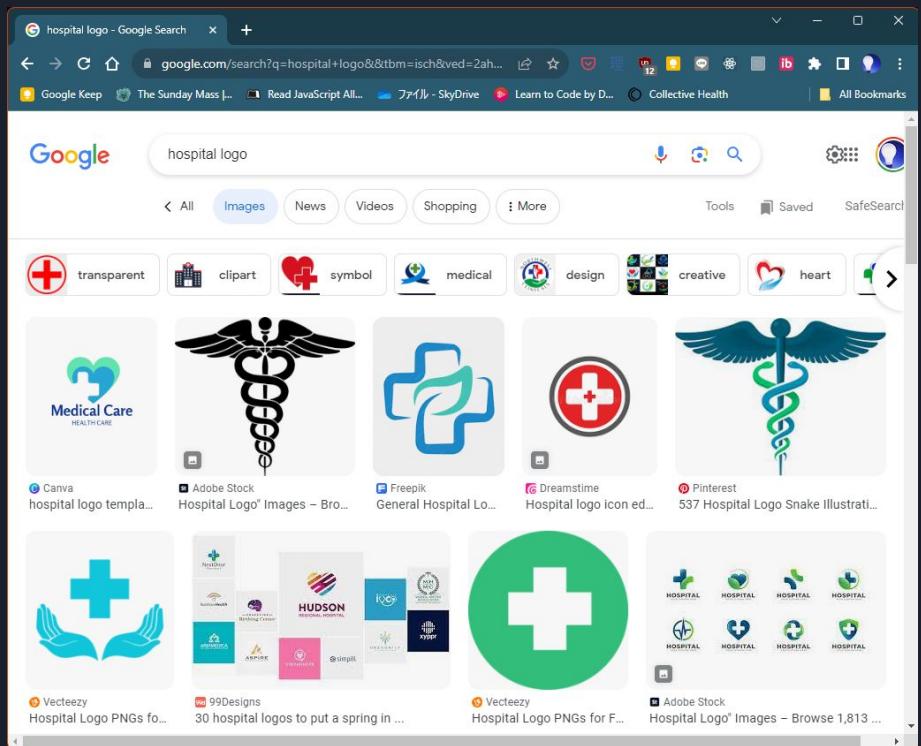
From [Flickr](#)



From [Wikipedia](#)

# Some color effects

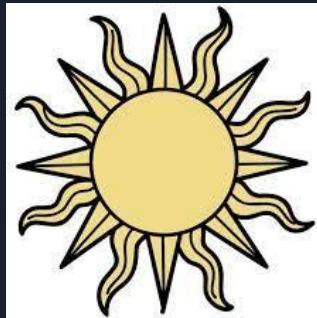
Green is especially associated with health and cleanliness. It is also correlated with nature.



# Some color effects

Yellow is bright and happy. Used in subtle hues, it conveys warmth as well.

It can also mean “warning”.



From [vectorportal](#)



Lamp and house interior. Photo by Fernando López

# Some color effects

White conveys purity and cleanliness in Western cultures.

It's also a color associated with death in other cultures, however.



Chinese funeral procession. From [Flickr](#).



Old Baptist church in South Carolina,  
from [getarchive.net](#)



Wedding dress and bouquet.  
From [freerangestock.com](#)

# Some color effects

Black reflects formality and elegance, but in the Western world it is also associated with passing away.



From [Wikipedia](#)



From [rawpixel](#)



From [getarchive.com](#)

# Some color effects

In many countries, pink is associated with femininity, cuteness, and softness; also, love.



Both photos from Fernando López



From [Wikipedia](#)

# Some color effects

A design without colors is in grayscale (all grays from white to black).

Designs in grayscale or with very muted colors convey sobriety, formality, and elegance. However, they can also be perceived as “dead” - combine with bright accents to avoid this and to call attention.

