

Kotlin

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Kotlin is...

Language

Statically Typed Object Orientated

Targets

JVM Bytecode and JavaScript

License

Apache 2 OSS License

Current Status

Milestone 5 (M5.2)





Kotlin
by JetBrains



Anonymous

In German, Kot = Shit, and Kutteln (which sounds similar) is tripe (this is how it looks: [Trippa.jpg](#))

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Why Kotlin?

Beyond the Dogma

Design Goals

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Full Java Interoperability

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At least as fast as Java

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Safer than Java

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Safer than Java

More concise than Java

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Full Java Interoperability

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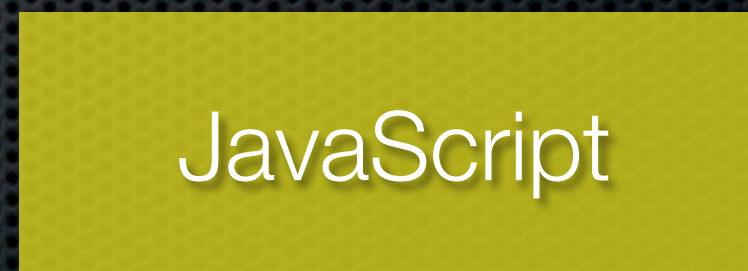
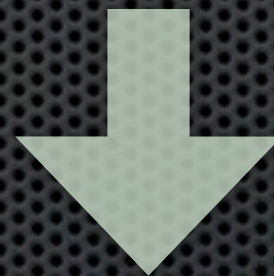
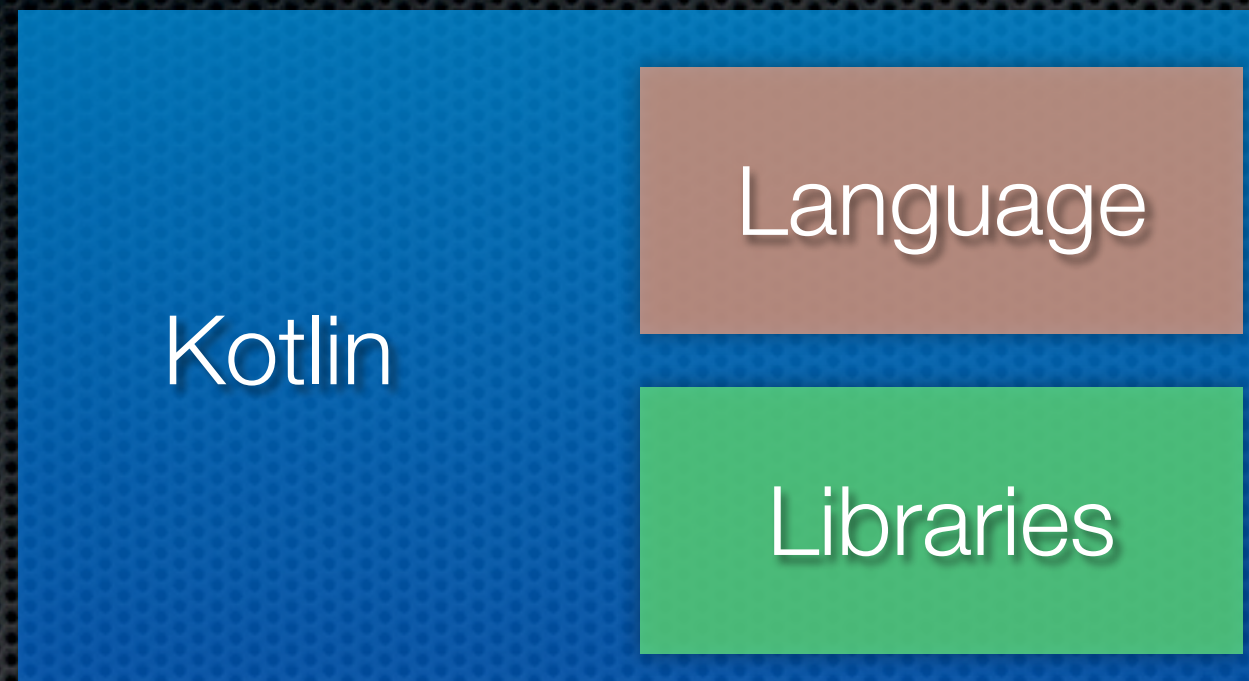
Safer than Java

More concise than Java

Simpler than Scala



Don't compare me to Scala



Packages	
kotlin	Core API
kotlin.beans	Functions for working with Java Beans
kotlin.browser	API to access the web browser DOM and windows
kotlin.concurrent	Concurrent programming API
kotlin.dom	Functions for working with the W3C DOM
kotlin.io	IO API for working with files and streams
kotlin.jdbc	Functions for working with SQL databases via JDBC (in kotlin-jdbc module)
kotlin.math	Mathematics API
kotlin.modules	API for defining compilation units
kotlin.nullable	Functions for treating nullable types as composable collections of zero or one element
kotlin.swing	Swing API (in kotlin-swing module)
kotlin.template	Text processing API
kotlin.test	Functions for writing tests (in kunit module)
kotlin.util	Utility functions

Implicit imports

```
import kotlin.*
import kotlin.io.*
import jet.*
import java.lang // JVM Target
```




CAUTION

Nothing is final

Let's dive in...

