



UI/UX Design Concepts

by Sophia



WHAT'S COVERED

In this lesson, you will be introduced to user interface/user experience (UI/UX) and the factors of a site's design that can impact the user. Additionally, you will learn about the basic psychology of color and how colors can be used strategically to influence the user and their perceptions.

Specifically, this lesson will cover the following:

- [**1. What Is UI/UX?**](#)
- [**2. Principles of UI/UX**](#)
 - [**2a. User-Centered Design**](#)
 - [**2b. Consistency**](#)
 - [**2c. Simplicity and Minimalism**](#)
 - [**2d. Feedback and Responsiveness**](#)
 - [**2e. Accessibility**](#)
- [**3. The Power of Color**](#)
 - [**3a. Color Modes**](#)
 - [**3b. Branding Strategy**](#)
- [**4. Real-World Color Palette Example**](#)

1. What Is UI/UX?

User interface/user experience (**UI/UX**) refers to a field of study focused on promoting positive user interface and user experiences when interacting with technology. UI/UX focuses on a set of principles and best practices for designing effective digital experiences for users.

UI design is concerned with how the interface is structured, how information is presented, and how users interact with the visual elements and controls. Elements such as buttons, menus, forms, typography, colors, icons, and layout all need to be carefully considered during the design phase of the website's pages. UI design also incorporates the concept of **responsive web design (RWD)**, which is a website's ability to adjust the UI

design and layout based on the size and orientation of the device's screen. RWD will be discussed in more detail in a later unit as it is important that the UI design concepts will need to be applied differently and dynamically depending on the screen's size.



KEY CONCEPT

The user interface has a direct impact on the user's experience and whether or not they will return to a site or use an application.

Effective user interfaces are focused on what is important to the user and make it easier for the user to accomplish their goals. An interface should be simple, easy to recognize, visually appealing, and easy to use.

EXAMPLE

Poorly designed search and filtering tools reduce the visitor's ability to locate and purchase the product they want, likely causing the user to locate another, more effective retail site.

UX focuses on the user's perception and satisfaction during or after their interaction with the product, service, or site itself. UX design aims to create meaningful and valuable experiences by understanding user needs and considering factors like **usability**, **accessibility**, efficiency, satisfaction, and the overall impact of the product on the user. The meaningful organization of content, the ease of navigation, accessibility, and even the emotional impact of the site can affect the user's experience.

EXAMPLE

Poorly designed sites are not only displeasing to look at and difficult to use, but they also do not instill a sense of confidence and legitimacy regarding the organization or the site's content.

Considerations for UI	Considerations for UX
<ul style="list-style-type: none">• Visual Design: typography, colors, icons, and images.• Layout and Composition: spacing of elements, use of layout grids, and visual hierarchy.• Responsive Design: ensure the content looks good and functions correctly on various screen sizes.• Consistency: promote consistency in visual design and interactivity.• Navigation: ensure the navigation is meaningful and easy to understand and indicates the current location.• Accessibility: design and coding aspects that allow users with disabilities to access the site.• Feedback and Responsiveness: indications that the system is responding to the user.	<ul style="list-style-type: none">• User's Needs: ensure the design and functions are focused on meeting the user's needs.• User Flow: ensure the user interactions are well planned out.• Usability: ensure the menus and controls are easy to use.• Performance: loading times and responsiveness to user interactions.• Emotional Design: ensure the emotional impact of the interface is positive.• Context: ensure the proper context and surrounding environment match the product or service.• User Feedback: ensure users have an opportunity to provide UI/UX feedback and that it is used to improve the design.



TERMS TO KNOW

User Interface/User Experience (UI/UX)

Refers to the field of study on how the design of a computer application or website's interface can impact the perception of the user.

Responsive Web Design (RWD)

A design approach for user interfaces that addresses a range of device types and screen sizes and enables a user interface to automatically adjust.

Usability

The effectiveness, efficiency, and overall satisfaction of users interacting with a website or application.

Accessibility

The ability of individuals with disabilities to access the same benefits and resources from a site, system, or application.

2. Principles of UI/UX

While the set of principles varies, let's take a look at five of the more common principles, including user-centered design, consistency, simplicity and minimalism, feedback and responsiveness, accessibility, and the power of color.

2a. User-Centered Design

User-centered design focuses on ensuring all elements and design decisions are made from the perspective of the user and support their goals. Understanding the target audience, including their motivations and goals for using the site, is a critical first step in ensuring the design supports the intended audience.



KEY CONCEPT

Menus, headings, visual designs, and functionality should all be focused and aligned with the user's needs and should make it easier for them to fulfill their goal.



TERM TO KNOW

User-Centered Design

A design approach wherein all aspects are designed to be focused on the user's needs and convenience.

2b. Consistency

Consistency refers to the continuity of the site as a whole. Navigation menu styles and the organization of buttons should also remain consistent across an entire website.



KEY CONCEPT

The visual style and design of the site should not change from one page to the next unless the change is meaningful.

Also, processes and functions that are common among most sites should follow a similar sequence and flow. In other words, don't reinvent the wheel when it comes to a simple user account registration process, for example.

2c. Simplicity and Minimalism

By removing unnecessary elements and reducing visual clutter, the user interface can be focused on helping the user accomplish their goal. The purpose of a page should be clear to the user. Furthermore, by reducing the amount of unnecessary content, you will reduce the amount of time it takes for the website to load and generally improve performance.



KEY CONCEPT

Avoid unnecessary distractions and elements that take away from the site or page's intended purpose.

2d. Feedback and Responsiveness

The feedback and responsiveness of a site refer to when the site provides some indication that it has received the user's command. If the user clicks on a button to start loading the web app, the button should visually indicate that the click has been registered and should show that the web app is loading.

Another aspect of feedback and responsiveness, on a more strategic level, is providing the users with an opportunity to provide feedback on their experience using the site and the site itself.



KEY CONCEPT

User feedback is a valuable gift to developers and should always be taken into consideration when making design revisions or changes.

The responsiveness in this case comes in the form of site changes in response to users' comments and feedback.



KEY CONCEPT

The proper use of **progress bars** and **loading spinners** is important to the user's perception as it helps them know that the software is working and has not stalled or hung.

⟳ EXAMPLE



TERMS TO KNOW

Progress Bars

Visual indicators of how far along something is in a process.

