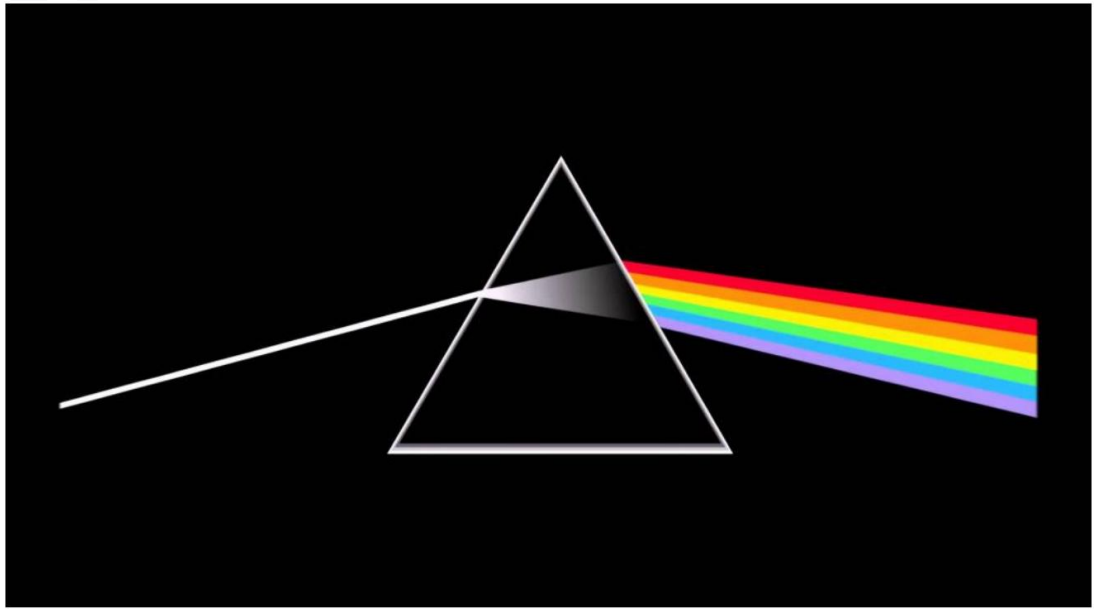
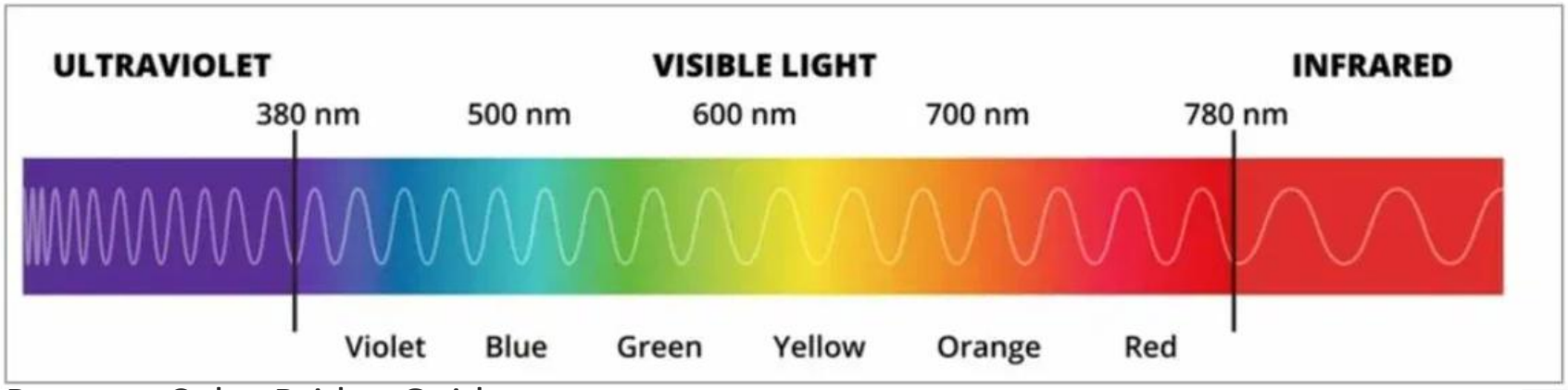
UI/UX DESIGN

Lecture 7. Colors, composition, grids

Color Theory

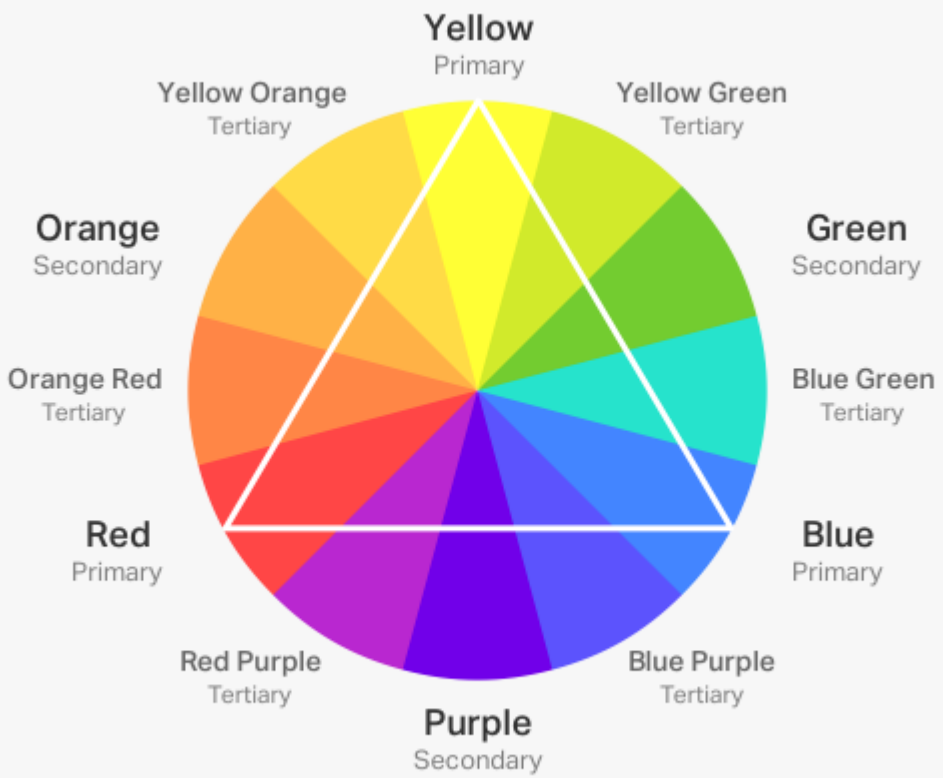


Color theory is a vast field that involves more human perception, cultural associations, and color psychology.



Pantone Color Bridge Guide

Color Wheel



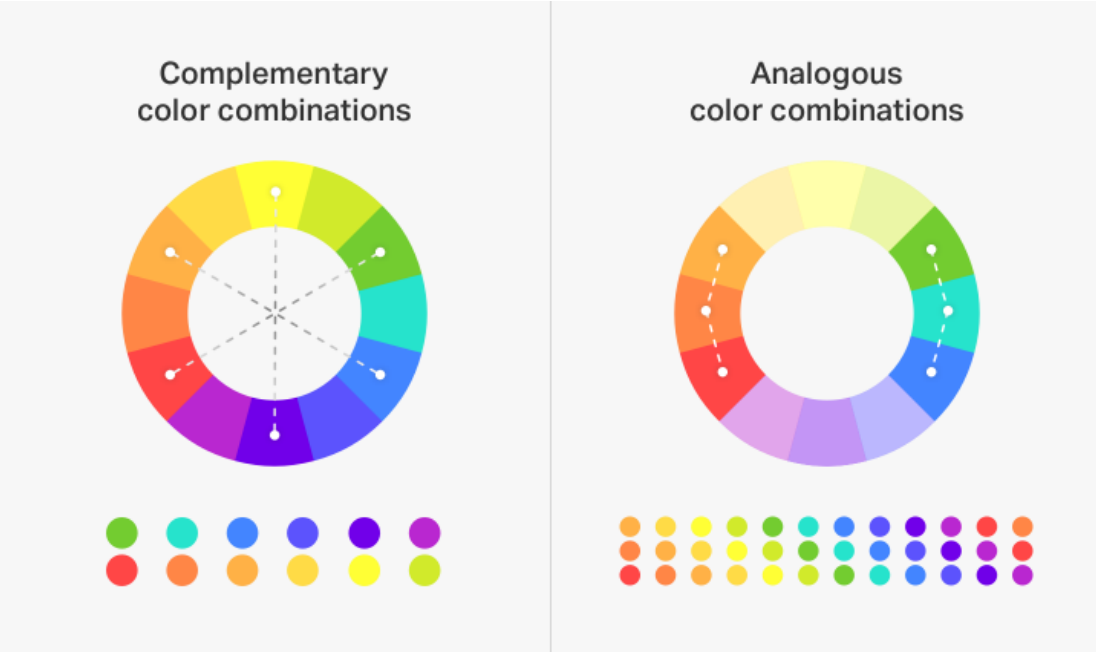
A color wheel is a powerful tool that can help you visualize relationships between colors in a standard, schematic way.

Primary colors - red, yellow, blue.
Secondary - colors that are obtained as a result of mixing two primary colors - orange, green, violet.
Tertiary - colors that result from mixing primary and secondary colors - yellow + orange, red + orange, red + violet, blue + violet, blue + green, yellow + green.

