

# MOBILE DESIGN PRINCIPLES (UI / USER INTERFACE)

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**MOBILE APPLICATIONS DESIGN AND  
DEVELOPMENT 2 | IT6324B**



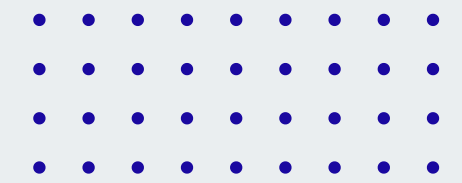
JOHN PAUL M. MANUEL | ACLC COLLEGE OF TAYTAY



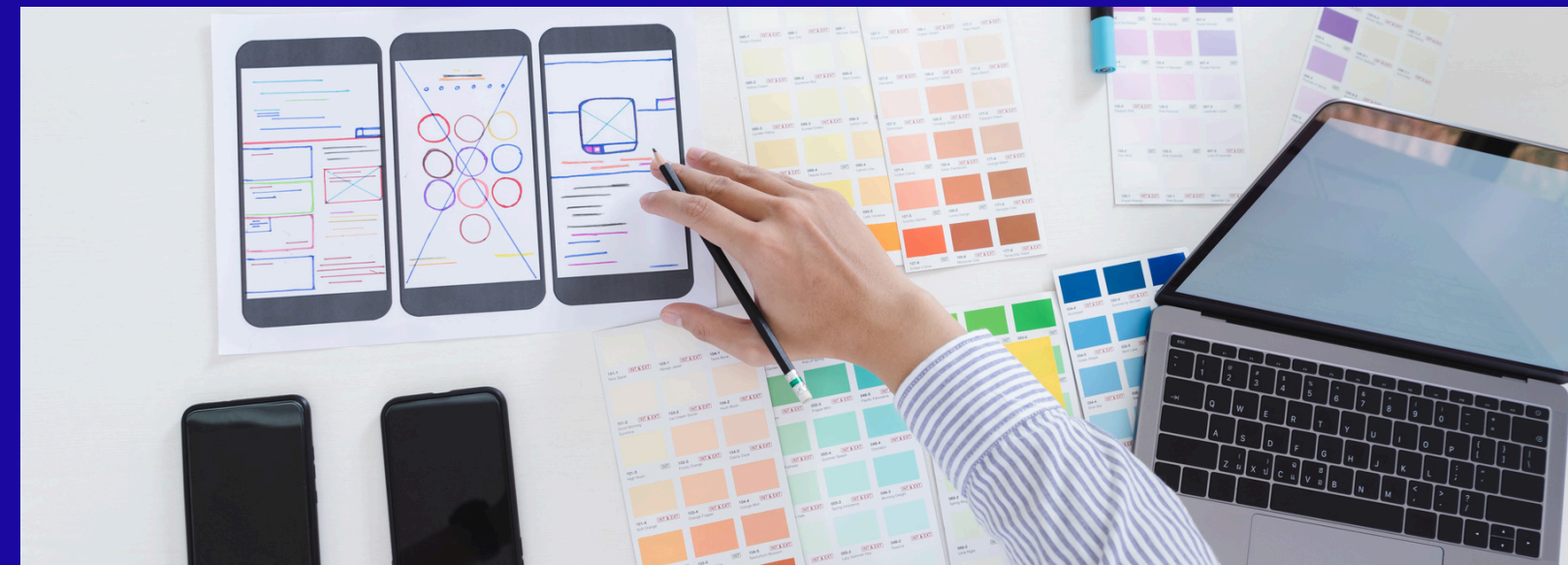
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# MOBILE DESIGN PRINCIPLES IN USER INTERFACE (UI)



refer to the best practices and guidelines used to create visually appealing, functional, and user-friendly interfaces specifically for mobile devices. These principles focus on layout, typography, color, icons, and interactive elements to ensure the design works effectively on small screens.



