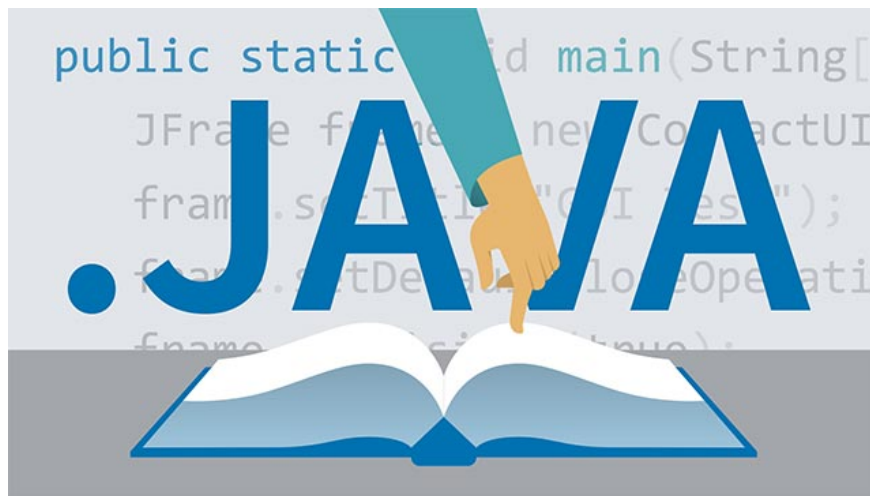


Kotlin - the fastest growing programming language in the world

Google, Square and Atlassian are in the race to switch to Kotlin, and according to open source library GitHub, Kotlin is the fastest-growing programming language in the world at the moment.

When Square Valeriy Ovechkin's well-known software engineer and his associates embarked on the Caviar application development project, this application was written entirely in Java by simply considering many different aspects, There are no better programming languages ??than Java at the time. In fact, Java is one of the most widely used programming languages ??in the world so far. This language was originally created in 1995 by Sun microsystems and later acquired by Oracle, it is often used to write databases and Android applications.



1. The worst programming languages ??you need to avoid if you don't want to "bury the youth"

However, in many developers' opinion, this 24-year-old programming language is complicated and complicated, making it sometimes difficult to keep up with the development of the modern programming world. While Java 'old man' is increasingly suffering from complaints from the programming community, another 'young, strong, and ambitious' name is emerging as an annoying challenger, that it's Kotlin. More and more Android engineers switch to using this new open source programming language to write their applications. Google, Square and Atlassian are in the race to switch to Kotlin, and according to open source library GitHub, Kotlin is the fastest-growing programming language in the world at the moment. So what makes this fledgling programming language 'able to' win over the difficult big guys in software? We will find out later.

1. 7 reasons you should choose C # programming

What makes Kotlin successful?

1. What makes Kotlin different?
2. A project derived from passion
3. "Billion dollar mistakes"
4. Mix and match
5. The departure of Java

What makes Kotlin different?

'Kotlin himself is a modern programming language. I have seen features that can really make a difference in Kotlin, making the well-known programming work coupled with boredom now much more interesting. Kotlin is easier to choose and feel, so writing the same code in Kotlin often leads to fewer lines of code, 'said engineer Valeriy Ovechkin.

In the past few years, Kotlin has quickly achieved tremendous growth in popularity. This is the world's No. 1 fast-growing language according to GitHub - the forum is widely discussed as "Facebook for programmers", with a growth rate of more than 2.5 times in 2018 alone. Not only that, Kotlin was voted one of the five most popular programming languages ??according to Stack Overflow, a popular website where developers around the world set and answer questions about code. .



1. Bookmark a few tricks to help you master a programming language

"It can be said that what makes Kotlin interesting is basically, it helps to promote and better apply the existing skills of Java developers, and at the same time bring the appropriate change to pass through. Thereby, providing new features, things that help Java developers achieve greater efficiency in their work without needing to be overly hard-working ', Pivotal Sébastien Deleuze said in Kotlin in an interview. Consult with Business Insider website.

A project derived from passion

Kotlin was originally created in 2010 by JetBrains, a software tool company, with the aim of overcoming some of Java's nasty drawbacks.

"Back in the time when we started embarking on the Kotlin project, Java was generally a very lengthy, cumbersome programming language, or it could be said to be 'bulky'. because to get programming code, there will be a lot of things that you have to do and these affect the overall work progress, so we decided to develop Kotlin based on the effort to keep To the fullest extent of Java's strengths, while also doing its best to rectify the root of this age-old language, it is these seemingly simple things that make Kotlin the language of everyone. began to notice and spend more sympathy, "said Hadi Hariri, vice president of JetBrains.



