ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Professional Angular Testing

Introduction

About Me...

Rainer Hahnekamp

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https://www.youtube.com/@RainerHahnekamp

https://www.twitter.com/RainerHahnekamp

NEWS https://www.ng-news.com

TS https://github.com/softarc-consulting/sheriff

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Goal

- Cover major testing technologies and techniques
- Understanding trade-offs between unit/component/integration/e2e tests
- Try them out

Caution: Live Coding Ahead

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Housekeeping

- 9.00 - 16.30 CEST
- 15 minutes breaks in morning and afternoon session
- 1 hour lunch break from 12.00 - 13.00
- GitHub Repo
- Solution Branch
- Live Coding

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Agenda

- E2E Tests
- Component Tests
  - Cypress
  - Testing Library
- Unit Tests
- Testing Strategies

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Housekeeping

- 15 minutes breaks
- 16.00 (MEZ) - 20.00 (MEZ)
- GitLab Repository

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Agenda

Part 1
Unit Tests

- Introduction
- Asynchrony
- Mocking
- RxJs Marbles

Part 2
Component & Integration Tests

- Basics Test Bed
- Miscellaneous
  - Mocking Components
  - Test Setup
- PowerTools
  - Spectator
  - Testing Library
  - Harnesses
- Testing Strategies

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Agenda

Part 1

E2E Testing

- Basics
- Advanced

Part 2

Unit Tests

- Asynchrony
- Mocking
- RxJs Marbles

Part 3

Component & Integration Tests

- TestBed
- Cypress Component Testing
- Fallback Power Tools
  - Harnesses
  - Spectator
  - Harnesses
- Visual Regression
- Testing Strategies

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Exercise-intensive workshop

Engage!

I don't know everything, but I'll try to look it up

Introduction Round

1. Who are you?
2. What do you do (in your job)?
3. What topic(s) interests you the most?

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Outside-In Tests

Integration Tests

State-Driven Tests

Inside-Out Tests

Wide Tests

Sociable Tests

Behaviour-Driven Tests

Isolated Tests

Narrow Tests

Laser Tests

Component Tests

Solitary Tests

Flashlight Tests

Unit Tests

Integrated Tests

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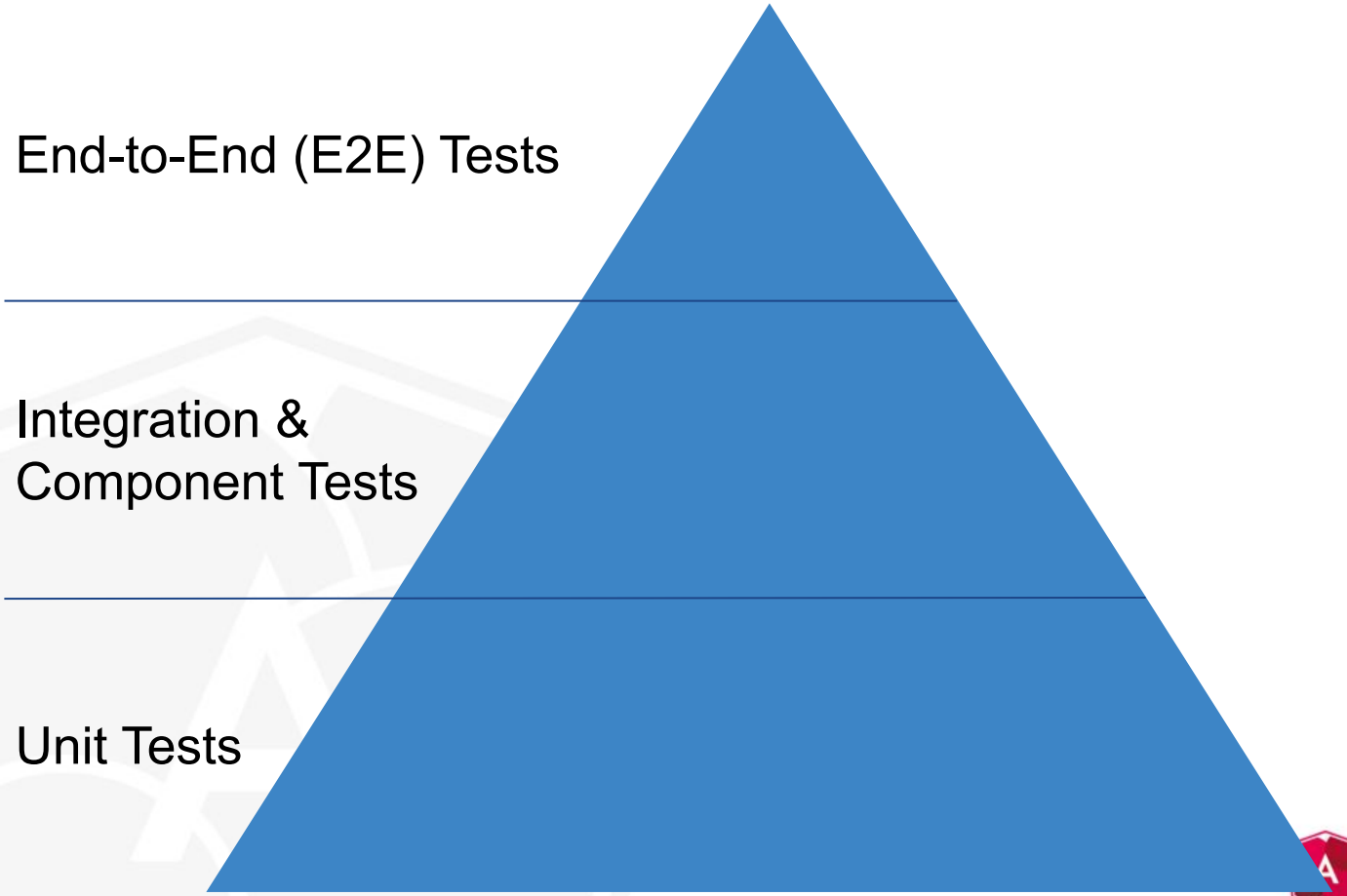