## MOBILE DESIGN PRINCIPLE UI

# CLARITY AND SIMPLICITY

The UI should be straightforward, with only essential elements visible. This reduces cognitive load and helps users focus on the main task

- Minimal text
- Clean layouts with ample white space
- Simple icons with recognizable functions

### Examples:

- Instagram: The home screen has a clean feed, with intuitive icons for likes, comments, and shares. The navigation bar at the bottom uses simple icons without text clutter.
- iOS Calculator: No decorative elements—just clearly labeled buttons, making it functional and easy to understand at a glance.

# MOBILE DESIGN PRINCIPLE UI

# CONSISTENCY

Maintain uniform design patterns, colors, fonts, and icons throughout the app to improve familiarity and ease of use.

- Repeated use of the same color palette
- Consistent button shapes and typography
- Predictable navigation patterns

## Examples:

- Spotify: Consistent dark theme with green highlights across the app. Buttons, fonts, and icons follow the same design language on all screens.
- WhatsApp: Chat bubbles, icons, and font sizes remain consistent whether you're on the main chat screen or in settings.

# **TOUCH-FRIENDLY TARGETS**

Interactive elements (like buttons) should be large enough for easy tapping without accidental clicks.

- Minimum touch target size of 48x48 pixels (as recommended by Google)
- Adequate spacing between clickable elements

## **Examples:**

- YouTube: Large play, pause, and like buttons ensure users can easily interact without precise tapping.
- Uber: Big buttons for key actions like “Confirm Pickup” to reduce errors during quick interactions.

# **VISUAL HIERARCHY**

Design elements should guide the user's eye to the most important information first.

- Use of size, color, and contrast to emphasize key elements
- Clear distinction between primary and secondary actions

## **Examples:**

- Google Maps: The current location and search bar are prominent, while less critical information is smaller or faded.
- Netflix: Featured content uses large thumbnails at the top, while other shows are displayed in smaller tiles below.



# **READABILITY AND TYPOGRAPHY**

Text should be legible without straining the user's eyes.

- Large font sizes (16px or more recommended)
- High contrast between text and background
- Avoiding long blocks of text

## **Examples:**

- Medium: Clean, large fonts with generous line spacing for easy reading.
- Apple Music: Bold section headers with clear song titles and artist names in a readable font.

# **FEEDBACK AND RESPONSE**

The UI should provide immediate feedback for user actions to confirm that the system is working as expected

- Button animations when tapped
- Loading indicators for processes
- Visual cues like color changes on selection

## **Examples:**

- Facebook: Buttons change color when pressed, and animations (like a pulsing “like” icon) provide immediate feedback.
- Gmail App: Swipe actions trigger colored backgrounds (green for archive, red for delete) to confirm the action.



# **ADAPTIVE LAYOUTS**

The UI should adjust seamlessly to different screen sizes and orientations.

- Responsive grids and flexible images
- Content reflows based on screen dimensions

