

These programming languages ??for the best mobile application development

You are intending to develop mobile applications but do not know where to start, choose the appropriate programming language. Read this article to find your programming language.

How many times a day do you use smartphones? According to a dscout survey conducted in 2016, "smartphone users touch their phones 2,670 times a day and spend an average of 145 minutes a day on mobile phones."

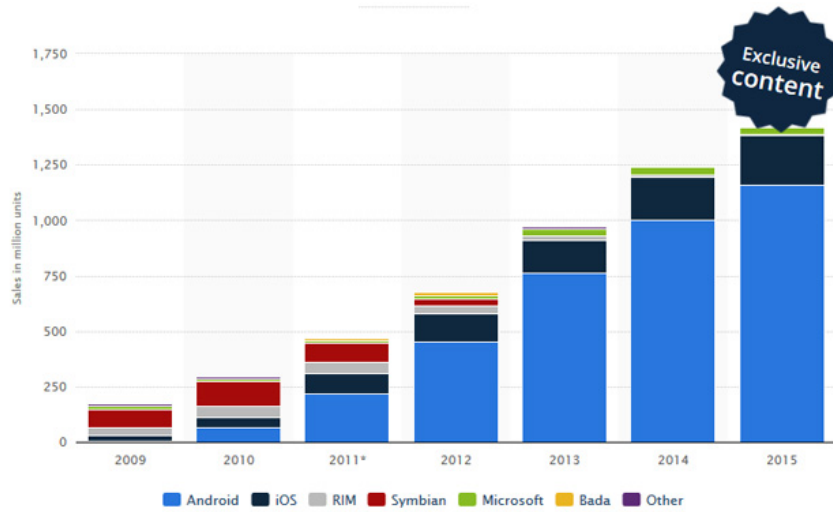
Mobile users are among the most dynamic consumers. If you can reach them through the mobile app, you can convince them to try the product, buy the product. That's why you should constantly try to create new application ideas.

As mobile marketing continues to dominate the digital market, many businesses invest in mobile technology, mobile applications to create brands, attract customers and increase revenue.

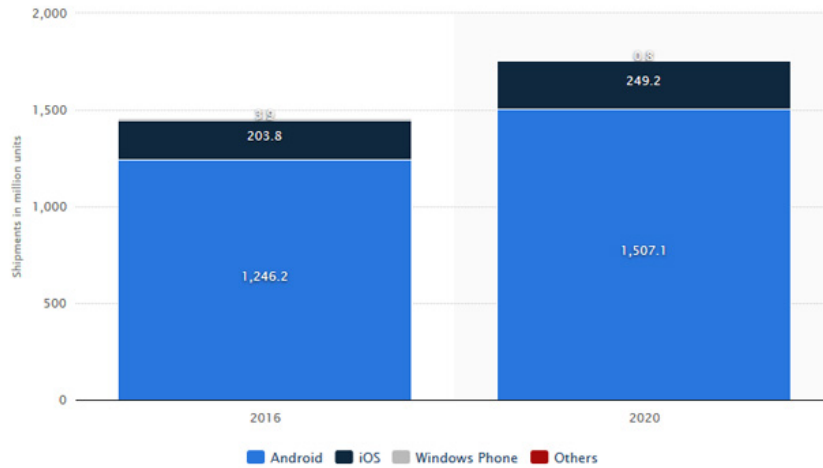
To keep up with this trend, you also want to develop your own mobile application? If you are just starting out, you need a suitable tool for producing mobile applications and giving it a good idea. But it is important that you use the right programming language that is compatible with the modern mobile platform. Millions of people use smartphones every day, so you need to build compatible mobile applications.

A Statista report showed an astounding increase in smartphone sales from 2009 to 2015. Annual sales of Android smartphones surpassed \$ 1.3 billion by 2015. Android is considered the most used operating system for smartphones.

1. Why is the Android operating system popular?



In another report, predicts that worldwide smartphone sales will surpass the 1.6 billion figure by 2020. Once again, Android is expected to dominate the global smartphone market.



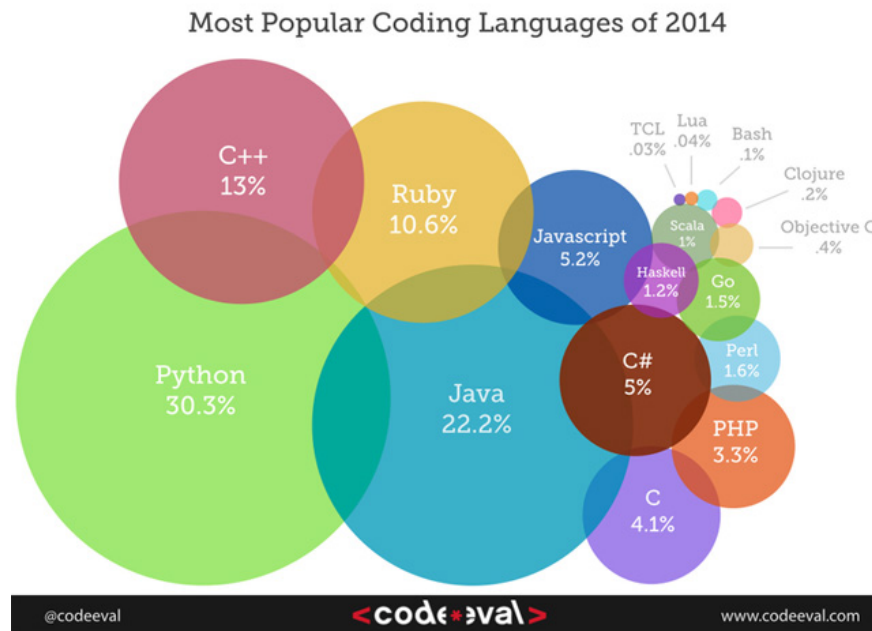
What do these numbers mean?

If you intend to develop mobile applications, this is the best time. The decision to jump into the 'train' of mobile application development is not a challenge but challenging in choosing the right programming language.

To choose the appropriate programming language, you need to answer the following questions:

1. Where should I start?
2. Which programming language should I choose and why?
3. How to understand and master it?
4. What should I look for from a mobile developer?

These are just a few basic questions that you should keep in mind when thinking about developing mobile apps. There are several programming languages ??to choose from. One of the simplest ways is to choose the most popular language. According to codeeval, Python is the most popular programming language in 2014. This article will give a list of the 14 best programming languages ??for mobile application development.



14 languages ??to learn if you want to create mobile applications

1. 1. BuildFire.js
 1. Main features of BuildFire.js
2. 2. Python
 1. Main features of Python
3. 3. Java
 1. The purpose of use and development of Java
 2. Main features of Java
4. 4. PHP
 1. Purpose of using PHP
 2. Main features of PHP
5. 5. Swift
 1. Main features of Swift
6. 6. C #
 1. Main features of C #
7. 7. Objective-C
 1. Objectvie-C's main feature
8. 8. C ++
 1. Some main uses of C ++ (and C):
 2. Main features of C ++
9. 9. JavaScript

1. Main features of JavaScript
10. 10. HTML5
 1. Main features of HTML5
11. 11. Ruby
 1. Ruby's main feature
12. 12. Perl
 1. Key features of Perl
13. 13. Rust
 1. Rust's main feature
14. 14. SQL
 1. Key features of SQL

1. BuildFire.js



BuildFire.js uses BuildFire SDK and Javascript to allow developers to quickly build mobile applications with the power of BuildFire. BuildFire has plugins, which are used for more than 70% of common use cases in the enterprise, so developers only need to build specific unique functions for customers without having to do it all from the beginning. That means you will build applications faster and less complicated.

BuildFire.js has a flexible architecture, offering developers the option to use any JavaScript framework that customers want such as jQuery, Angular, React, Underscore and many more.