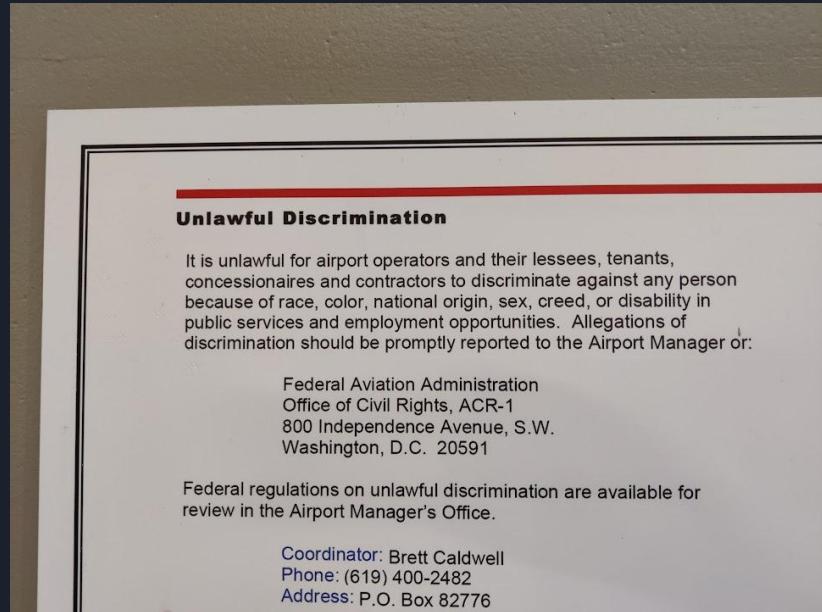


Photo from Fernando López

# Some color effects

A combination of bright colors brings (and requires from the viewer) lots of energy. Designs aimed at children use this.

A bright color is just a pure “hue” with no black or white added. Primary and secondary colors work well here.



From [Flickr](#)

# Some color effects

Designs aimed at adults will use more muted colors, possibly with the occasional accent.

Muted colors are “greyish”: pure colors plus some black or some white.



Photo by Carol M. Highsmith, from [picryl](#)



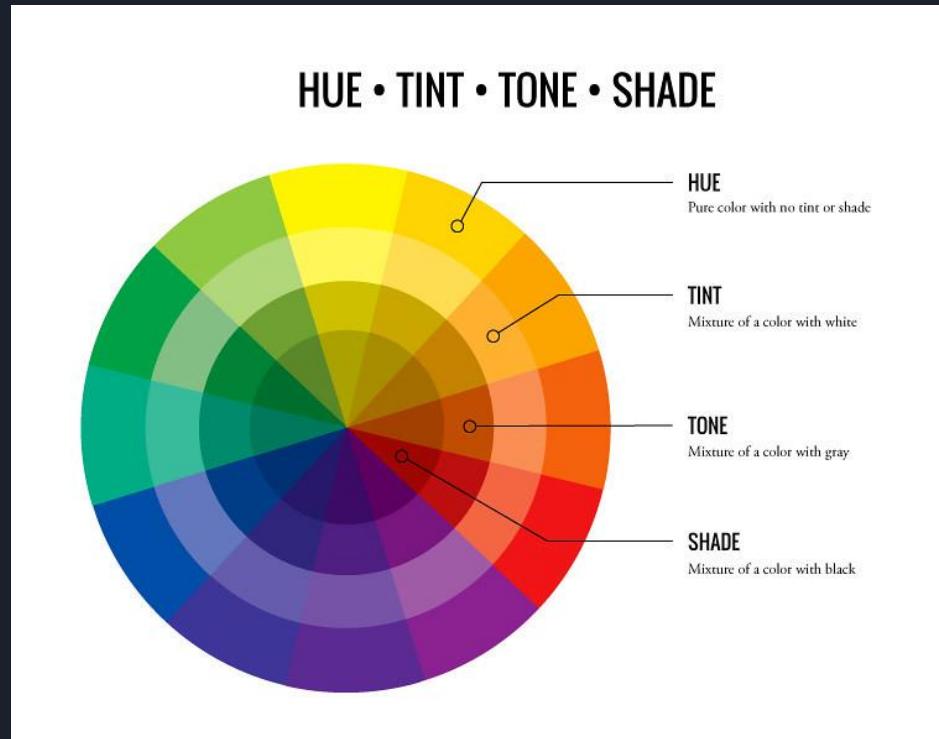
Photo by Rachel Claire, from [Pexels](#)

# Some color effects

Designs aimed at adults will use more muted colors, possibly with the occasional accent.

Muted colors are “greyish”: pure colors plus some black or some white.

Colors more complex than primary and secondary work well for more “sophisticated” connotations.