1. Chinese programmers use GitHub as a 'battlefield' to oppose harsh working conditions

However, this programming language only really exploded after May 2017, after the time when Google gave Kotlin a approval stamp when the Android development team announced Kotlin became a supported language. No.1 support on this operating system platform.

According to engineer Jerry Cheng, head of mobile development at Atlassian, that is also the reason why Atlassian's mobile development team decided to switch to using Kotlin because initially, there was some hesitation about Using Kotlin for Atlassian's products, and without the full support of Android, the team thought that investing in Kotlin was a too risky decision.

But as we know, after Google announced that it would officially support Kotlin for Android, Atlassian would like to 'turn on the green light' to deploy its decisions more confidently. Currently, Atlassian is using Kotlin for all Android applications on many of its famous products like Trello, Jira and Confluence.

'We were lucky when Kotlin was a relatively new name for mobile platforms. Atlassian took the opportunity to master this programming language quite quickly and extensively with many obvious advantages. Kotlin is more compact, more stable and really superior in maintaining. Since switching to using this programming language, everything is great with Atlassian, 'Jerry Cheng said.

Similar to Atlassian's case, Valeriy Ovechkin decided to rewrite Caviar application with Kotlin platform as a "project of passion". He proposed this idea to his development team and convinced them that Kotlin would be a great assistant to help Square grow faster and stronger.



1. The 'battlefield code' and job opportunities for you

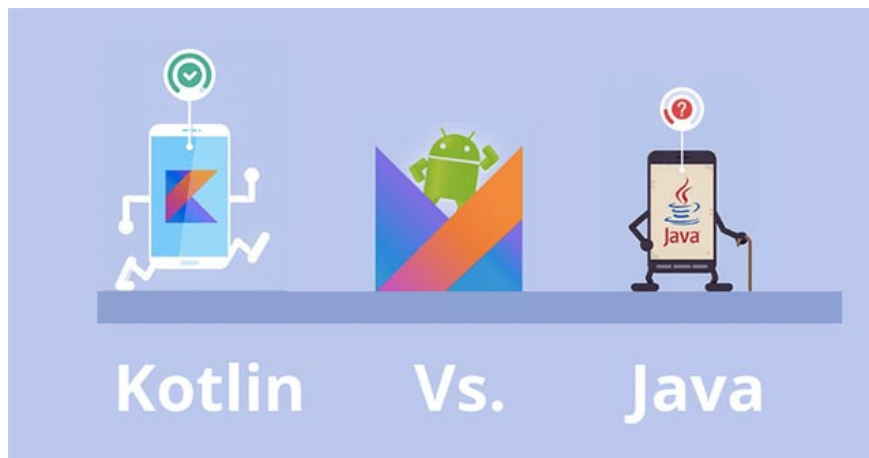
In September 2017, Valeriy Ovechkin and his team implemented their first conversion project to Kotlin with the Caviar application. Since then, Square has written new features with Kotlin, and gradually they also began to convert the rest of the application into this new programming language.

'One really great thing is that the transition has been smoothed out without causing any noticeable impact on customers,' said Caviar's Michael White, head of engineering at Square. in an interview with Business Insider.

"Billion dollar mistakes"

With Kotlin, code snippets become more concise, which in turn leads to a more compact and manageable code base. Instead of being stuck all day with syntax problems, engineers can spend time focusing on more complex, larger-scale tasks. According to Ovechkin's estimate, using Kotlin, base code can be 15-25% smaller.

Talking about Java again, when working with this language, software developers often encounter an error called a "null pointer exception". In Java, variables may default to "null", meaning that it does not have any values ?? attached. 'Null pointer exception' occurs when the code references a variable, but the variable has no value when the application is running. As a result, the application will not have any options except error reporting. Computer scientist Tony Hoare, author of null references, once called this his "billion-dollar mistake".