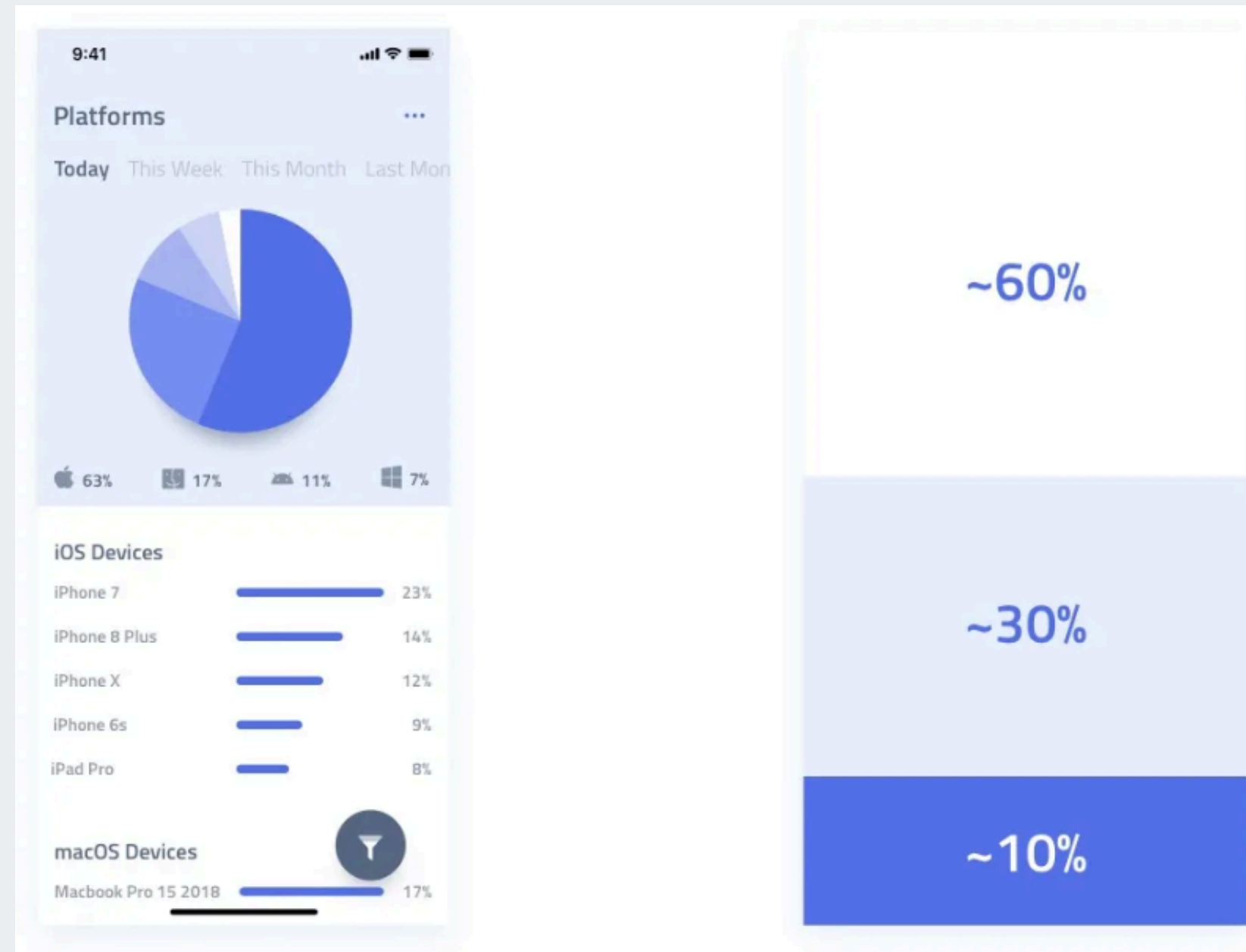
## **Examples:**

- Twitter: The feed adjusts smoothly from portrait to landscape, keeping content readable.
- Pinterest: Dynamic grid layout that adapts as you scroll, fitting images perfectly on any screen size.

## COLORS

# 60-30-10 RULE

is a popular color theory used by interior designers, fashion designers, and graphic designers to create a balanced and harmonious color scheme. The rule states that a color scheme should consist of three colors in the following proportions:



- 60% of the dominant color
- 30% of the secondary color
- 10% of the accent color

## COLORS

# COLOR THEORY

Color theory encompasses a multitude of definitions, concepts and design applications - enough to fill several encyclopedias.

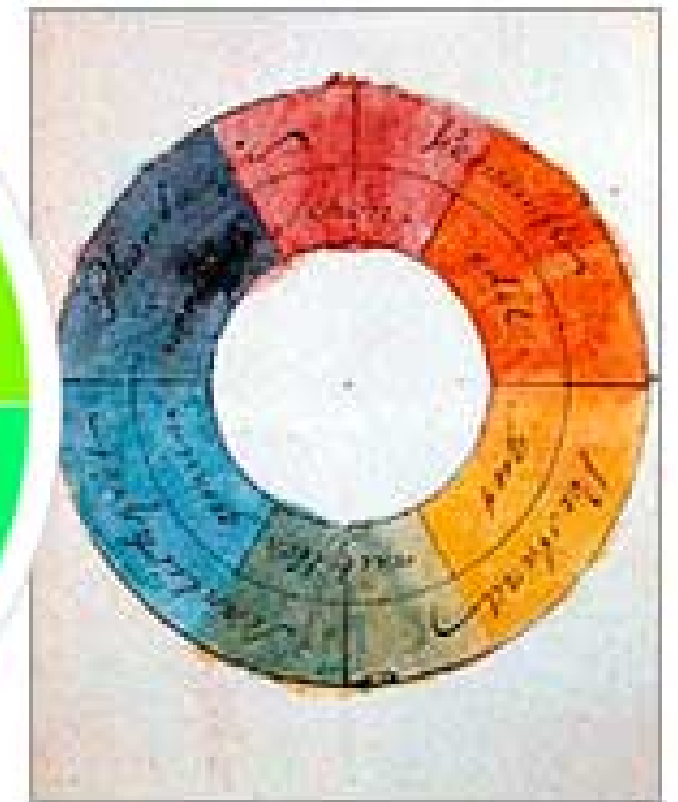
However, there are three basic categories of color theory that are logical and useful : The color wheel, color harmony, and the context of how colors are used.