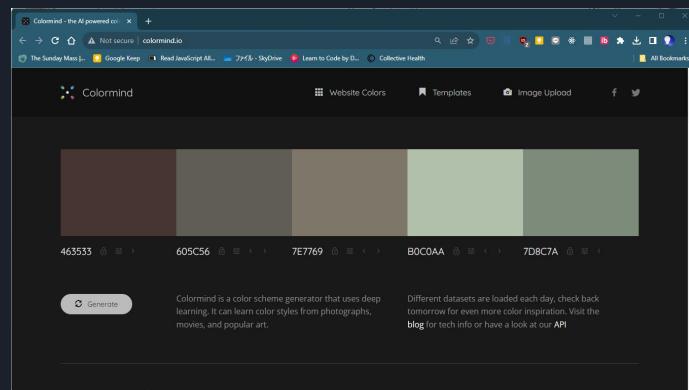
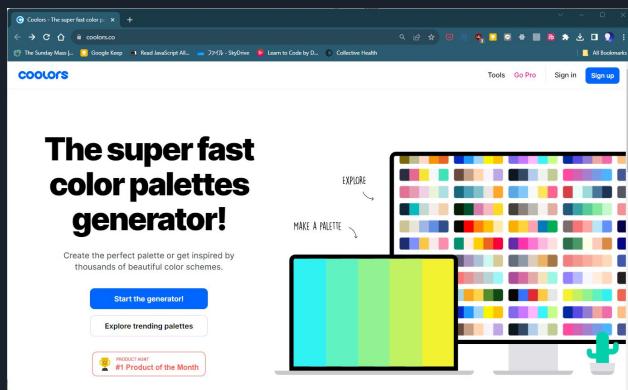


From Lacie Lannae on [Flickr](#).

# Color palette generation

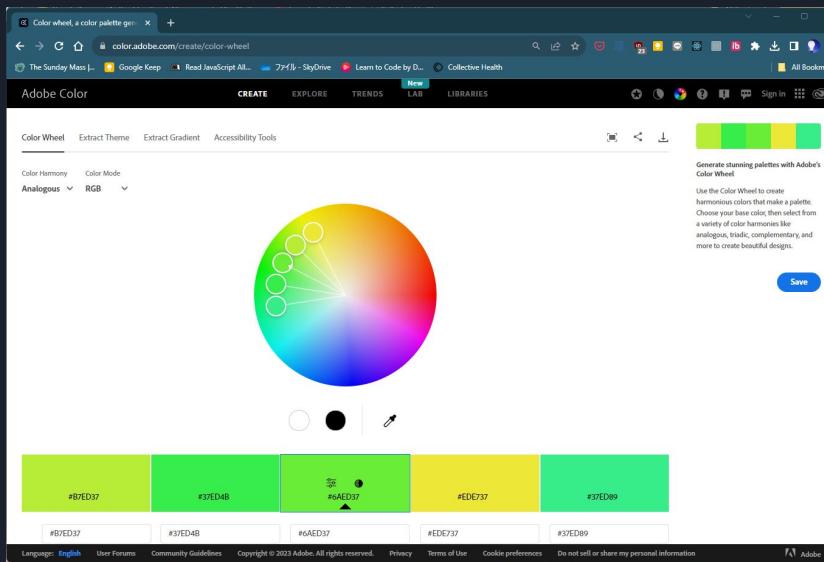
There are many free color palette generators available, such as [Coolors](#), Canva's, or Colormind.

These palettes are a great starting point; you may need to tweak them.