Color Relationships

When working on a project, designers often rely on fundamental color relationships, also known as color schemes. The four main types include:

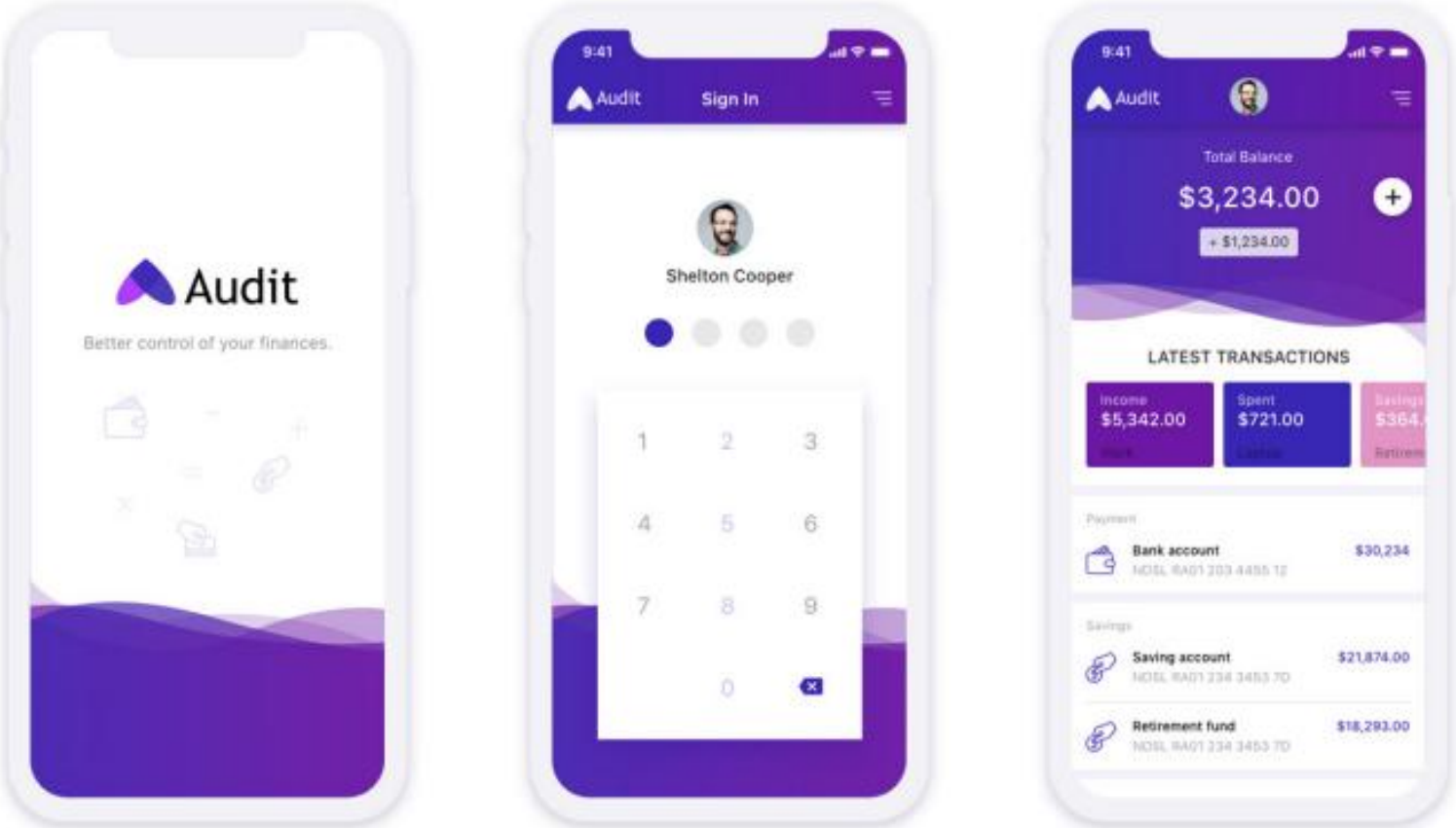
- **Monochrome:** Consisting of various tints, shades, and saturation of the same color.
- **Complementary**: Based on two colors from opposite sides of the color wheel.
- **Analogous:** Featuring three colors that are next to each other on the color wheel.
- **Triadic:** Using three colors that are at the points of a triangle drawn within the color wheel.



Triadic

Color Relationships. Analogous

Monochrome


Audit
Better control of your finances.
9:41
Audit
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1 2 3
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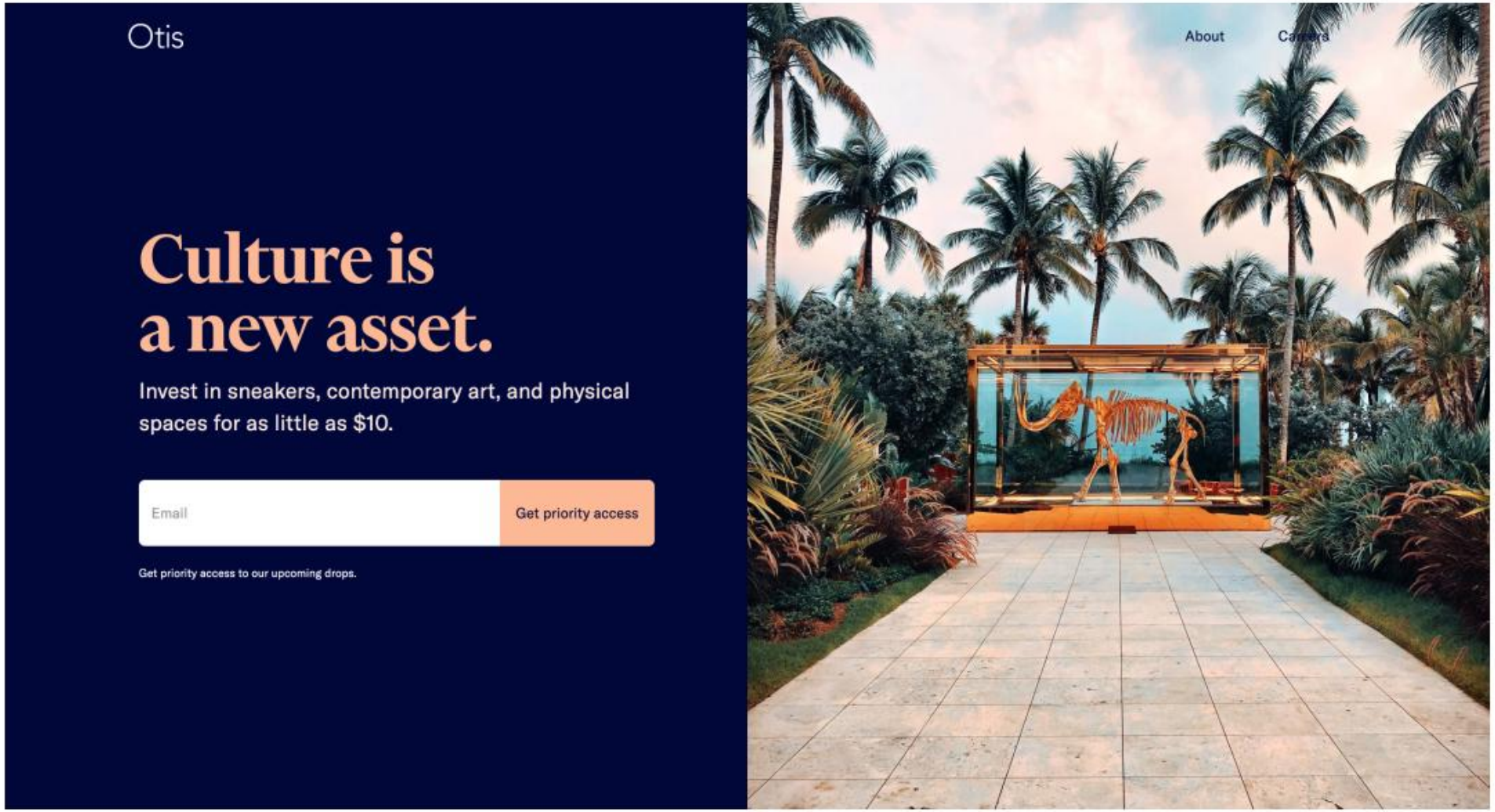
Total Balance
$3,234.00
+ $1,234.00
LATEST TRANSACTIONS
Income
$5,342.00
Spent
$721.00
Bank account
$30,234
Saving account
$21,874.00
Retirement fund
$18,293.00

2 colors (**complementary** or **analogous**)



Color Warmth

Colors can be either “cool” or “warm.”

Hues that contain higher amounts of yellow and red are considered **warm colors**. They evoke a sense of passion, happiness, and heat, but can also seem aggressive and bring feelings of danger. That’s why they’re often used in alert messages.

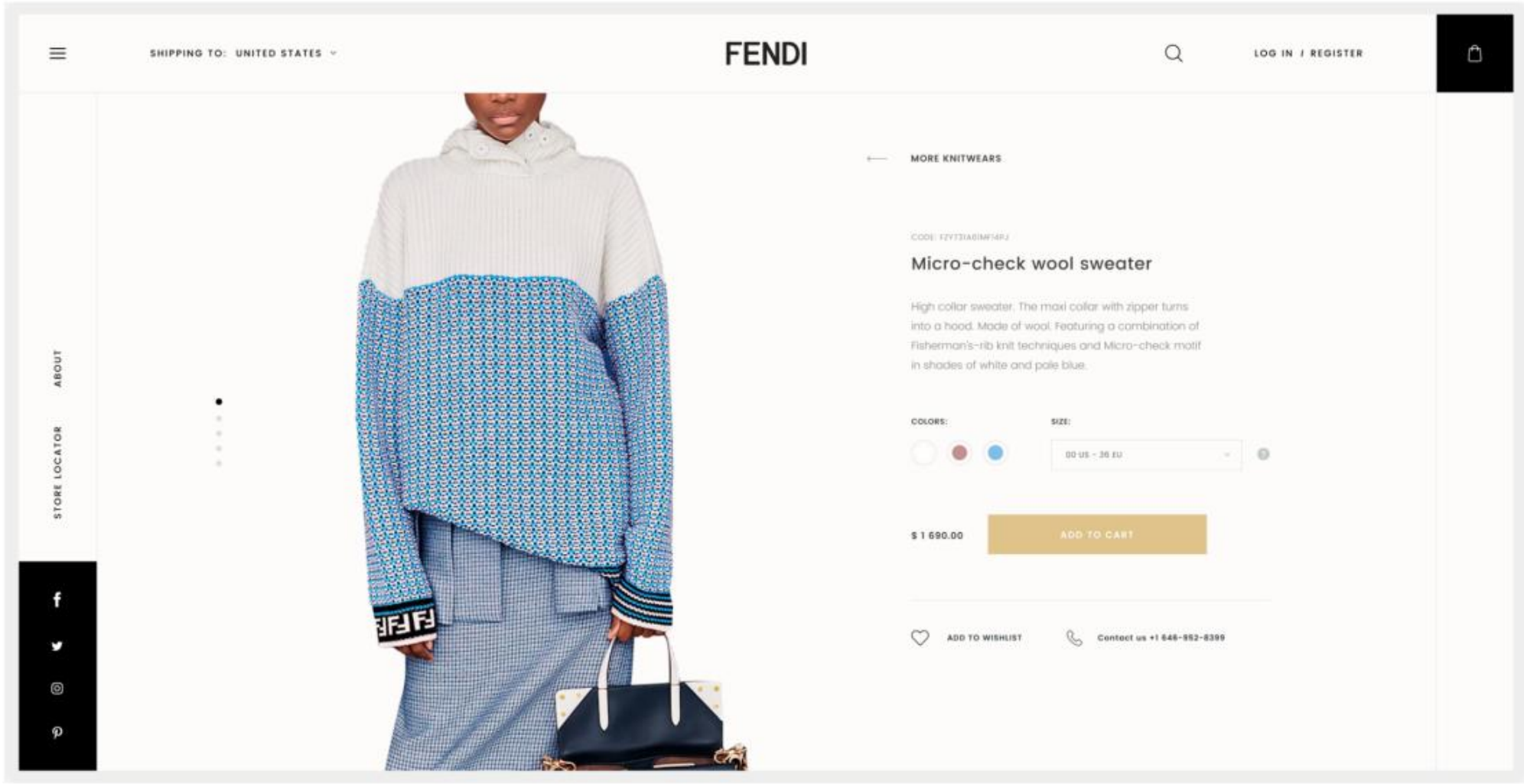
Cool colors, on the other hand, contain higher amounts of blue and purple. These colors are reminiscent of chilly climates, crystal clear waters, or the sky. They are considered more soothing and relaxing than warm colors. However, they can also carry connotations of formality and sadness.