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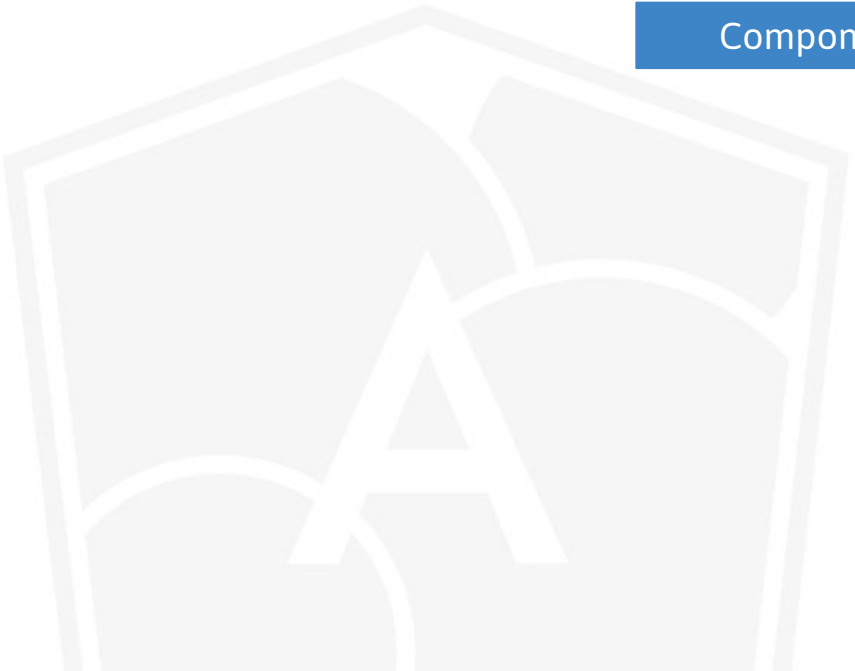
Component