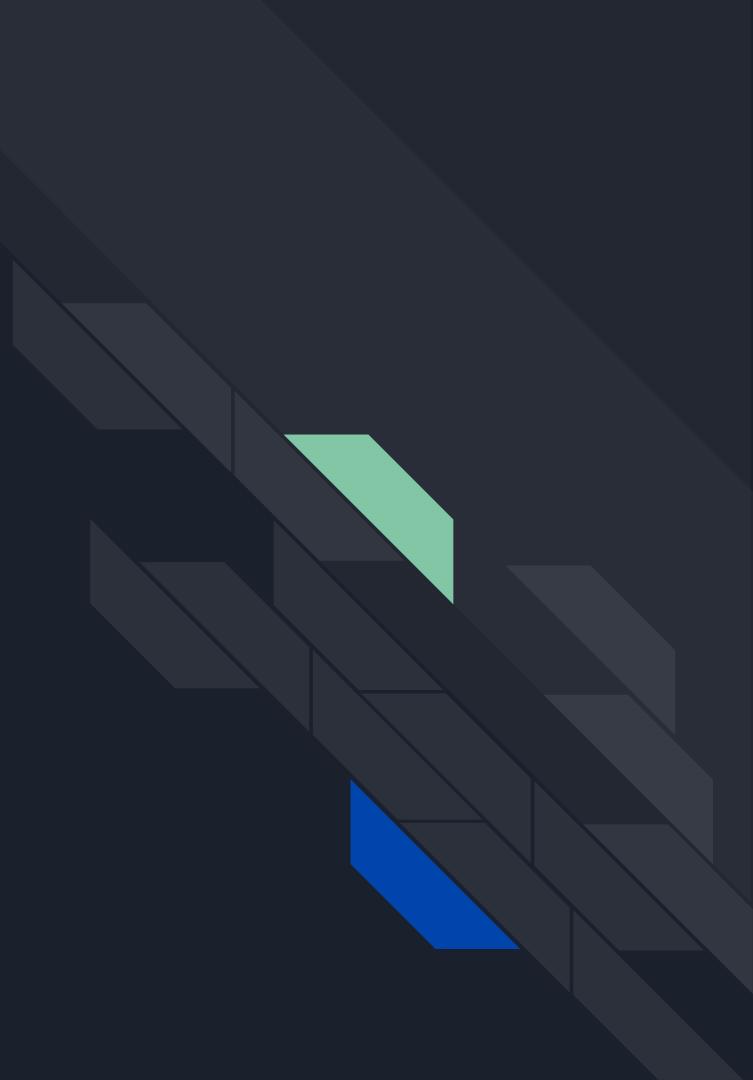


# Color palette generation

Adobe Color deserves a special mention, since it allows you to use the color wheel to tweak your colors.



# Typography





# Typography principles

- **What is typography**
- **Font anatomy**
  - Weight, proportion, metrics
  - Leading, kerning, and tracking
- **Classification**
  - Display vs text fonts
  - Font families



# Typography principles

Typography is the study of text types (fonts).

The type is the “voice” of your text.

The correct term is “type”, but we’ll say “font” to avoid confusion with eg. programming terms.

Contents in this section refer to Western-style typography. Some concepts translate to other writing systems as well.



# Font weight

Refers to how wide are the letter traces.

When designing a type, typographers create different versions with varying weights.

Letters may change form to look better in each weight.

In a computer, a “bold” letter is usually just an artificially-widened “normal” font. Designers cringe at this. You may want to include different weights of the font in your design instead.

ITC Cheltenham Light  
ITC Cheltenham Book  
**ITC Cheltenham Bold**  
**ITC Cheltenham Ultra**

Gill Sans Light  
Gill Sans Book  
Gill Sans Medium  
**Gill Sans Bold**  
**Gill Sans Heavy**

[Source.](#)

# Font proportion

Refers to how wide is a letter in relation to its weight - does it look more “vertical” or more “horizontal”?

More condensed: more text fits in the space, but less readability.

Not all font families feature differing proportions.



[Source.](#)

# Font proportion

Most fonts are “proportional”: the letters have varying widths.

There are also “monospaced” fonts, where all of the characters have the same width.

Monospacing started with typewriters and is now very used for eg. programming interfaces.



Source: [Wikipedia](#)

# Font metrics and x-height

There are many measures of a font, and many names for the common characteristics of their letters.

For our purposes, we will focus on one:  
x-height.

X-height is the relative size of the lowercase  
“balls” with respect to the whole letter.

Fonts with a high x-height in many cases are  
more readable, but also occupy more space.



[Source.](#)

# Font leading

The spacing between lines.

Increase leading to improve readability at the expense of using more available space.

Note: too much leading can result in a disconnect between lines and worsen readability.

"The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not"  
-Mark Twain

"The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not"  
-Mark Twain

LEADING

Source.

# Tracking

The spacing between characters in the whole text. Adjust it to improve readability.



[Source.](#)

# Kerning

The spacing between two particular letters.

Some fonts (especially lower quality ones) have bad kerning, meaning specific letter pairs will look much closer than others, or much more separated than others. This affects readability and looks awful.



Source: r/keming on [Reddit](#)



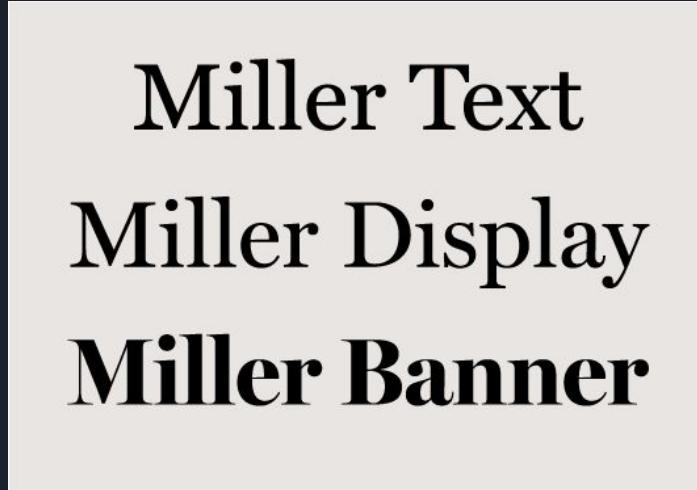
# Classification: Display and text fonts

Display fonts are better suited for large titles or headers

- They can be very complex and/or detailed.
- Full of personality; made to bring the reader's attention.
- Generally won't render well in small sizes.