Loading Spinners

Active visual indicators that software is currently loading or processing and has not stalled or frozen.

2e. Accessibility

Accessibility is the concept of designing a site to be inclusive of all potential users, even those with disabilities such as visual or even physical impairments. Impairments can vary from permanent (paralyzed or missing arm), temporary (arm in a cast), or even situational (person holding a baby). Users with impairments often use special software or techniques to interact with websites.

☞ EXAMPLE

The visually impaired use **screen reader software** that reads the content out loud for them as they navigate and interact with the site. As such, when including important images or graphics on a webpage, those visual elements need to include an **alternative text description**. This allows the screen reader software to describe the image to the user as opposed to skipping over it altogether.

Additionally, navigation menus should provide some indication of what page the user is currently on; however, this is usually done with some visual cue, such as an arrow, symbol, or use of a different color for the navigation menu button. Most screen readers won't read aloud symbols and do not mention the different colors of the menu buttons, so additional location cues that are hidden from view should be included in the menu.

Visual impairment might also include someone who simply has poor eyesight. As such, a site should be designed with appropriate levels of contrast and be able to scale to make it easier to read. The browser's native zoom feature is one option users can utilize; however, the site needs to use a responsive design technique to ensure all content scales correctly. Another option is to provide high-contrast and zoom options directly on the website that allow users to easily select from different text sizes and levels of contrast and have those settings apply to the entire website.

Another possible visual impairment that we need to be aware of and design our site to work with is color blindness. Color blindness does not always refer to someone who can only see in shades of black and white, most people affected with color blindness struggle with seeing red and green colors and less commonly blues and yellows.

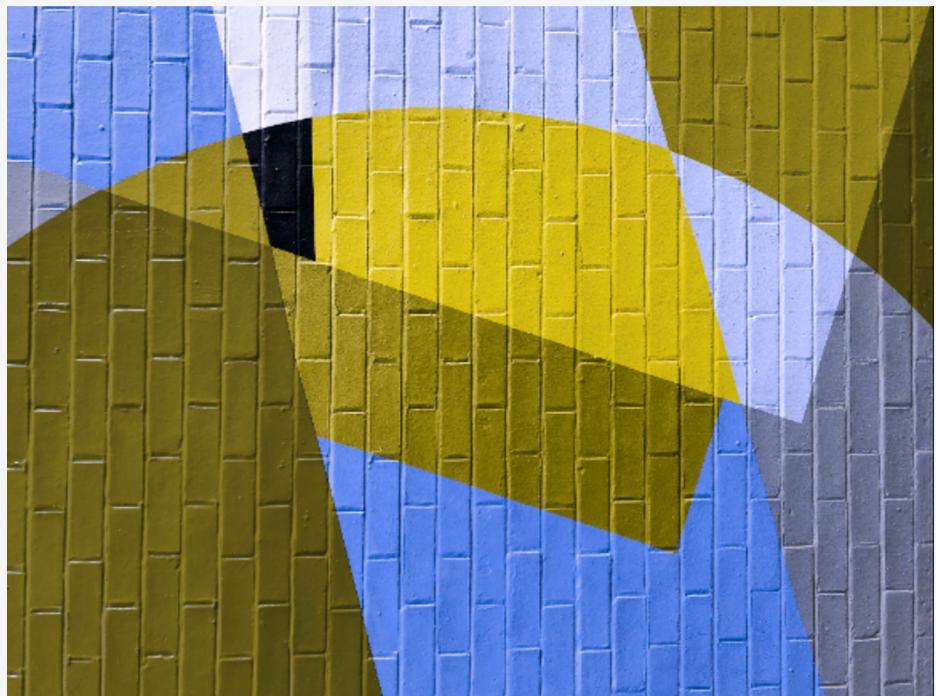
☞ EXAMPLE Samples of color blindness.

Vision Type	Example
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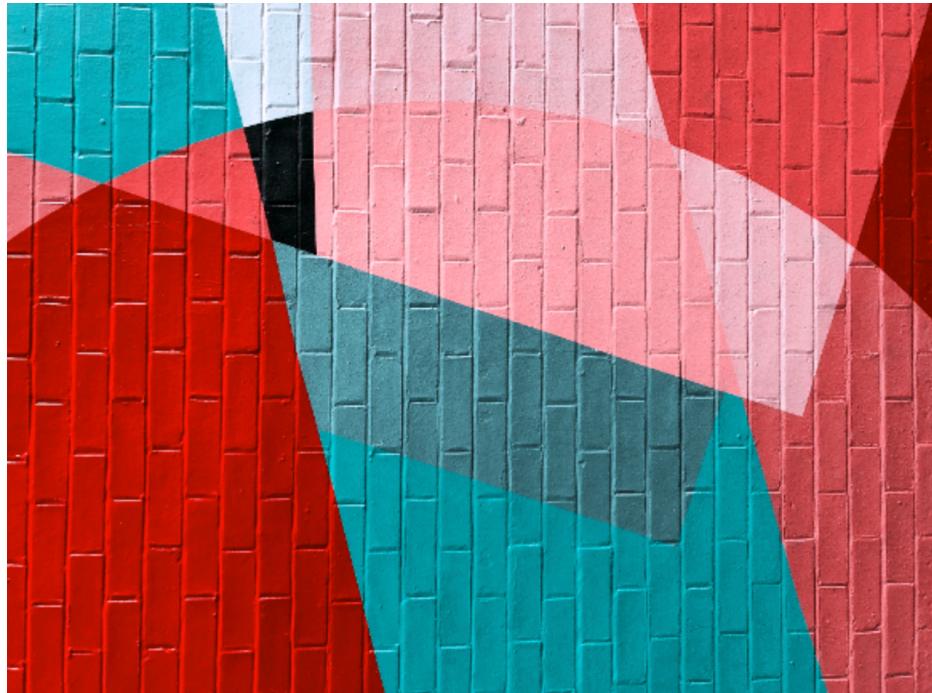
Normal Vision