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Component

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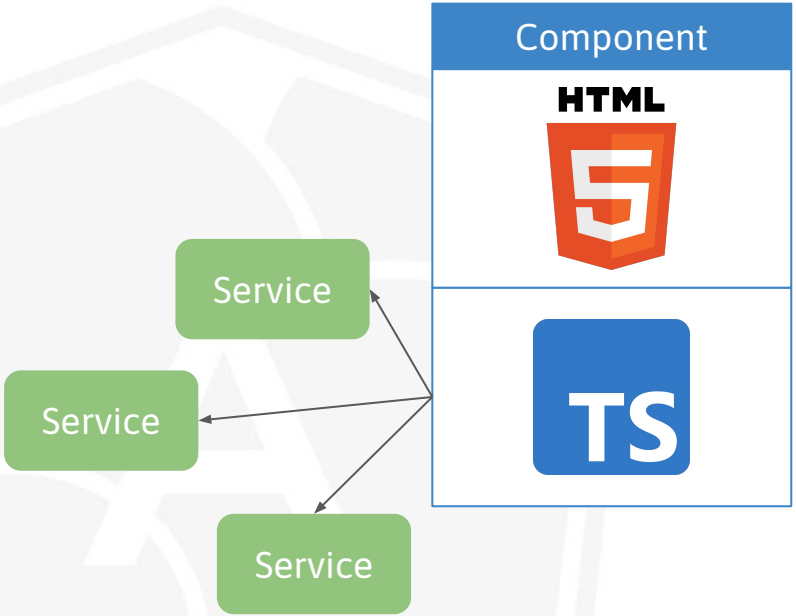

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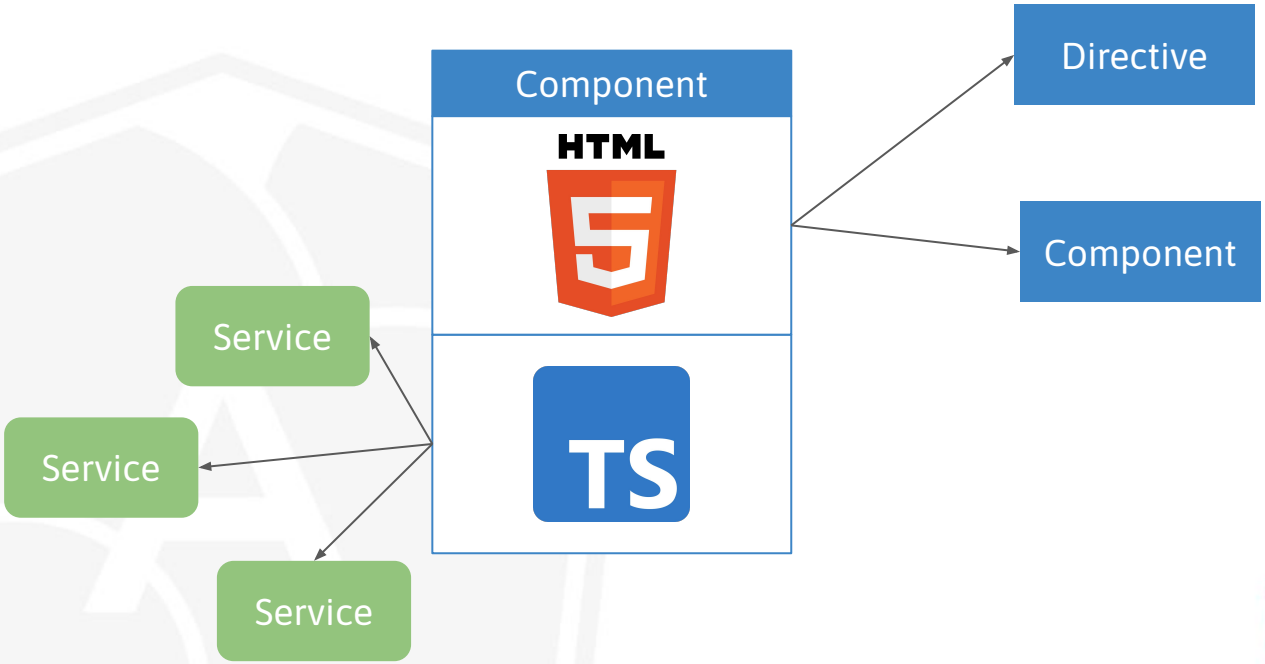