1. 7 Framework JavaScript for mobile application development

Main features of BuildFire.js

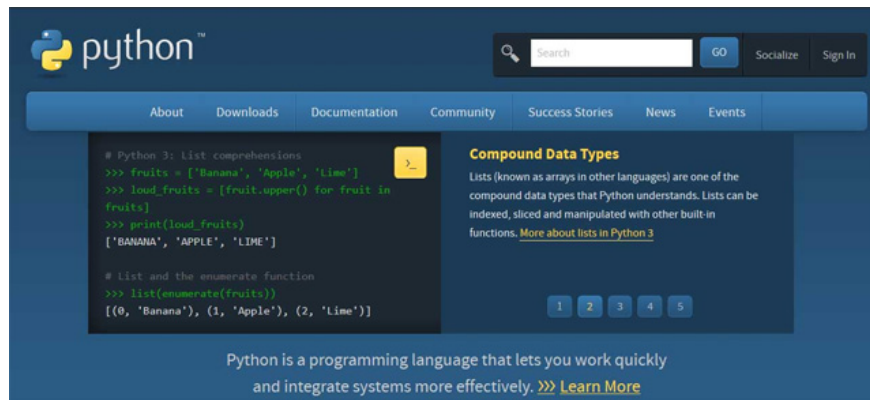
1. Easy to learn and work with existing frameworks
2. High scalability
3. Shorten development time by 40% or more

2. Python

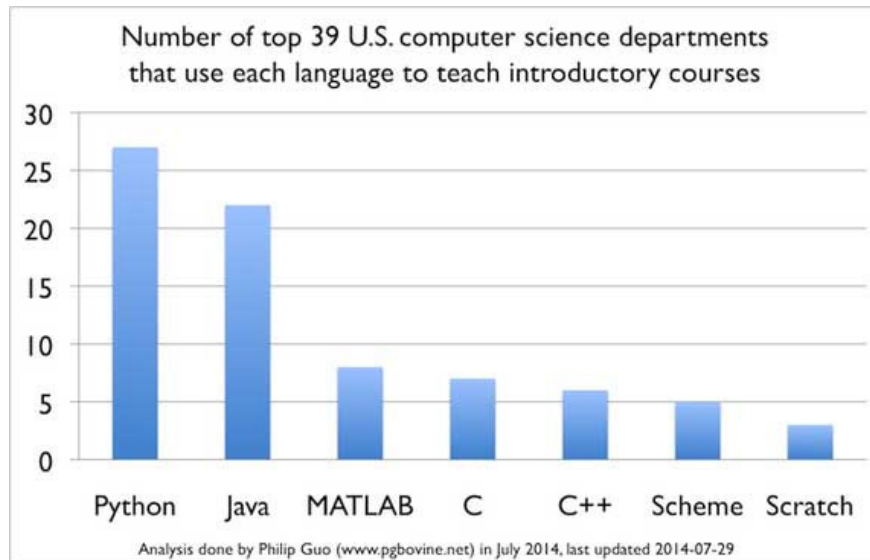
Let's talk about the most popular application development language, Python. Python is a high-level programming language that is widely used in web development, application, scientific and digital data analysis

and calculations, creating GUI for desktops and software development.

1. What is Python? Why choose Python?



Python is the most commonly taught programming language in schools and colleges because it has many applications in real life.



If there is a language that you should learn to develop applications, it's Python because it's easy to learn and it's easy to read. Python is a powerful high-level language that can be used to create Android apps and desktops from scratch. You may not know, Dropbox is created in Python language. Other applications and websites developed in Python are: Caliber, OpenStack, Ubuntu Software Center, World of Tanks, BitTorrent, Quora, Reddit, Spotify, Instagram, YouTube, etc.



You can create any kind of mobile application in Python and learn it is not a big problem because this is one of the easiest languages ??to learn.

Main features of Python

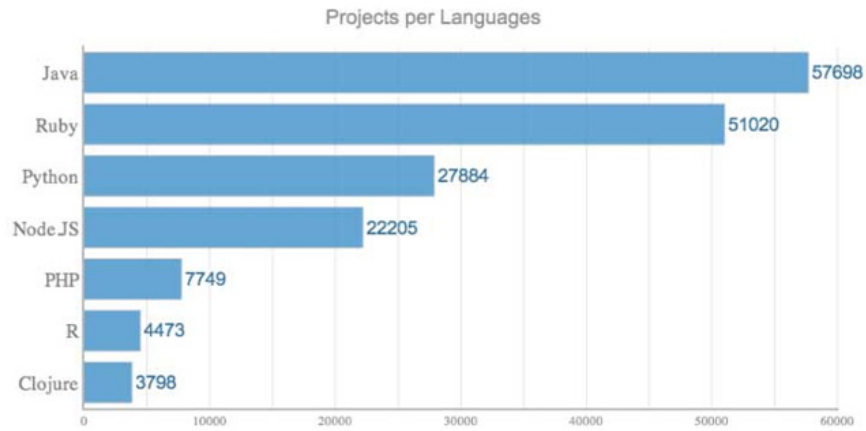
1. Processed at runtime by the interpreter
2. Object-oriented language
3. Easy to learn and master
4. Interactive language
5. Easy to read
6. Can be expanded
7. GUI application support
8. Run on Windows, Mac, Unix and Linux

See also: More than 100 Python exercises have solutions (sample code)

3. Java

Java is the most used application development language. According to VersionEye, developers completed most of their projects in the Java language and followed by Ruby.

1. What is Java? Why choose Java?



According to PYPL Popularity, Java is one of the most searched languages on Google.

Search

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About Java

go.java Alice Java + Alice Greenfoot Java + Greenfoot Java Developer Conference Oracle Academy Java Magazine

Java ranked first with 23.4% market share, Python ranked second with 13.7% market share. The difference between first and second place shows how popular Java is in the mobile app development world.

Worldwide, Nov 2016 compared to a year ago:

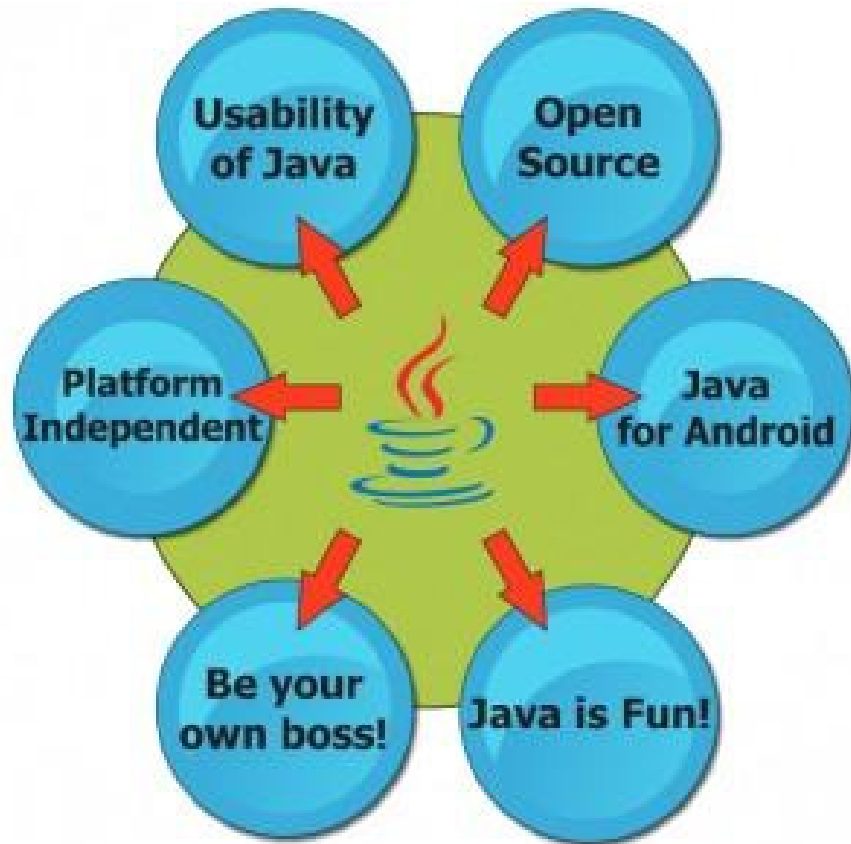
| Rank | Change | Language | Share | Trend |
|------|--------|--------------|--------|--------|
| 1 | | Java | 23.4 % | -0.5 % |
| 2 | | Python | 13.7 % | +2.4 % |
| 3 | | PHP | 9.8 % | -0.9 % |
| 4 | | C# | 8.4 % | -0.4 % |
| 5 | ↑↑ | Javascript | 7.6 % | +0.6 % |
| 6 | ↓ | C++ | 7.1 % | -0.7 % |
| 7 | ↓ | C | 7.0 % | -0.5 % |
| 8 | | Objective-C | 4.7 % | -0.5 % |
| 9 | ↑ | R | 3.2 % | +0.5 % |
| 10 | ↓ | Swift | 3.2 % | +0.3 % |
| 11 | | Matlab | 2.6 % | -0.1 % |
| 12 | | Ruby | 2.0 % | -0.3 % |
| 13 | ↑ | VBA | 1.5 % | +0.1 % |
| 14 | ↓ | Visual Basic | 1.4 % | -0.5 % |

Android operating system is written in Java so if you intend to learn Java, you will be able to create Android applications with many genres and control the future of application technology. Java is the most suitable mobile application development language because it runs on all platforms including Android versions.