Adding **neutral colors** such as white, black, and gray can help you achieve a harmonious palette. They can balance out your color scheme and add contrast to your designs.

Warm Colors. Passion, energy, happiness

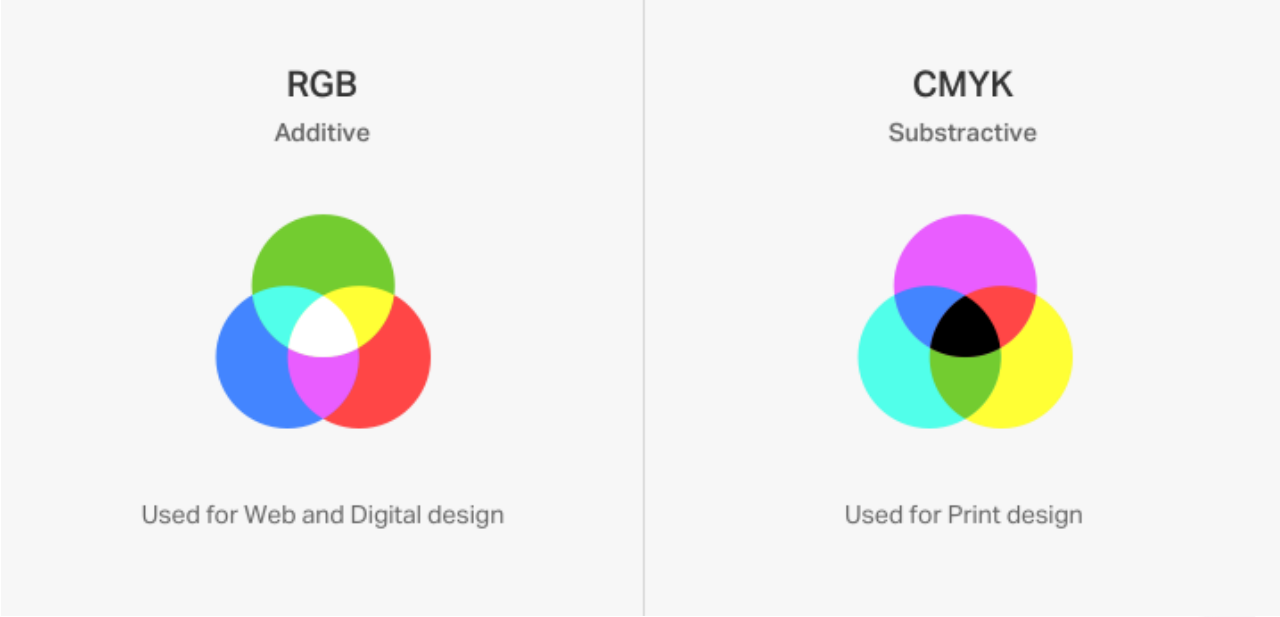
Cold colors. Calm, professionalism

Neutral colors + accent



Color Systems: RGB, CMYK, and HEX

The three standard color systems are **RGB** (Red, Green, Blue), **CMYK** (Cyan, Magenta, Yellow, Black), and **HEX**.
The **RGB** color system is based on light. All colors in this system are a combination of Red, Green, and Blue.
CMYK is used in print design. These are also the standard cartridges for most color printers.
HEX color system uses a six-digit, three-byte, hexadecimal description of each color.

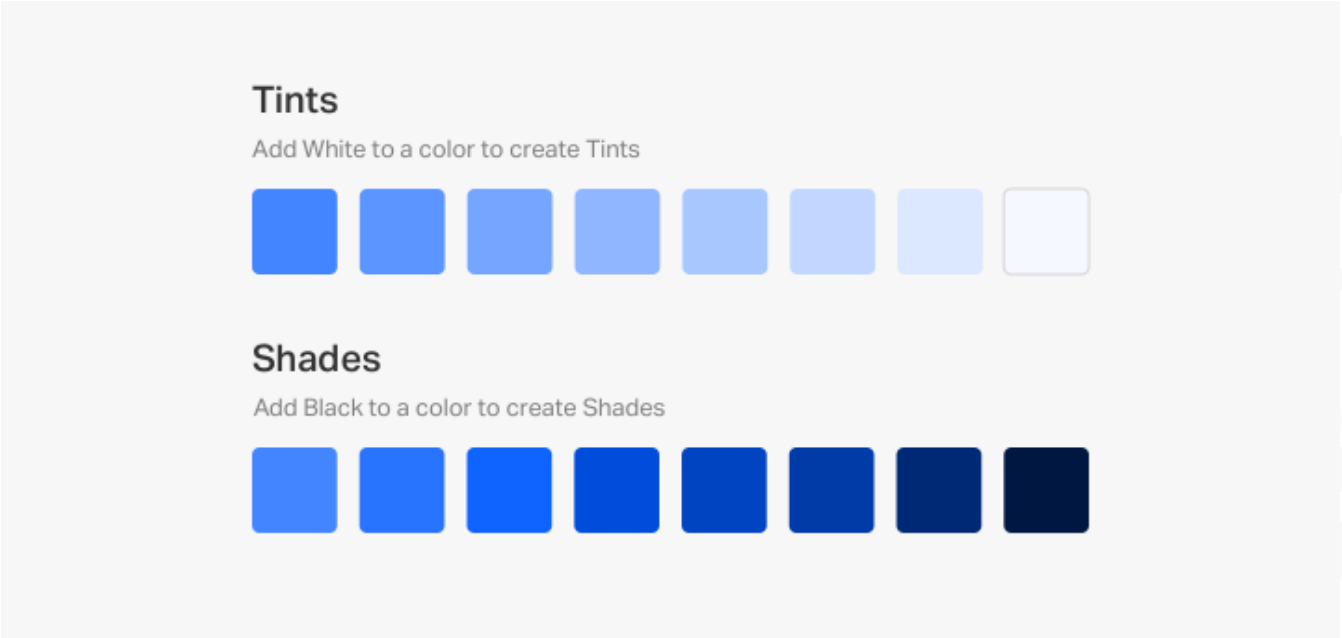


When to Use Each Color System

Scenario	Use RGB	Use CMYK	Use HEX
Designing a Website	✅	❌	✅
Creating a Print Poster	❌	✅	❌
Mobile App UI	✅	❌	✅
Business Cards	❌	✅	❌
Social Media Graphics	✅	❌	✅

Tints and Shades

You can create **tints** by adding white to a color. Higher levels of white will produce lighter tints. Similarly, if you add black, you will produce a different **shade**. The darker the shade, the more black it contains.

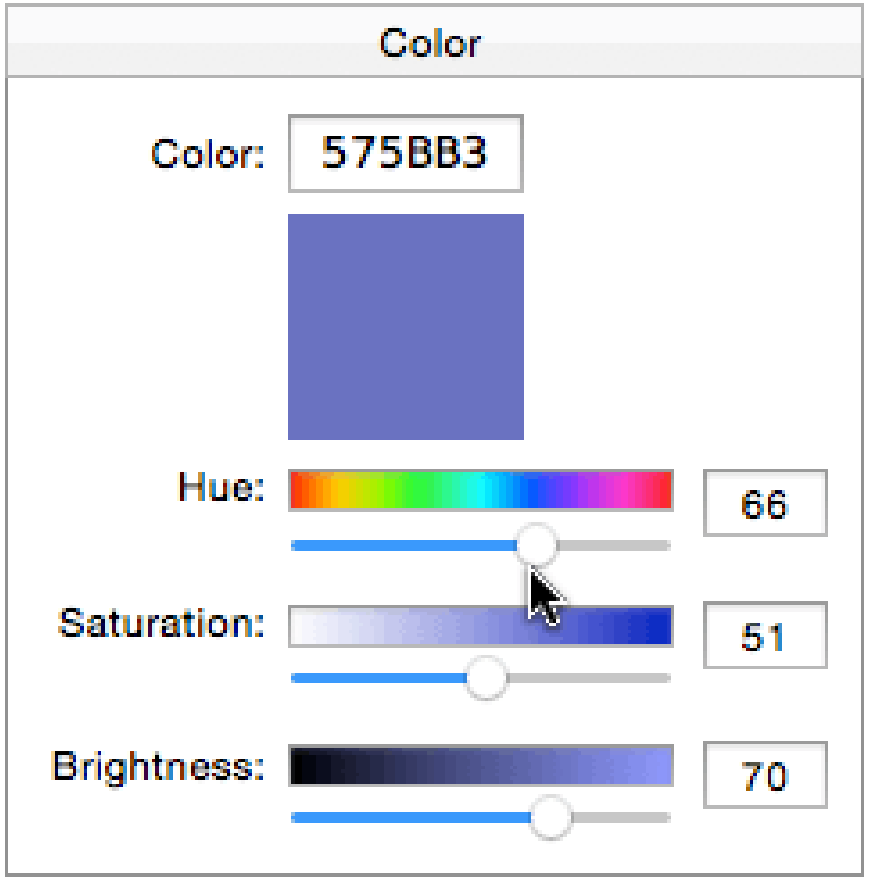


Hue, Saturation, and Brightness

Hue describes the degree of similarity between colors. The point of reference is usually a color such as red, green, blue, or yellow. For instance, when you describe a color as yellow-green, you're thinking of it as having two hues.

