Scala: The Hidden Gem of the JVM

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UQCS

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"2003 - A drunken Martin Odersky sees a Reese's Peanut Butter Cup ad featuring somebody's peanut butter getting on somebody else's chocolate and has an idea. He creates Scala, a language that unifies constructs from both object oriented and functional languages. This pisses off both groups and each promptly declares jihad."
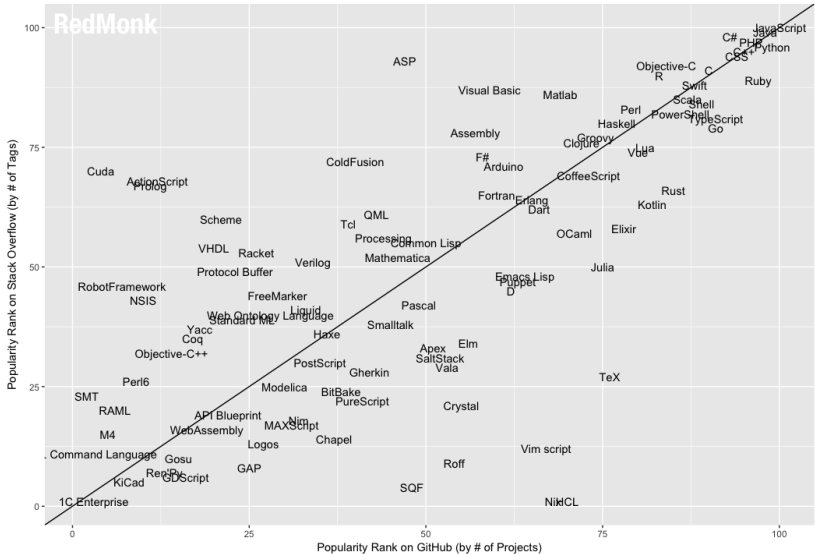
James Iry from 'A Brief, Incomplete, and Mostly Wrong History of Programming Languages'
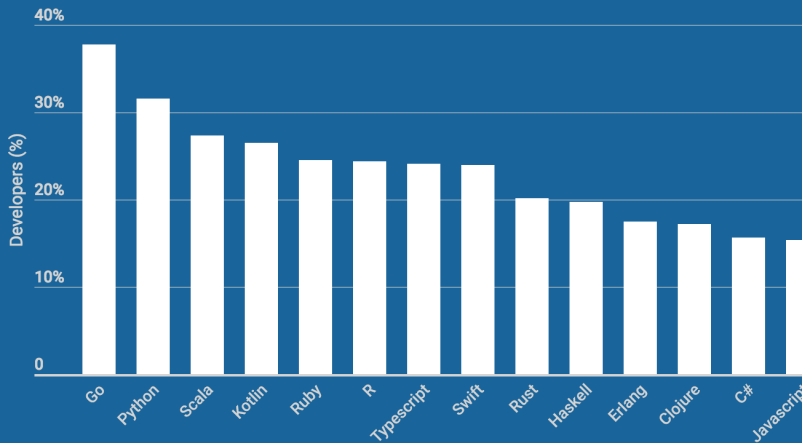
About Me

- 3rd year Computer Science @ UQ
- Currently interning at Skedulo
- @mb on the UQCS Slack

Why you should care

The RedMonk Programming Language Rankings: January 2018

Which languages are developers planning to learn next?

HackerRank 2018 Developer Skills Report

What Languages Are Associated with the Highest Salaries Worldwide?

| Global | United States |

Erlang	$115,000
Scala	$115,000
Ocaml	$114,000
Clojure	$110,000

Feature	JavaScript ES5	JavaScript ES6	TypeScript	Scala.js
Interoperability				
Fully EcmaScript5 compatible	●	●	●	●
No compilation required	●	○	○	○
Use existing JS libraries	●	●	●	●
Language features				
Classes with inheritance	○	●	●	●
Modules	○	●	●	●
Support for types	○	○	●	●
Strong type system	○	○	○	●
Extensive standard libraries	○	○	○	●
Optimizing compiler	○	○	○	●
Macros, to extend the language	○	○	○	●
IDE support				
Catch most errors in IDE	○	○	●	●
Easy and reliable refactoring	○	○	●	●
Reliable code completion	○	○	●	●

```
var xhr = new XMLHttpRequest();

xhr.open("GET",
  "https://api.twitter.com/1.1/search/" +
  "tweets.json?q=%23scalajs"
);
xhr.onload = (e) => {
  if (xhr.status === 200) {
    var r = JSON.parse(xhr.responseText);
    $("#tweets").html(parseTweets(r));
  }
};
xhr.send();
```

```
val xhr = new XMLHttpRequest()

xhr.open("GET",
  "https://api.twitter.com/1.1/search/" +
  "tweets.json?q=%23scalajs"
)
xhr.onload = { (e: Event) =>
  if (xhr.status == 200) {
    val r = JSON.parse(xhr.responseText)
    $("#tweets").html(parseTweets(r))
  }
}
xhr.send()
```

Which frameworks do you use? (%)

Akka	ScalaTest	Spark	JUnit	Spring	Scalacheck	Slick	Spray
80	73	55	43	37	28	27	24

Scalaz	Scala.js	Cats	Shapeless	TestNG	Specs2	Finagle	Others
22	19	17	12	11	8	4	11