



The Rise and Fall and Rise of Java

February 2010



 **RedMonk**

<http://redmonk.com/public/fosdem.pdf>



The Rise

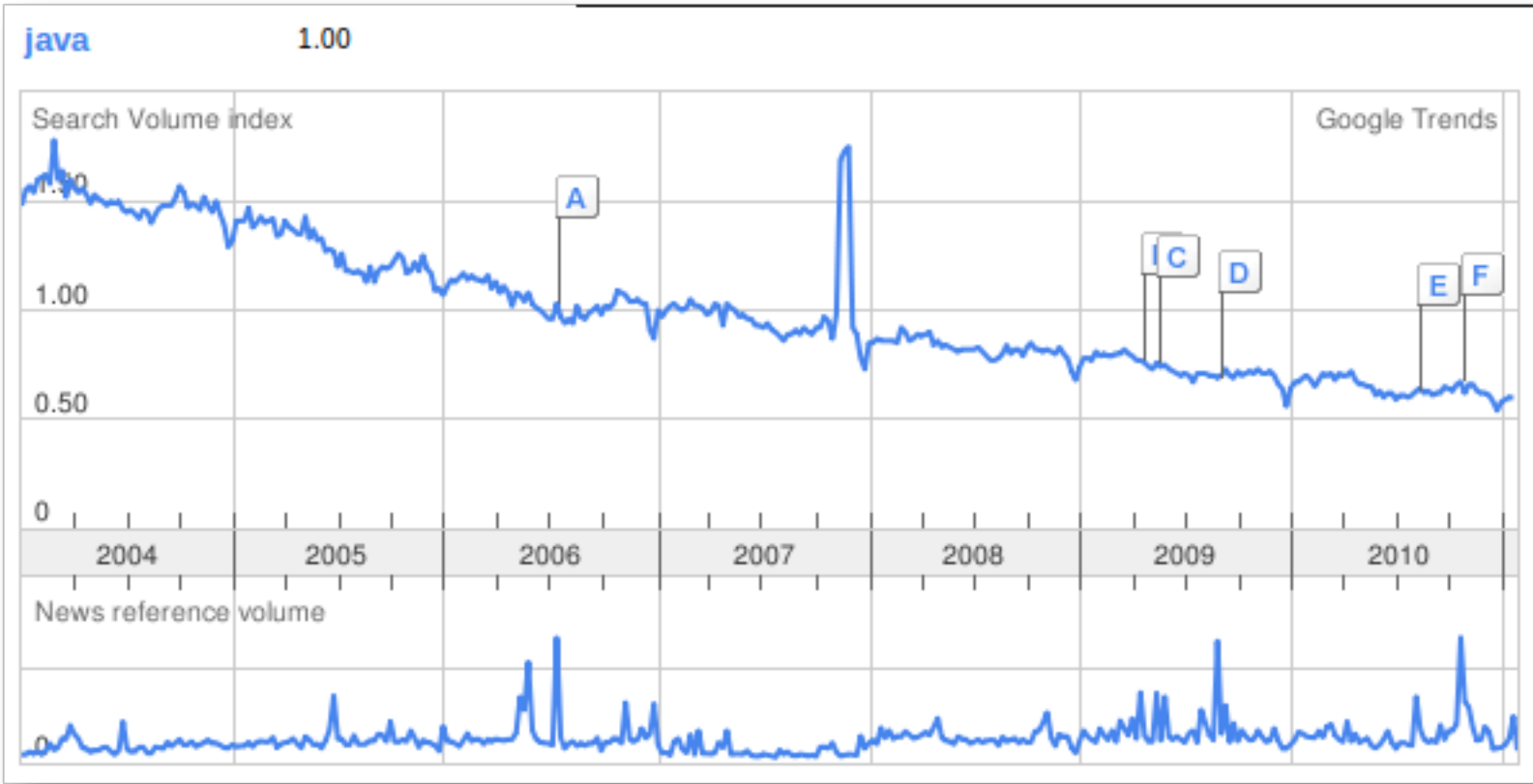
The History

Programming Language	Position Jan 1996	Position Jan 2006
Java	5	1
C	1	2
C++	2	3
PHP		4
Python	22	8
C#		7
(Visual) Basic	3	5
Objective-C		44
Perl	6	6
Ruby		20
Lisp	13	14
Ada	12	17