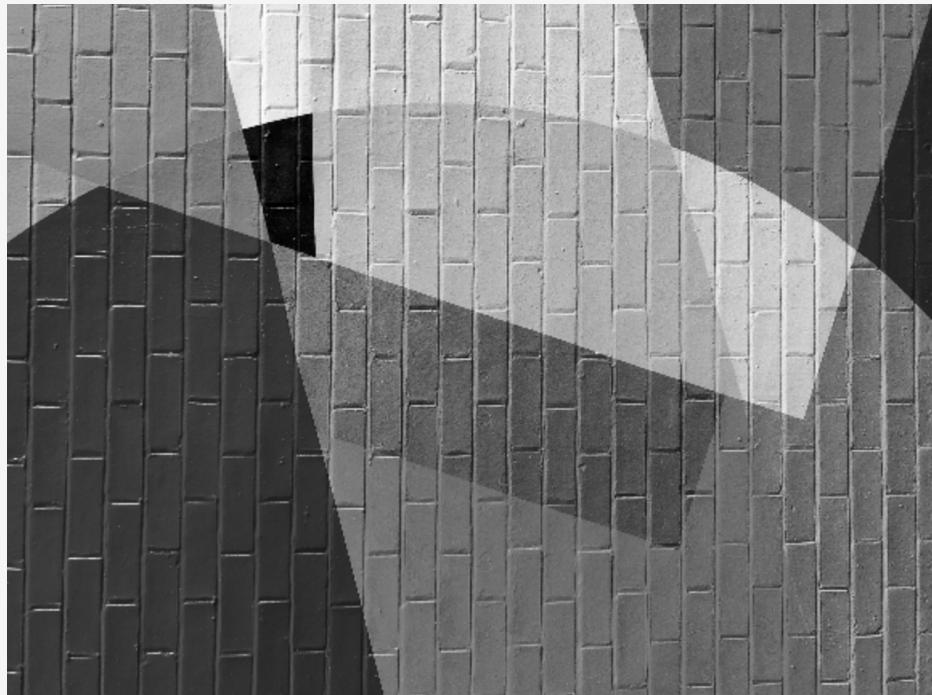
Protanopia / Deutanopia



Tritanopia



Monochromacy





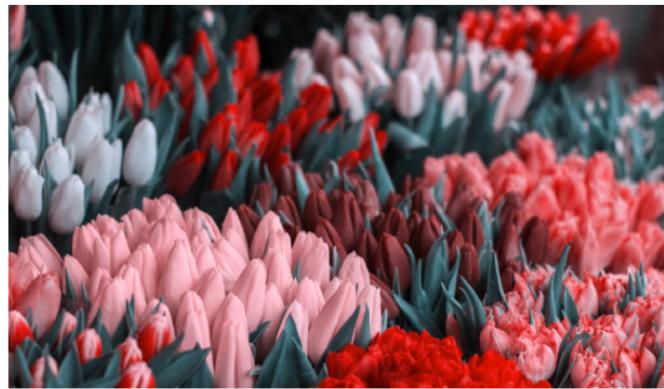
Normal Vision



Deuteranomaly



Protanopia



Tritanopia

When designing for color blind accessibility, remember to never solely use color as emphasis, meaning, or an indicator of anything without backing it up with something non-color related. For example, if you wanted to emphasize a single word in a paragraph using a background color, you should also include another aspect to emphasize the word such as bold font, underline, italics, etc. Additionally, due to the relative rareness of tritanopia, which is the inability to perceive yellow and blue, yellows and blues are some of the safer colors to use. Regardless, remember to avoid using color as the sole element for communicating meaning or additional information.

There are organizations that provide sets of standards that serve as valuable guides to what elements need to be made accessible in order to provide an all-inclusive website.

☞ EXAMPLE

Section 508 of the Rehabilitation Act and the **Web Content Accessibility Guidelines (WCAG 2.1)** of the World Wide Web Consortium's (W3C) Web Accessibility Initiative are two bodies that provide extensive research, recommendations, and solutions to provide accessible information technology resources.



KEY CONCEPT

The **Americans with Disabilities Act (ADA)** is a federal law that governs everything related to website accessibility for people with disabilities. The law dictates that any website belonging to a government organization or private business that is accessible to the public must be accessible to individuals with disabilities.

Some of the basic concepts of accessibility include providing the following:

- Alternative text for images
- Closed captions or scripts for videos
- Color-blind-safe colors when using color to convey meaning or information
- Proper tab navigation through menus and page contents (i.e., using the keyboard's "Tab" key to navigate a webpage)
- Helpful context to users such as the proper use of headings, table headings, and even hidden elements in the navigation menu that indicate a blind user's current location

However, one thing to keep in mind is that accessibility goes beyond making your site accessible to those with disabilities. Regardless of whether your users have impairments or not, user interfaces should always be designed to be easy to navigate and use. Customers will appreciate the overall convenience and ease with which they can access the resources provided by your site.



For your Touchstone, you will be asked to perform an accessibility test for your website design choices using Adobe's accessibility tools here: <https://color.adobe.com/create/color-accessibility>.



TERMS TO KNOW

Screen Reader Software

Specialized computer software that reads content on the screen out loud for the user and that is primarily used by individuals with visual impairment.

Alternative Text Description

A written description of an image's content that is included with the image. Used when an image cannot be displayed or when using screen reader software.

Section 508 of the Rehabilitation Act

A requirement that federal agencies ensure their electronic information and communication technology are accessible to people with disabilities.

Web Content Accessibility Guidelines (WCAG 2.1)

Guidelines developed as part of the World Wide Web Consortium's Web Accessibility Initiative to provide detailed documentation and guidance for developers to ensure accessibility on websites, web applications, and other electronic resources.