The purpose of use and development of Java

1. Android application
2. Server application
3. Web application
4. Embedded space
5. Big data technology
6. Scientific application
7. Webpage
8. Game

Some of the most famous Java applications like ThinkFree, NASA world wind, Blu-ray Disc Association, UltraMixer, etc., but nothing can beat the Android operating system. Java is said to be everywhere since it was used on the Android operating system. This is open source, it is platform independent and is used in practice.



Main features of Java

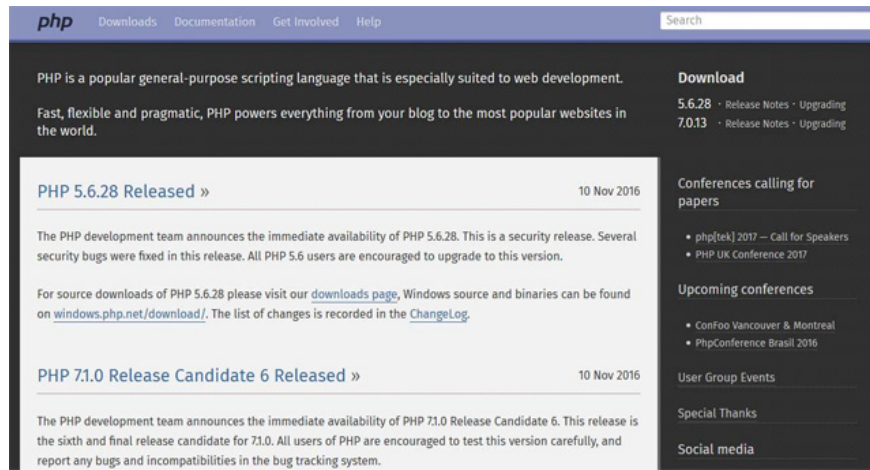
1. Object-oriented language.
2. Run on all platforms.
3. Supporting APIs makes integration easier.
4. Easy to learn and easy to read.
5. There are hundreds of open source libraries available.
6. Easily get expert help from the Android community.
7. Powerful IDEs make coding easy and error-free.

See also: Basic Java exercises, with sample decoding

4. PHP

Hypertext Preprocessor (PHP) is an open source scripting language for servers. It was designed by Zend Technologies in 1995, used primarily for web development, but it is also used for general development purposes today.

1. Why should you learn PHP programming language?

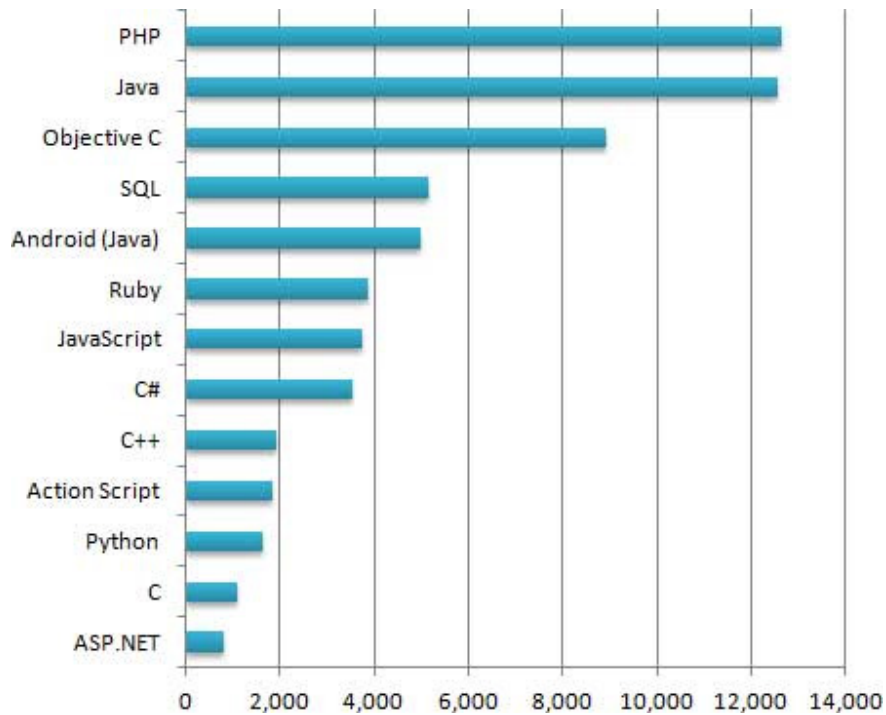


In addition to being a scripting language for servers, it is also used for command line scripts and encryption applications. PHP is primarily a coding language used to create dynamic websites, but it is also used to create Android and iOS applications.

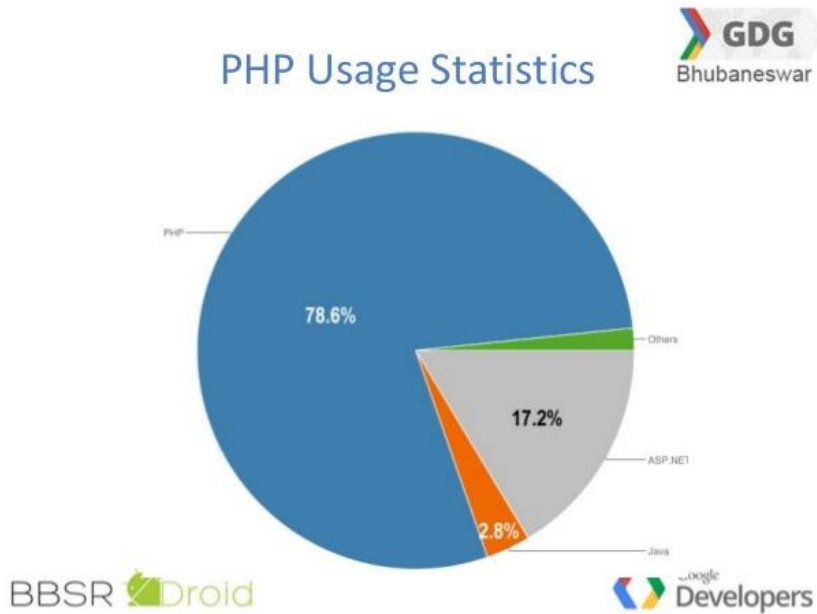
With PHAP, you can write complete Android, iOS and Windows applications. Suman Tripathi shares a three-layer model to develop great applications in PHP for mobile phones.



PHP is the most popular programming language reported by Jobs Tractor and in this list Java ranks second.



If you learn PHP programming language, you can create dynamic websites, web applications and all mobile applications. This is the most used language, it is supported and used by 78.6% of developers.



In addition, you can create great Facebook apps like Family Treen and eBuddy. Maybe some big websites you have visited PHP code like Facebook, Wikipedia, Flickr, Yahoo, Tumblr, and a few other sites.



Purpose of using PHP

Not just developing applications, you can use PHP for:

1. E-commerce website
2. Create GUI
3. Code project management tool
4. Create a Facebook application
5. Image processing
6. Application development on the phone
7. Content management systems like WordPress and Drupal
8. Dynamic websites
9. Develop WordPress plugin
10. Create PDF file

Main features of PHP

1. Open source
2. Independent platform
3. Use process and object-oriented
4. Easy to learn
5. Application development and use purpose
6. Compatible with server
7. Easy database integration

5. Swift

If there is a programming language that can change the future, it could be Swift.