Source: Tiobe Programming Community Index

The Fall

The Decline



The **Analysts**

Forrester's Mike Gualtieri

Forrester Blogs › Information Technology › Application Development & Delivery Professionals › Mike Gualtieri

Java Is A Dead-End For Enterprise App Development

Posted by Mike Gualtieri on November 23, 2010

Java Has Served Its Purpose, But Now It Is Time To Move Forward

Java development is too complex for business application development. Enterprise application development teams should plan their escape from Java because:

- **Business requirements have changed.** The pace of change has increased.
- **Development authoring is limited to programming languages.** Even though the Java platform supports additional programming languages such as Groovy and JRuby, the underlying platform limits innovation to the traditional services provided by Java. You can invent as many new programming languages as you want, but they must all be implementable in the underlying platform.
- **Java bungled the presentation layer.** Swing is a nightmare and JavaFX is a failure. JSF was designed for pre-Ajax user interfaces even though some implementations such as ICEfaces incorporate Ajax. There is a steady stream of new UI approaches reflecting Java's lack of leadership in the presentation layer.
- **Java frameworks prove complexity.** Hibernate, Spring, Struts, and other frameworks reveal Java's deficiencies rather than its strengths. A future platform shouldn't need a cacophony of frameworks just to do the basics.
- **Java is based on C++.** Is this really the best way to develop enterprise business applications?
- **Java's new boss is the same as the old boss.** Oracle's reign is unlikely to transform Java. Oracle's recent Java [announcements](#) were a disappointment. They are focused on more features, more performance, and more partnerships with other vendors. So far, it appears that Oracle is continuing with Sun's same failed Java policies.
- **Java has never been the only game in town.** C# is not the alternative. It is little more than Java Microsoft style. But, there are new developer tools such as [Microsoft Lightswitch](#) and [WaveMaker](#) -- and traditional but updated 4GL tools such as [Compuware Uniface](#) and [Progress OpenEdge](#). And don't forget about business rules platforms, business process management (BPM), and event processing platforms that enable faster change offer by enterprise software vendors such as IBM, Progress, TIBCO, Software AG.



Forrester's John Rymer

The Future Of Java

Posted by John R. Rymer on January 23, 2011

14 Recommendations  Print  Email  102 Comments

Java's future will be constrained by the bounds of Oracle's business model.

Oracle's strategy for Java will change the Java ecosystem that has existed for 11 years.

- Oracle will direct Java innovation. Oracle has made it clear that from this point forward, it will direct all innovation in core Java (Java SE). Oracle will happily accept the contributions of others through OpenJDK as long as those contributions align with Oracle's priorities.
- OpenJDK is not fully open. OpenJDK is covered by a General Public License (GPL), and though it's certainly true that there are alternative JVM implementations and derivatives out there, OpenJDK is not open in spirit: It's practically impossible to distribute an alternative implementation without Oracle's sanction — specifically without a grant of the Java TCK. Losing The Apache Software Foundation as a supporter also hurts Oracle's credibility as a partner with the Java alpha geeks who drive so much independent and discontinuous Java innovation. Those developers will take their energy elsewhere, probably to Apache projects.
- The JCP is dying. The Java Community Process remains in place, but we believe that Oracle will formulate an alternative that ends the fiction of JCP as an open process and streamlines the process of Java platform evolution. The result will be total domination of Java's evolution by Oracle and IBM.
- Competition will shift to frameworks. With Oracle directing innovation at Java's core, others in the Java ecosystem will focus on higher-level frameworks. This shift began years ago, but we now expect it to intensify. We expect most of the work on frameworks to focus on the enterprise, as that is clearly Oracle and its core partners' focus with Java.
- Fewer young developers will learn Java first. One of Java's greatest strengths has been the number of young developers who learn it as a first language. As Java becomes less and less of a client-side language, we expect to see educational institutions switch to other languages for primary education, ones with stronger client-side representation such as JavaScript and HTML 5. Over time, developers will begin to view Java as a server-side language for enterprises — like COBOL.



