

# **Top 6 Programming Languages Of 2023**

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## JavaScript

Bun, the JavaScript runtime environment released to developers in 2022, quickly became popular among developers upon its public beta release. Bun was designed to offer all-encompassing capabilities including bundlers, transpilers, task runners, and an NPM client; ultimately it aims to be an alternative platform to Node.js and Deno platforms which have proven popular. Built using Zig and powered by the JavaScriptCore engine - which allowed for faster benchmark tests than its counterparts Node.js and Deno; Bun has amassed over 37,000 stars since public beta release - rapidly becoming popular among developers since its public beta release!

Containers have become an invaluable tool in web development, offering faster and safer application creation and deployment. According to the Developer Survey 2022, Docker and Kubernetes are two popular container technologies that both offer numerous advantages such as flexibility, scalability, and cost savings.

The State of CSS Survey offers insight into both popular and emerging features within CSS, from Flexbox gaps and filter effects to variables, Parent Selectors (: has()), Container Queries (@container) Subgrids, and Parent Selectors - among many others. Bootstrap remains popular with developers while Tailwind has slowly been making waves as an appealing CSS framework alternative.

DHTMLX, a productivity software provider, recently unveiled two JavaScript libraries designed specifically for web developers: To-Do List and Event Calendar are specifically targeted toward this community of professionals. Both libraries include feature-packed checklists that make managing day-to-day activities on web pages easy as well as customizable

day planners similar to Google Calendar - making integration into productivity apps simple for web developers working on them. Both libraries feature similar APIs and user interface design approaches making them simple for web developers working on productivity applications to use.

# Python

Python, an established programming language of over three decades, continues to gain in popularity each year. Python is a high-level, interpreted programming language with an easily readable syntax that is user and beginner friendly; originally designed as an attempt by Guido Van Rossum to satisfy his need for something easy yet visually pleasing, the first release was to the world in 1991 and has since found wide application in developers, data scientists, researchers and more.

Python is a general-purpose programming language designed for various uses, from automating tasks and building websites or software to analyzing data. Due to its ease of use and open-source nature, it has quickly become one of the favorite choices amongst engineers and developers and boasts several key characteristics like being easily read, portable, extendable, and having a broad standard library.

Python can be used for just about everything from web and software development to machine learning and artificial intelligence (AI). Python has long been popular as a development language because you can create complex multi-protocol applications while still keeping their syntax concise and readable; the open-source community offers plenty of reusable code, frameworks, and support available through it; it's also one of the leading tasks automation solutions, with its ability to automate manual repetitive tasks by taking advantage of built-in modules or prewritten code available through its extensive library.

Python is widely considered one of the leading data science and research languages, thanks to its intuitive syntax which is easily understandable and adaptable for non-developer people to pick up easily and use for research, reporting, prediction, regression, and regression analyses as well as data collection/parsing activities. Furthermore, it's one of the leading languages used for training Machine Learning models (ML).

Python is widely utilized by financial industries for performing complex computations quickly. Python can import stock prices and generate strategies with algorithms to identify trading opportunities quickly. Furthermore, this language can also be utilized for portfolio optimization, risk management, financial modeling, visualization, and visual analytics purposes. Python is a flexible and popular programming language used for everything from web and software development, machine learning and financial analysis to beginner-friendly beginner tutorials and an expansive community that provides resources and reusable code.

## Java

Java is a programming language introduced by James Gosling in 1995 and continues to remain one of the world's most widely-used programming languages, regularly ranking at the top of the TIOBE Index rankings. This popularity can be attributed to Java's easy learning, secure design, and object-oriented characteristics compared to competing alternatives.

Java's versatility is another key reason behind its widespread appeal. It can be applied to a range of tasks ranging from cloud computing and machine learning, to building practical desktop GUI apps, with multithreading making Java particularly suitable for creating large-scale, high-performance programs.

One of the major advantages of Java is its cross-platform nature; code written for this programming language will run on any computer regardless of the operating system or hardware type it's being run on. This makes Java an economical solution for developers who must develop applications that run across various platforms.

Java developers are in great demand globally, with an estimated 8 million Java programmers currently employed worldwide. Their high demand has made Java developer one of the most sought-after job profiles within tech and proficiency in this programming language is a necessity for anyone seeking a career in software development.

Java is one of the easiest programming languages to pick up for beginners, with its intuitive syntax and object-oriented nature making it accessible even to novices. Due to its many applications and high demand for skilled developers, it will likely remain an increasingly popular programming language over time.