Saturation, on the other hand, refers to color intensity. Increasing it will make the color more vibrant and darker while decreasing it will make the color appear faded and pale.

Finally, **brightness** defines how bright a color is compared to pure white. Changing only the lightness parameter in graphic editing software will produce different tints and shades.



Hue, Saturation, and Brightness

Насыщенный голубой среди монохромных цветов сразу привлекает внимание

Color contrast

Contrast is a crucial element of any website, especially when it comes to background color and text. If the contrast is too low, users are more likely to have trouble differentiating between elements.

Emotional color guide

Red

Red is a strong, energetic color. It can symbolize many emotions and ideas, both positive and negative. Users can associate it with love and passion, but it can also signal danger or anger.

Red can be a bold statement color if you want to draw users' immediate attention. In fact, many food and beverage companies use red to evoke feelings of hunger and desire.

Orange

Orange is a warm and happy color that reminds many users of friendliness, enthusiasm, and motivation.
Using orange as a key player in your color scheme can result in a highly memorable site that leaves visitors with positive first impressions.

Yellow

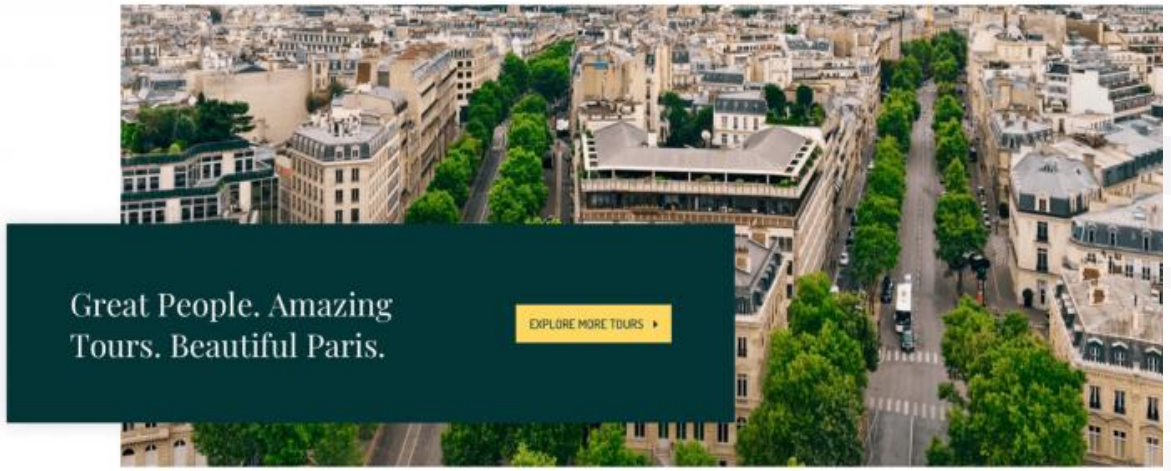
Yellow is another warm color that symbolizes joy, happiness, and sunlight. When used strategically on your website, you can easily inject confidence and inspiration in your design.

That said, too much yellow can tire the eyes and even create anxiety, so it's best to keep it as an accent color.

Green

Green is a positive and calm color widely associated with nature, ecology, and renewing energy.

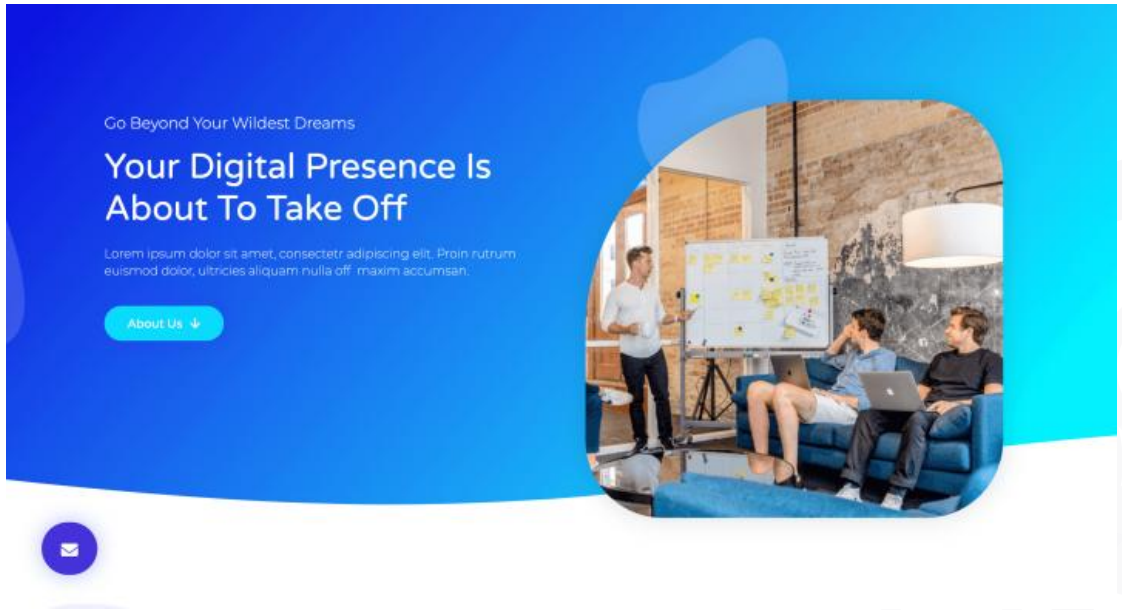
This color is pleasant and refreshing to look at, and it’s often used for environmentally-conscious brands.



Blue

Blue is a popular choice for many corporate brands as it symbolizes trust and reliability. It’s a calm, soothing color that can easily create a sense of freshness when highly saturated.

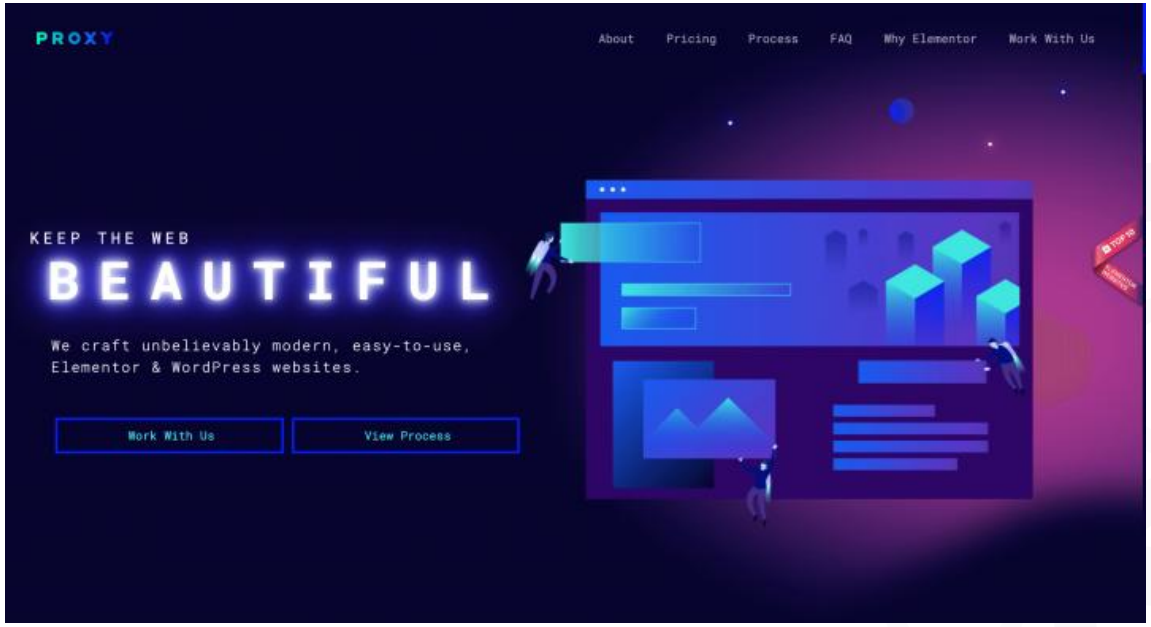
Blue can also look distant and sad when pale, so it’s essential to strike a thoughtful balance with this color.



Purple

Purple has long been associated with royalty, luxury, and wealth, but it’s also a mysterious and magical color. Combining the energy of red and blue, it can be an excellent option if you want to convey a message of power and trustworthiness.

Purple can be relaxing as it reminds many people of the dream sphere. However, a high concentration may also distract users.



Pink

Pink is a youthful and romantic color, reminding users of everlasting love. It's widely associated with sensitivity and femininity, and it can also be a bold statement color.

It can take a fair bit of confidence to pull off a pink-heavy color scheme. However, when used wisely, it makes for striking and memorable designs.

