

Kotlin programming language

Kotlin is a modern, cross-platform, multi-purpose programming language. JetBrains started the design and development of the language back in 2010 and has watched it rapidly grow in popularity. Known for its concise syntax and pragmatic design, Kotlin provides ample opportunity for sharing and reusing code between multiple projects and platforms.

The potential for the language is immense. Programmers are using Kotlin for mobile — both Android and iOS, server-side and client-side web applications, and data science. With Kotlin/Native, the support extends to other platforms like embedded systems and macOS. Kotlin has functional constructs. It supports both object-oriented and functional programming styles — or a mix of the two together. This is why the developer community has truly embraced Kotlin. In 2020, Stack Overflow reported Kotlin as being the fourth most-loved language among professional programmers and the 13th most popular language overall.

It has had an exciting journey. In July 2011, JetBrains unveiled Project Kotlin, and by February 2012 the project had been made open-source under the Apache Licence, version 2.0. 2016 saw the release of Kotlin 1.0, the language gained traction and continued to amaze tech giants and developers alike. In 2017, Google announced that it would officially support Kotlin as a first-class language for mobile development on Android. By 2018, the language had already reached over 1.5 million users, with over 96,000 repositories containing Kotlin code on Github. Today, more than 4 million programmers use Kotlin all over the world, with more than 1 million developers, every month, using the language in their professional work.



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General Info

What is Kotlin?

Kotlin is a cross-platform, multi-purpose modern programming language. Known for its concise syntax and pragmatic design, Kotlin provides ample opportunities for code-sharing and code-reuse between multiple projects on multiple platforms, for productive concurrent programming.

Who is behind it?

Kotlin is developed by JetBrains and open-source contributors. Its development is secured by the Kotlin Foundation which is sponsored by JetBrains and Google. Today, 70+ people work on the core Kotlin project team at JetBrains and 250+ independent contributors drive the language and its ecosystem.

Who uses Kotlin?

<u>Google, Uber, Atlassian, Pinterest, N26, Square, Corda</u> use Kotlin in their production code.

What are the industrial use cases for Kotlin?

Programmers are using Kotlin for mobile — both Android and iOS, server-side and client-side applications, and data science. With Kotlin/Native, the support extends to other platforms like embedded systems and macOS.



Historical overview

- 2010 the development of the language started.
- July 2011, JetBrains unveiled Project Kotlin.
- February 2012, JetBrains open sourced the project under the Apache 2 license.
- February 15, 2016, Kotlin 1.0, the first officially stable version was released.
- May 2017, Kotlin was officially <u>supported by Google as a language for</u> <u>development on Android</u>.
- April 2017, Kotlin goes multiplatform Kotlin/Native announced, Kotlin targeting JavaScript is production ready.
- November 2017, Kotlin 1.2 is released with an option of sharing code across a back-end, browser front-end, and Android mobile app.
- November 2017, the first KotlinConf was hosted in San-Francisco.
- October 2018, the <u>Kotlin Foundation</u> was publicly announced by Google and JetBrains at KotlinConf'18.
- May 2019, Google announced Kotlin as the preferred language for Android. That
 means many new features will be offered first in Kotlin. In the official Android blog
 post Google also recommends starting all new Android projects in Kotlin.
- July 2019, Kotlin won the prestigious Breakout Project of the Year award at O'Reilly Open Source Software Convention (OSCON) 2019.



The state of Kotlin in 2020 (according to the latest Kotlin Census and statistical data)

- 4,7 million users
- 65% of users use Kotlin in production
- For 56% of users, Kotlin is their primary language, which means the main or only one they use at work
- 100+ people are on the Kotlin development team at JetBrains
- 350+ independent contributors develop the language and its ecosystem outside of JetBrains

Kotlin growth facts

- Kotlin is the 13th most popular programming language in 2020. It overtook Scala and Swift, and is breathing down the neck of Go. Acc. <u>Stack Overflow developer</u> <u>survey 2019</u>
- Kotlin is the fastest-growing programming language. Acc. <u>Github report 2018</u>
- Kotlin is the fourth most loved programming language among professional programmers. Acc. <u>Stack Overflow developer survey 2020</u>
- Kotlin was rated as one of the top-20 programming languages in 2020 by RedMonk. Acc. <u>RedMonk</u> programming language rankings

Kotlin in Media

- The rise of Kotlin. SDTimes, June 10, 2019;
- Kotlin is now Google's preferred language for Android app development.
 TechCrunch, May 7, 2019;



- Why companies like Google, Square and Atlassian are sprinting to use Kotlin.
 Business Insider, April 21, 2019;
- Kotlin Multiplatform for iOS developers. InfoQ, April 16, 2019;
- Kotlin accelerating in usage, buzz: RedMonk Rankings. Dice, March 26, 2019;
- <u>Java vs Kotlin: Which one will be the best in 2019?</u> DZone, January 18, 2019;
- Android Dev Summit: Google details Kotlin, Jetpack, and instant app improvements. VentureBeat, November 7, 2018;
- How to learn Kotlin: a resources guide for developers. TechRepublic, October 26, 2018;
- Why Kotlin is exploding in popularity among young developers? TechRepublic, July 12, 2018;
- Google makes Kotlin a first-class language for writing Android apps. TechCrunch, May 17, 2017.

JetBrains

JetBrains is a global software vendor specializing in the creation of intelligent, productivity-enhancing tools for software developers and teams. It maintains its headquarters in Prague, Czech Republic, with offices located in St. Petersburg, Moscow, Novosibirsk, Munich, Amsterdam, and Boston. JetBrains employs more than 1200 people and is grown organically, with no external funding. Its product catalog includes award-winning tools such as IntelliJ IDEA and ReSharper.

- Founded in February 2000
- Privately funded
- 40-60% Year-over-Year revenue growth



- CEO: Maxim Shafirov
- 28 products launched to date
- 8 million developers use and trust JetBrains tools, 100,000 new users join every month
- 95 of the Fortune 100 companies use JetBrains tools. 418 of Fortune 500 companies
- JetBrains has won 80+ international industry awards
- 8,000+ universities use JetBrains classroom licenses



Assets

Logos & Guidelines

Kotin:

https://resources.jetbrains.com/storage/products/kotlin/docs/kotlin_logos.zip

JetBrains:

https://www.jetbrains.com/company/press/