Text fonts are better suited for long running text.

- High readability, even in small font sizes.



Miller Text

Miller Display

Miller Banner

[Source.](#)

# Font families

(Many classifications exist. We're going with a simplistic one for Latin script fonts.)

- Roman type
  - Serif - with "feet"
    - Slab serif - with wide "feet"
  - Sans-serif - without "feet"
  - Ornamental
  - Script
- Blackletter
- Gaelic
- Monospaced
- Display (Decorative)

**Serif** (Minion Pro)

- Old Style (Adobe Jenson Pro)
- Transitional (ITC New Baskerville)
- Modern (Bodoni)

**Slab Serif** (Clarendon)

**Sans serif** (Myriad)

*Script* (Coronet)

**Blackletter** (Teutonic No. 1)

**DISPLAY** (LiquidCrystal)

**Monospaced** (Courier)

♣♦■★●▼ (ITC Zapf Dingbats)  
(Dingbat)

Source: [Wikipedia](#)

# Font families

## “Classic” Serif: thin serifs

- These fonts often feature varied-width forms (eg. some traces are wider than others)
- Can be used to make long-running text more readable.
- Convey formality and classicism.



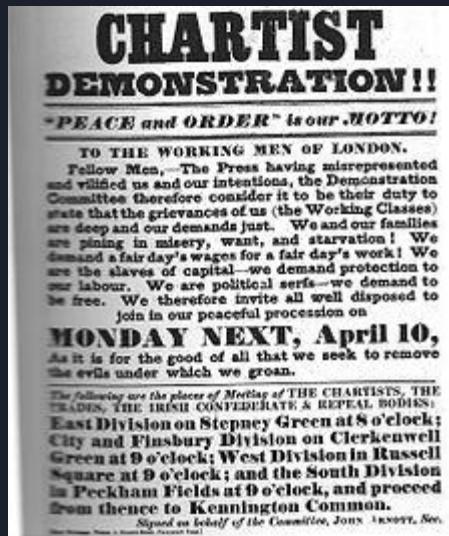
Watlington  
Watlington  
Watlington

Garamond, Baskerville, Didot. Source:  
[Wikipedia](#)

# Font families

Variation: “slab” serif (thick serifs)

- More of a display type
- Connotations: friendliness, strength.  
Historical “Old Western” type (USA).



Slab-type serif in this header. Source: [Wikipedia](#)

# Font families

## Sans-serif:

- A much younger, dynamic family.
- Suitable for both display and text usage.
- Connotation of clarity for the whole family. Very neutral.
- The “humanist” sans-serifs have more variety in their widths, and can convey more warmth. Very used for eg. road signs.



*Akzidenz Grotesk:*  
The Quick Brown  
Fox Jumps Over  
The Lazy Dog.

g

*Helvetica:*  
The Quick Brown  
Fox Jumps Over  
The Lazy Dog.

g

*Futura:*  
The Quick Brown  
Fox Jumps Over  
The Lazy Dog.

g

Examples from [Wikipedia](#).

# Font families

Script: Fonts that simulate handwriting.

- Use mostly as display type, for logos and invitations



Examples from [Wikipedia](#).

# Font families

Blackletter and Gaelic:

Historical classifications.

Used in old times to display text, mainly in the German (Blackletter) and Gaelic languages.



Blackletter, from [Wikipedia](#).

Óraiś bé mór iáic le dlúctírád  
fíoréinn tpirí hata mo ðea-þorcáin  
ðig. jkqwxy ȝ z & 1234567890:  
Ceanannas an cló a úsáidtear anseo.

Gaelic, from [Wikipedia](#).

# Font families

Display / decorative fonts:

Includes fonts with a high degree of complexity and variety that do not fall on the previous groups.