Black

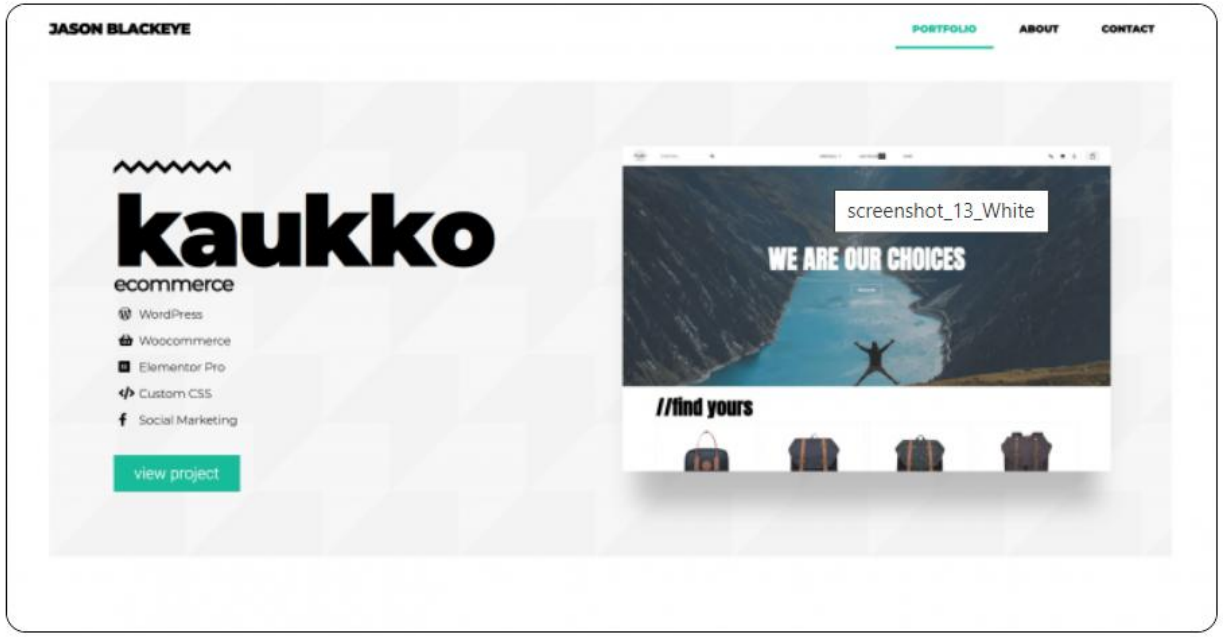
Black has many meanings and can evoke different feelings when used in combination with other colors. Western cultures will sometimes associate it with evil and death, while in the East, it symbolizes strength and wisdom.

Black can be tragic and mysterious, or serious and modern. It’s excellent for website backgrounds as it sets a sharp contrast with lighter typography.

White

White is a popular choice for modern, minimalist websites as it increases readability and pairs well with any color. The use of white space creates a feeling of cleanliness and light.

White can inspire new ideas as it reminds users of a blank page, so it's not surprising it's such a popular choice for a background color. However, too much white can also look empty and isolated.



How to Use Color Theory On Your Website

Now we've covered the basics of color theory, you should be able to implement it in your next project. To recap, here are the main points to consider:

•Color choices are vital for satisfactory user experience. An effective color scheme can make a massive difference to your customers and contribute to your website's success.

•Rely on color theory to come up with harmonious palettes and find the right color combinations.

•Color psychology is a powerful technique that can convey a variety of messages to users.

•You should always research your target audience and test their color preferences.

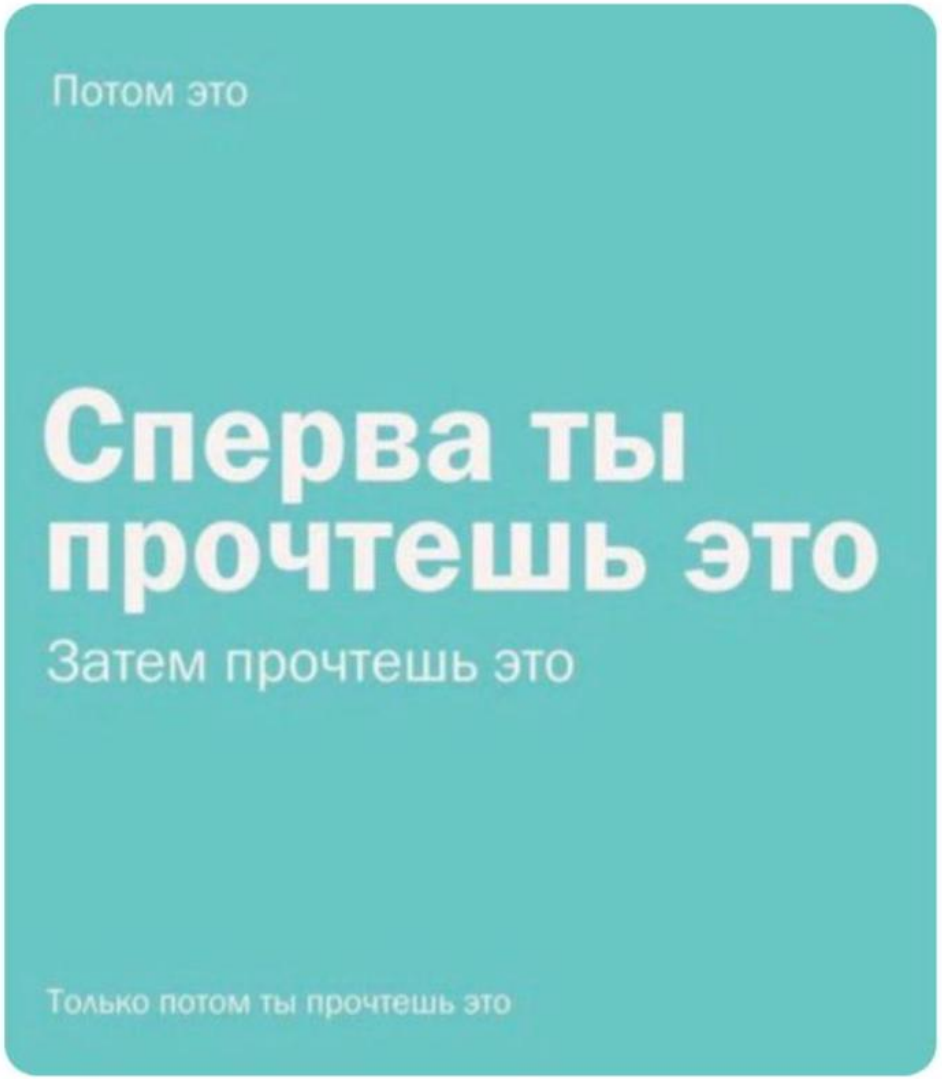
•Don't be afraid to perform additional testing to establish whether your choice of color scheme is optimal on all devices.

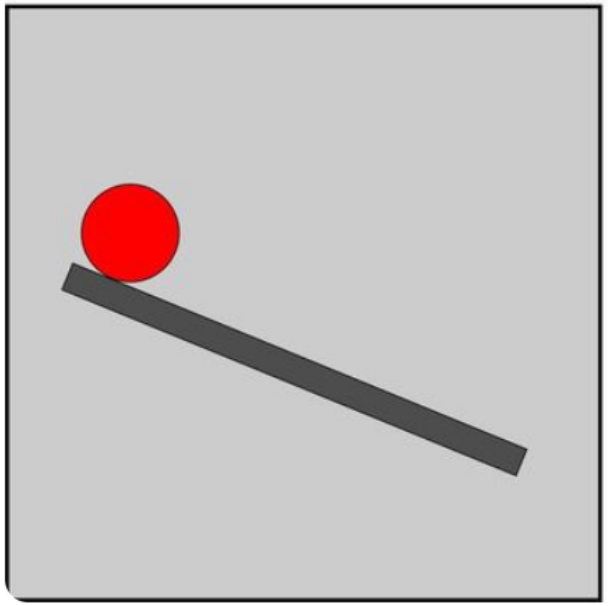
Composition

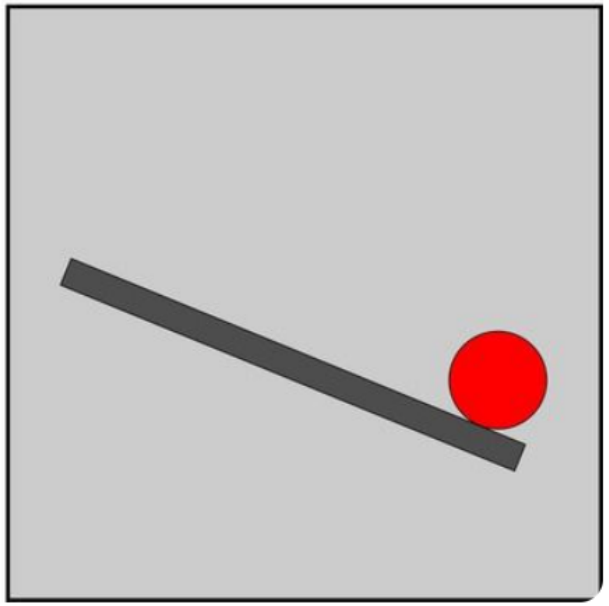
Composition refers to how you arrange and place design elements on a page.
The spaces between the design, the arrangement, and the ways in which the designs interact or crossover with other elements.

Successful composition means that you have organised, delivered, coordinated and assembled the template in a manner that not only looks good but is also highly functional and effective.