1. 7 reasons you should learn Swift programming language



Swift 3

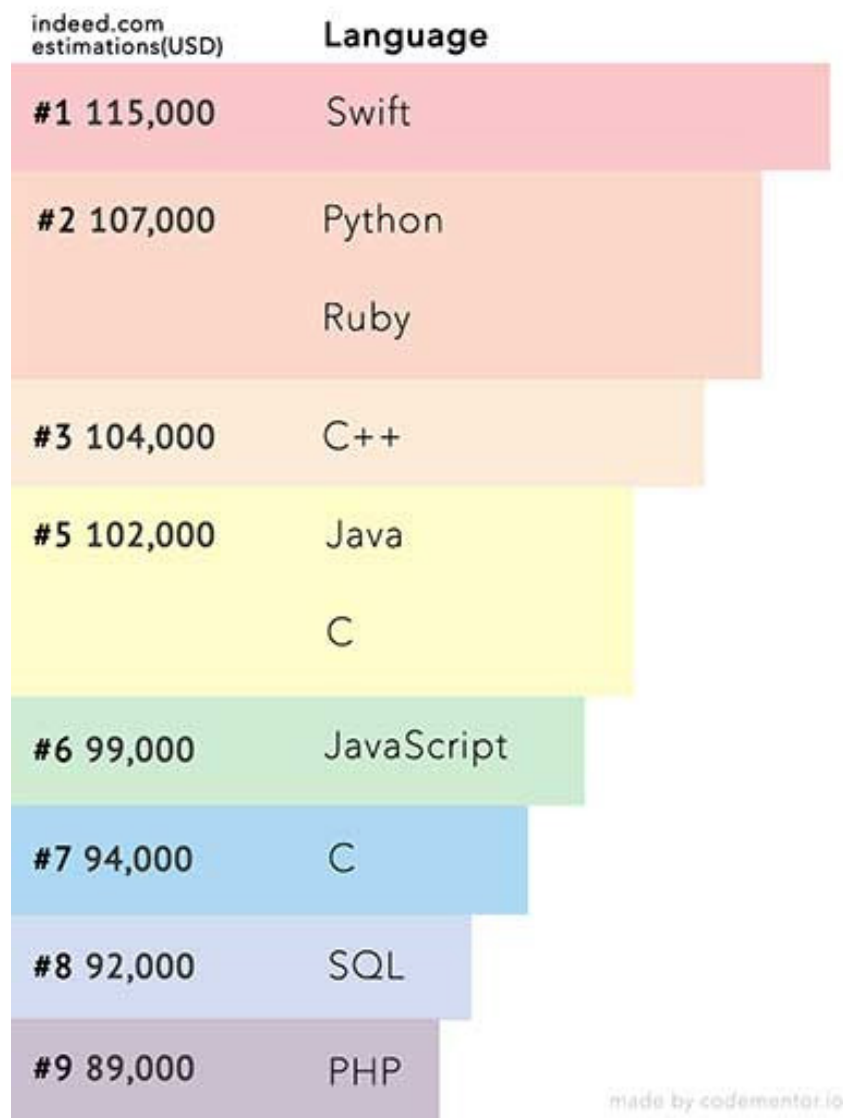
The powerful programming language
that is also easy to learn.

Swift is a powerful and intuitive programming language for macOS, iOS, watchOS and tvOS. Writing Swift code is interactive and fun, the syntax is concise yet expressive, and Swift includes modern features developers love. Swift code is safe by design, yet also produces software that runs lightning-fast.

Apple Inc. released this language in April 2014 for iOS (and support systems) and Linux. This is the main programming language used to develop iOS and OS X applications.

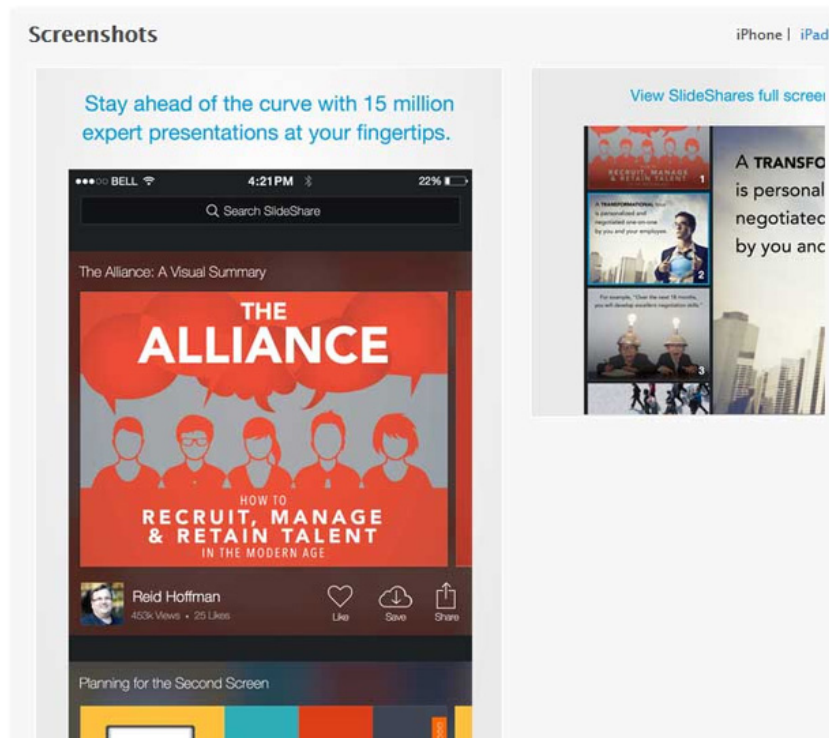
According to TNW, Swift is the fastest growing language. Demand for developers using Swift has increased by 600%, making it the most used language. And Swift developers have a fairly high salary, in the US they have the highest average salary.

2016 Average Developer Salary in the U.S.



Google is also considering turning Swift into a first-class language instead of Java. If Google moves to Swift, the demand for Swift apps and developers will skyrocket and there will be no other competitive language.

One of the most famous examples of the Swift application is the iOS SlideShare app, built entirely in Swift.



Currently, Swift is only available for iOS development but because it also works on Linux and is open source, which means it can be used by any platform. It is still a young language so those who move to Swift will soon have an advantage.

1. Learn Swift programming right on iOS

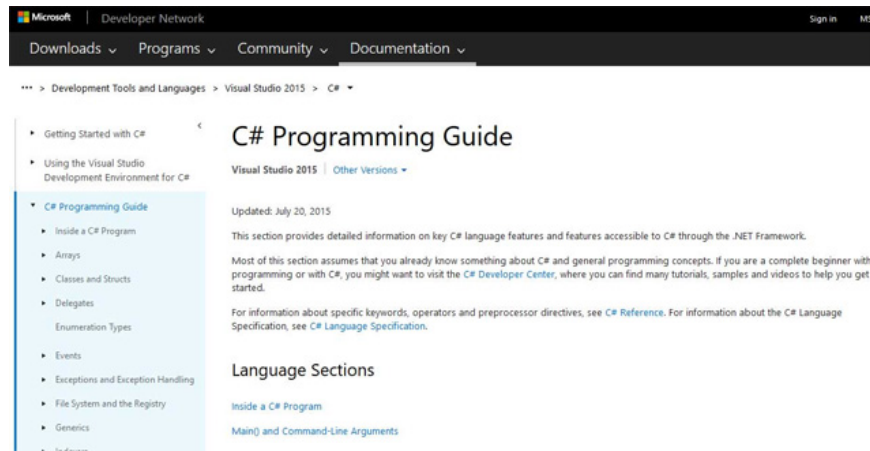
Main features of Swift

1. Extremely easy to learn especially if you know Objective-C.
2. Open source.
3. This is a simple version of Objective-C.
4. Easy code.
5. Easy maintenance.
6. This is the future of iOS development.
7. It requires less code than other languages.

See also: What is the Swift programming language? What does it mean for mobile apps?

6. C

C # is known as C Sharp, it is a multi-paradigm programming language, object-oriented, and component. This is a versatile programming language that Microsoft developed.

