GO

A PREPRINT

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April 4, 2020

ABSTRACT

1 Introduction

2 History

Go was designed by a group of Google Engineers: Robert Griesemer, Rob Pike, Ken Thompson, and Russ Cox. The language was created due to frustration with existing languages, as they believed that no single language possessed qualities such as efficient compilation, execution, or general ease of use. The designers saw programmers choosing languages that prioritize ease of use over safety and efficiency, and realized a change needed to be made.

Aimed to integrate the strengths of both interpreted, dynamically typed languages and statically typed, compiled languages; Go is designed to be easy to use, efficient, safe, and modern. This was all achieved by doing things such as formulating intuitive syntax, designing a new type system, incorporating an efficient garbage collector, supporting networked and multi-core computing, and more.

Though the language was conceptualized in late 2007, The Go Programming Language Project was officially launched on November 10, 2009 as an open source project. Go is very much alive, popular applications such as Dropbox, Docker, and Kubernetes have been written in Go, and the language continues to grow in popularity.

3 Control Structures

Go has control structures

4 Data Types

5 Subprograms

6 Summary

References

[1] Golang Control Structures. `https://golang.org/doc/effective_go.html#control-structures`.

[2] Golang Origins. `https://golang.org/doc/faq#Origins`.