A Comperative Study : Java and Koltin

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Abstract
UPDATED—May 18, 2020. This paper presents the results of a comparative study about Kotlin and Java as programming languages for realizing Android Applications. In particular we cover different fields like complexity, coding costs, and code structure. Furthermore, we undertook a closer look at the features of Kotlin and Java. Conclusively we will go over which coding language fits beginners.

Author Keywords
Java; Kotlin; Application Development; Code Complexity;

CCS Concepts
•**Human-centered computing** → **Human computer interaction (HCI);** *Haptic devices;* User studies; Please use the 2012 Classifiers and see this link to embed them in the text: https://dl.acm.org/ccs/ccs_flat.cfm

Einleitung
Derzeit werden immer mehr Applikationen mit Kotlin entwickelt. Diese Programmiersprache ist im Gegensatz zu Java relativ neu und wurde erstmals 2016 veröffentlicht. Zugleich ist Kotlin seit dem ersten Release als Open-Source-Software erhältlich und zielt im speziellen JVM (Java Virtual Machine) und Android an. In diesem Paper vergleichen wir Java mit Kotlin in den Aspekten Code Komplexität, Aufwand und Struktur. Darüber hinaus gehen wir auch auf einige

Figure 1: JetBrains Kotlin Logo. Photo: ⓒⓄ JetBrains s.r.o.

Figure 2: Java Technologies Java Logo ⓒⓄ Java Technologies.

Sprachfeatures die Kotlin und Java bieten ein.

Kotlin

Kotlin ist gleich wie Java eine objektorientierte Programmiersprache. In dieser Sprache geschriebener Code kann in Bytecode für die JVM (Java Virtual Machine) kompiliert werden. Mit Kotlin können große Teile der Java-Boilerplate-Codes verhindert werden.

Java

Java ist eine objektorientierte Programmiersprache und besteht aus den JDK (Java-Entwicklungstools) und der JRE (Java-Laufzeitumgebung). Grundsätzlich wird diese Programmiersprache für die Android Entwicklung verwendet, weil sie sehr bekannt ist.

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Figure 3: Insert a caption below each figure.

		Test Conditions	
Name	*First*	*Second*	*Final*
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Nass	22.2	16	234,333
Borriello	22.9	11	93,123
Karat	34.9	2200	103,322

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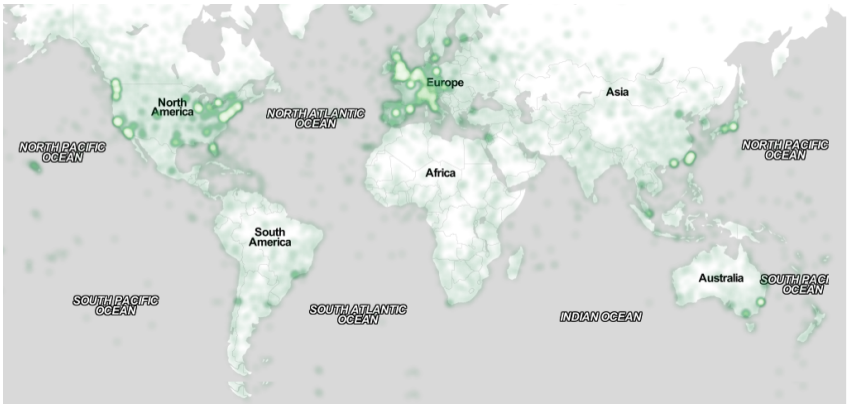

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	First	Location
Child	22.5	Melbourne
Adult	22.0	Bogotá
Gene	22.0	Palo Alto
John	34.5	Minneapolis

Table 2: A simple narrow table in the left margin space.

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