Americans With Disabilities Act (ADA)

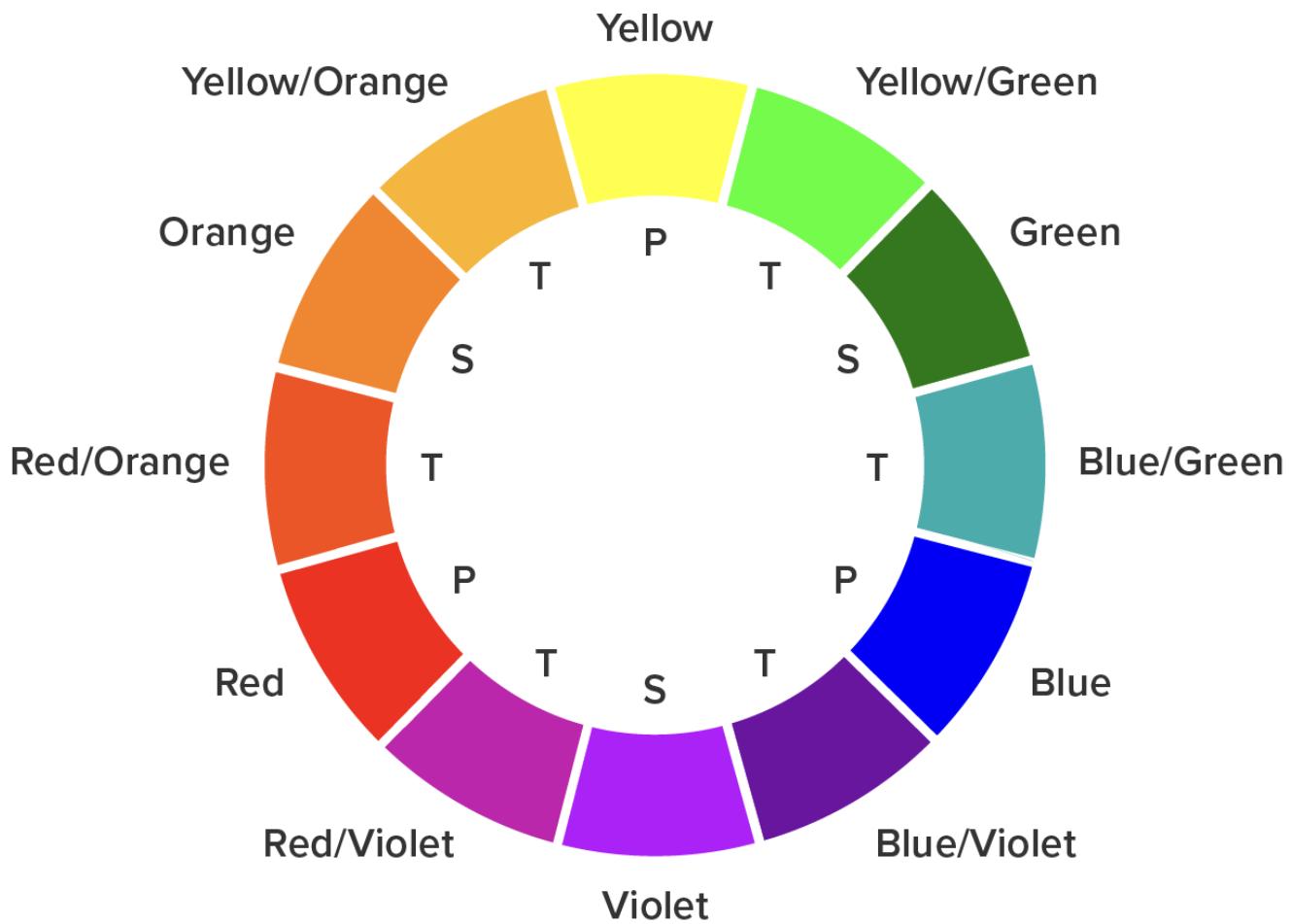
A U.S. civil rights law that prohibits discrimination based on a person's disability.

3. The Power of Color

Color plays a significant role in influencing emotions and can have a profound impact on website visitors' perceptions, moods, and behaviors. Color theory is used by web designers to communicate a message, feeling, or action to the target audience. Color theory focuses on guidelines and the meanings of different colors. Colors can evoke different emotional responses, and understanding the psychological effects of color can help designers create websites that effectively communicate and resonate with users. Furthermore, the combination of different colors that complement each other can also influence the perceptions of the site's visitors, as the colors can invoke a sense of professionalism.

Designers may refer to a color wheel diagram when selecting a color palette for their site. Color wheels model the relationship between primary, secondary, and tertiary colors. Basic color wheel diagrams often have 12 colors representing three primary colors (red, yellow, and blue), three secondary colors (orange, green, and violet), and six tertiary colors formed from mixing a primary color with a secondary color (red/orange, yellow/orange, yellow/green, blue/green, blue/violet, and red/violet).

☞ EXAMPLE



Color wheels can have more than 12 basic colors. The web-safe color palette, for example, consists of 216 colors that have been standardized to display consistently across browsers.



KEY CONCEPT

It is important to understand the basic psychology of colors, how they impact the viewer, and how to form color palettes that align with the site's purpose and the brand's style. We will start with understanding how color affects viewers.

Red	Blue	Yellow
Red is associated with strong emotions such as passion, excitement, and urgency. It can create a sense of energy and grab the user's attention.	Blue is commonly associated with calmness, trust, and reliability. Lighter shades of blue can create a sense of serenity, while darker blues convey professionalism and authority.	Yellow is often associated with optimism, happiness, and energy. It can grab attention and convey a sense of warmth and friendliness. <i>However, too much yellow can be overwhelming or cause feelings of anxiety.</i>
Green	Orange	Purple
Green is closely associated with nature, growth, and harmony. It can evoke feelings of relaxation, balance, and freshness. Green is often used in designs related to health, sustainability, and outdoor activities.	Orange combines the energy of red with the friendliness of yellow. It can evoke feelings of enthusiasm, creativity, and warmth. Orange is often used to create a sense of excitement or to call attention to specific elements on a website.	Purple is often associated with luxury, royalty, and creativity. It can evoke a sense of elegance, mystery, and spirituality. Lighter shades of purple can have a soothing effect, while darker shades can be associated with power and sophistication.

Neutral Colors: White, Gray, Black

Neutral colors include black, white, gray, tan, and brown. White conveys cleanliness, simplicity, and purity. Gray can evoke feelings of professionalism, stability, and balance. Black is associated with sophistication, power, and formality.

There are several variations of the basic colors discussed in the previous table that can have different effects, but the overall effect remains the same. Every color chosen should be used strategically and thoughtfully to convey the right impression to the target audience.

☞ EXAMPLE

A random color should *never* be chosen and used within a webpage just to add a pop of color or because that color hasn't been used yet.

