



(almost)
Every
Programming
Language in
< 4 minutes



C: The FSF Special

How it works: The compiler converts code directly into machine code for the type of CPU you're using.

What you need: Nothing except a CPU you can compile for.

What's Good: It's really fast, great for networking, and runs anywhere.

What's Not: Unwieldy for large projects; impractical for scripting.



C++: Access Friends' Privates

How it works: Compiles natively to machine code.

What you need: No requirements, runs on any compatible CPU

What's Good: Fast large projects where you need to render on-the-fly.

What's Not: It's hard to read.



C#: The Language of MS Paint

How it works: Your code either gets compiled into a not-quite-machine code instruction set that's portable, or it can be compiled natively for Windows.

What you need: Windows, with mediocre support for Mac and Linux.

What's Good: Servers and database applications on Windows.

What's Not: FOSS implementations, use on Linux.



Java: Valgrind's Archenemy

How it works: Your code is transformed into 'bytecode' that's ran by the Java Virtual Machine (JVM).

What you need: An OS and the JVM.

What's Good: Reflection heavy applications, high readability, dynamic code loading.

What's Not: It's not very fast.



Kotlin: Java but with more features

How it works: Runs on the JVM, compiles to JavaScript, or compiles to machine code.

What you need: Varies (listen to Jack)

What's Good: JVM-based scripts. It's extremely portable.

What's Not: It's tough to understand big programs.



Go: Yes, That's its Logo

How it works: Like C, but it cleans up after you with garbage collection.

What you need: Google compiler toolchain, or compile to bare metal.

What's Good: It's a little like C.

What's Not: Pretty much everything else.



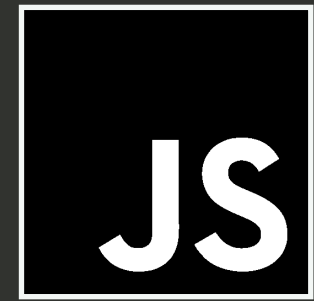
Lua: Modding and what else?

How it works: It's interpreted, just like JavaScript!

What you need: The Lua Interpreter.

What's Good: Scripting for video games; highly controllable libraries.

What's Not: Trying to write applications kinda sucks.



JavaScript: More Libraries than Illinois

How it works: Interpreted on-the-fly by your browser sandbox/
Node server.

What you need: A web browser.

What's Good: Scripting for web apps and pages.

What's Not: Using it for anything that's not a web page.

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Unix Shell: Can you hear the C?

How it works:

What you need:

What's Good:

What's Not:

Works Cited

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