1. Prepare for your baby: 5 ways to get children interested in programming

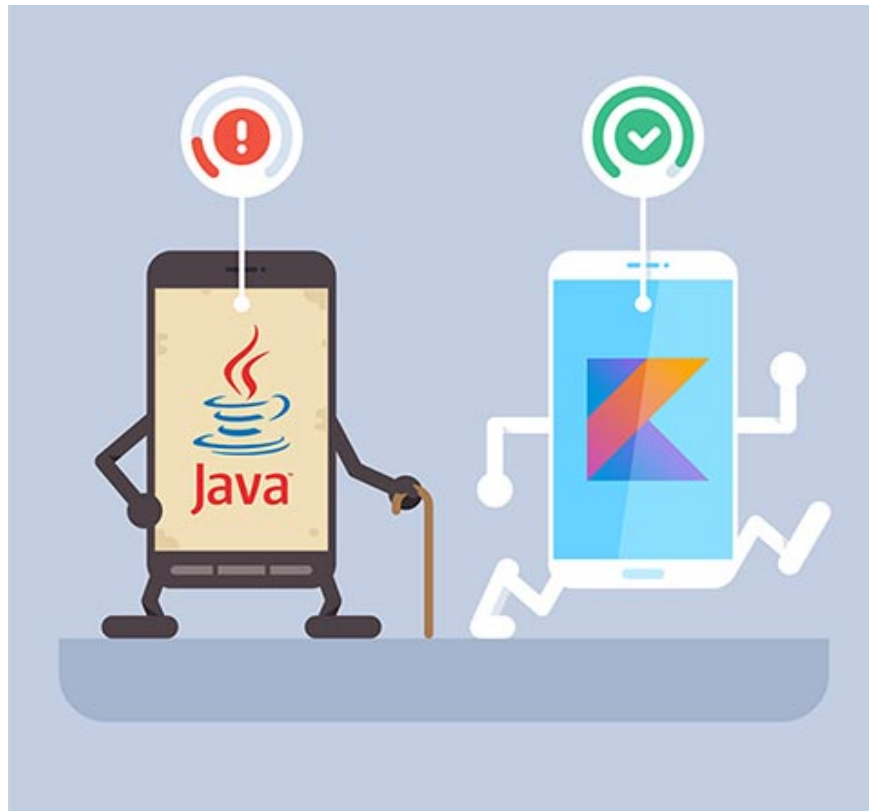
However, Kotlin can ensure developers will not encounter this problem. Kotlin will simulate variables that cannot be "null" unless the developer tries to do it that way. This contributes to applications written in Kotlin that are stable and less likely to be 'collapsed'.

Although the application conversion to Kotlin is not simple and consumes a lot of time and effort, but with the effect that this programming language brings, according to Valeriy Ovechkin, this is really a transfer process. "It is worth to sacrifice".

"If you are the only person who believes in the results, rest assured that there will not be any risk in this proposal. It is an investment that you should make, and also a learning pathway. necessary exercises, "said Valeriy Ovechkin.

Mix and match

Another benefit not to mention is the great compatibility of Kotlin with Java - the original language that Android applications are often written. Basically, developers can mix and match both of these programming languages ?? at the same time. In addition, because Kotlin is fully compatible with Java, developers can also gradually convert their applications from Java to Kotlin and even vice versa without encountering too many difficulties.



1. 9 tips to help you write 'more delicious' code

While Square completely rewrites his Caviar application in Kotlin, Atlassian chose to retain applications written in Java, simply because it is compatible with Kotlin. However, for new features, developers will use Kotlin.

Jerry Cheng said that his Atlassian group did not see any real value in spending time completely rewriting applications just to convert them to Kotlin, but at the same time he also realized that Java was gradually being eliminated. by the time.

"The way Atlassian determines itself is that while we really love Kotlin, it is not so important to rewrite everything just to achieve equivalence," Jerry Cheng said.

Like Atlassian, Capital One has no plans to completely switch its door applications from Java to Kotlin, since both languages ??work "nicely", Keith Forsythe, vice president of engineering at Capital. One said. Currently, Forsythe said, about half of Android engineers at his company are using Kotlin and the other half using the Capital One mobile banking application written in Java.

1. "Father" of the 10 most popular programming languages ??in the world - Who are they?

The departure of Java

In Square, Kotlin not only helps write applications - it can also help with recruitment. Michael White, Caviar's technical leader, said Square wanted to take the lead in using Kotlin, and this could become "a difference" for Square when recruiting talent to his team.

Atlassian's Jerry Cheng also thinks that Kotlin is contributing to lowering barriers among young people to the software industry, which is famous for its complexity and dryness. Kotlin is a modern language, easier to use, and it can create a new perspective for the programming industry, thereby attracting more young people to participate in this field.



1. How to 'survive' with the stress of learning programming

"Modernizing the programming language and taking care of the challenges of computer programming will help improve the aspect of human resource supply in programming, or more simply, to help overcome scarcity. of those who can learn how to write programs and software, "Cheng said.

So will developers return to using the "once-shiny" Java language? Engineer Valeriy Ovechkin thinks this will be very unlikely. Neither he nor White saw much benefit in returning to using Java in Square, and they hoped to witness a departure in Java's "peace" over time.

Have you ever used Kotlin? What do you think about this interesting programming language? Please leave a comment below!

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