Specifics of visual perception





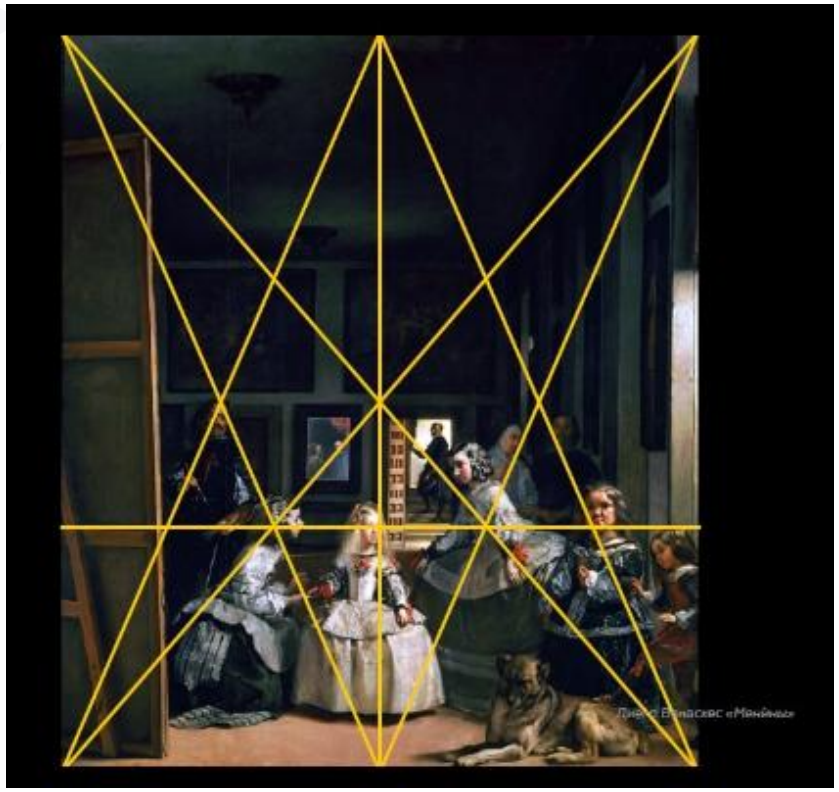


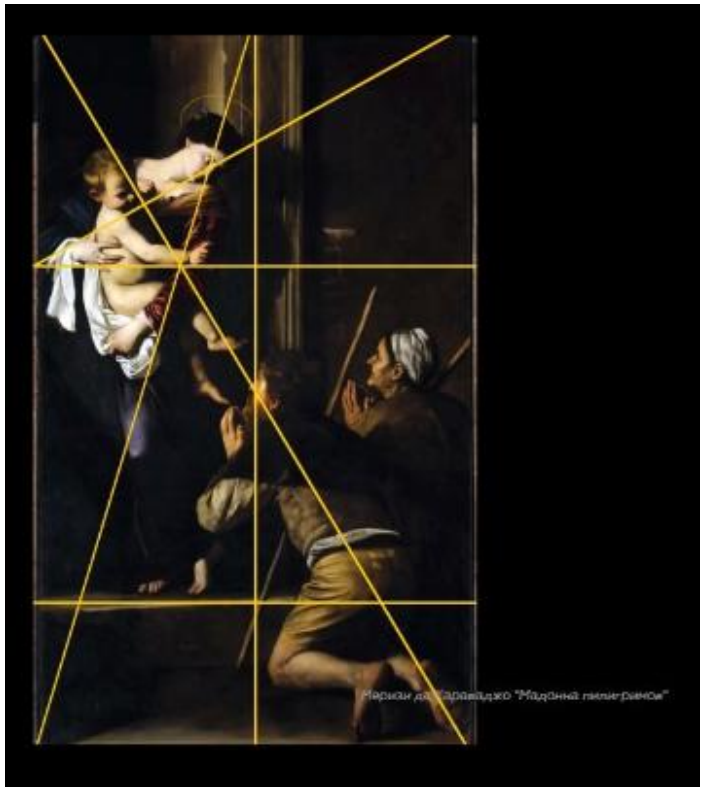
Why you need to follow the composition in web design

1. **Integrity and unity** - the indivisibility of the design despite the large number of elements.
2. **Balance** - the elements of the image are balanced with each other. If the parts are balanced, visual stability is obtained.
3. **Co-ordination** - subordination of all elements to a single idea of the author. This rule is the creation of hierarchy.

Types of composition

Arrangement of elements: symmetrical and asymmetrical





Symmetry is balanced, and therefore the line of symmetry helps your audience feel the balance or imbalance of the composition. Compositions that use symmetry axes are perceived to be more organized, orderly and balanced.

Asymmetrical composition, on the other hand, is built without symmetrical lines. Doing this evokes a sense of dynamism and absence of stereotypes, projecting strong individuality.

Types of composition

Eye movement: closed and open

In a closed composition, key elements are often surrounded by elements that limit them, making it look closed. In graphic design, this can be achieved by adding contour frames or abstract limiting shapes to the composition.

Conversely, in an open composition, there are no limiting frames. This allows you to convey a sense of space, freedom and scale.

Types of composition

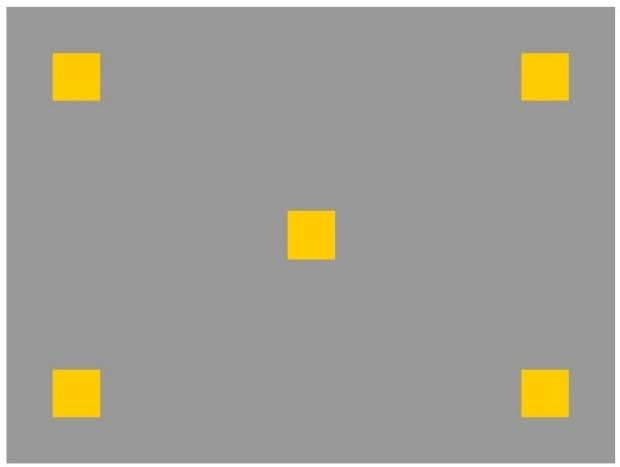
Movement: dynamic or static

Building a composition

Focal point

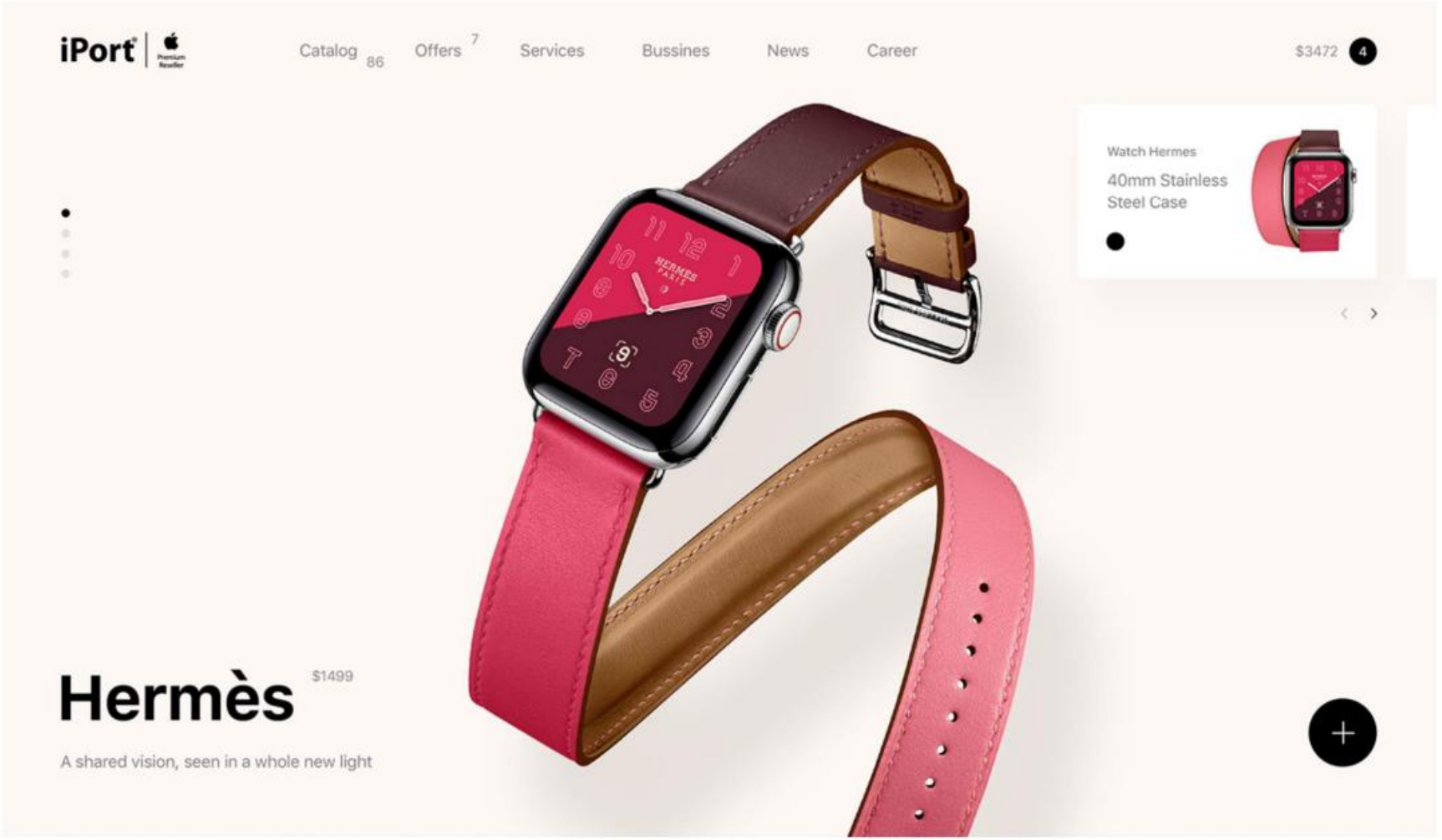
Focal points are the most prominent objects on the page: Illustrations, photos, headlines, etc.

With their help we can control the user's attention, show the hierarchy of elements in the design.



