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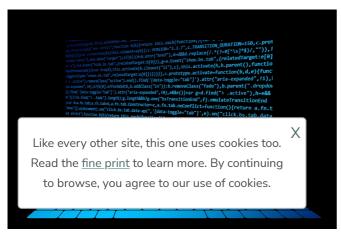
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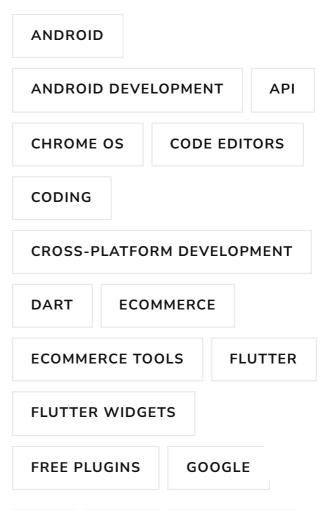
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## Most Useful Kotlin Tips and Tricks for Beginners



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Kotlin was launched to make Android development a whole lot easier as well as faster. After being named as an official language for Android, it has gradually taken over Java and is the first choice for Android developers in the current scenario.

Considering their similarities, the adaptations could not have been easier for Java developers switching to Kotlin. However, it's really easy to take notice of the unlikeness or rather conversational aspects of Kotlin on the same time. This can help to write code as same as Java.

Savvy Apps began to employ Kotlin for its new Android projects late in 2016, that is, when Kotlin 1.0.4 was launched. At first, Kotlin was tried out on a smaller scale project. It was tried and seen to ease the use of this programming language. It showed the potential to easily separate the components from business logic with the help of various extensions. Typically, the time taken for development was saved for us. And eventually, the developers decided that it would be the language of choice moving forward. And following this, the

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In order to establish their experience with Kotlin, they decided to assemble their most useful and noteworthy tips. Before we dive into these tips, you should know that these tips specifically focus on using Kotlin within the context of Android development. You might as well have experience with the Android SDK. You should also be familiar with the concept of **Kotlin plugin**. Using Kotlin with Android Studio is provided by **Jet Brains**, that is, the creators of Kotlin.

# Initial Kotlin Tips for Android LAZY LOADING

There are various different advantages which come along with the lazy loading. Lazy loading can lead to rapid start-up time. Since loading is delayed when the variable is retrieved, this is particularly useful in using Kotlin for an Android app. For Android apps, the developers want to take the edge off the app start-up time with the intent that the user sees the app content faster, rather than sitting

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memory structured, as the developers

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only burden the resource into memory if it is addressed. Memory usage is a very well-planned on mobile platforms such as Android as the phones have limited, shared resources.

#### CUSTOM GETTERS/SETTERS

Kotlin's custom getters and setters exercise the structure of a model. However, you will have to state the custom behavior to get and set the domain. Let's say, you are using custom models for specific frameworks, just like the Parse SDK. In doing so, you are attracting values which are not really local variables in the class. However, they are stored and retrieved in some custom fashioned way, for instance from JSON.

#### **LAMBDAS**

Lambdas diminish the lines of code in general in a source file. It also enables you for the purpose of functional programming. While lambdas are at present possible with Android, Kotlin takes them a step ahead by making sure that you don't have to deal with Retro

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The Android SDK composes a huge variety of cases where you are setting a listener or executing a single method. Therefore, Lambdas work efficiently, in those circumstances.

#### **DATA CLASSES**

Data classes disentangles the classes, adding equals(), hashCode(), copy(), and toString() formula instinctively. They also bring certain clarification in the intention of the model and what should go in it by spliting pure data from business logic.

If you are exercising data classes with something like Gson or another JSON parsing library, you can build the default constructor using the default values.

### COLLECTION FILTERING

Collections are handled repeatedly when working with an API. On a very general basis, you would want to filter or bring changes to the contents of that collection. So, by employing Kotlin's collection filtering, you will successfully be able to add certain amount of clarity



comprise of using the collection filtering .

Straining a collection using the built-in Kotlin technique is very similar to other functional programming languages too, such as Java 8 streams or Swift collection types. Seeping through the collections in a unified way helps. It come to a great help when talking with team members about what operations need to be made to get a list down to the right functionalities to present.

### OBJECT EXPRESSIONS

Object expressions permits for strict singleton definition so there is no misapprehending it for a class that can be incorporated. They also guarantee that you do not have to box those singletons somewhere like in the Application class or as a static class variable.

#### **COMPANION OBJECT**

While taking a glimpse, Kotlin seems to be missing static variables and techniques. In a manner, it does not have



class. They comprise of the techniques and variables you might want to access in a static fashion. A companion object gives you the permission to define constants and methods, similar to static in Java. With it, you can follow the **newInstance** pattern of pairing.

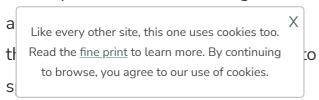
#### **GLOBAL CONSTANTS**

Kotlin permits you to define constants that span over an entire app in one place, if applicable. Customarily, constants should have their extent brought down as much as possible. However, when scope needs to be global this is an efficient way to do so without having to undergo a constants class.

## OPTIONAL PARAMETERS

Alternative parameters make technique calls more malleable without having to pass null or a default value. This is specifically important when defining animations.

For instance, if you want to have a technique defined for reducing the views



# Intermediate Kotlin Tips for Android

#### **EXTENSIONS**

Extensions are essential as they enable you to add to the elements of a class without having to adopt from it. With the help of the extensions, you can easily discard the need to have utility classes or techniques. It can also help you improve the readability of your code.

#### **LATEINIT**

A main component of Kotlin is its commitment to null safety. Lateinit offers a simple method to both have null safety and divide a variable the way Android needs you to. This is a great language feature. Even so, it takes some time to get used to after doing extensive Java development.

These components of the language can be disappointing when dealing with Android layouts. This is because we know that the views are going to exist

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In **oncreate/oncreateview** after the

layout is distended. You could also handle this by maintaining checks in each place you touch the view throughout the Activity. However, this would be disspointing to handle and avoidable from a null check point of view. Rather, you can use the lateinit editor.

#### SAFE TYPECASTING

Some Android conventions need a safe typecasting due to its normal typecasting that would cause an exception. For instance, an usual method of forming a Fragment in an Activity is to first check and see if it subsists already, with the help of the FragmentManager.

#### LEVERAGING LET

Leverageing let allows you to implement a block if the value of the object is not null. This further enables you to keep away from null checks and makes code more readable.

## ISNULLOREMPTY | ISNULLORBLANK

We need to certify several times in the



making the use of Kotlin, you may have found the TextUtils class in Android

## Advanced Kotlin Tips for Android

#### AVOIDING SINGLE ABSTRACT METHODS FOR KOTLIN CLASSES

This tip enables you to use lambdas, which enables cleaner, more compact code. For instnce, when working in Java, it is very normal to have a simple listener class. One of the great features of Kotlin is that it performs SAM (Single Abstract Method) conversions for Java classes.

## COROUTINES INSTEAD OF ASYNCTASK

Because AsyncTask is bulky and leads to leaks. The developers prefer to use coroutines as they enhance readability and don't leak memory. Its important to

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#### **Conclusion**

Thus, we have gathered these tips from what is considered to be the most efficient methods and techniques which one should learn before you get started with developing in Kotlin. These tips will for sure help you understand its key features. It will also provide you with a head start in using Kotlin for your Android projects.

#### References

- 16 Kotlin Tips for Android
   Development SAVVY
- Kotlin: Tips and Tricks Part -1 –
   Medium
- 7 Quick Kotlin Tips for Android
   Developers Medium

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