The Events

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vs

Google

What **developers** were asking us in 2010

Top Searches		FILTER ▾
KEYWORDS	QUESTIONS?	
11 amazon rds	Ask RedMonk	
12 oracle google	Ask RedMonk	
13 google oracle	Ask RedMonk	

Source: RedMonk Analytics



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vs



Language **Fragmentation**



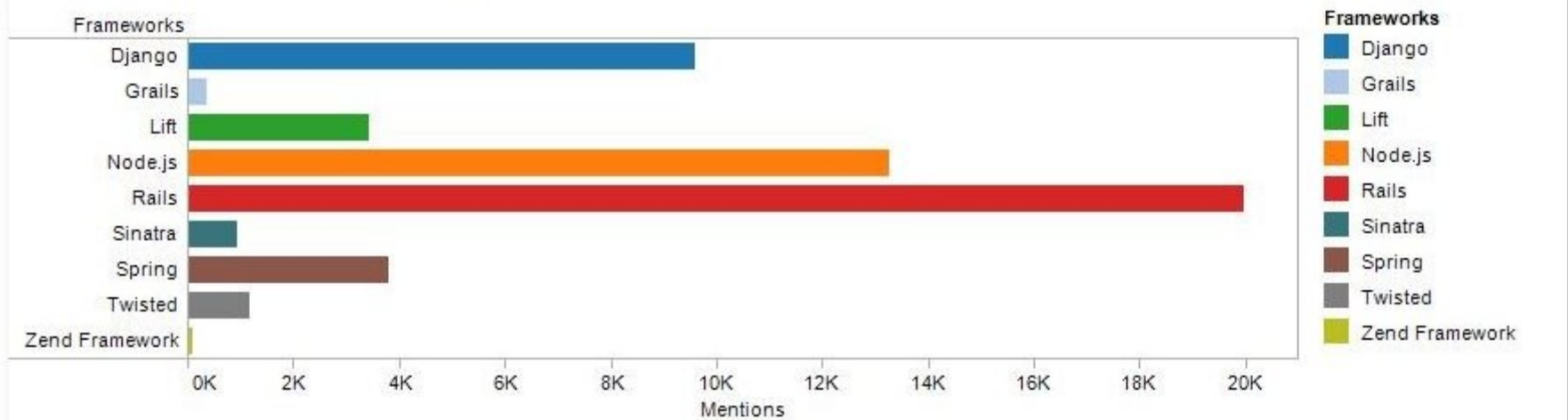
The Rise

ORACLE®

+

IBM

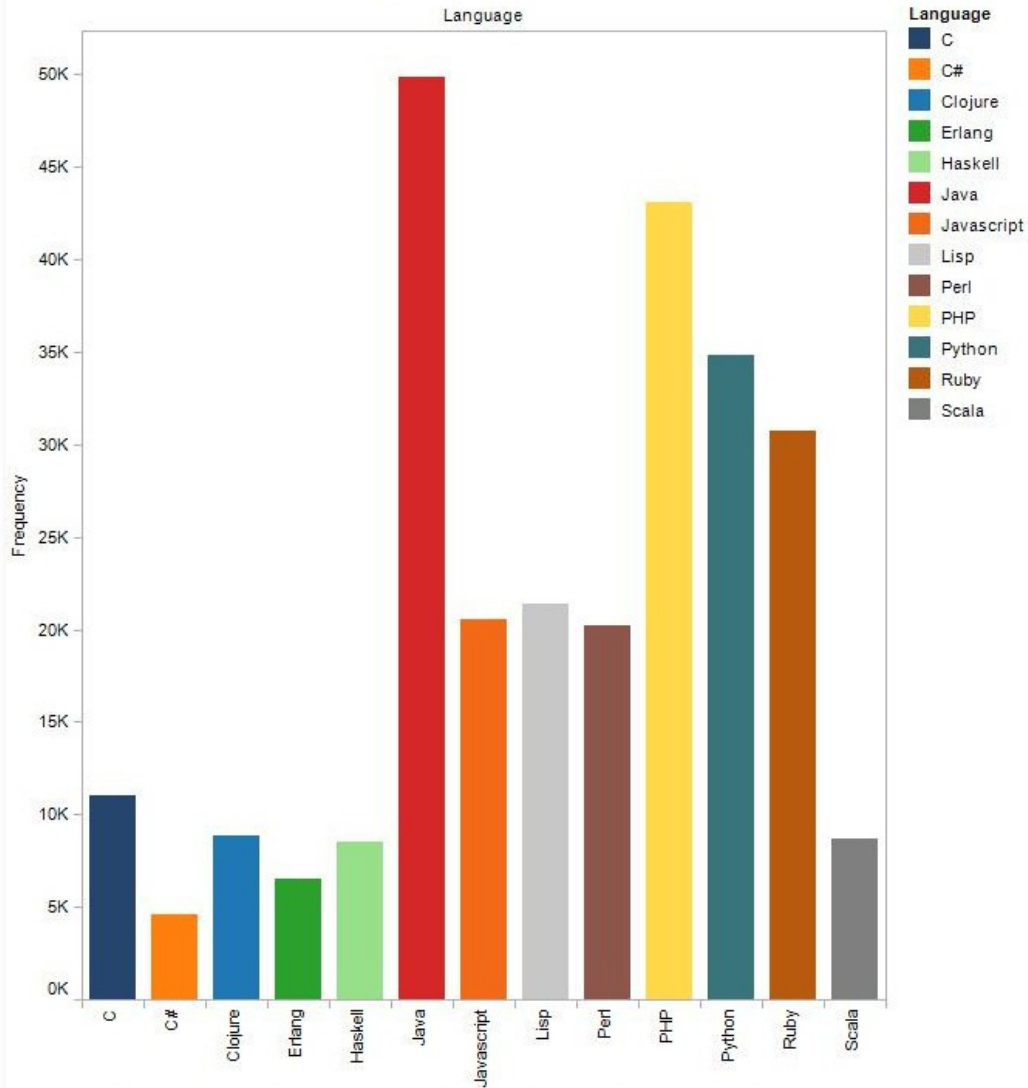
Language Framework Mentions on Hacker News



Sum of Mentions for each Frameworks. Color shows details about Frameworks.