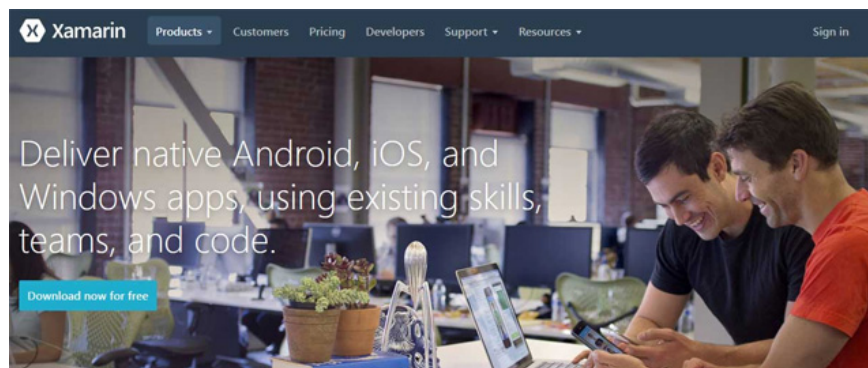


You can create any application in C # programming language, from server applications, web services to games to mobile applications and more. If you are planning to develop a game application, C # is one of the best languages ??to use because it is supported by Unity3D.

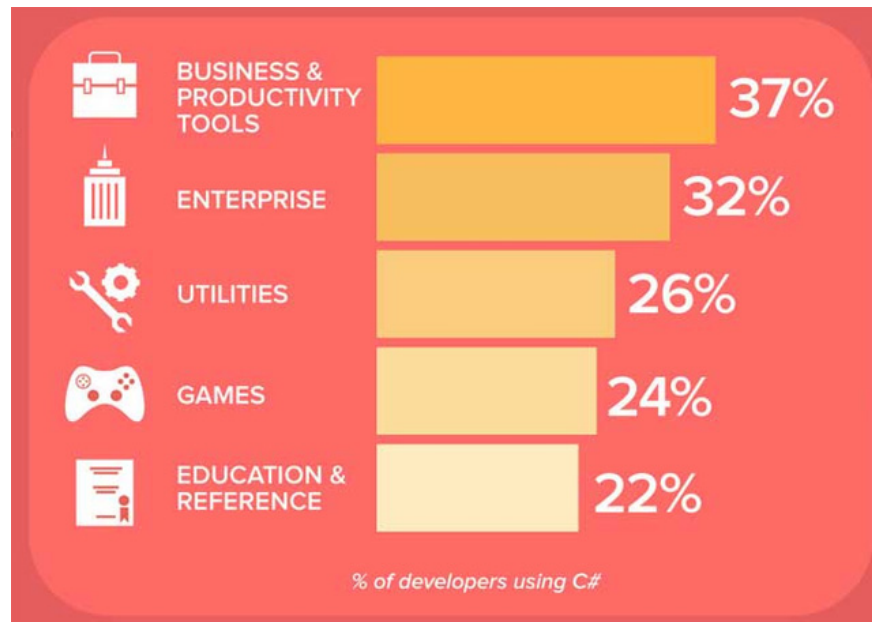
Most experts believe that demand for C # has gone down and there is not enough work available in the market for C # developers.



Xamarin is the platform that changed the minds of professionals and developers. This is a simplified application builder tool for C # developers to create apps for Android and iOS.



But mobile application development is not the only thing developers do, C # is also widely used in productivity and business tools, businesses, utilities, games, etc.



The C # programming language has a lot of potential, it is used for everything you can think of: Visual Studio, AutoCAD, Office 365 and SharePoint, and these are just a few examples of built software build with C #. This language is mainly used in developing enterprise-level programs.

Main features of C

1. Easy to use and is a simple language
2. Widely used in developing large web applications and tools
3. Is a safe language
4. Can be expanded
5. Access the .NET framework

See also: eQuiz - Quiz on C # - part 1

7. Objective-C

Objective-C is an object-oriented programming language derived from C. Objective-C is the core programming language used by Apple for iOS and developed OS X before Swift.

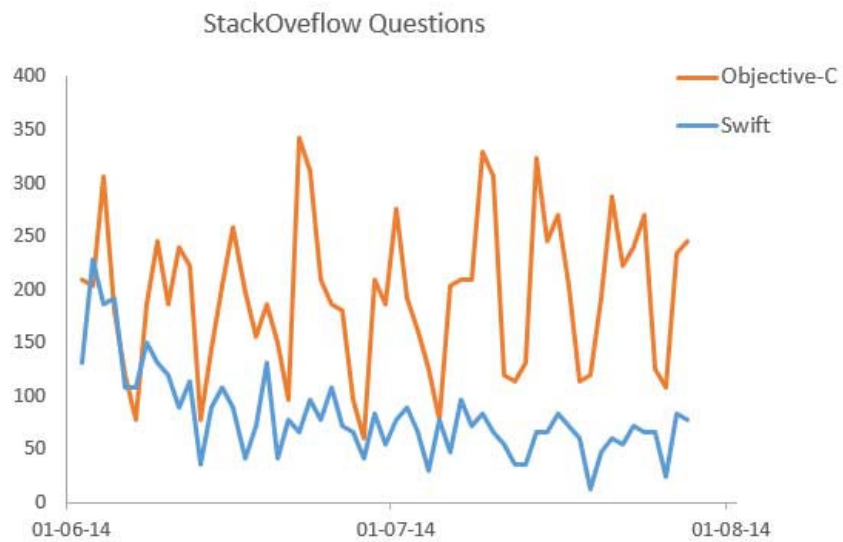
About Objective-C

Objective-C is the primary programming language you use when writing software for OS X and iOS. It's a superset of the C programming language and provides object-oriented capabilities and a dynamic runtime. Objective-C inherits the syntax, primitive types, and flow control statements of C and adds syntax for defining classes and methods. It also adds language-level support for object graph management and object literals while providing dynamic typing and binding, deferring many responsibilities until runtime.

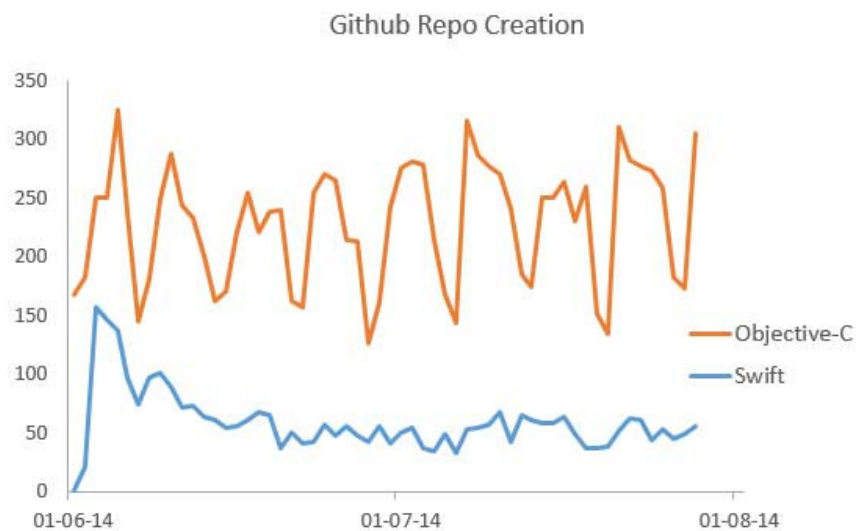
At a Glance

This document introduces the Objective-C language and offers extensive examples of its use. You'll learn how to create your own classes describing custom objects and see how to work with some of the framework classes provided by Cocoa and Cocoa Touch. Although the framework classes are separate from the language, their use is tightly wound into coding with Objective-C and many language-level features rely on behavior offered by these classes.

Although Swift is replacing Objective-C, queries at StackOverflow show that developers are still working with Objective-C.



Similarly, at Github, developers are still creating their projects with Objective-C.



The conversion will not happen immediately. According to Paul-Krill, there are two main reasons why this transition will not happen soon. Firstly, there are many investment applications in this language. Second, the application's Framework still relies on Objective-C even after launching Swift. Therefore, learning and creating a mobile application in Objective-C programming language is still potential, you can create all kinds of applications in this language.

Objective-C's main feature

1. Easy to use
2. You can use C ++ and C while using Objective-C
3. Use the running time
4. Dynamic typing
5. Smooth operation with Apple Inc.