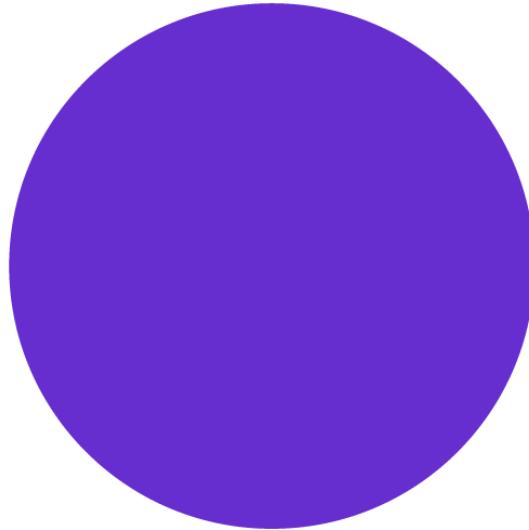
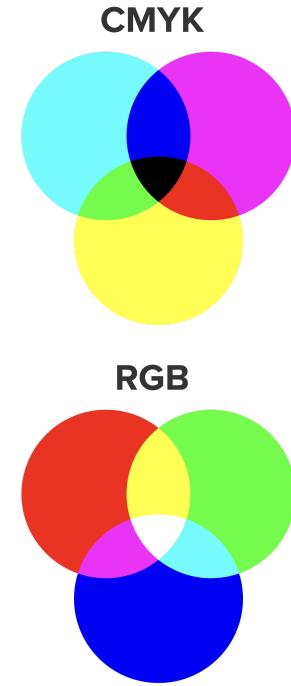
3a. Color Modes

As we learned earlier, secondary and tertiary colors are made by mixing different colors together. There are two main color modes for mixing colors in graphic design: **CMYK** and **RGB**. RGB (red, green, and blue) is used primarily for digital designs, and CMYK (cyan, magenta, yellow, and black) is used primarily for printed designs. In fact, you may have noticed that a color printer has four main colors of ink. CMYK has a limited color palette designed for precise colors that can be reproduced accurately in any printer. We will focus on the RGB color mode in this course, but web developers may be asked to work with preexisting CMYK colors in their projects. In the RGB color mode, computer colors are made up of the different values for red, green, and blue.



KEY CONCEPT

As RGB is the standard color mode for digital devices, there are multiple ways to represent RGB colors. One of the more common methods is to use Hex codes. “Hex” is short for hexadecimal, which is a base-16 numbering system (decimal is our normal base-10 numbering system).



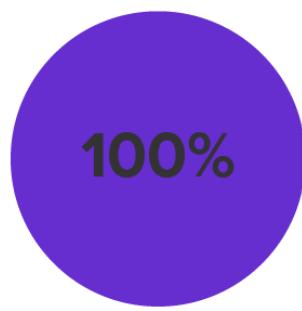
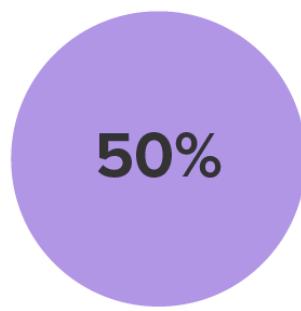
#RRGGBB
#662DCF
RGB(102, 45, 207)

Each RGB Hex color starts with the pound/hash symbol, followed by a six- or eight-digit Hex number. The six digits are made up of three pairs of Hex digits. Each pair represents the amount of that color from 0 to 255(ff), 0 being 0% and 255 being 100%. Another commonly used method is to use the RGB() function, which allows you to use decimal values from 0 to 255 in place of Hex values. If there is a fourth pair of Hex digits, it refers to **opacity**, with 0 being invisible and 255(ff) being fully visible. There is also the RGBA() function, which takes a fourth value ranging from 0.0 to 1.0 (0.0 being 0% and 1.0 being 100%) to indicate the opacity. The “A” in RGBA stands for **Alpha Channel**, which is a color component that indicates the amount of opacity.

#662DCF**19**
rgba(108, 187, 207, **0.1**)

#662DCF**80**
rgba(108, 187, 207, **0.5**)

#662DCF**19**
rgba(108, 187, 207, **1.0**)



LEARN MORE

You can see an interactive example of the different methods of representing colors in the [W3schools.com color picker](#). Choose a color and wait for the page to update; you will see the color represented in the RGB, HSL (hue, saturation, and lightness), and Hex versions.



TERMS TO KNOW

CMYK

Stands for cyan, magenta, yellow, and black. It is the color mode used primarily for printing.

RGB

Stands for red, green, and blue. It is the color mode used primarily for digital work.

Opacity

The opposite of transparency; how solid an object appears.

Alpha Channel

A component of digital graphics that refers to the opacity of an object or color.

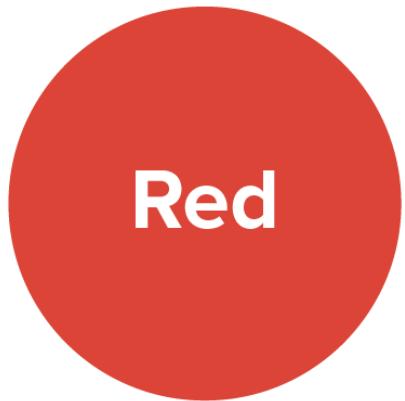
3b. Branding Strategy

Additionally, the organizational branding strategy needs to be considered as well. **Branding** is the use of colors, logos, and typography to establish brand recognition, the ability of individuals to quickly recognize a particular company based solely on these elements. Branding is not typically something that a web designer or developer has any say about. Instead, designers are informed about the organization's branding strategy and must stay within the given color palette and other guidelines.

In a situation where you, as the web designer and developer, are in charge of choosing the site's colors, there are some guidelines that can help you design an effective color palette.

1. Choose two to three primary colors to serve as the core colors that can identify your brand and should be the primary colors of the logo.

↗ EXAMPLE



2. Secondary colors are used to highlight and complement the primary colors. It is common to use anywhere from one to six colors, but more could be used as needed.

⇒ EXAMPLE



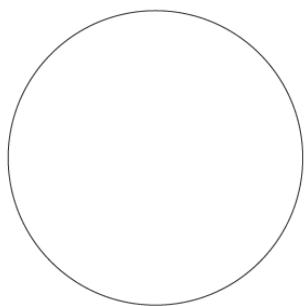
3. Tertiary colors are the third level of colors added to a brand's color palette. Tertiary colors should be complementary to the primary and secondary colors. While not always used on each page, or even any page of a site, tertiary colors can add diversity to the overall design when they are needed.