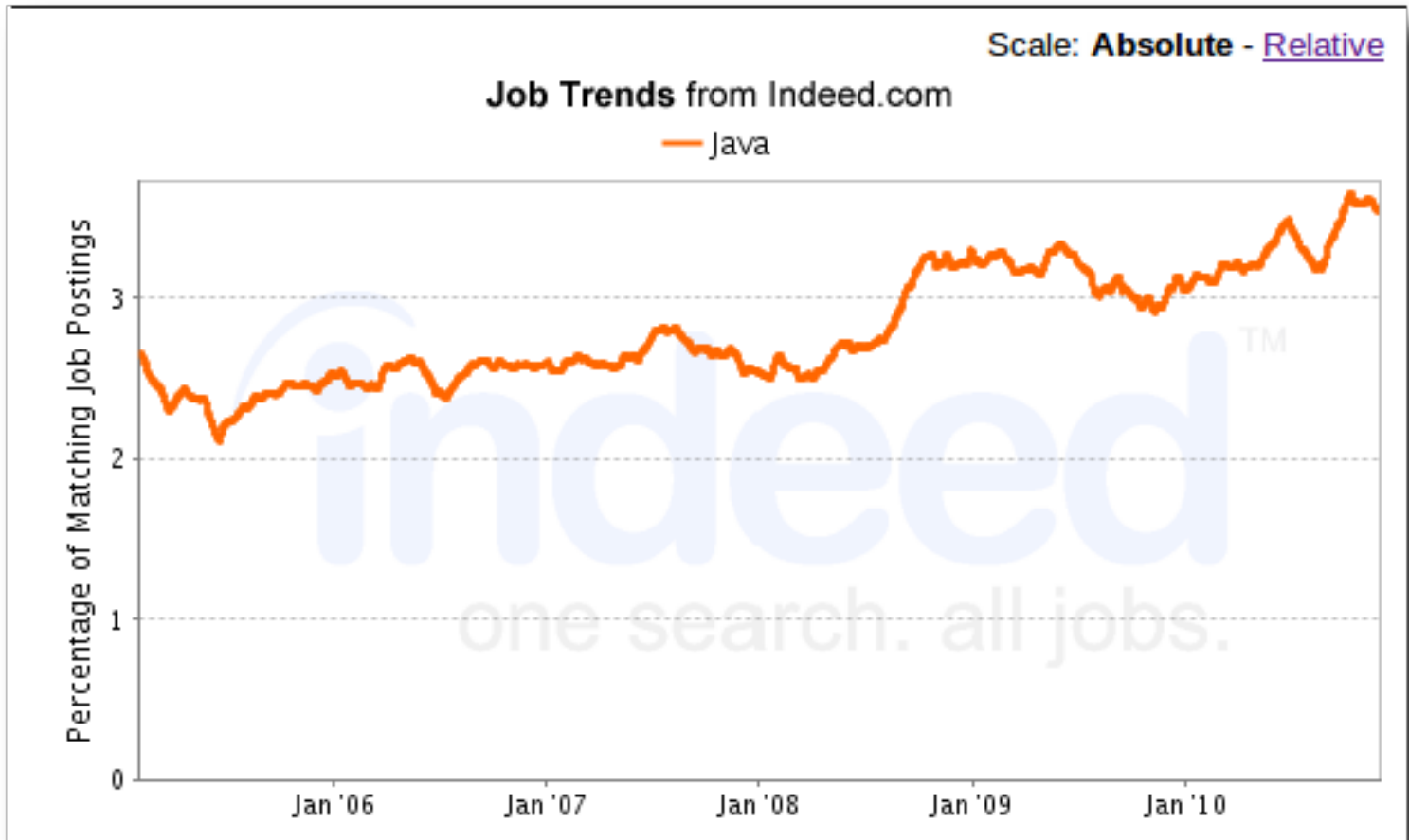


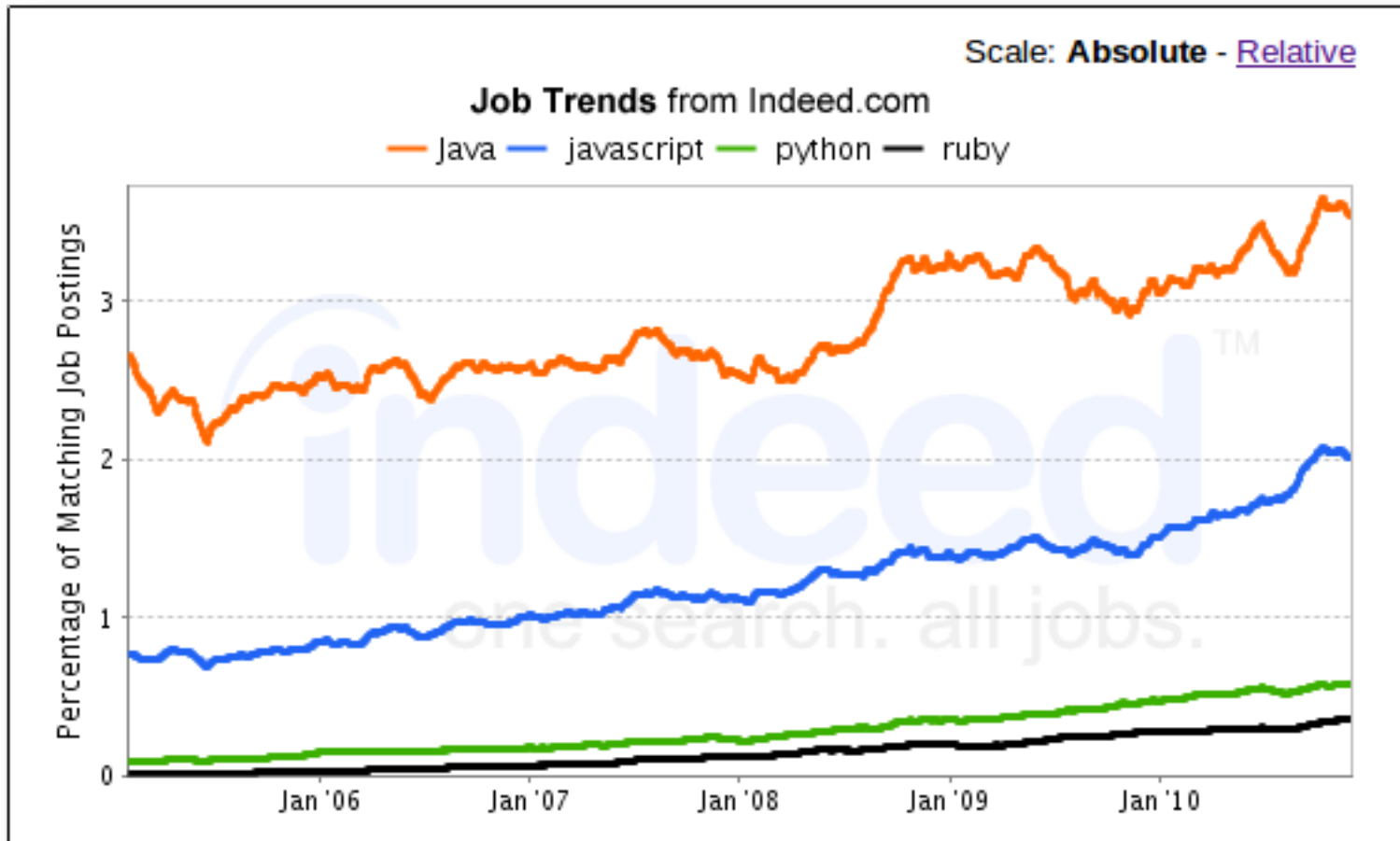
Programming Language Mentions on Hacker News



