Apple's Human Interface Guidelines (HIG)

 provided by Apple give developers and designers a clear path to follow.

iOS UI components:

Navigation components:

- **1. Tab bars** primary navigation across an app's core features.
- **2. Navigation bars** sit at the top of the screen and help users move through hierarchical levels of the app.
- 3. **Side menus and modals** Side menus typically <u>slide in from the side of the screen</u> and are useful for secondary navigation. Modals, on the other hand, <u>temporarily take over the screen</u> to focus the user's attention on a specific action or information.

UI components:

1. Buttons, switches, sliders, and segmented controls - bread and butter of any app, ways for users to interact with content.

2. Gestures -

These gestures feel natural and allow users to navigate quickly without needing to learn anything new.

3. Status bars, toolbars, and menus -

status bar at the top of the screen shows essential info like time, battery, and network strength.

Toolbars usually appear at the bottom and offer quick actions related to the current screen.

Menus help users find what they need without distracting from the main content.

4. Icons and symbols - quickly and help users navigate without needing to read every label

Material Design

 design language developed by Google in 2014 to create a consistent and modern user experience across different platforms and devices.

Android Material Design - is a design language developed by Google to create visually appealing, intuitive, and consistent user interfaces across Android applications.

Importance of Material Design in Android Development:

- -Enhances usability and accessibility.
- -Provides a unified experience across apps and platforms.

Key Principles of Material Design

1. Material is the Metaphor

 mimics the behavior of real-world materials, giving a sense of touch and interaction through shadows, layering, and animations.

2. Bold, Graphic, and Intentional

 Uses strong colors, meaningful typography, and clear layouts to <u>enhance</u> <u>readability</u> and usability.

3. Motion Provides Meaning

 Smooth animations and transitions guide users through the app, ensuring a <u>natural</u> and responsive experience.

Core Features of Material Design:

- Elevation & Shadows: Elements appear layered to mimic real-world depth.
- Typography: Uses clear and scalable fonts like Roboto.
- Color System: Defines primary, secondary, and accent colors with shades for consistency.
- Components: Includes ready-to-use UI elements like buttons, cards, dialogs, and navigation bars.
- Adaptive Layouts: Responsive grid systems ensure a seamless experience across different screen sizes.

App Bars (Top and Bottom Navigation)

- App bars help users navigate and interact with an application's key functionalities.
 - Top App Bar (Toolbar) Displays the app title, navigation controls and actions like search or settings. Often used in combination with the Navigation Drawer.
 - Bottom Navigation Bar consists of 3-5 labeled icons representing different sections.

Buttons

- Buttons are interactive UI elements that trigger actions when tapped.
 - 1. Floating Action Button (FAB)
- circular button that stands out to promote a primary action
 - Positioned above other content for visibility.

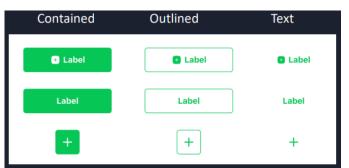
2. Extended FAB

- Similar to the FAB but includes a label to describe the action (e.g., "Add to Cart").
- Provides clarity while maintaining the prominence of a floating button.
 - 3. Contained, Outlined, and Text Buttons

Contained Button – A button with a filled background, commonly used for prominent actions.

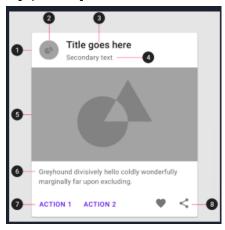
Outlined Button – A button with a transparent background and an outline, used for secondary actions.

Text Button – A button with no background, used for less prominent actions.



Cards

- Typically used to display content like images, text, and actions (basta ito yung sa pag nag post sa FB)
- 1. Container
- 2. Thumbnail [optional]
- 3. Header text [optional]
- 4. Subhead [optional]
- 5. Media [optional]
- 6. Supporting text [optional]
- 7. Buttons [optional]
- 8. Icons [optional]



Dialogs

- Dialogs temporarily capture the user's attention to request an action or provide information.
 - Alert Dialog Displays a message with optional actions (e.g., confirmation prompts).
 - 2. **Simple Dialog** Presents a list of selectable options.
 - 3. **Custom Dialog** Allows full customization, such as form inputs or images.

Menus

- Menus organize navigation efficiently by providing additional options and actions.
 - 1. **Popup Menu** Displays a list of options when a button is tapped.
 - 2. **Context Menu** Appears when a user longpresses an item, offering contextual actions.
 - 3. **Options Menu** Part of the app bar, providing key actions related to the current screen.

Navigation Drawer

- A side panel that provides quick access to different sections of the app.
- Typically hidden by default and accessed by swiping or tapping the hamburger icon.
- Useful for organizing multiple destinations in apps with deep navigation structures.
- Often combined with a Top App Bar for better usability

Snackbars and Toasts

 Provide quick feedback messages to users without interrupting their workflow

1. Snackbar

- Displays a short message at the bottom of the screen.
- Can include an action (e.g., "Undo" after deleting an item).
- Automatically disappears after a few seconds

2. Toast

- A simple popup message that appears briefly and fades away.
- Used for lightweight feedback (e.g., "Message Sent"). P
- Cannot include actions