Building a composition

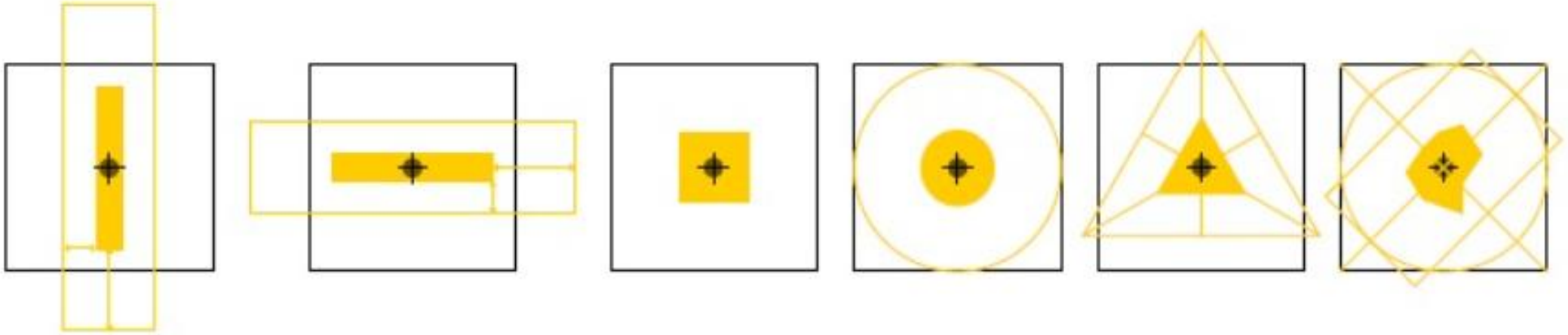
Focal point



Building a composition

Focal point

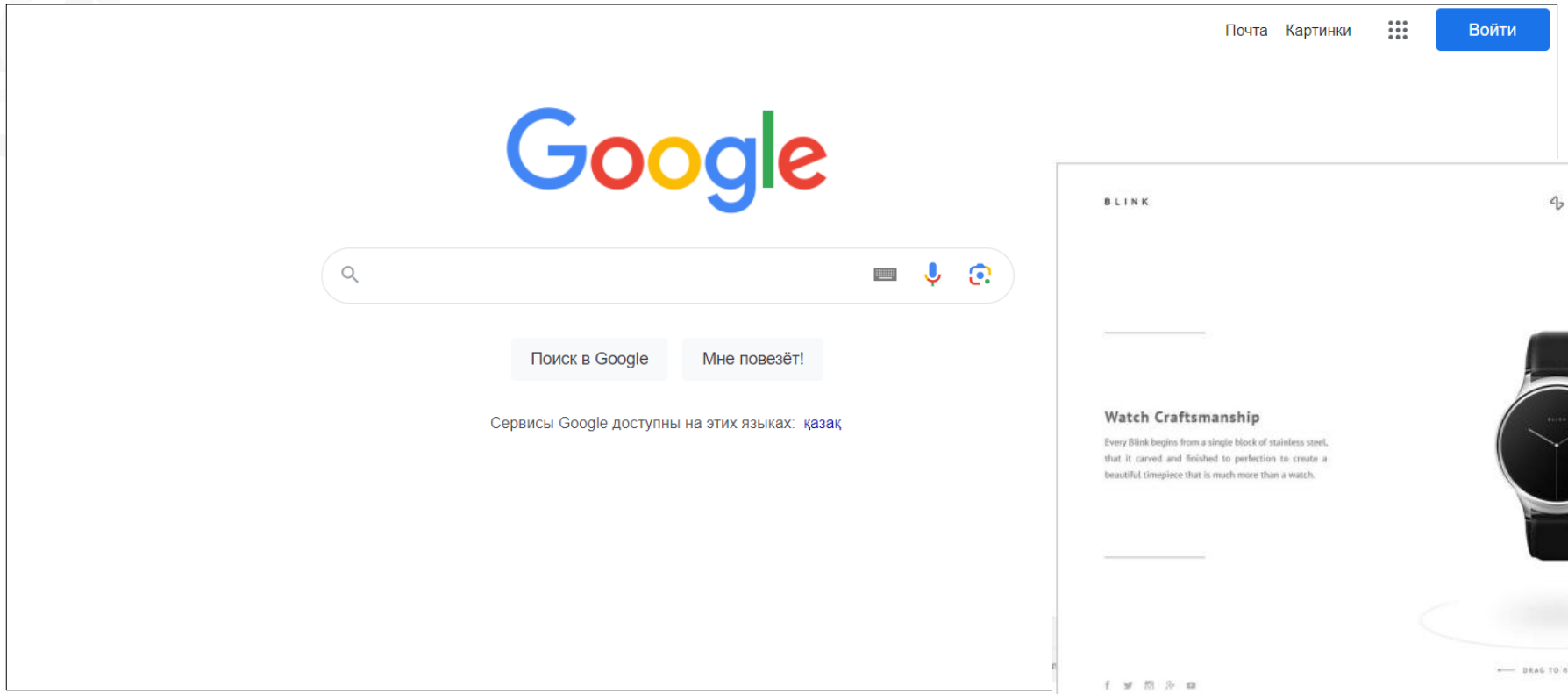
White space

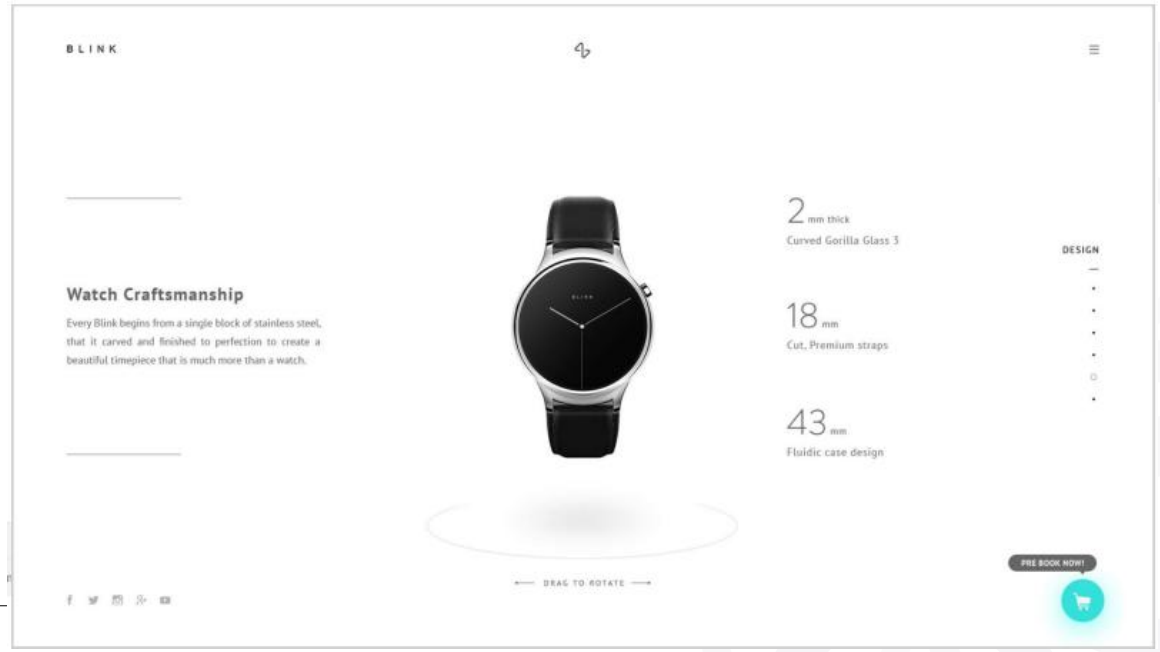


White space when used strategically can help boost your design’s clarity and overall look by balancing out the more complicated and busy parts of your composition with space that helps your design to breathe.

- Easy to perceive content
- Adds contrast and aesthetics to the composition
- Creates a sense of quality and premium feel

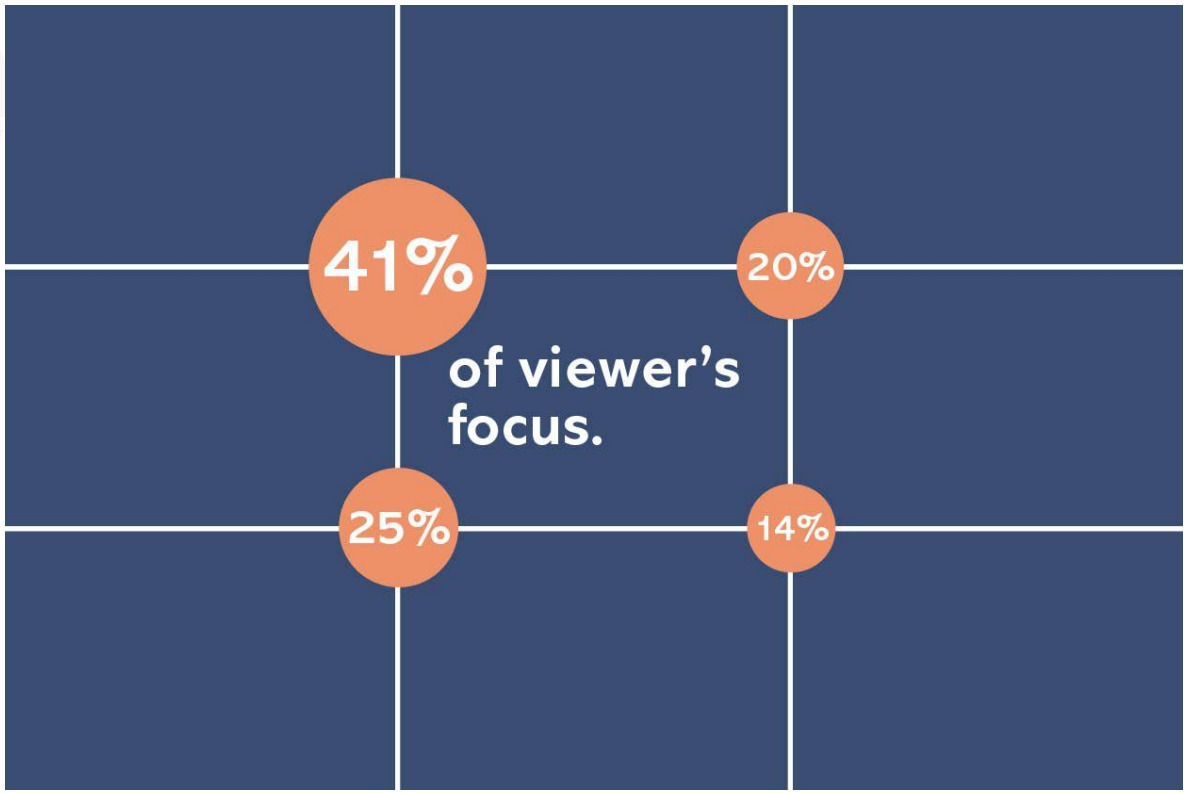
White space


Почта
Картинки
Войти
Google
Поиск в Google
Мне повезёт!
Сервисы Google доступны на этих языках: қазақ


BLINK
Watch Craftsmanship
Every Blink begins from a single block of stainless steel, that it carved and finished to perfection to create a beautiful timepiece that is much more than a watch.
2 mm thick
Curved Gorilla Glass 3
18 mm
Cut, Premium straps
43 mm
Fluidic case design
DESIGN
DRAG TO ROTATE
PRE BOOK NOW!