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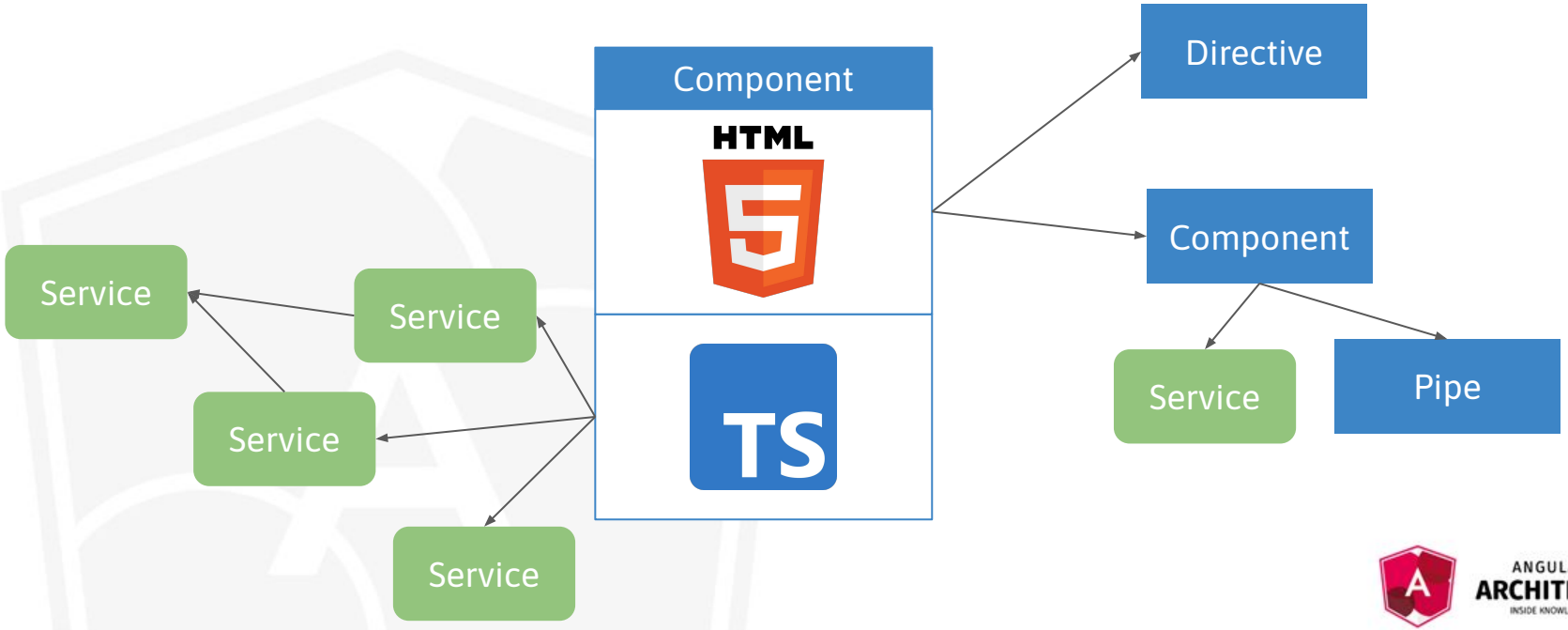
Component
HTML
TS
Directive
Component
Service
Pipe
Service
Service
Service
Service
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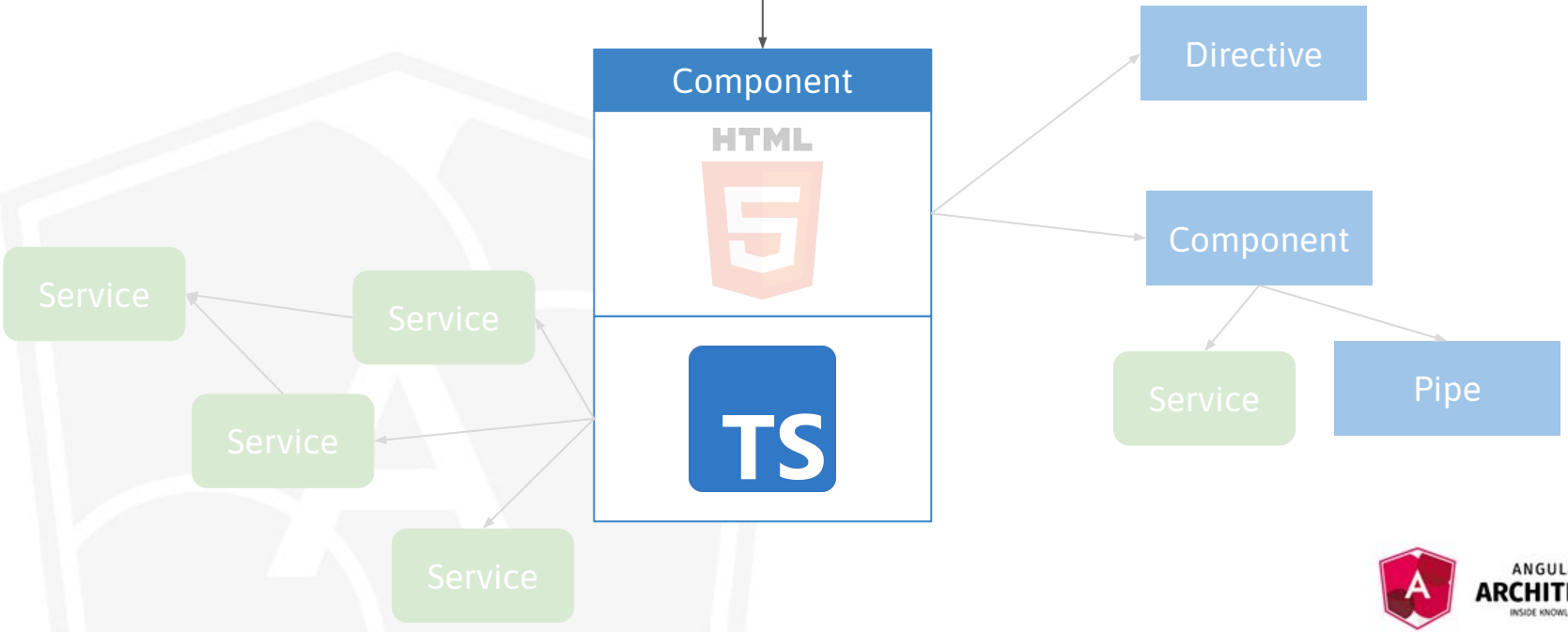
Unit Test