1776  
Harris



TODAY



1810  
Goethe

## Color Wheel

## COLORS

# PARTS OF COLOR WHEEL



Primary Colors



Secondary Colors



Tertiary Colors

**Primary Colors:** Red, yellow and blue

In traditional color theory (used in paint and pigments), primary colors are the 3 pigment colors that cannot be mixed or formed by any combination of other colors. All other colors are derived from these 3 hues.

**Secondary Colors:** Green, orange and purple

These are the colors formed by mixing the primary colors.

**Tertiary Colors:** Yellow-orange, red-orange, red-purple, blue-purple, blue-green & yellow-green

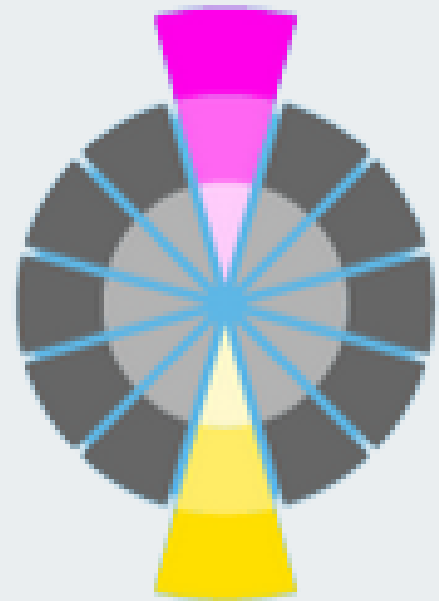
These are the colors formed by mixing a primary and a secondary color. That's why the hue is a two word name, such as blue-green, red-violet, and yellow-orange.



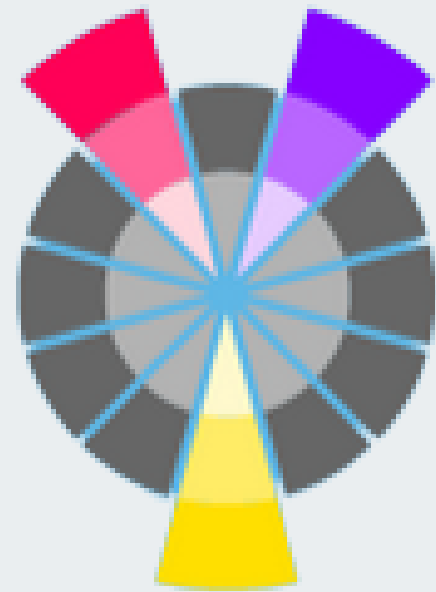
## COLORS

# COLOR HARMONY

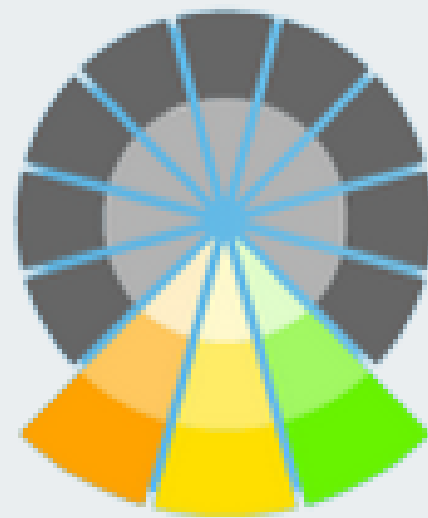
Color harmony is a set of rules for producing visually appealing color combinations. These ideas frequently use the color wheel, a circular depiction of primary, secondary, and tertiary colors ordered in rainbow order.



