# Kotlin

* Object Oriented Programming language official for Android App development.
* It runs over JVM.

## Logs

Log.\*(tag, value)

* Debug 🡪 d as Log.d(tag, value)
* Error 🡪 e
* Verbose 🡪 v
* Warning 🡪 w
* Info 🡪 i

## Class



### Data Class



* Creates constructors, setters, getters, and all other methods for us

# Android Project Structure

## Manifest Folder

It is an XML file in which you describe everything that you want to do in your project. Examples include:

* Activities
* Permissions
* Services
* App Icon
* Parent Activities
* And Many more

## Java

It contains all the source code files written in either java or kotlin.

* Activities
* Fragments
* Services
* Data Classes
* Controllers
* And Many more

## Res

It is a directory that stores the resources that your app will use. It again comprises different folders which are either by default there or created in need.

### Layout

It contains all the UI layouts created explicitly by the developer or Android.

### Drawable

It contains all the images that will be used in the project.

### Mipmap

It contains icons.

### Values

It contains predefined constant values used in the project. It is really helpful for Language Localization. The application can be transferred from one language to another one by just changing a string value file.

### Menu

It contains the menu UIs which will be inflated at run time on the activity UI.

### Raw

It contains all the audio and text files.

## Gradle

It contains build tools to build/ compile the whole app. There is a tool called AAPT, Android Asset Packaging Tool, used to compile all the resources into an R.java file. So, if you have to access any resource then you have to prefix it with R.resource.name.

R.java

AAPT

Manifest

Resources