Keine Angst vor dem eigenen Quellcode

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DIGICOMP   Microsoft   NOSERENGINEERING
WE KNOW HOW   progile
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SOLUTIONS
SOFTWARE

Who are we?

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Content

1. **Introduction**

2. **Unit Test**

3. **Outro**

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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

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Test Strategy

- Use the smallest test type possible

- Write readable tests

- Make tests fail

- Test all the time

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Tools & Setup

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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

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Insiders' tip

Wallaby.js

- Integrated Continuous Testing

  Tool for JavaScript

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Demo

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Unit Tests

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Definition

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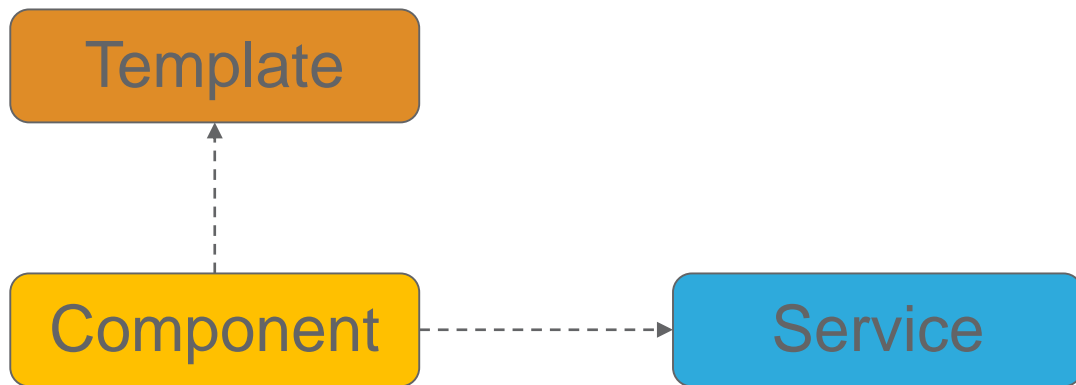
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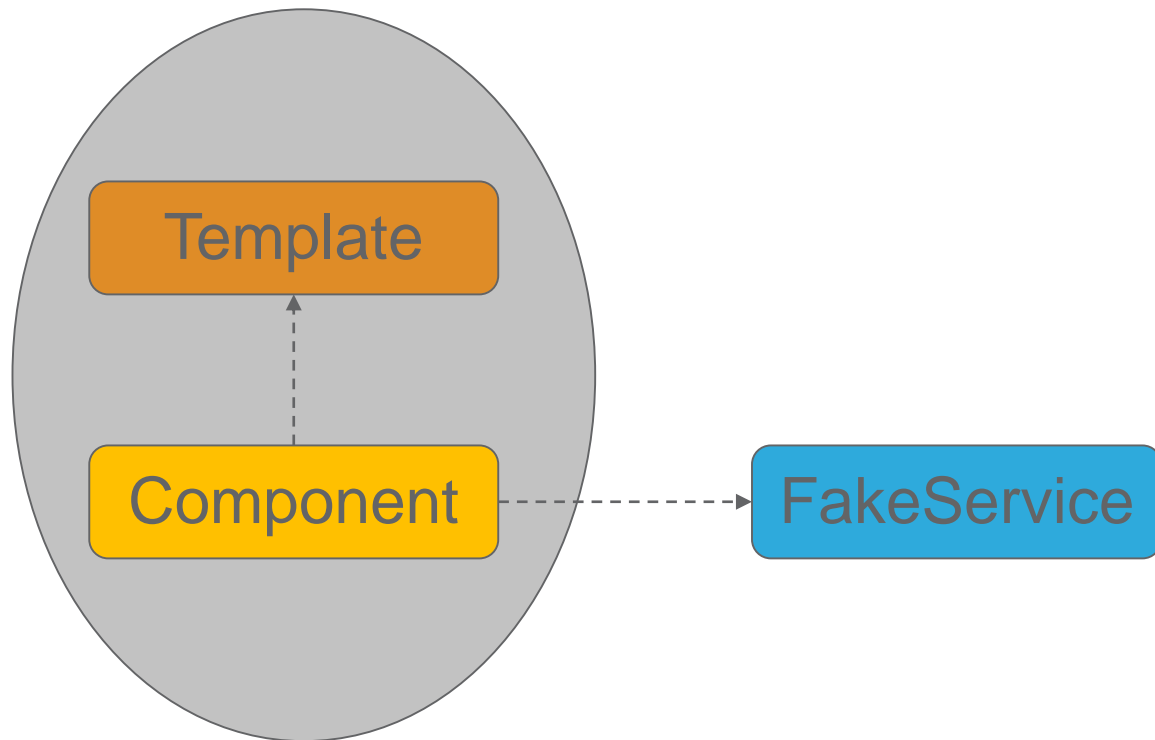
Unit Test vs. Integration Test

Unit Test

- Test in isolation, without
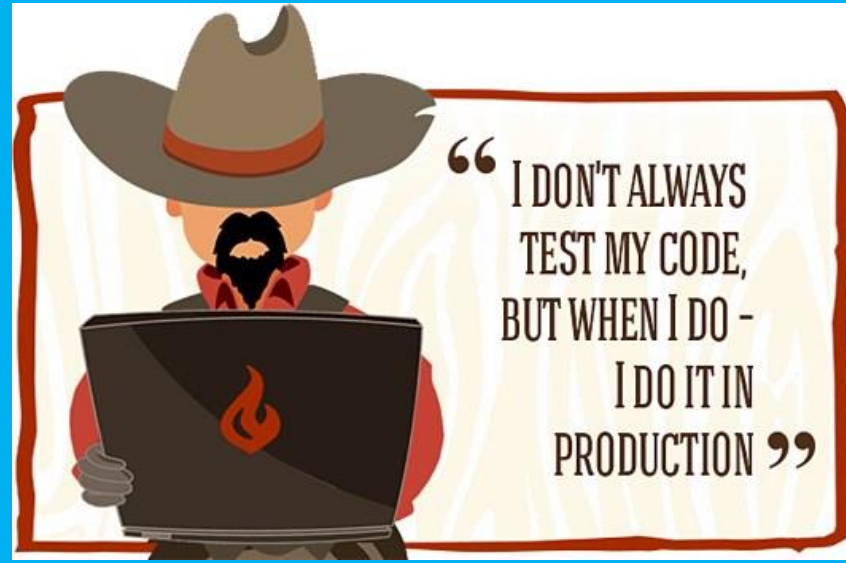 external resources (e.g.
  templates)

- Just a simple function

Integration Test

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

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

I DON'T ALWAYS TEST MY CODE, BUT WHEN I DO – I DO IT IN PRODUCTION

Basics

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

    });
});
```

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Basics

```javascript
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");
    });
});
```

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Demo

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How to start

- Angular CLI

- Our Demos

- Documentation on Angular Docs

- Ask us ☺

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Demos and slides

github.com/gassmannT/Angular-Testing-DOTNETDAY/

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Thank you – Besten Dank

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