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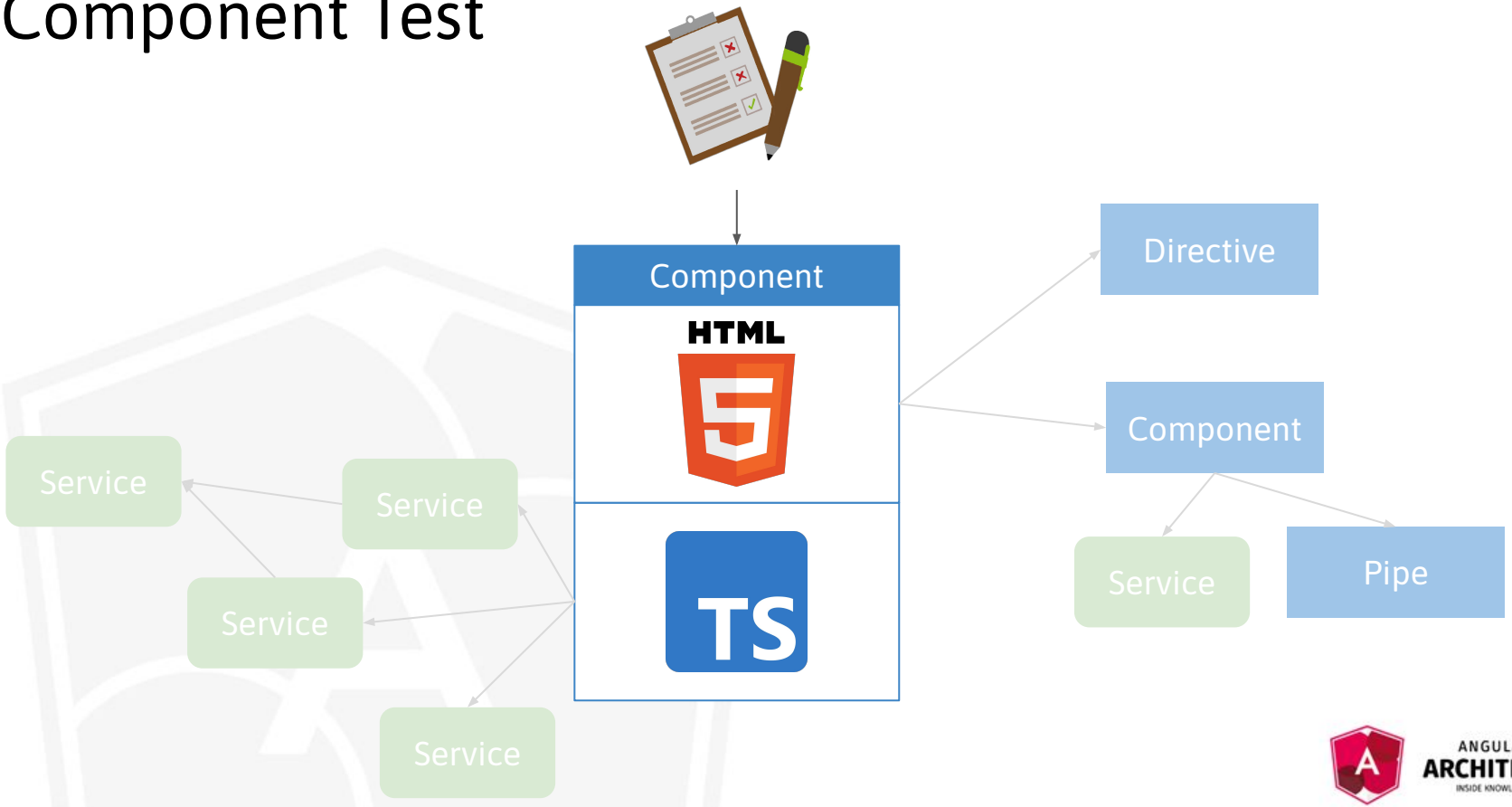
~Component Test



