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Go Usergroup Rhein-Ruhr / Düsseldorf

Testing à la Go

INNOQ

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Das Hauptgericht



Das Hauptgericht

- Testframework: *testing* package
- Testrunner: *go test*

Das Hauptgericht

<package-name>_test.go

Das Hauptgericht

```
func TestXxx(t *testing.T)
```

Das Hauptgericht

testing.T

Ein Blick in die Küche I



Die Beilagen



Die Beilagen - Benchmarking

```
func BenchmarkXxx(b *testing.B)
```

Die Beilagen - Benchmarking

testing.B

Die Beilagen - Benchmarking

go test -bench

Die Beilagen - Coverage

go test -cover

Die Beilagen – Example Tests

```
func ExampleHello() {
    fmt.Println("Hello Go-RR")
    // Output: Hello Go-RR
}
```

Die Beilagen – Example Code

```
func Example( ) { ... }  
func ExampleF( ) { ... }  
func ExampleT( ) { ... }  
func ExampleT_M( ) { ... }
```

Ein Blick in die Küche II



Dessertvariationen



Dessertvariationen

- **testing/iotest**
- **net/http/httptest**
- **testing/quick**

Ein Blick in die Küche III





Testen à la Chef

Testen à la Chef

- Integrations-/(langsame)-Tests:
 - `*_integration_test.go`
 - `// +build integration`
 - `go test -tags=integration`

Testen à la Chef

- Testaufteilung für *mypackage*
 - Test der *internen/privaten* Funktionen:
mypackage_internal_test.go
 - Test des *Behaviour / API*
(im package mypackage_test):
mypackage_test.go

Testen à la Chef

- Testdaten:
 - *table-driven tests*
 - **testdata/**

Der Feinschmecker



The image shows a laptop screen displaying a recipe for "Chicken & chorizo paella" from the Jamie Oliver website. The website has a green header with the Jamie Oliver logo, navigation links for RECIPES, LEARN, CHRISTMAS, HEALTH, and MORE, and buttons for SIGN UP/LOG IN, FOLLOW, and a search icon. The main content features a large image of a paella dish in a pan, garnished with lime wedges. The title "Chicken & chorizo paella" is prominently displayed, along with the subtitle "MY QUICK & EASY RECIPE". A quote by Jamie Oliver follows: "I've made a few paellas in my time. The biggest one was for about 800 people in a village in Spain and it was hard work, but an incredible experience. The Spanish can be quite protective about what is and what isn't a paella, but at the same time, the spirit of their cooking has always been flexible to whatever meat, fish, seafood or game can be found. I've eaten and enjoyed many paellas, and I hope you like my humble, great-value expression of one." Below the quote, the recipe details are listed: "SERVES 4 COOKS IN 50 MINUTES DIFFICULTY SUPER EASY". The ingredients are categorized as "Rice, Dinner Party, Dairy-free, Spanish". A "NUTRITION PER SERVING" table is shown with columns for Calories, Fat, Saturates, Protein, Carbs, Sugars, Salt, and Fibre.

Der Feinschmecker

- <https://github.com/stretchr/testify>
- <https://github.com/vektra/mockery>
- <https://github.com/leanovate/gopter>

Danke! Fragen?



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<https://github.com/ci42/testing-a-la-go>

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