

# **Tools for Understanding Go Module Dependencies**

**What are Go modules?**

**go.mod**

Everything is sweet 🥥



# Gotcha 1

**go.mod versions aren't the compiled versions**

# Gotcha 2

**go.mod does not tell us all our deps**

# Gotcha 3

**go.mod tells us nothing about indirect deps**

**GOOD  
NEWS  
IS COMING**



# Tool 1

```
go list -m all
```

# Tool 2

```
go mod graph
```

# Tool 3

```
go mod why <pkg>
```

```
go mod why -m <module>
```

# Tool 4

**install:** `go get github.com/stellar/golistcmp`

`golistcmp <go list before> <go list after>`

# Recap

```
go list -m all
```

```
go mod graph
```

```
go mod why
```

```
golistcmp
```

# Further Reading

[alexedwards.net/blog/an-overview-of-go-tooling](https://alexedwards.net/blog/an-overview-of-go-tooling)

[golang.org/ref/mod](https://golang.org/ref/mod)

[ardanlabs.com/blog/2019/12/modules-03-minimal-version-selection.html](https://ardanlabs.com/blog/2019/12/modules-03-minimal-version-selection.html)

[research.swtch.com/vgo](https://research.swtch.com/vgo)

[research.swtch.com/vgo-principles](https://research.swtch.com/vgo-principles)

# Attributions

- Photo of [Man with fresh coconut relaxing](#) by [Artem Beliaikin](#)
- Photo of [Good news is coming](#) by [Jon Tyson](#)