

Seminario de Lenguajes opción Go

Raúl Champredonde

Seminario de Lenguajes opción Go

- Packages
- Modules
- Dependencies

Packages

```
✓ src
✓ projecttempconv
  ✓ tempconv
    -GO conv.go
    -GO tempconv.go
    -GO main.go
```

```
package main                                     main.go

import (
    "fmt"
    tc "projecttempconv/tempconv"
)

func main() {
    c := tc.BoilingC
    fmt.Println(c, "=",
    tc.CToF(c))
}
```

```
package tempconv                                conv.go

// CToF converts a Celsius temperature to
// Fahrenheit.
func CToF(c Celsius) Fahrenheit {
    return Fahrenheit(c*9/5 + 32)
}

// FToC converts a Fahrenheit temperature to
// Celsius.
func FToC(f Fahrenheit) Celsius {
    return Celsius((f - 32) * 5 / 9)
}
```

```
// Package tempconv performs Celsius
// and Fahrenheit conversions.
package tempconv                                tempconv.go

import "fmt"

type Celsius float64
type Fahrenheit float64

const (
    AbsoluteZeroC Celsius = -273.15
    FreezingC      Celsius = 0
    BoilingC       Celsius = 100
)

func (c Celsius) String() string {
    return fmt.Sprintf("%g°C", c)
}

func (f Fahrenheit) String() string
{
    return fmt.Sprintf("%g°F", f)
}
```

Packages

```
▼ src
▼ projecttempconv
  ▼ tempconv
    -go conv.go
    -go tempconv.go
    -go main.go
```

```
package main                                     main.go

import (
    "fmt"
    tc "projecttempconv/tempconv"
)

func main() {
    c := tc.BoilingC
    fmt.Println(c, "=",
tc.CToF(c))
}
```

```
package tempconv                                conv.go

func CToF(c Celsius) Fahrenheit { ... }

func FToC(f Fahrenheit) Celsius { ... }
```

```
package tempconv                                tempconv.go

import "fmt"

type Celsius float64
type Fahrenheit float64

const (
    AbsoluteZeroC Celsius = -273.15
    FreezingC      Celsius = 0
    BoilingC       Celsius = 100
)

func (c Celsius) String() string { ... }

func (f Fahrenheit) String() string { ... }
}
```

```
> C:\Usuario\go\src\projecttempconv> go run .\main.go
main.go:5:2: package projecttempconv/tempconv is not in GOROOT (C:\Program Files\Go\src\projecttempconv\tempconv)
```

Modules

```
> C:\Usuario\go\src\projecttempconv> go mod init projecttempconv
```



```
go.mod
module
projecttempconv
go 1.20
```

```
> C:\Usuario\go\src\projecttempconv> go run .\main.go
100°C = 212°F
```

Dependencies

```
package main                                     main.go

import (
    "fmt"
    tc "projecttempconv/tempconv"

    "rsc.io/quote" // <=====
)

func main() {
    c := tc.BoilingC
    fmt.Println(c, "=", tc.CToF(c),
quote.Hello())
}
```

```
> C:\Usuario\go\src\projecttempconv> go get -u rsc.io/quote
```

```
> C:\Usuario\go\src\projecttempconv> go run .\main.go
100°C = 212°F
99 bottles of beer on the wall, 99 bottles of beer, ...
```

```
module projecttempconv                             go.mod

go 1.20

require (
    golang.org/x/text v0.9.0 //
indirect
    rsc.io/quote v1.5.2 // indirect
    rsc.io/sampler v1.99.99 // indirect
)
```