How to make a composition

Harmony. The Rule of thirds



Arrange your design so that its most important elements are in one-third or two-thirds sections vertically and horizontally. This will help keep viewers' eyes moving around the page and prevent them from getting bored.

How to make a composition

Harmony. The Rule of thirds

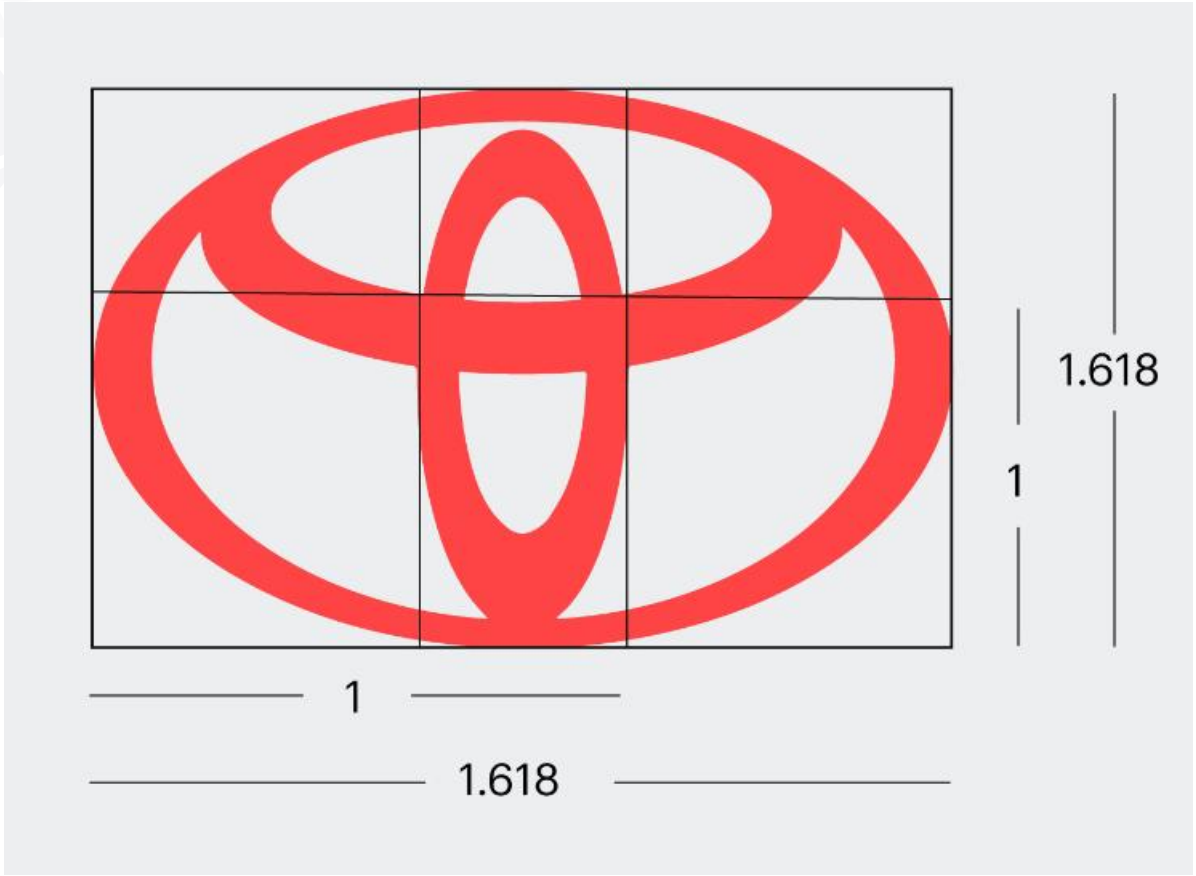
How to make a composition

Harmony. The Golden Ratio

The Golden Ratio is a standard mathematical ratio found in nature to create natural-looking compositions in your design work. Sometimes it is referred to as Divine Proportions. A series of interlocked golden rectangles establish the shape of a golden spiral.

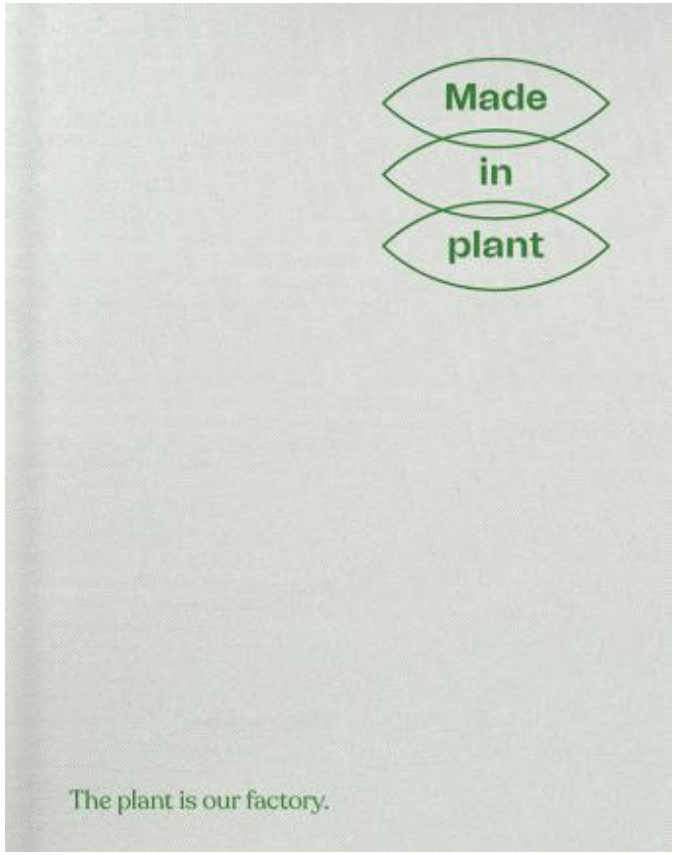
How to make a composition

Harmony. The Golden Ratio



How to make a composition

Rhythm



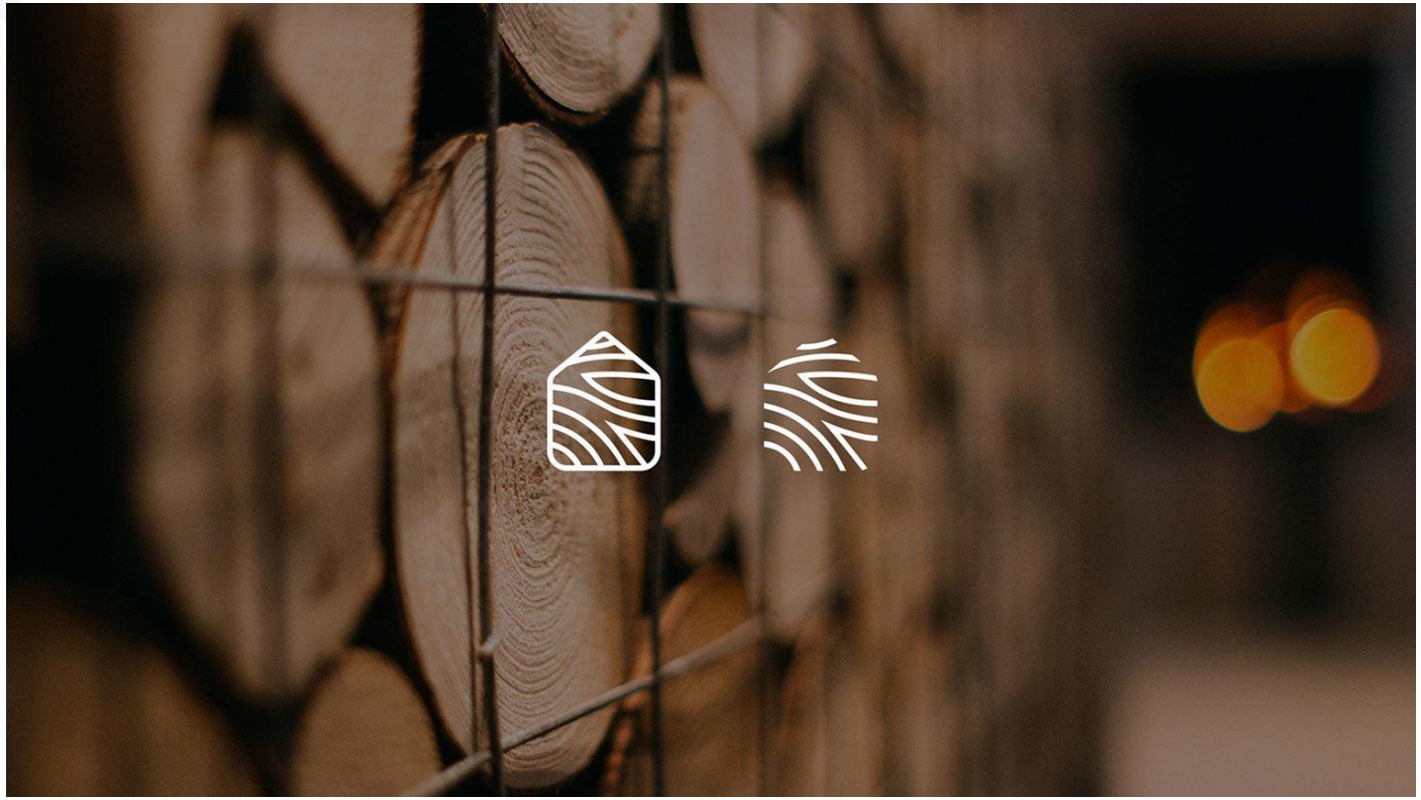
Regular rhythm

Rhythm in composition creates orderly movement. Rhythmic patterns are built from similar elements and the intervals between them.

- Regular rhythm
- Smooth rhythm
- Progressive rhythm

How to make a composition

Rhythm



Smooth rhythm

How to make a composition

Rhythm

Progressive rhythm

How to make a composition

Hierarchy

Compositional Analysis

- What first caught your attention? Why?
- What emotions does the work evoke?
- What contributes to this?
- Is the composition dynamic or static, closed or open, symmetrical or asymmetrical?
- What is the main object?
- How is the dominant object emphasized?
- What color scheme is used: contrasting or close?

THANK YOU!