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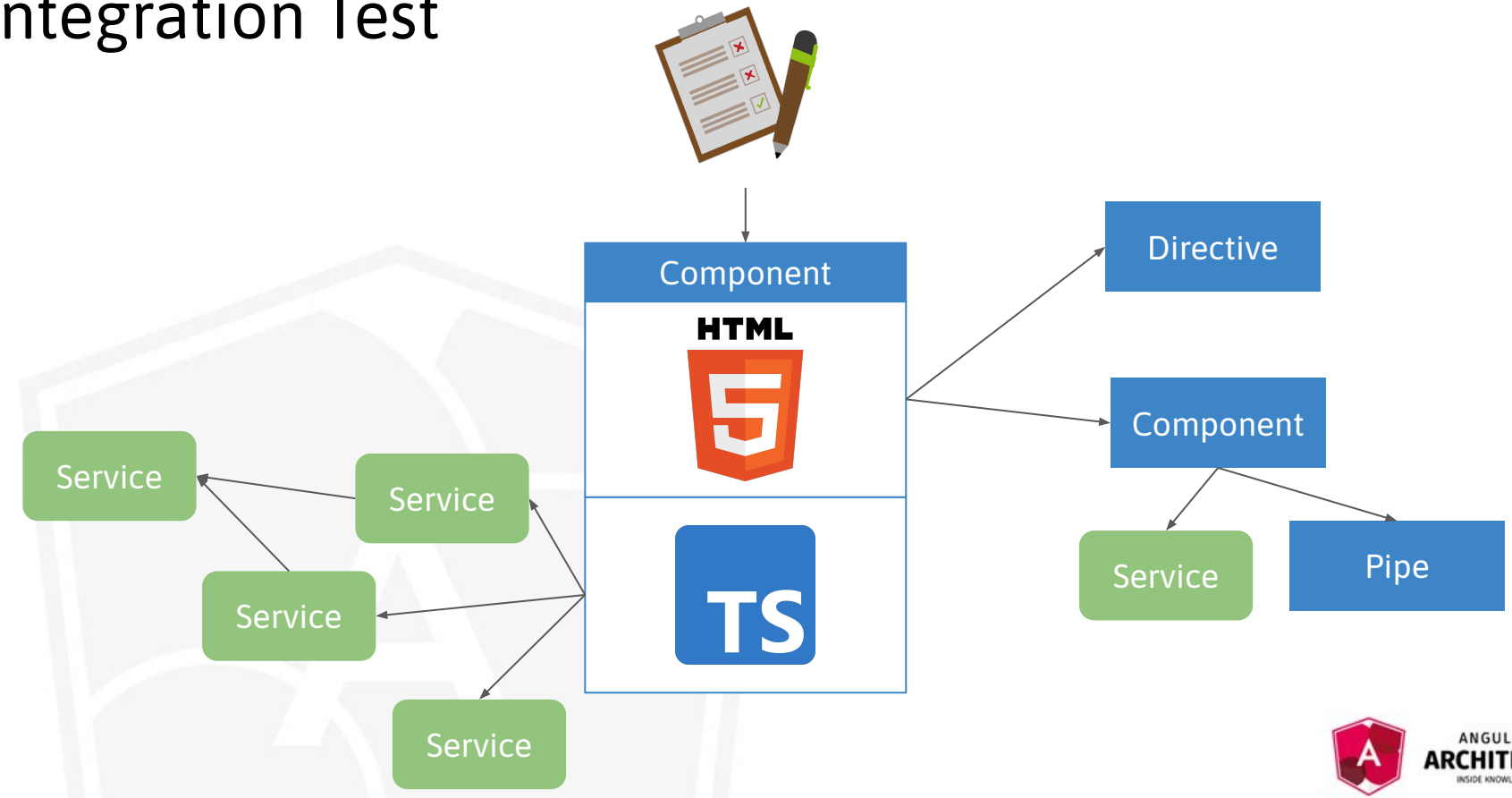
Integration Test