⇒ EXAMPLE

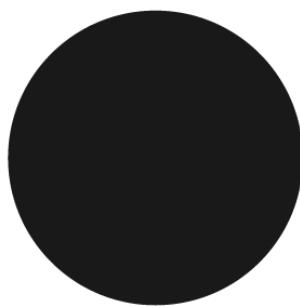


4. While black may or may not be part of a color palette, one best practice for using black in digital settings is to NOT use pure black. Pure black, on a computer, means using a value of 0 for red, blue, and green. Pure black elements on digital devices can be visually overpowering, taking attention away from other elements. Pure black also creates more strain on the viewer's eyes. Instead of using pure black, the best practice is to use a very dark shade of gray, but not pure black.

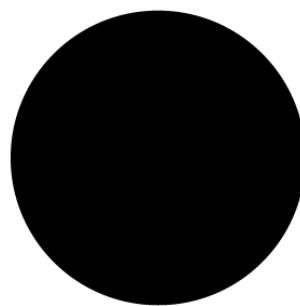
☞ EXAMPLE



R: 255
G: 255
B: 255



R: 25
G: 25
B: 25



R: 0
G: 0
B: 0

Pure black is made using a value of 0 for red, green, and blue.

Pure white is made using the maximum value of 255 for red, green, and blue.

As such, the ideal black for a website would be something close to 25-red, 25-green, and 25-blue.



BIG IDEA

When designing a color palette, make sure to carefully consider your audience and the intended message and attitude that you want to convey to your audience. The tone of your site and its content should align with the colors you choose.

☞ EXAMPLE

A site for extreme motorsports should want to convey excitement and adventure, instill a sense of edginess, and appeal to younger audiences. Orange, red, and high-energy bright greens and blues should be some of the colors chosen. Colors like pastels, beige, coffee, and dusty browns and greens would not align with the site's high-energy content.

On the other hand, a website for a relaxing spa should not use high-energy colors; instead, it should use calming greens, light browns and tans, and soft blues and should convey elegance and relaxation.



LEARN MORE

Visit [Usability.gov](#) for more color basics.



TERM TO KNOW

Branding

The use of colors, logos, and typography to establish brand recognition, the ability of individuals to quickly recognize a particular company based solely on these elements.

4. Real-World Color Palette Example

Let's practice with a real-world example now that you have learned how color can impact your site audience.

IN CONTEXT

Returning to the bakery website, let's put together a color palette that meets the needs and tone of the site. The owner sent us the following image of the store for inspiration:



TRY IT

Directions: Consider the following questions about a bakery business. Reveal the answers to see if you're on the right track.

When we think about a bakery, what descriptive terms come to mind?

+

Fresh, bright, and clean.

When we think about a bakery, what qualities do we want to convey to the audience using colors?

+

Professionalism, quality, and natural.



REFLECT

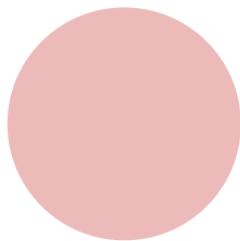
We want to choose colors and combinations that reflect the chosen descriptors for the company's online presence. For example, "fresh, bright, and clean" lends itself to lighter colors that are bright. Additionally, "professionalism" is conveyed with more elegant color choices with lower amounts of contrast. "Natural" leans more toward earthy colors, such as cream, wheats, yellows, and light browns.



TRY IT

Directions: Looking at the following color palettes, which one do you think works best for a bakery?

Color Palette 1:



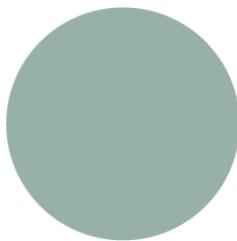
EBBAB9

Tea Rose (Red)



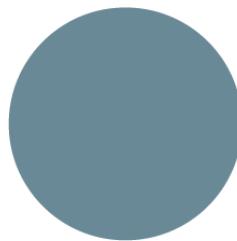
C9C5BA

Timberwolf



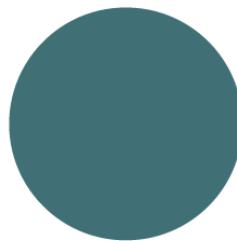
97B1A6

Cambridge Blue



698996

Air Force Blue



407076

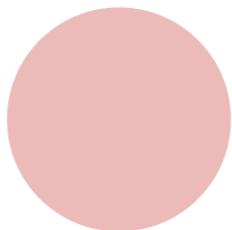
Caribbean Current

[Is Color Palette 1 the best choice for the bakery website?](#)



Color Palette 1 could be made to work, but it is not the most ideal. The colors are a bit dim and the bakery should reflect bright and clean.

Adjusting the brightness of the colors could help:



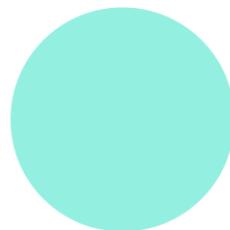
EBBAB9

Tea Rose (Red)



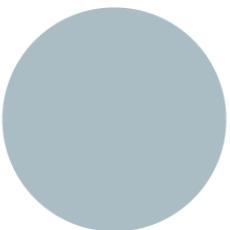
FFFFFF

Ivory



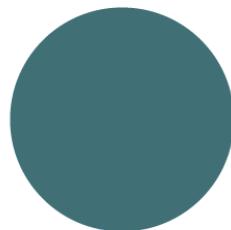
93F0E0

Tiffany Blue



ABBDC4

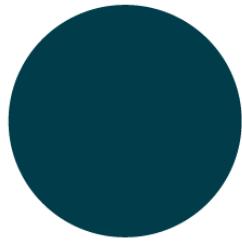
French Gray



75CBD7

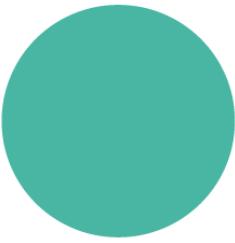
Sky Blue

Color Palette 2:



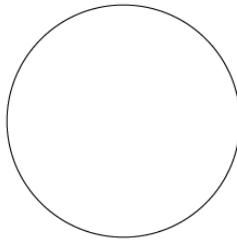
013C4A

Midnight Harvest



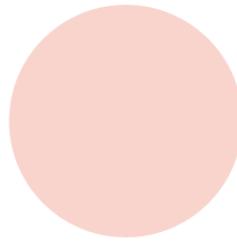
49B8A5

Samba Sage



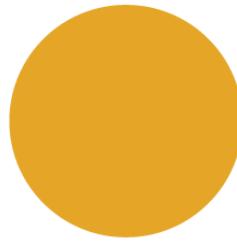
FFFFFF

Pure White



FBD6CE

Apricot Blush



E7A827

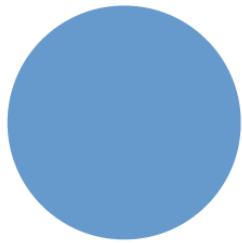
Sunlit Wheat

[Is Color Palette 2 the best choice for the bakery website?](#)

+

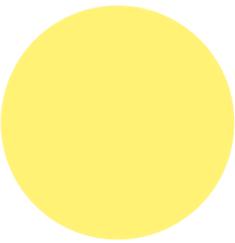
Palette 2 reflects the essence of the Good Harvest Bakery's brand. The deep teal (Midnight Harvest #013C4A) radiates sophistication and complements the bakery's commitment to creativity and natural goodness. The sea green (Samba Sage #49B8A5) adds a refreshing and calming element, reinforcing the bakery's dedication to providing fresh, high-quality products. Pure white (#FFFFFF) signifies cleanliness and simplicity, enhancing the overall aesthetic and aligning with the brand's commitment to wholesomeness. The peachy pink (Apricot Blush #FBD6CE) and goldenrod yellow (Sunlit Wheat #E7A827) bring warmth and positivity, creating an inviting atmosphere that resonates with the bakery's goal of being a friendly and wholesome choice for breakfast and lunch.

Color Palette 3:



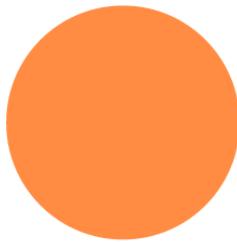
6699CC

Blue Gray



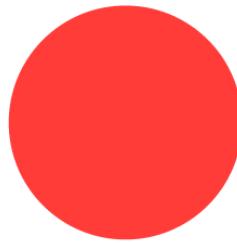
FFF275

Maize



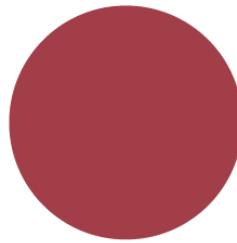
FF8C42

Pumpkin



FF3C38

Vermilion



A23E48

Redwood

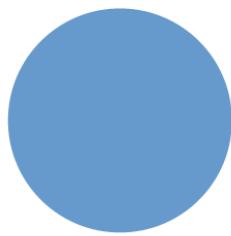
[Is Color Palette 3 the best choice for the bakery website?](#)

+

Color Palette 3 could be made to work, but it is not the most ideal. Palette 3's colors are relatively bright and earthy, but they are also too rich.

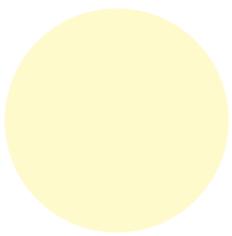
Adjusting the richness of the colors could help. Bright rich colors can be overpowering; adjusting them

down and muting them a bit help soften their presence.



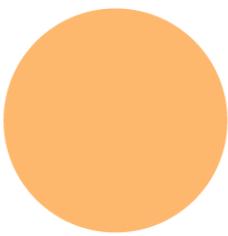
6699CC

Blue Gray



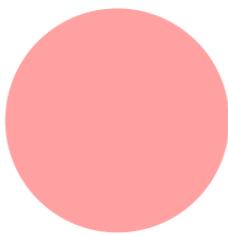
FFFACC

Lemon Chiffon



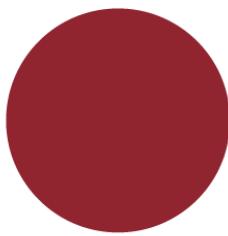
FEB86D

Fawn



FFA1AO

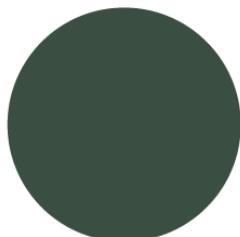
Salmon Pink



902530

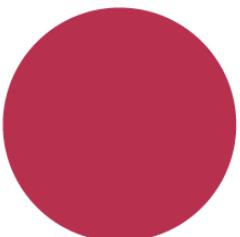
Burgundy

Color Palette 4:



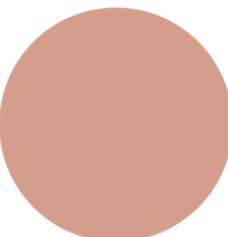
3A4F41

Mossy Grove



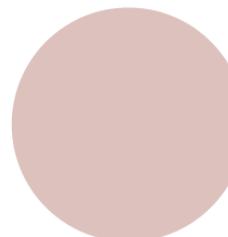
B9314F

Berry Bliss



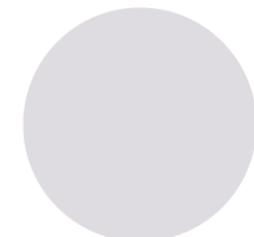
D5A18E

Warm Latte



DEC3BE

Chai Cream



E1DEE3

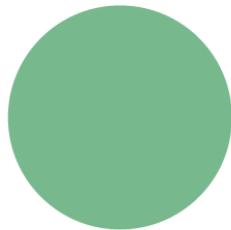
Hazy Gray

[Is Color Palette 4 the best choice for the bakery website?](#)

+

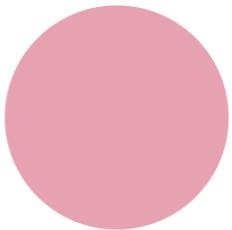
Color Palette 4 is the least ideal as the colors are too dark or high energy for the bakery.

