

Emerging Technologies

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Languages

Go

Languages

Popular programming languages

JavaScript “high-level, dynamic, untyped, and interpreted”

SQL “special-purpose programming language”

Java “general-purpose, concurrent, class-based, object-oriented”

C# “multi-paradigm programming language”

PHP “ server-side scripting”

Python “high-level, general-purpose, interpreted, dynamic”

C++ “general-purpose, imperative, object-oriented and generic”

C “general-purpose, imperative”

Node.js? “open-source, cross-platform JavaScript runtime environment”

Kinds of programming languages

Interpreted Software interprets the language at runtime.

Compiled Software translates the language into machine code, which is then run.

Systems Designed with operating system, device drivers development in mind.

Applications Designed with user applications development in mind.

High-level Abstraction from the nitty-gritty computer details.

Imperative Statements change the program state.



I'm always delighted by the light touch and stillness of early programming languages. Not much text; a lot gets done. Old programs read like quiet conversations between a well-spoken research worker and a well studied mechanical colleague, not as a debate with a compiler. Who'd have guessed sophistication bought such noise?

— Dick Gabriel

People: Dennis Ritchie



Dennis Ritchie 1941-2011 (right)

Go

Hello, World!

```
package main
import "fmt"
func main() {
    fmt.Println("hello world")
}
```