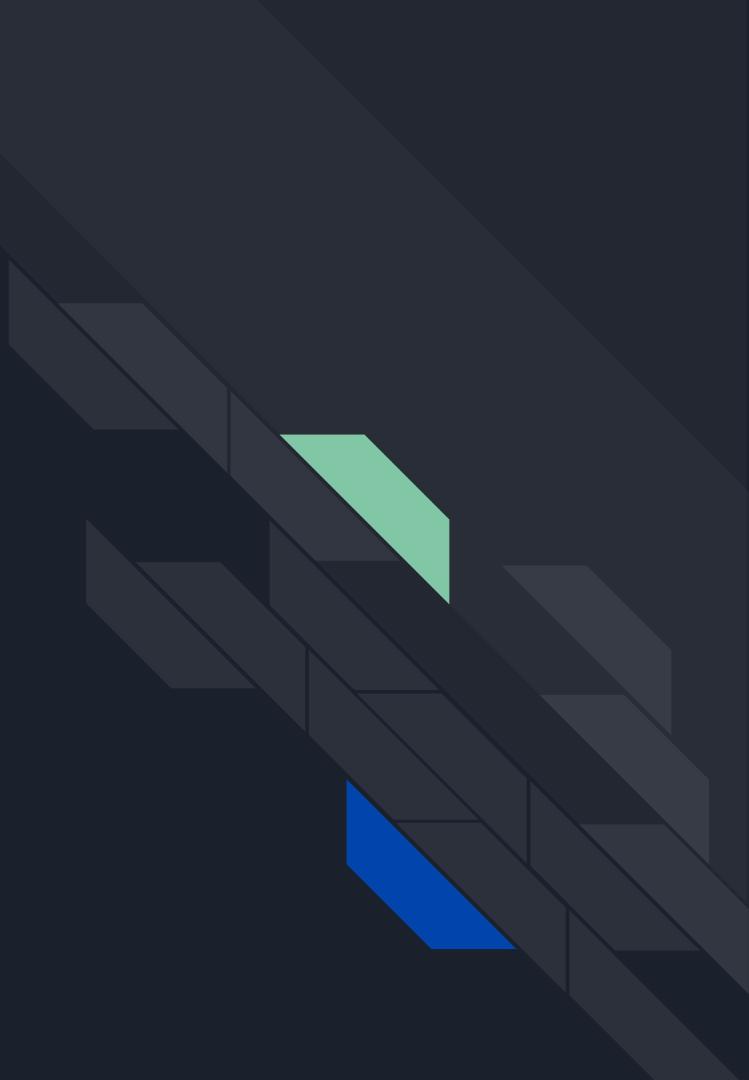
Use sparingly, and as display fonts only.

Some of these fonts have very specific usage and strong connotations.

[Source](#)



# **Putting it all together**



# **“So, how’s my website going along?”**

A few days have passed and Riccardo, the totally-a-real-person, not-an-AI-generated owner of The Orange Grove restaurant, is waiting on the first results for his webpage.

We have a website map. Now we need to think about what content goes there.



Riccardo.



# The website map so far

## Website map:

- Home
  - Website intro
- About Chef Riccardo
  - Chef's motivation
  - Link to buy the book
- Menus
  - Lunch / Dinner menu
  - Drinks menu
  - Desserts menu

## Included in all pages (footer and/or header):

- Opening hours
- Contact info
- Link to reservation system (?)

## Included in the design:

- Photos, as relevant

Let's now work on those mockups, shall we?



# The Home mockup

The website is for a high-class restaurant.

It needs to reflect an image of propriety, refinement, and class.

At this stage we can look at other websites that reflect that, for inspiration.

How do these websites' layouts reflect class, refinement, etc.?

Sites-CartierUS-Site

cartier.com/en-us/thefabulouspage.html

The Sunday Mass |... Google Keep Read JavaScript All... ファイル - SkyDrive Learn to Code by D... Collective Health All Bookmarks

Enjoy complimentary standard shipping. [Click here to learn more about returns and exchanges.](#)

UNITED STATES CONTACT US SERVICES

*Cartier*

FESTIVE SEASON HIGH JEWELRY JEWELRY WATCHES BAGS AND ACCESSORIES FRAGRANCES ART OF LIVING LA MAISON



MAGICAL ICONS

DISCOVER THE SELECTION

Sound

Scroll to navigate



VEHICLES

SHOPPING

ELECTRIC



My Account



Find a Dealer



# The Holiday Love Celebration is here.

Exceptional cars, incredible offers. What's not to love?