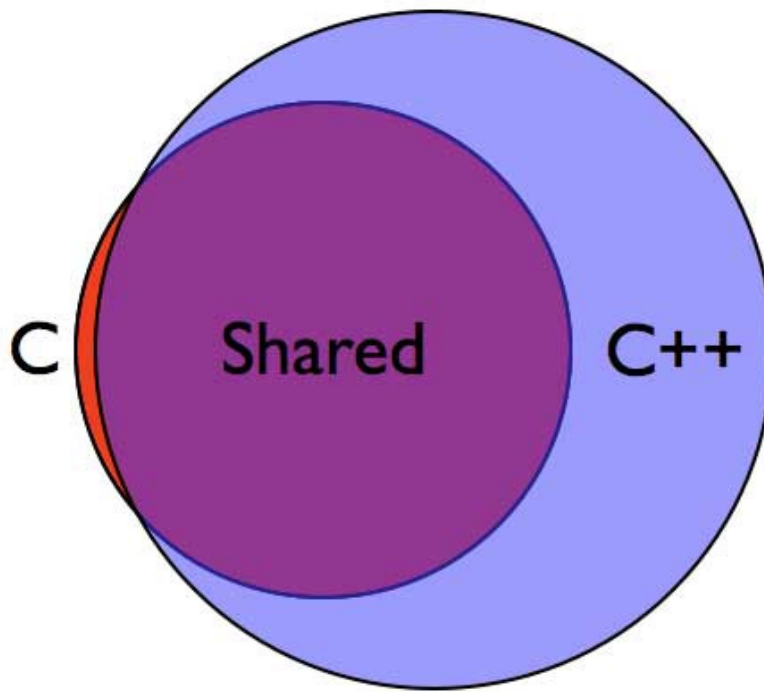
8. C ++

C ++, pronounced C Plus Plus, is an object-oriented programming language with low-level memory manipulation.

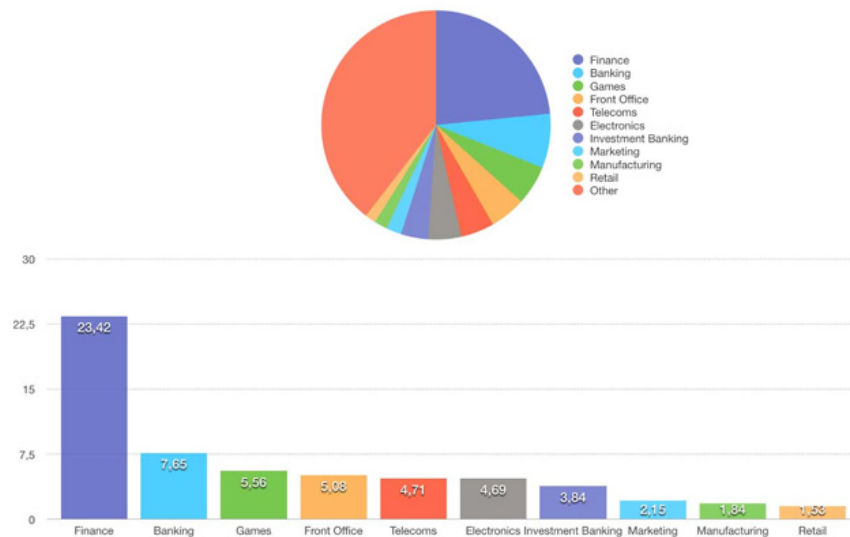


The screenshot shows the homepage of the C++ Standard website. The main heading is "News, Status & Discussion about Standard C++". Below this, there is a "Follow All Posts" button and a tagline: "The home of Standard C++ on the web – news, status and discussion about the C++ standard on all compilers and platforms." The page is divided into three main sections: "Recent Highlights" on the left, a profile picture of a man in the center, and "Selected Recent C++ Questions" on the right. The "Recent Highlights" section lists several articles with their titles and authors, such as "Give Visual C++ a Switch to Standard Conformance—Andrew Pardoe" and "Lambda Magic #2—Adi Shavit". The "Selected Recent C++ Questions" section lists questions from Stack Overflow, such as "Uses of destructor = delete;" and "Forward declaration as struct vs class".

C ++ inherits the syntax from C and it is an extension of C. If you know how to use C, it is very advantageous to use C ++. Both languages ??have similar features but more comprehensive C ++.



The demand for using C ++ programming language is also very large. It is not only used for application development, but also for all industries from finance, manufacturing to banking and some other industries.



For mobile applications, C ++ develops cross-platform mobile applications easily with a unified debugging and powerful environment experience. It can be used to create great applications for Android, Windows and iOS.

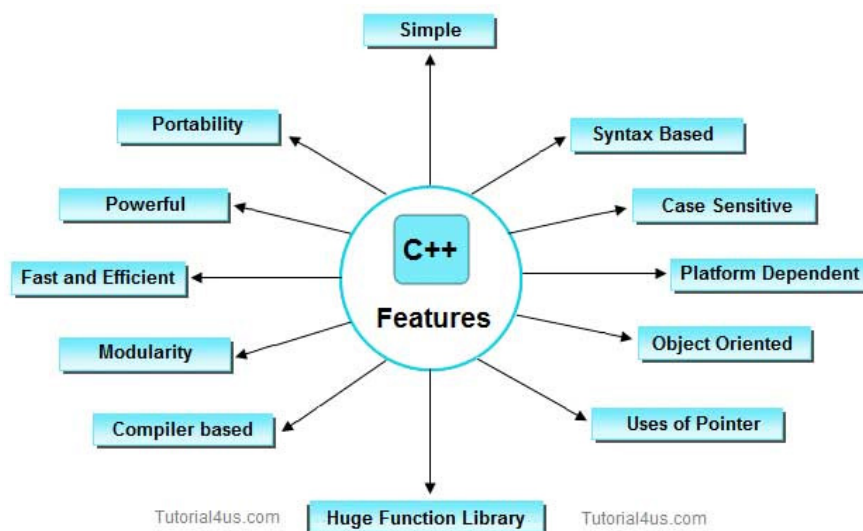
In addition to developing mobile applications, C ++ programming language can also create some great tools like Google Chrome, Amazon, PayPal, World of Warcraft, Photoshop and many other tools. Learning C ++ means you will be able to easily write game code, applications and commercial software.

Some main uses of C ++ (and C):

1. Operating system development
2. Develop new programming language
3. Graphics and design
4. Developing games
5. Application development
6. Web browser
7. Develop compilers for programming languages
8. Medical, mathematical and technical applications
9. Tools for businesses
10. Calculation platform

Main features of C ++

C ++ is one of the most powerful languages ??today with tons of features.



1. Simple and effective
2. Object-oriented
3. Huge library
4. Portable
5. Extremely fast

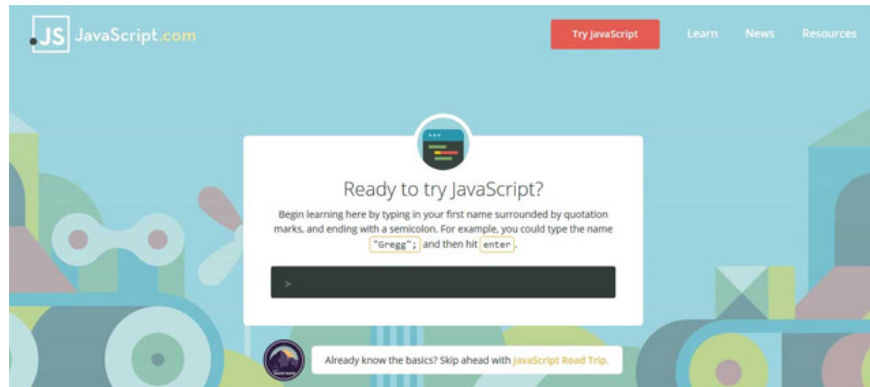
See more:

1. The reason why C programming language is never outdated
2. C ++ exercises have solutions (sample code) for variables, data types, and operators