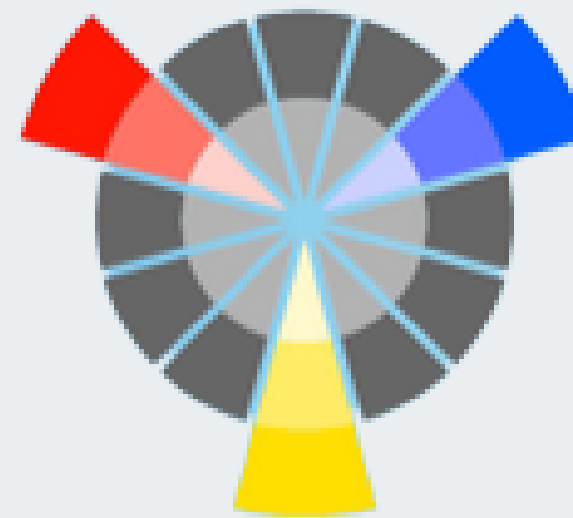
Direct  
Harmony



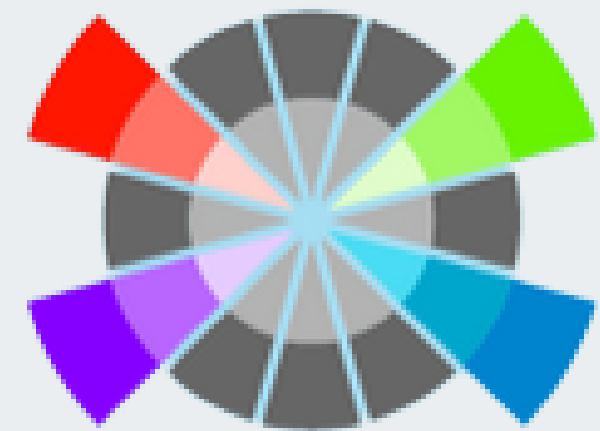
Split  
Complementary



Analogous  
Harmony



Triadic  
Harmony



Triadic  
Harmony

## COLOR HARMONY

# DIRECT HARMONY

Direct harmony, also known as complementary colors, involves combining your primary color with the color on the opposite side of the color wheel. The essential instances of direct harmony include red/green, blue/yellow, and orange/purple. Complementary color combinations contrast with one another, creating a lively effect. Although direct harmony can pack a visual punch, one should use it thoughtfully. Complementary colors can be harsh if overused, but these combinations stand out when used correctly.





## COLOR HARMONY

# SPLIT COMPLEMENTARY

Rather than the point opposite the key color on the wheel, the split complementary takes the two colors directly on either side of the complementary color. This allows for a nicer range of colors while still not deviating from the basic harmony between the key color and the complementary color.



## COLOR HARMONY

# TRIADIC HARMONY

Also called Triadics or Triads. This refers to the color two spaces to either side of the key color's complement. Essentially, with the triadic harmony, you are using three equally distanced colors on the color wheel. As such, you're stretching the basic idea of color harmony and thus this harmony is best used with only touches of color.





## COLOR HARMONY

# ANALOGOUS HARMONY

Also referred to as related colors, these are the colors directly on the left and right of your key color. They usually match up quite well and create a serene and comfortable design. While this color harmony can be pleasing to the eye, it can also come across as monotone. If you are going for a design that's primarily one color, this is a good choice.



## COLOR HARMONY

# TETRADIC HARMONY

Similar to the Triadic, except that there are four points, all equally distanced on the color wheel. This is a color harmony I've only seen mentioned in more recent texts on the subject of color harmony. In my earlier post on this subject, I didn't even include it. My personal opinion is that a design using this isn't really using color harmony and is instead using every color on the color wheel. Or, where done more subtly, it is a design simply using two sets of complementary colors.

