

WHAT JAVA MIGHT HAVE BEEN IF IT WERE WRITTEN TODAY



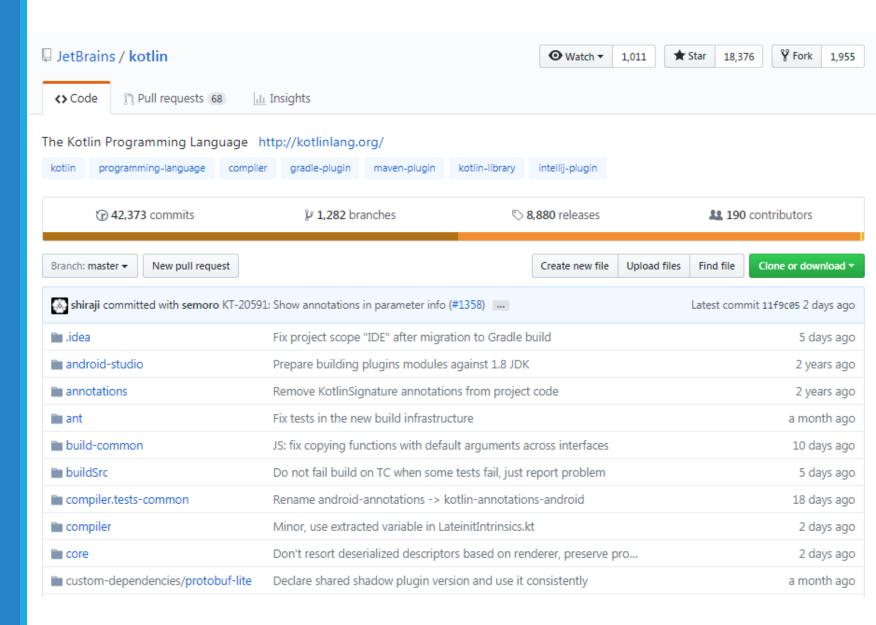
What is it?

Island just west of Saint Petersburg, Russia in the Baltic Sea

What is it?

- Programming language first revealed by JetBrains in 2011. Version 1.0 release in February 2016.
- Statically-typed
- Runs on the JVM
- Object Oriented or Functional
- Fully interoperable with Java
- Officially listed as a first-class language for Android development by Google in May 2017

Open Source



Language Goals

- Be useful
 - Developed by developers for developers
 - Can be used for server-side, web, or Android applications. Native support is currently being worked on.
- Be safe
 - Support for non-nullable types
 - Can be introduced gradually to existing Java projects
- Be concise
 - Their estimates say that there should be about a 40% decrease in lines of code compared to Java.

Demo

Things Kotlin Doesn't Have

Checked Exceptions

- These generally force Java applications to have a large amount of boilerplate around handling exceptions that happen very infrequently, leading to hard to read code.
- Semicolons
- Primitive Types
 - int, boolean, double, etc.
- Great Tooling/Static Analysis Support
 - SonarQube/Checkstyle/Findbugs
- Open Classes By Default
 - This means you can't extend classes unless you explicitly declare them open for extension.