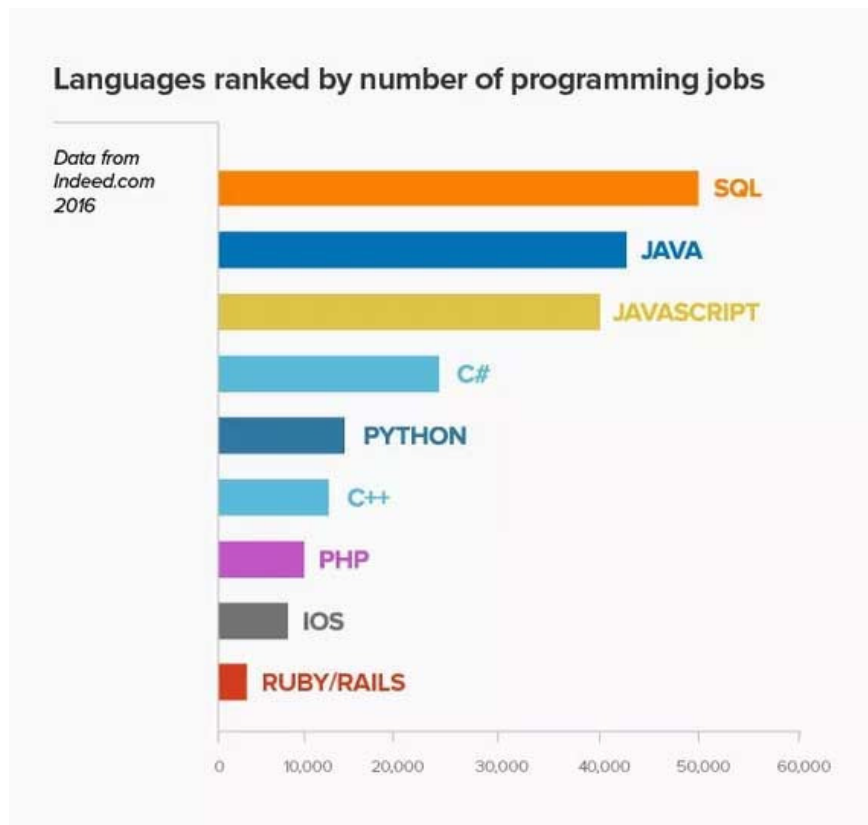
9. JavaScript

JavaScript is an advanced programming language. It is a multi-modal language that supports object-oriented programming and functional orientation.

1. What is JavaScript? Can the Internet exist without JavaScript?



JavaScript is ranked third by the amount of programming work it provides.



JavaScript is not the main language for application development; instead, it is a language that runs on browsers, used to develop and control web pages. You can create mobile applications with JavaScript but it must be used with CSS, HTML and AJAX.

1. 10 simple CSS codes you can study in 10 minutes
2. 17 simple HTML codes you can learn in 10 minutes

There are several frameworks that can be used to create a professional JavaScript application like PhoneGap, jQuery Mobile and Ionic. Creating applications in JavaScript is easy because you only have to code once and can be released on all platforms (Android, iOS and Windows).

Main features of JavaScript

1. One of the most understandable languages ??you can learn in a few days.
2. Fast and effective.
3. It is done on the client side, which means saving bandwidth by not using the server.
4. Used for motivation and animation creation on boring sites.

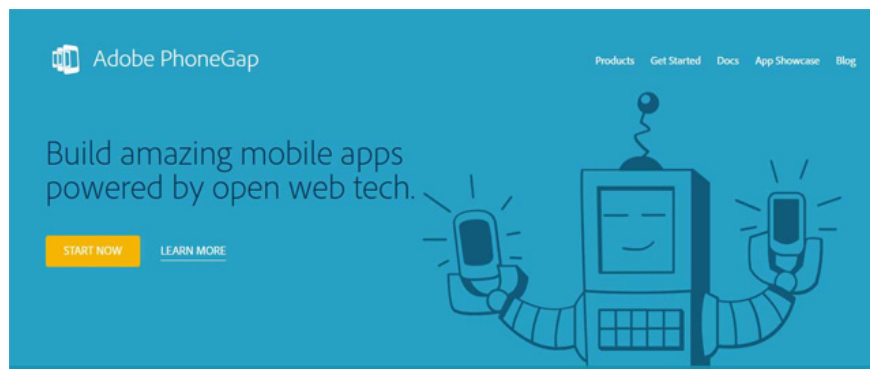
See also: 12 extremely useful tricks for JavaScript programmers

10. HTML5

HTML5 is the fifth version of HTML (HyperText Markup Language - HyperText Markup Language). HTML5 is used to present content on the Internet. HTML5 is not a mobile application development language. To create an HTML5 application, you need to use it with other languages ??like JavaScript.

1. Things to know about HTML5

You can create Android and iOS apps in HTML5, the only requirement is to use a powerful Framework like PhoneGap.



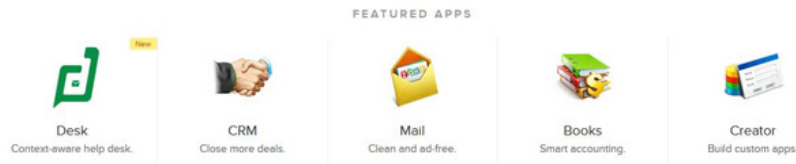
You can create a mobile application in HTML5 (CSS and JavaScript) or you can use it in conjunction with the API. In all cases, HTML5 applications are responsive and work smoothly on all devices. Code once and used on many devices.

There are hundreds of web applications created by HTML5 that you use every day. Google Docs and Google Drive are famous for being the most encrypted programs with HTML5. In addition, there are more than 33 applications in the Zoho application and most of them are developed in HTML5.

The operating system for business.

Zoho has everything you need to boost sales, step up productivity, and manage all day-to-day activities.

SIGN UP FOR FREE



So why create a mobile application in HTML5 when there are more complex programming languages ?? available to choose from? Here are a few reasons to learn and write code in HTML5:

1. HTML5 has been fully accepted by mobile browsers (and desktops).
2. Support multiple browsers.
3. With the support of multiple browsers and responsiveness, everything created in HTML5 works on all devices simply.
4. Use canvas tags to develop HTML5 games.
5. Easily write and delete code.
6. It fully supports video and audio.

Main features of HTML5

1. Easy to learn
2. Support for mobile phones
3. Responsive design with support for all devices
4. Drag and drop feature

See also: 12 stunning HTML5 templates that web designers should not ignore

11. Ruby

Ruby is a general object-oriented programming language. It was developed by Yukihiro Matz Matsumoto in the 1990s to support many models.

1. Ruby programming language for beginners

Ruby is...

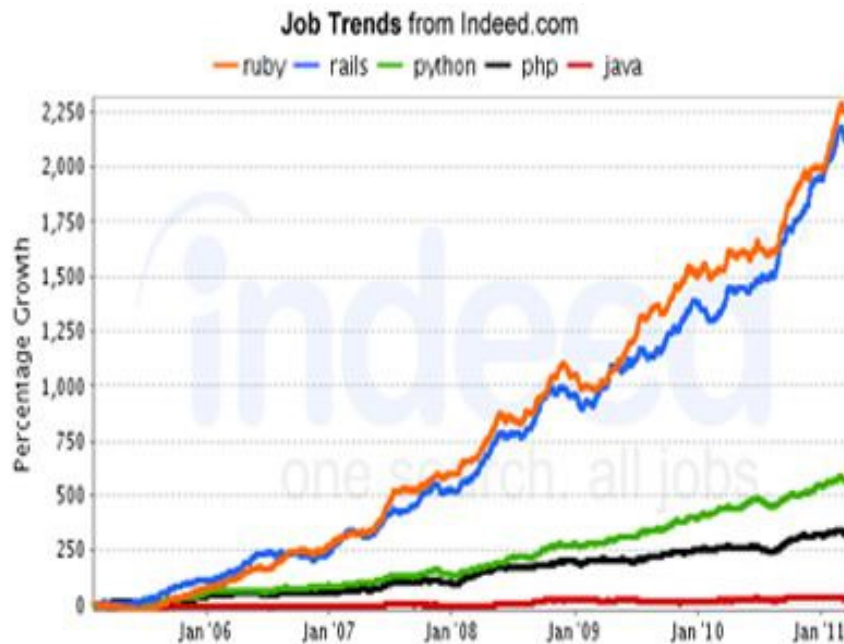
A dynamic, open source programming language with a focus on simplicity and productivity. It has an elegant syntax that is natural to read and easy to write.