Adjusting the brightness of the colors could help:



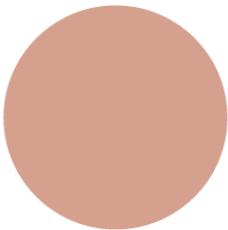
77B98C

Mint



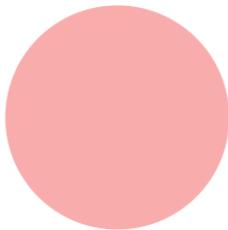
E6A2B1

Amaranth Pink



D5A18E

Rosy Brown



F9ACAC

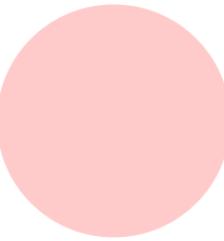
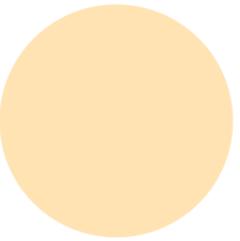
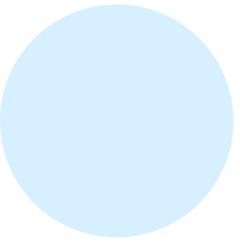
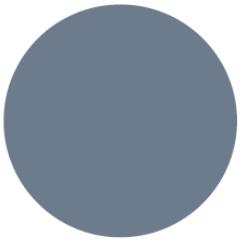
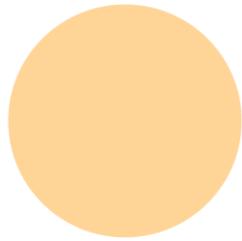
Melon



F1F1F1

Anti-flash White

Color Palette 5:



FF6700

Honeysicle Glow

545863

Sheet Pan

00E8FC

Aqua Mist

F9C846

Soft Wheat

FFE3E3

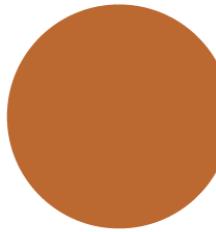
Sweet Rose

[Is Color Palette 5 the best choice for the bakery website?](#)

+

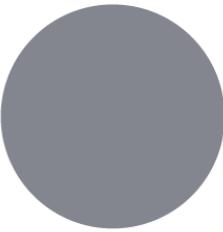
Color Palette 5 is too dark or high energy for the bakery.

Adjusting the colors could help. Mute (to make appear faded or dusty) the intense blue and orange a bit and lighten the gray.



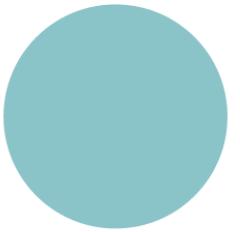
BC6931

Alloy Orange



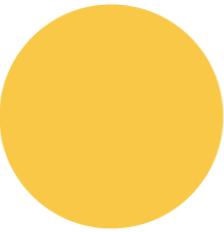
83868F

Taupe Gray



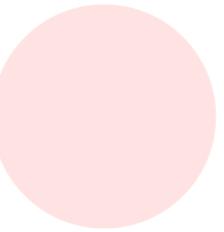
8AC3C8

Non Photo Blue



F9C846

Saffron



FFE3E3

Misty Rose



REFLECT

There are a couple of the choices that may work overall, depending on the theme or style of the bakery. Color Palette 1 could be made to work, but the colors are a bit dim and the bakery should be bright and clean. Color Palette 3 is bright and earthy, but the colors are too rich. Color Palettes 4 and 6 are the least ideal as the colors are too dark or high energy for the bakery. The best choices are palettes 2 and 5. They are bright, clean, and earthy.



MAKE THE CONNECTION

You will review client options and make recommendations for color and typography in Touchstone Task 1: Selecting Your Client and Planning Your Website Design.



SUMMARY

In this lesson, you learned **what UI/UX is** and the different design **principles of UI/UX** that can influence the user's perceptions of a website. Furthermore, you learned about **the power of color** and how different color choices can influence and affect visitors.

Source: This Tutorial has been adapted from "The Missing Link: An Introduction to Web Development and Programming" by Michael Mendez. Access for free at <https://open.umn.edu/opentextbooks/textbooks/the-missing-link-an-introduction-to-web-development-and-programming>. License: **Creative Commons attribution: CC BY-NC-SA.**

REFERENCES

Interaction Design Foundation. (n.d.) Color Theory. Retrieved from <https://www.interaction-design.org/literature/topics/color-theory>

Usability.gov [https://www.usability.gov/how-to-and-tools/methods/color-basics.html#:~:text=Three%20Primary%20Colors%20\(Ps\)%3A,a%20primary%20with%20a%20secondary](https://www.usability.gov/how-to-and-tools/methods/color-basics.html#:~:text=Three%20Primary%20Colors%20(Ps)%3A,a%20primary%20with%20a%20secondary)



TERMS TO KNOW

Accessibility

The ability of individuals with disabilities to access the same benefits and resources from a site, system, or application.

Alpha Channel

A component of digital graphics that refers to the opacity of an object or color.

Alternative Text Description

A written description of an image's content that is included with the image. Used when an image cannot be displayed or when using screen reader software.

Americans with Disabilities Act (ADA)

A U.S. civil rights law that prohibits discrimination based on a person's disability.

Branding

The use of colors, logos, and typography to establish brand recognition, the ability of individuals to quickly recognize a particular company based solely on these elements.

CMYK

Stands for cyan, magenta, yellow, and black. It is the color mode used primarily for printing.

Loading Spinners

Active visual indicators that software is currently loading or processing and has not stalled or frozen.

Opacity

The opposite of transparency; how solid an object appears.

Progress Bars

Visual indicators of how far along something is in a process.

RGB

Stands for red, green, and blue. It is the color mode used primarily for digital work.

Responsive Web Design Design (RWD)

A design approach for user interfaces that addresses a range of device types and screen sizes and enables a user interface to automatically adjust.

Screen Reader Software

Specialized computer software that reads content on the screen out loud for the user and is primarily used by individuals with visual impairment.

Section 508 of the Rehabilitation Act

A requirement that federal agencies ensure their electronic information and communication technology are accessible to people with disabilities.

Usability

The effectiveness, efficiency, and overall satisfaction of users interacting with a website or application.

User Interface/User Experience (UI/UX)

Refers to the field of study on how the design of a computer application or website's interface can impact the perception of the user.

User-Centered Design

A design approach wherein all aspects are designed to be focused on the user's needs and convenience.

Web Content Accessibility Guidelines (WCAG 2.1)

Guidelines developed as part of the World Wide Web Consortium's Web Accessibility Initiative to provide detailed documentation and guidance for developers to ensure accessibility on websites, web applications, and other electronic resources.