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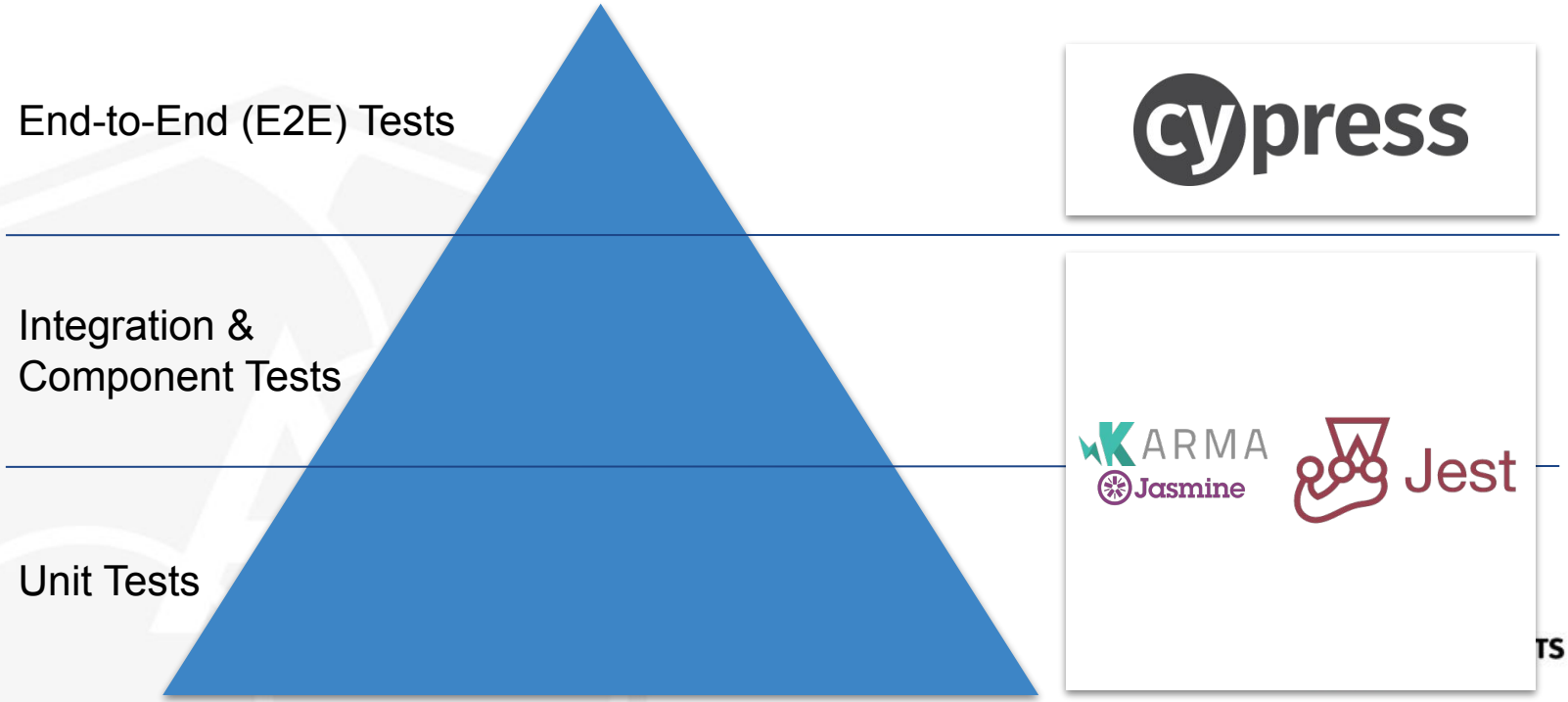
