# An Empirical Study on the Usage of the Kotlin Programming Language for Android Development

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### **General Information**

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The purpose of the study is to understand how developers are dealing with the recent adoption of Kotlin as the official language for Android development:

- The perception about the advantages and disadvantages to use Kotlin for Android development;
- Most common problems faced by developers that choose Kotlin as Android programming language.

- Interviewer Introduction
- Confidentiality Ensured
  Go as far as possible in your answers

3. Go as far as possible in your answers. The more details, the better.

Do you fully understand and agree with the consent form previously sent to you?

Can you please tell us your name?

Is that okay if I ask how old are you?

How long have you been working as a

developer?

How long have you been working with

Android development?

What is your current role in the

organization you work for?

## Kotlin?

How long have you been working with

How do you consider your knowledge

level in Kotlin?

# Do you have any background with Java?

How was your first contact with Kotlin? \*

Do you think Kotlin improves code

quality in any way?

What do you most like in Kotlin

development?

What do you most dislike in Kotlin

development?

Can you remember one or more problems you faced in Kotlin development and had to resort to any specialized forum like StackOverflow?

Kotlin is designed with Java Interoperability in mind. Existing Java code can be called from Kotlin in a natural way, and Kotlin code can be used from Java as well. In your opinion, what are the benefits of Kotlin and Java interoperability?

Despite the fact that Kotlin and Java are interoperable, both languages are quite distinct. Have you ever experienced problems trying to interop Kotlin and Java?

What you think could be improved in

Kotlin-Java Interoperability?

## Do you think that Kotlin provides support for functional programming in any way?

Have you ever experienced problems with any functional programming practices in Kotlin? Practices like lambdas, high order functions, currying, etc?

What do you think could be improved in

Kotlin functional paradigm support?

# In your opinion does Android Studio provide a good experience for Kotlin Developers?

# trying to develop Android Apps with Kotlin regarding Android Studio?

Have you experienced any problems

Gradle is currently the most popular compilation automation system used by android developers. To use Kotlin with Gradle some settings must be made, but may vary depending on the version of gradle and Android Studio you are using. Have you experienced compile issues because of some gradle configuration?

## Android Studio regarding Kotlin?

What do you think could be improved in

### Closing

Is there anything else you would like to discuss that was not addressed by the previous questions or you believe that can improve this interview?

Do you have any questions for me?

### Thank you.