[Download Ruby](#) or [Read More...](#)

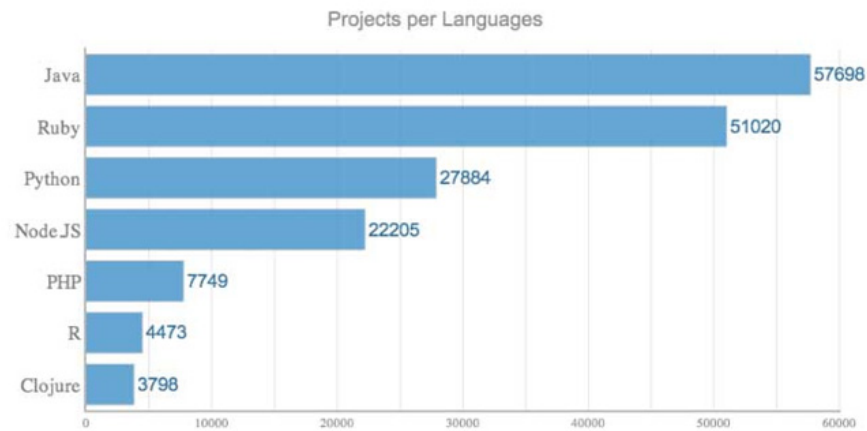
```
# Ruby knows what you
# mean, even if you
# want to do math on
# an entire Array
cities = %w[ London
            Oslo
            Paris
            Amsterdam
            Berlin ]
visited = %w[Berlin Oslo]

puts "I still need " +
      "to visit the " +
      "following cities:",
      cities - visited
```

Ruby's development needs are five times that of Python's development needs. This is the fastest-growing programming language and an average Ruby developer earns \$ 77,000 for each project while some projects earn higher, up to 112 thousand USD.



Analysis of more than 50 servers shows the number of completed applications written in Ruby, second only to Java.



You cannot create a mobile application for Android, iOS, Windows and OS X in Ruby without using a framework like RubyMotion or Rhodes.



If there is one simplest programming language, it is Ruby. You can create an application in 10 minutes with Ruby. Some of the largest sites are encoded in Ruby such as Fiverr, Airbnb, Pixlr, Groupon, Basecamp, Scribd, Bloomberg, ThemeForest and many others.

Ruby's main feature

1. Support dynamic styling
2. Object-oriented language.
3. Easy to encrypt, anyone can do it.
4. Best for beginners.
5. Use existing code.
6. Useful support community.

12. Perl

Perl is a combination of two languages ??(Perl 5 and Perl 6), this is a high-level dynamic (dynamic) programming language. It uses features from other programming languages ??such as C, sed, AWK, etc. Both Perl 5 and Perl 6 languages ??run and develop independently.

Perl is used for many applications such as automation, bioinformatics, website development, applications, games and more. LiveJournal, IMDB, and Booking are some of the most popular websites developed by Perl. Create Android apps with Perl easier than before because Google already has APKs for Perl developers.

To develop iOS applications, you must use a Framework like Catalyst, Dancer and Mojo. These are the three most famous Frameworks for Perl mobile application development.

Key features of Perl

1. Perl's most powerful feature is CPAN, a comprehensive Perl storage network.
2. Fast, reliable and personal.
3. If you learn Perl, you won't have to compete much.

13. Rust

Rust is Mozilla's programming language, which is a multifaceted language for general purpose.



Rust is a systems programming language that runs blazingly fast, prevents segfaults, and guarantees thread safety.

[See who's using Rust.](#)

Recommended Version:
1.33.0 (Windows Installer)

Install

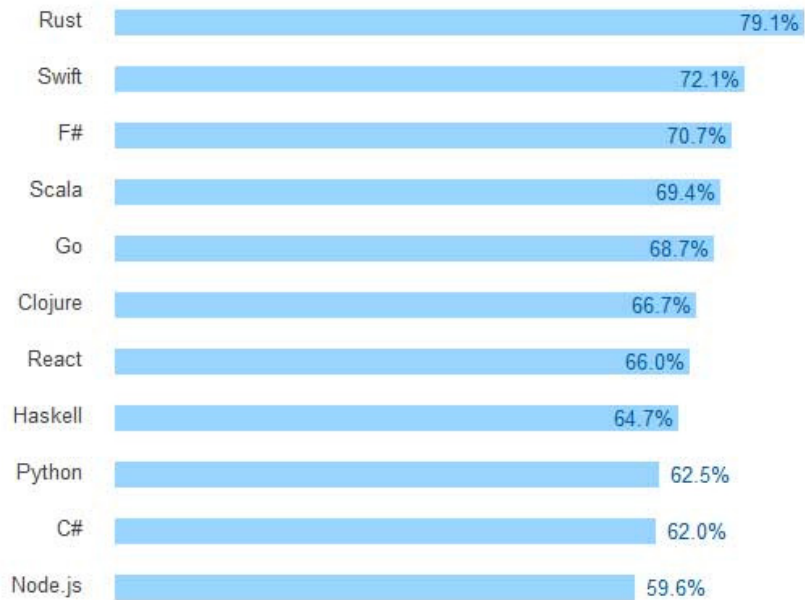
Other Downloads

Featuring

- zero-cost abstractions
- move semantics
- guaranteed memory safety
- threads without data races
- trait-based generics
- pattern matching
- type inference
- minimal runtime

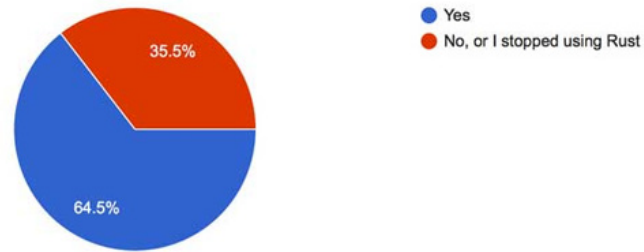
```
// This code is editable and runnable!  
fn main() {  
    // A simple integer calculator:  
    // '+' or '-' means add or subtract by 1  
    // '*' or '/' means multiply or divide by 2  
  
    let program = "+ + * - /";  
    let mut accumulator = 0;  
  
    for token in program.chars() {  
        match token {  
            '+' => accumulator += 1,  
            '-' => accumulator -= 1,  
            '*' => accumulator *= 2,  
            '/' => accumulator /= 2,  
            _ => { /* ignore everything else */ }  
        }  
    }  
}
```

Rust is considered the most popular programming language of 2016 according to a survey of Stack Overflow.



Rust is like C and C ++ but it's safe and better. It has a powerful management tool, which makes it better than other programming languages ??like Ruby and Python. This language is also quite popular when more than 64% of developers use it.

Do you use Rust? (3086 responses)



Rust is still a new immature language but it has a great future. Developers use it to create mobile apps for iOS. Mozilla's browser tool, called Servo, was developed in Rust language. In addition Rust is also used in a number of other major projects such as Piston, Zinc, and Madsafe.

Learning Rust language at this time is very good because it has the potential to grow, maybe in the near future it can replace C and C ++.

Rust's main feature

1. Not an easy language to learn.
2. Safer than most other languages.
3. Fast.
4. It can be used to create a lot of applications in different fields.

14. SQL

Structured Query Language (SQL) is a programming language used to manage relational database systems, database analysis and data processing.

1. Overview of SQL



SQL is not the language used to develop mobile applications but it supports applications. Basically, this is the only language that will be integrated with most mobile applications so it is important to learn SQL.

1. 13 important SQL statements Programmer needs to know

Local Database for Windows Phone

- With Windows Phone OS 7.1, you can store relational data in a local database that resides in your application's isolated storage container.



6 |



Key features of SQL

1. The best thing about SQL is that it does not require code.
2. It is portable and works on all devices.
3. One of the easiest languages to learn.
4. The SQL standard makes it easier to understand and manage databases.
5. Act as an interactive programming language and language.
6. The language is both server and client side.
7. Easy integration with Java.

See more:

1. Should we learn many programming languages or just one?
2. 12 valuable tips of a successful Developer at age 40
3. What is the first programming language in the world?
4. Do you know the 15 hottest programming languages on this GitHub?

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