[Explore Offers](#)[View Inventory](#)

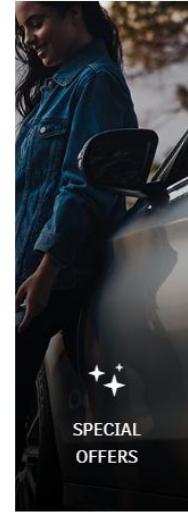
#### SHOPPING TOOLS



ALL  
VEHICLES



BUILD  
YOUR OWN



SPECIAL  
OFFERS



VIEW  
INVENTORY

#### IN THE SPOTLIGHT



Discover Mercedes-Benz





RELAIS &  
CHATEAUX



GARY DANKO







## ABOUT

Twenty-three years after opening its doors in San Francisco's iconic Fisherman's Wharf neighborhood, Restaurant Gary Danko continues to refine its award-winning combination of classic French cooking, thoughtful and inventive use of local ingredients and personable yet impeccable service. "You don't just open a great restaurant," says Chef Gary Danko, "it's a constant work in progress."

This commitment to excellence and innovation has earned Restaurant Gary Danko its twelfth Five Diamond rating from AAA as well as a coveted Relais & Châteaux designation. The Michelin rated restaurant has also earned several James Beard Awards, including Best New Restaurant, Best Service and Best Chef – California. In a warm, enveloping space overhung with orchids and vibrant artworks, an evening at Gary Danko is both intimate and theatrical—a loving nod to an old-world dining experience with its heart thoroughly planted in the new: fresh, locally grown and raised foods drawn from the region's vast seasonal offerings, prepared with precision and flair.

CHEF GARY DANKO







# **Some layout trends:**

- Lots of negative space; focal points are few and clear
- Lots of symmetry
- Big images and animations that make an impression.
- Visible navigation, but unobtrusive
- Sections that take the whole screen



Created by HideMaru  
from Noun Project

# A low fidelity mockup for the homepage

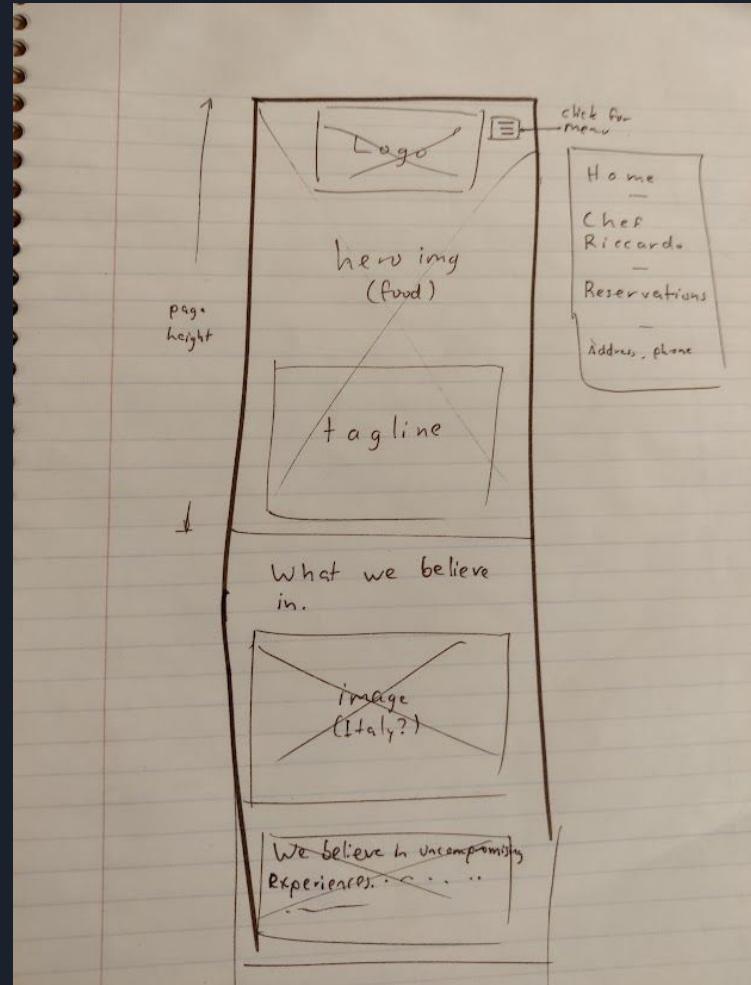
We've taken clues and created an airy layout with big images and lots of empty space.

Focal points are far and between.

The main purpose of the page is to establish what the restaurant's concept is - pretty much like an ad.

