

# Keine Angst vor dem eigenen Quellcode

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**DIGICOMP**



# ■ Who are we?

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## ■ Who are we?



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# ■ Content

1. Introduction

2. Unit Test

3. Outro

# ■ What kind of tests exists?

## Unit Tests

- Test certain functions or units of code
- Super fast
- Easy to write

## e2e Tests

- Runs the real application and simulate the users behavior
- Very slow
- Very fragile

# ■ Test Strategy

- Use the smallest test type possible
- Write readable tests
- Make tests fail
- Test all the time

# Tools & Setup

■ Tools







- Test runner
- Test code on various browsers
- Integrate with various continuous integration services like Jenkins



- Behavior-driven development framework
- Fast
- Dependency free



# Protractor

end to end testing for AngularJS

- End-to-end test framework
- Built on top of Selenium WebDriverJS
- Runs in a real browser
- Test like a user

## ■ Insiders' tip



### Wallaby.js

- Integrated Continuous Testing Tool for JavaScript

# Demo

# Unit Tests

## ■ Definition

**Unit Testing** is a level of software **testing** where individual functions of a software are tested. The **purpose** is to validate that each function of the software performs as designed.

# ■ Unit Test vs. Integration Test

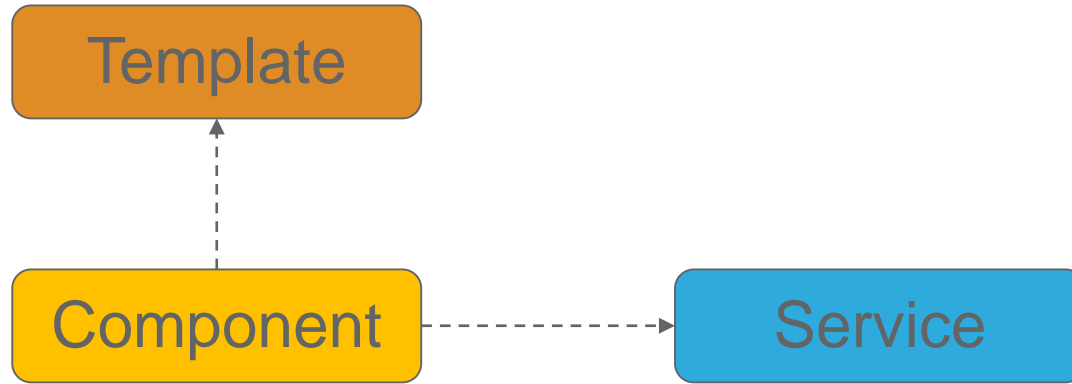
## Unit Test

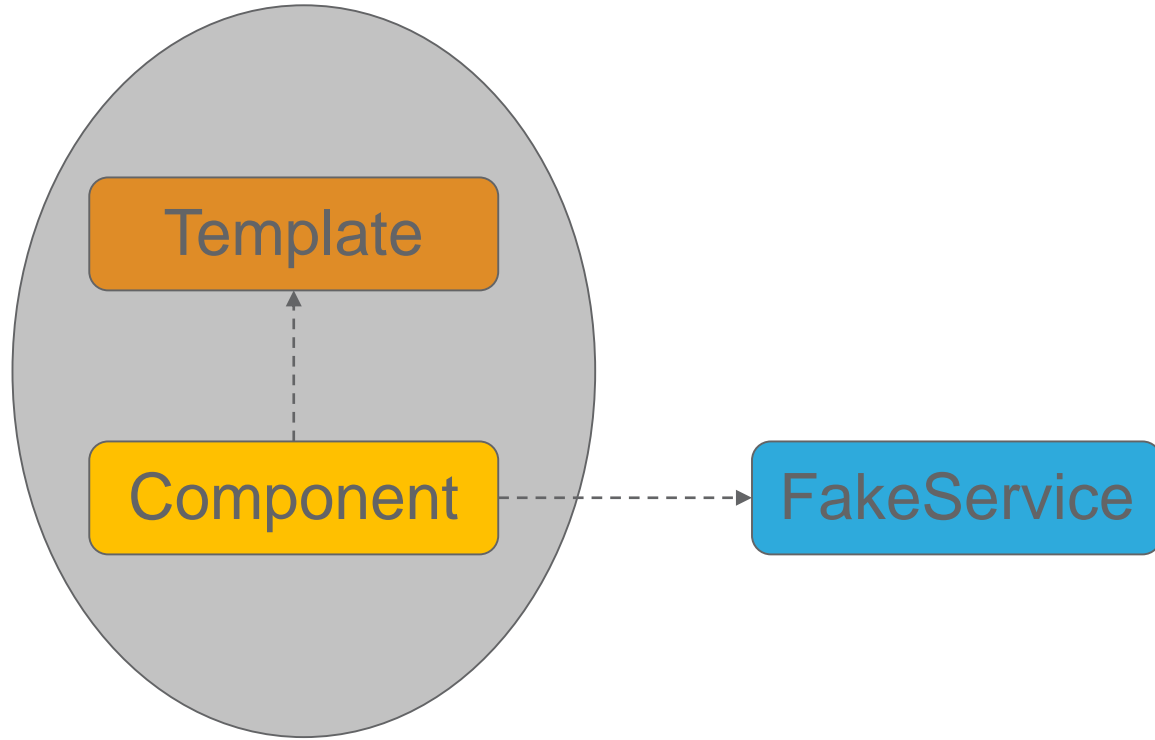
- Test in isolation, without external resources (e.g. templates)
- Just a simple function

## Integration Test

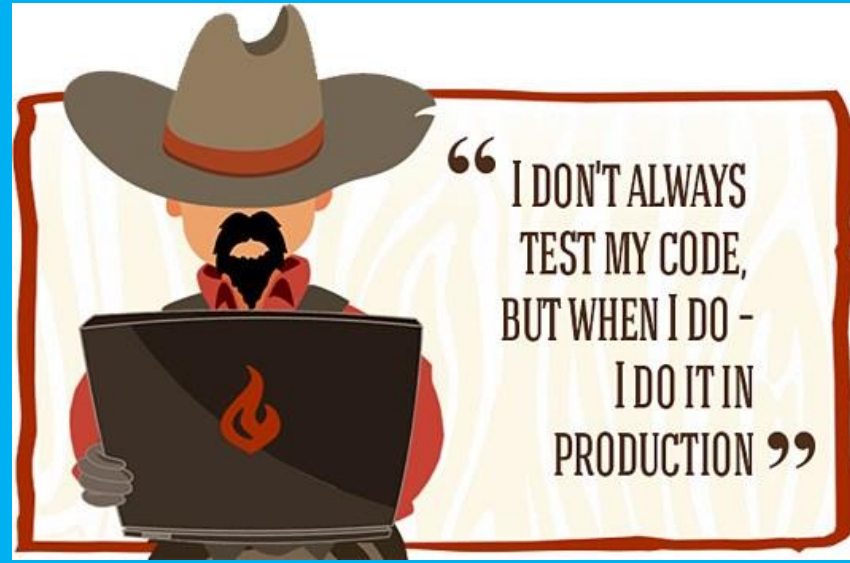
- Test with external resources (e.g. templates)







It helps you catch defects **before**  
releasing software



## ■ Basics

```
describe('Test Suite', () => { //Test Suite
    it("A single spec", () => { // Spec or test

    });
});
```

## ■ Basics

```
describe('Test Suite', () => { // Test Suite
  it("A single spec", () => { // Spec or test
    // Arrange
    let component = new AppComponent();

    // Act
    component.ngOnInit();

    // Assert
    expect(component.title).toBe("hallo thomas");
  });
});
```

# Demo

## ■ How to start

- Angular CLI
- Our Demos
- Documentation on Angular Docs
- Ask us 😊

# Demos and slides



[github.com/gassmannT/Angular-Testing-DOTNETDAY/](https://github.com/gassmannT/Angular-Testing-DOTNETDAY/)



# Thank you – Besten Dank

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