**Popular programming languages**

Here is the list of the most popular programming languages nowadays:

* Java
* C
* C++
* C#
* JavaScript
* PHP

**Key characteristics and specifics:**

**Java** - Java is a general-purpose computer programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that code that runs on one platform does not need to be recompiled to run on another. Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of computer architecture. Java is, as of 2015, one of the most popular programming languages in use, particularly for client-server web applications, with a reported 9 million developers.

**C#** - C# is intended to be a simple, modern, general-purpose, object-oriented programming language. It was developed by Microsoft within its .NET initiative and later approved as a standard by Ecma (ECMA-334) and ISO (ISO/IEC 23270:2006). The language is intended for use in developing software components suitable for deployment in distributed environments. C# is intended to be suitable for writing applications for both hosted and embedded systems, ranging from the very large that use sophisticated operating systems, down to the very small having dedicated functions.

Java and C# are similar programming languages that are statically, strongly, and manifestly typed, both are class-based object-oriented, both are designed with semi-interpretation or runtime compilation in mind, both use garbage-collection, and both are "curly brace languages" like C and C++

**C** - C is a general-purpose, high-level language that was originally developed by Dennis M. Ritchie to develop the UNIX operating system at Bell Labs. The UNIX operating system, the C compiler, and essentially all UNIX applications programs have been written in C. C was initially used for system development work, in particular the programs that make-up the operating system. C was adopted as a system development language because it produces code that runs nearly as fast as code written in assembly language. Some examples of the use of C might be: Operating Systems, Language Compilers, Assemblers, Text Editors, Print Spoolers, Network Drivers, Modern Programs, Databases, Language Interpreters,Utilities.

**C++** - C++ is a general-purpose programming language. It has imperative, object-oriented and generic programming features, while also providing the facilities for low-level memory manipulation. It is designed with a bias toward system programming (e.g., for use in embedded systems or operating system kernels), with performance, efficiency and flexibility of use as its design requirements. C++ has also been found useful in many other contexts, including desktop applications, servers (e.g. e-commerce, web search or SQL servers), performance-critical applications (e.g. telephone switches or space probes), and entertainment software. C++ is a compiled language, with implementations of it available on many platforms and provided by various organizations, including the FSF, LLVM, Microsoft and Intel.

**JavaScript** - JavaScript is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also used in server-side network programming with runtime environments such as Node.js, game development and the creation of desktop and mobile applications.

JavaScript is classified as a prototype-based scripting language with dynamic typing and first-class functions. This mix of features makes it a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles.

**PHP** - PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP code can be simply mixed with HTML code, or it can be used in combination with various templating engines and web frameworks. PHP code is usually processed by a PHP interpreter, which is usually implemented as a web server's native module or a Common Gateway Interface (CGI) executable. After the PHP code is interpreted and executed, the web server sends resulting output to its client, usually in form of a part of the generated web page – for example, PHP code can generate a web page's HTML code, an image, or some other data. PHP has also evolved to include a command-line interface (CLI) capability and can be used in standalone graphical applications.