Try to come up with mockups for the Chef Riccardo page and the Reservations page. What do they have to contain?

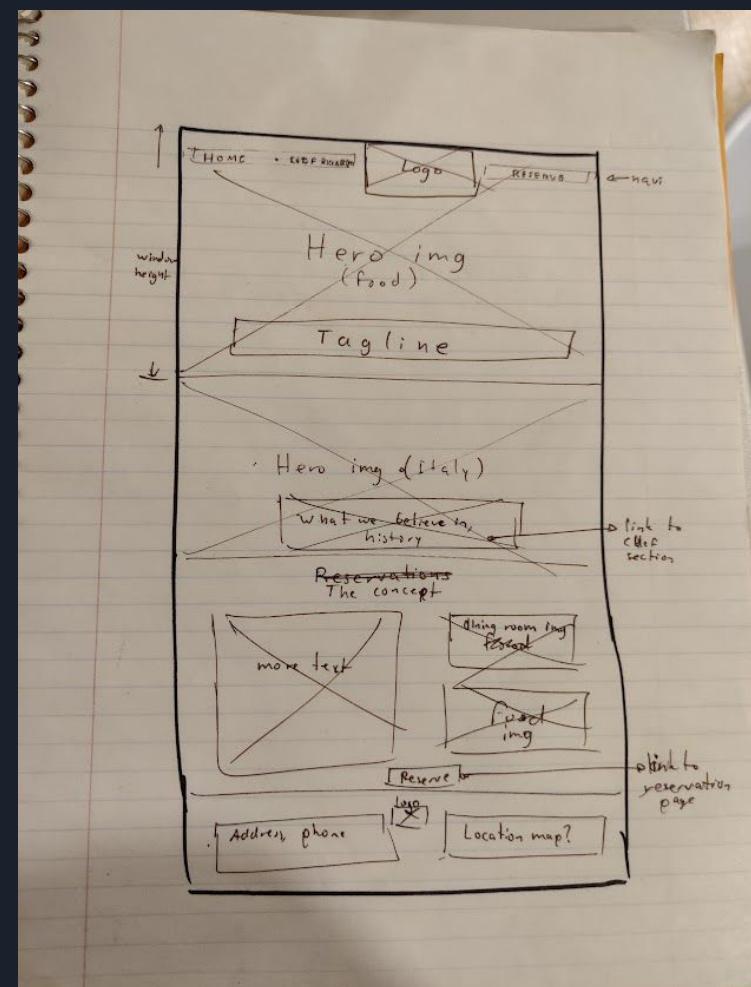
Have we missed anything in this mockup? What do you think will be Riccardo's impression?





# A low fidelity mockup, part 2

This is the mockup adjusted for the widest screen.



# Good news - he likes it! What's next?

“Um, chef, you look different. What happened to your hair?”

“Never mind that. Anyways, this is great work but - I’d really like to see something more finished...”

Gladly, since we have the OK on the layout, it’s now safe(r) to work on a higher-fidelity design.





# Selecting design parameters

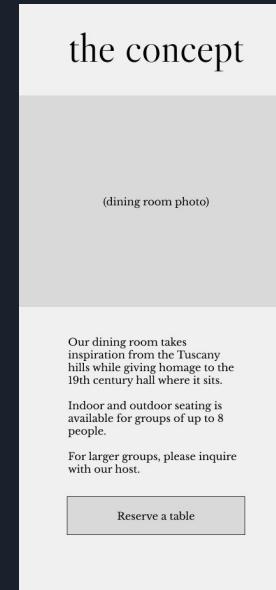
Created by HideMaru  
from Noun Project

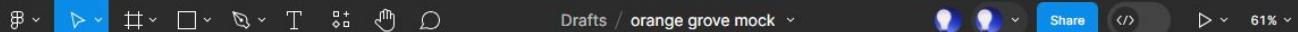
Based on what we now know and what we've observed from other websites, try to come up with proposals for the following:

- What kind of typography would be adequate?
- What colors? Specifically, can you come up with a color palette?

# The high-resolution mockup

For a better view, check out the files included with the course material, made with Figma.





iPhone 14 & 15 Pro Max - 1

orange grove.  
fine dining by Riccardo

real food  
for  
real people.

# We made it... so far

The chef likes it and wants to go forward with the website.

Except for one thing...

**“For reservations, can you actually create a system to handle that? I don’t want to use other providers, even if they’re cheaper.”**

This means new low-fi mockups, at least. But we’ll leave that for the next time we meet, chef.