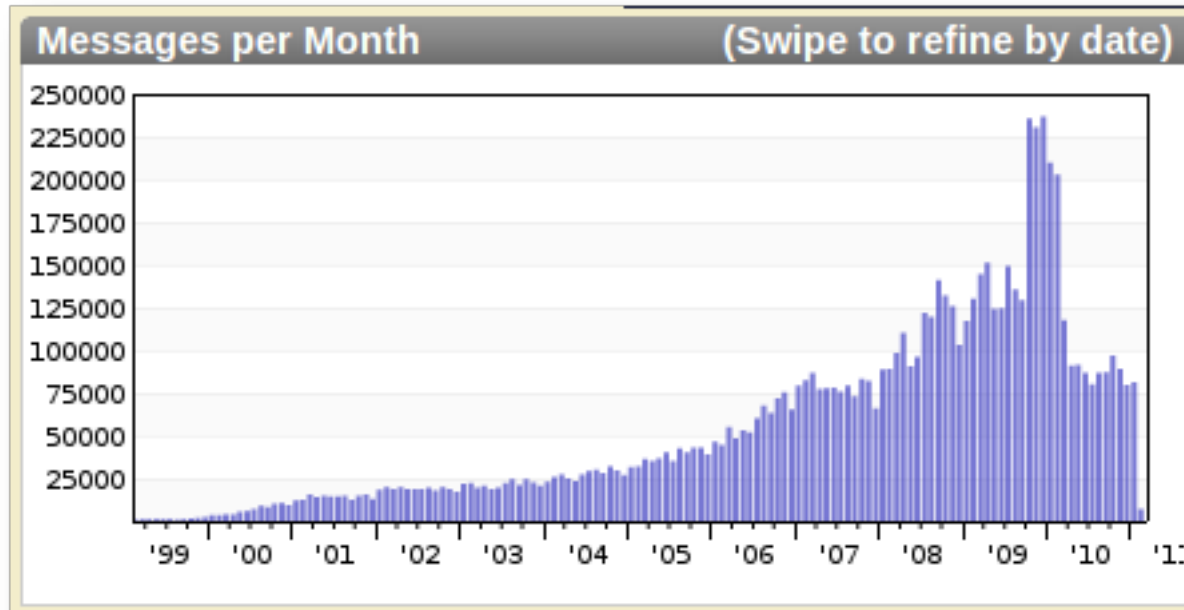
Sum of Frequency for each Language. Color shows details about Language. The view is filtered on Language, which excludes Null.





