

1. Which language did you choose?

I have chosen Go Lang programming language because it is one of the program language I must dominate in the future. I started learned it last semester in the Computer 460 “Robots Class” for the first time. It’s look interesting to me, but I still got long way to go. I know I had been learning little bit of Python Java, Visual Studio and C# until today.

2. When was it developed?

Go was deliberate at Google in **2007** to increase programming efficiency in a time of multicore, networked machines and enormous codebases. The inventers desired to discourse denigration of supplementary languages in use at Google, but preserve their worthwhile physical characteristics: static typing and run-time efficiency.

3. Who designed/developed it? If a designer and a developer are different, write both names.

Designed by: Robert Griesemer, Rob Pike, and Ken Thompson Developer: The Go Authors

Stable release: 1.15.6, / 3 December 2020; 38 days ago

Robert Griesemer, Rob Pike, and Ken Thompson are developer of Go

4. If there is an interesting story about its birth, write it.

The inventers desired to discourse denigration of supplementary languages in use at Google, but preserve their worthwhile physical characteristics: static typing and run-time efficiency. For example the inventors were primarily motivated by their shared dislike of C++. Because C++ is a universal determination as programming language with commanding, object-oriented, and generic programming features. Numerous disapprovals have been razed at C++'s design by well-known software developers including Linus Torvalds, Richard Stallman, Joshua Bloch, Rob Pike, Ken Thompson, and Donald Knuth.

Go was in public broadcasted in November 2009 and version 1.0 was unrestricted in March 2012. Go is widely used in production at Google and in many other organizations and open-source projects. Since then Go agreements compatibility for the language requirement and most important parts of the customary library. Entirely descriptions up to the present-day Go 1.15 publication have sustained this possibilities. Individually major Go publication is maintained while waiting for nearby of two fresher most important publications. For example check: “Go (<https://golang.org/>) or https://en.wikipedia.org/wiki/Main_Page

5. Describe a programming environment of it. (Ex. which IDE supports this language? Does it work for all Windows, Mac, and Linux?)

Go programming environment can be describe variables such as GOPATH and add BIN to your existing PATH. Install and configure Git. Install Visual Code for editing your source code. Optional Steps: you can Install GCC, PostgreSQL, SQLite, Node/NPM, and Docker

Go is a categorically stretchy language, capable to answer a portion of difficulties. You can practice it for structure and network programming, enormous data, machine learning, audio and video editing, and more.

IDE supports Go language the most popular IDEs for Go: GoLand. JetBrains, a Software development company, released this IDE for Golang. It is a sophisticated yet commercial IDE for Golang development.

But we can leaning that we have others overwhelming IDE and the Go plugin, tools, debugger and Git integration to develop Go such as: Lite IDE, Eclipse with GoClipse, Visual Studio Code, Atom IDE, Vim IDE, IntelliJ IDEA, and Sublime Text

6. What is it good for?

Go language is small and simple

Go is intended to be modest to study, straightforward to work with, and stress-free to deliver by additional designers. Go does not have an outsized feature set, exclusively once associated to languages similar C++. Go is meaningful of C in its syntax, making it relatively stress-free for longtime C designers to study.

In addition “Go, or Golang, is an open source programming language. It's astatically typed and produces compiled machine code binaries. However, this new programming language includes tooling that allows you to safely use memory, manage objects, collect garbage, and provide static (or strict) typing along with concurrency by (<https://yalantis.com/blog/why-use-go/>)”

Are there specific advantages of it compared to other languages?

Write it briefly in 2 ~ 4 sentences. (Look at what its website advertises most.)

One of Golang's biggest advantages is that it offers the clarity and ease-of-use that other languages lack. Golang's advantages make it easy for new programmers to quickly understand the language and for seasoned veterans to easily read each other's code (<https://builtin.com/software-engineering-perspectives/golang-advantages>)

7. Write ‘Hello World’ program using the chosen language. Write (or copy-paste) your code

```
// First Go program
package main

import "fmt"

// Main function
func main() {

    fmt.Println("!... Hello World ...!")
}
```