What others are doing



BLIC



alextkachman / vertex-kotlin

[Watch](#)[★ Unstar](#)

12

[Fork](#)

4

Code

Network

Pull Requests 0

Issues 0

Wiki

Graphs

Clone in Mac

ZIP

HTTP

Git Read-Only

<https://github.com/alextkachman/vertex-kotlin.g>

Read-Only access

branch: master

Files

Commits

Branches 1

Tags

Downloads

vertex-kotlin /

[29 commits](#)

updated to 1.2



alextkachman authored 4 months ago



latest commit e6d474cd06



lib

4 months ago

updated to 1.2 [alextkachman]



src

4 months ago

updated to 1.2 [alextkachman]



test

4 months ago

freemarker example with event bud [alextkachman]



vertx

4 months ago

freemarker example with event bud [alextkachman]



ReadMe.md

4 months ago

added a simple executable main to show it working [jstrachan]



VertxTest.iml

4 months ago

freemarker example with event bud [alextkachman]



VertxTest.ipr

4 months ago

updated to 1.2 [alextkachman]



pom.xml

4 months ago

fixed up the pom with the freemarker dependency [jstrachan]

kool.io

a [kotlin](#) based framework for building real time web applications

[Kool Camel »](#)[Kool Streams »](#)[Kool Templates »](#)[API »](#)

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Kotlin for Android

Helps not to write boilerplate code with instantiating abstract or interfaces instances. The purpose of the library is to save time of writing code using Android SDK wrapping as much as possible common functionality.

The library uses one of the coolest feature of the Kotlin language `inline` almost everywhere, that prevents overhead code.

Warning

This project is not relative to JetBrains company or their products. Use this project as is, no author nor anybody else is responsible for any damage.

Linking to Android project

1. Create regular or use existing Android project in IDEA
2. Select `File` from menu and click on `Project Structure...`
3. Select `Libraries` section and add new Java library
4. Choose the source `src` folder of kotlinAndroidLib and click `Ok`
5. Choose category `sources` and click `Ok`
6. Select and name the library `kotlinAndroidLib`
7. Add new file to the library `^N` and choose classes.jar of kotlinAndroidLib
8. Add import to your kotlin files in the android project `import com.vlad.android.kotlin.*`

Kara Web Framework

Kara is an [open source](#) web framework for the JVM using the [Kotlin programming language](#). It uses Kotlin's unique syntax to allow developers to write succinct, statically-typed HTML and CSS all in one language.

Static Typing

Kara uses the Kotlin language to provide a statically-typed yet productive development experience.

HTML Templates

Kara uses a Kotlin DSL to render statically-typed [HTML views](#). Markup is succinct and expressive, yet compiled to yield ideal safety and performance.

Contributing

Kara is under active development, and contributors are welcome.

Open issues can be found at the project's [YouTrack](#) page.

Clone the project at [GitHub](#) to start making contributions.

There is a [Google Groups](#) forum where we discuss all things.

(M)VC Architecture

Kara provides a rich [view/controller](#) architecture to develop organized applications with proper separation of concerns.

Stylesheets

Kara uses a Kotlin DSL to render statically-typed [stylesheets](#). They are just as powerful as SASS and LESS, but written in Kotlin to leverage the full safety of the language.



Download
from Github

Documentation

[🏠 Overview](#)

[☰ Command Line](#)

[☑ Configuration](#)

[⚙ Controllers](#)

[🔧 Middleware](#)

[💧 Stylesheets](#)

[📄 Views](#)

Spek

A Specification framework for Kotlin

License

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Usage

Spek is a specification framework for Kotlin, allowing you to define your specifications in a fluent and easy to read way.

Writing specifications

A specification is a function (declared as fun in Kotlin) that has to be prefixed with the annotation *spec* :

```
spec public fun calculatorSpecs() {  
    given("a calculator")  
    {  
        val calculator = Calculator()  
  
        on("calling sum with two numbers")  
        {  
            val sum = calculator.sum(2, 4)  
  
            it("should return the result of adding the first number to the second number")  
            {  
                shouldBe(6, sum)  
            }  
        }  
    }  
}
```


Other possibilities

- ✦ JavaScript
- ✦ Scripting

“Real World” Apps

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- ✦ Concentrate on value, not ceremony

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- ✦ Enable, do not restrict

“Real World” Apps

- ✦ Concentrate on value, not ceremony
- ✦ Enable, do not restrict
- ✦ Tooling

Playing with Kotlin

IDE Support

IntelliJ IDEA via Plugin
(Community Edition also)

Web Interface

<http://kotlin-demo.jetbrains.com>

Source Code

<http://github.com/Jetbrains/Kotlin>

More information

Home Page

<http://kotlin.jetbrains.org>

Twitter

@project_kotlin

Thank you



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