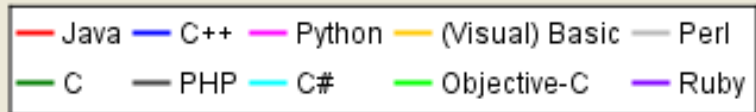
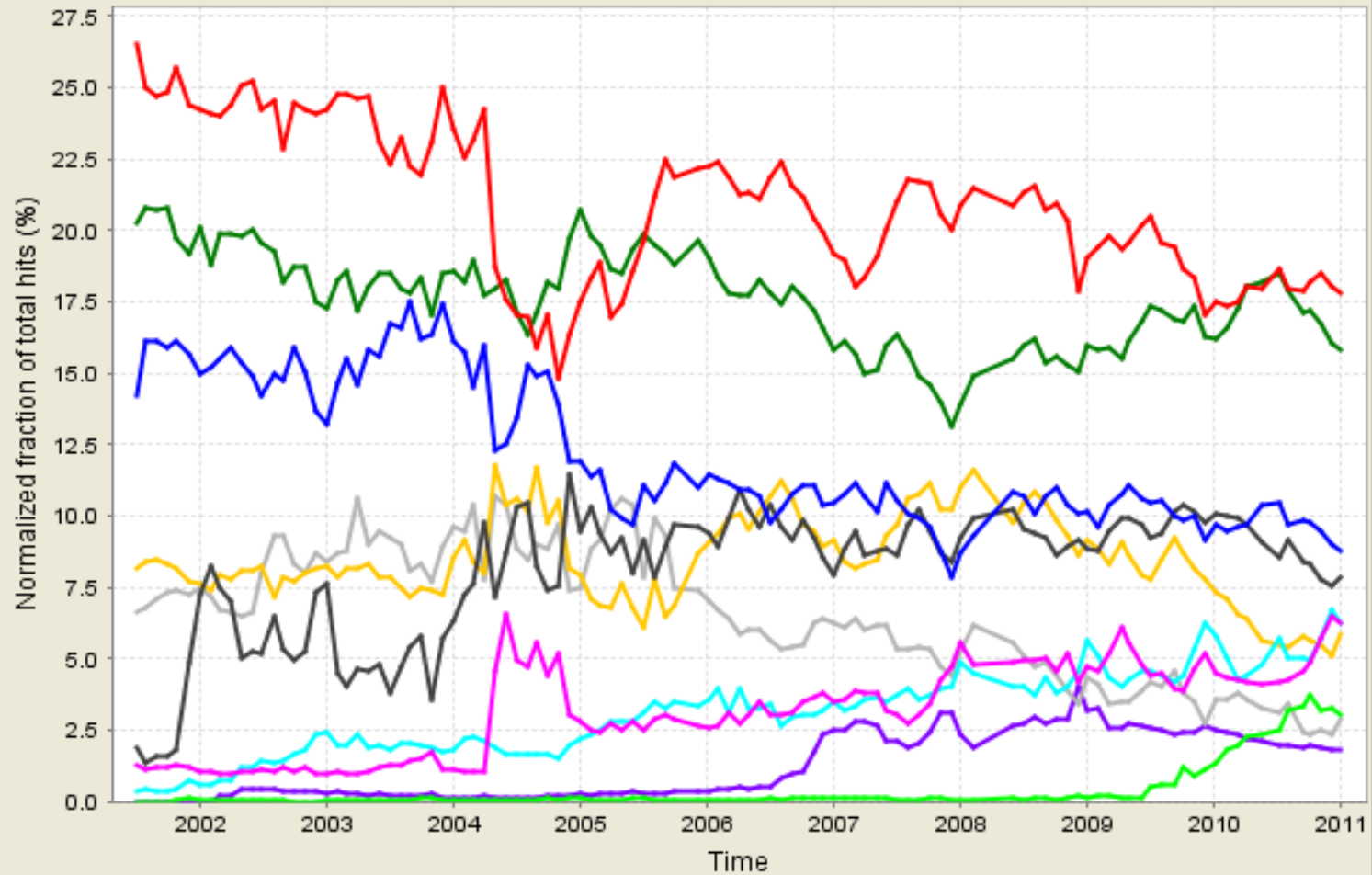


Java Mentions on **Open Source** List Traffic



Source: MarkMail

Tiobe Programming Community Index







Has Java **Peaked**?

Yes

But everything is relative

**The evidence simply does not
support the claim that Java is a
“dead end”**

**Java is no longer
as popular**

What Java is is the most popular

QUESTIONS