## Angular

AngularJS is a widely-used open-source framework created to simplify front-end development for web applications. Developers can utilize HTML as their template language while expanding it dynamically using page extensions, using two-way data binding so data syncs automatically between model and view components, dependency injection, single page applications (SPAs), and succinct code generation - making AngularJS an indispensable resource.

AngularJS framework is used by leading companies such as PayPal and Netflix, making it a highly sought-after skill on the job market. Expertise with AngularJS is necessary for roles such as Full Stack Engineer or JavaScript Developer across industries including computer software, financial services, higher education IT & services Internet marketing & advertising as well as marketing & advertising - with top hiring cities including New York San Francisco Bay Area Los Angeles Boston Washington D.C

With the rapidly advancing world of technology, AngularJS will remain an in-demand skill well beyond 2023. Developers favor it due to its ease of use and its features that support efficient web application creation; its importance will only continue to increase as companies strive to develop effective user-centric web apps.



# PHP

PHP has come a long way since its debut in the mid-90s, becoming one of the most sought-after languages for web development, from small blogs to enterprise applications. As a PHP developer, you must stay informed on its latest advancements - this guide takes an in-depth look at its current state in 2023.

In 2021, The PHP Foundation was formed as a collective of 10 volunteers and 6 developers being paid to work on PHP. Since its creation, it has made impressive strides, having raised \$580,000 last year while paying 6 developers working on PHP to work full time and creating 8 RFCs as well as almost half of all commits made on php-src by itself! As a developer working on PHP, we must support and donate to ensure its continued development and improvement.

PHP 8.2 is the latest release of PHP and features some notable new additions worth noting. One such exciting innovation is read-only classes, which enable you to create classes with read-only properties. Another notable development is the randomizer's standalone null, true, and false behavior; disjunctive normal form types provide greater precision when typing function parameters while redacted parameters offer security when hiding sensitive information.

The PHP ecosystem continues to thrive, with Packagist now listing 361,000 packages--an increase of 60,000 from last year --and handling over 74 billion installs over one year, an increase of 24 billion installs year over year. Although PHP 8.\* usage is increasing steadily, many users remain on older, slow, and insecure PHP versions that need upgrading; as a developer, your codebase must stay current with the most secure and optimized versions to maintain secure codebases and maximize code optimization benefits and optimize codebase performance for both security and optimization reasons.

Rector, a free automation tool designed to upgrade PHP codebases more easily, can make this task much simpler. Rector requires minimal configuration and can do an impressive

amount of work on its own - essential tools like this one to upgrade codebases to new versions of PHP!

As a PHP developer, you must stay informed on the latest advancements within its ecosystem and maintain up-to-date with them. Consider supporting the PHP Foundation with a donation, to ensure the continued development and improvement of this language. Furthermore, keeping your codebase up-to-date with the most up-to-date PHP version for security and optimization reasons is also key - make use of tools such as Rector to make upgrading easier!

## C#

As a C# developer, you can make use of the versatility offered by Microsoft .NET framework to create various types of applications, spanning desktop to web and mobile development. The framework offers a platform for developing applications across various operating systems like Windows, macOS, and Linux while C# offers a simple yet powerful programming language with type safety that comes equipped with its garbage collector that manages memory allocation/deallocation automatically.

Microsoft's commitment to investing in both .NET and C# ensures they will continue being widely adopted among developers for years to come, which may explain why these frameworks remain so prevalent:

**Cross-Platform Development:** With C# and .NET, you can develop applications that run across various platforms - Windows, macOS, Linux, and even mobile phones such as iOS and Android.

**Integration with Microsoft products:** C# and .NET can make developing applications for deployment on Microsoft platforms such as Azure and Visual Studio easier, making C#/.NET knowledge an asset when working at companies that heavily rely on these technologies.

**Scalability:** C# and .NET are extremely scalable technologies, suitable for applications of all kinds - desktop, web, game, mobile, and enterprise-grade - making them perfect for enterprise-level apps.

**High Demand on the Job Market:** C# and .NET developers are in high demand among startups as well as big tech companies alike, as these technologies are becoming more commonly utilized within enterprise applications. Employers frequently seek developers with expertise in these technologies.

Active developer community: C# and .NET boast an engaged developer community, offering many resources for learning and development such as tutorials, forums, and documentation.

C# is an easy programming language to pick up if you already know other object-oriented programming languages like Java or C++, especially its simple syntax designed to be powerful yet type-safe - meaning you can begin creating applications quickly without facing a steep learning curve.

If you want to start learning C# and .NET, there are various resources available. At Educative, industry experts have created the Mastering C# and .NET course designed for developers of all skill levels - 110 interactive scenarios cover essential topics of C#/.NET in this comprehensive learning experience!

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