

## Android Definitions :

- **Variable :** Variables are containers for storing data values. To create a variable, use var or val , and assign a value to it with the equal sign ( = ):
- **Data type :** A data type is a classification of data which tells the compiler or interpreter how the programmer intends to use the data. Most programming languages support various types of data, including integer, real, character or string, and Boolean.
- **Operator:** Operators are used to perform operations on variables and values. The value is called an operand, while the operation (to be performed between the two operands) is defined by an operator: Operand.
- **Control Flow :** The control flow is the order in which the computer executes statements in a script.
- **Function :** A function is a block of code which only runs when it is called. You can pass data, known as parameters, into a function.
- **Array :** Arrays are used to store multiple values in a single variable, instead of creating separate variables for each value
- **String :** Strings are a sequence of characters. For example, "Hello there!" is a string literal. In Kotlin, all strings are objects of String class. Meaning, string literals such as "Hello there!" are implemented as instances of this class.
- **Kotlin Activity and its lifecycle :** In Android development, an activity is a Java class that has some pre-defined functions that can be triggered in different app states to perform any kind of task you want. The activity is also responsible for the creation, destruction, and control of the other states of the app's lifecycle.

- **Layout** : A layout defines the structure for a user interface in your app, such as in an activity. All elements in the layout are built using a hierarchy of View and ViewGroup objects.
- **Linear** : LinearLayout is a view group that aligns all children in a single direction, vertically or horizontally
- **Relative** : RelativeLayout is a view group that displays child views in relative positions
- **Grid** : Android GridLayout is used to display elements and views in the form of a rectangular grid. GridLayout and GridView are two completely different terms and are used for other purposes. GridView is a view, whereas GridLayout is a layout that can hold various views in it.
- **Constraint**: A ConstraintLayout is a ViewGroup which allows you to position and size widgets in a flexible way. Note: ConstraintLayout is available as a support library that you can use on Android systems
- **LOG**: The Logcat window in Android Studio displays system messages, such as when a garbage collection occurs, and messages that you added to your app with the Log class.
- **SNACKBAR** : Snackbars provide lightweight feedback about an operation. They show a brief message at the bottom of the screen on mobile and lower left on larger devices. Snackbars appear above all other elements on screen and only one can be displayed at a time.
- **INTENT CLASS** : An intent is to perform an action on the screen. It is mostly used to start activity, send broadcast receiver, start services and

send message between two activities. There are two intents available in android as Implicit Intents and Explicit Intents

- **Implicit :** Implicit intents do not name a specific component like explicit intent, instead declare general action to perform, which allows a component from another app to handle.
- **Explicit:** Android Explicit intent specifies the component to be invoked from activity. In other words, we can call another activity in android by explicit intent.
- **Toast :** A toast provides simple feedback about an operation in a small popup.
- **Checkbox:** Checkboxes allow the user to select one or more options from a set.
- **Radiobutton :** RadioButton is a two states button which is either checked or unchecked. Radio buttons allow the user to select one option from a set.
- **Text View:** A TextView displays text to the user and optionally allows them to edit it.
- **Edit text:** A EditText is an overlay over TextView that configures itself to be editable.
- **Image view:** ImageView class is used to display any kind of image resource in the android application either it can be android.
- **Button:** a Button is a user interface that is used to perform some action when clicked or tapped
- **OnClickListener() :**In Android, the OnClickListener() interface has an onClick(View v) method that is called when the view (component) is clicked.
- **Action bar:** Android ActionBar is a menu bar that runs across the top of the activity screen in android.

- **Option menu :** The options menu is the primary collection of menu items for an activity. It's where you should place actions that have a global impact on the app, such as "Search," "Compose email," and "Settings."

- **Context Menu:** A context menu is a floating menu that appears when the user performs a long-click on an element.

- **Popup Menu:** Popup Menu displays a list of items in a vertical list which presents to the view that invoked the menu and useful to provide an overflow of actions that related to specific content

- **Alert dialogue :** Android AlertDialog can be used to display the dialog message with OK and Cancel buttons

- **Custom Alert Dialogue :** The custom dialog uses DIALOG to create custom alert in android studio. Dialog display a small window

- **Array Adaptor :** The simplest adapter to use is called an ArrayAdapter because the adapter converts an ArrayList of objects into View items loaded into the ListView container.