

Java is an object-oriented programming language that produces software for multiple platforms. When a programmer writes a Java application,

the compiled code (known as bytecode) runs on most operating systems (OS), including Windows, Linux and Mac OS. Developers use Java to construct applications in laptops,

data centres, game consoles, scientific supercomputers, cell phones, and other devices. Java is the world's third most popular programming language, after Python and C

according to the TIOBE index, which evaluates programming language popularity. Java produces applets (browser-run programs), which facilitate graphical user interface

(GUI) and object interaction by internet users. Prior to Java applets, web pages were typically static and non-interactive. Java applets have diminished in popularity

with the release of competing products, such as Adobe Flash and Microsoft Silverlight.

Java derives its huge popularity from its platform independence. Java only needs a Java Runtime Environment (JRE) to be installed in order to work, regardless of whether

it is installed in a desktop PC running Windows, Linux, or Unix, a Macintosh computer, a smartphone or a mainframe computer. Here are some common places you'll see Java.

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general-purpose

programming language intended to let programmers write once, run anywhere (WORA), meaning that compiled Java code can run on all platforms that support Java without

the need to recompile. Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of the underlying computer

architecture. The syntax of Java is similar to C and C++, but has fewer low-level facilities than either of them. The Java runtime provides dynamic capabilities

that are typically not available in traditional compiled languages. As of 2019, Java was one of the most popular programming languages in use according to GitHub,

particularly for client-server web applications, with a reported 9 million developers.