

# Golang for DevOps

## Course Outline

- Introduction to Go
  - Brief history of Go
  - Why Go
- Setup development environment (Linux, Mac, Windows)
  - Install Go
  - Configure VS Code
  - Code organization & Structure
- Getting Started
  - Compiling (go build) and Running Go Applications (go run)
  - Go Packages and Modules
  - Formatting Go Source Code (gofmt)
- Go Basics
  - Variables, Constants
  - Types and Zero Values
  - Comments
  - Naming Conventions in Go
  - Package fmt (print)
  - Comparison and Logical Operators
  - Flow Control (if, for, switch)
  - Arrays
  - Maps
  - Slices
  - Structs
  - Pointers
  - Functions
  - Working with files
  - Packages & Modules
  - Goroutines & Channels
- CLI Apps in GO
  - Cobra (CLI)
  - Viper (config)
- Goreleaser
  - Go app distribution
  - Releasing using Goreleaser