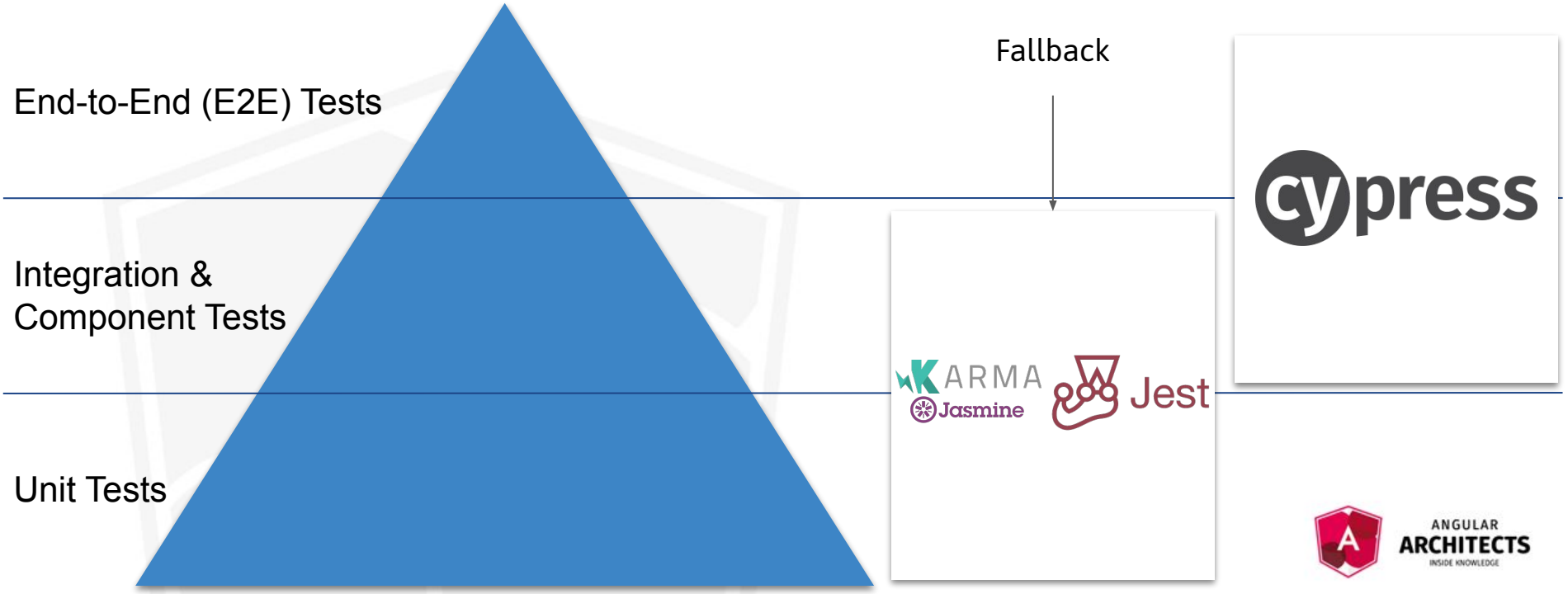
Classic testing pyramide



Testing pyramide with Cypress Component Test Runner



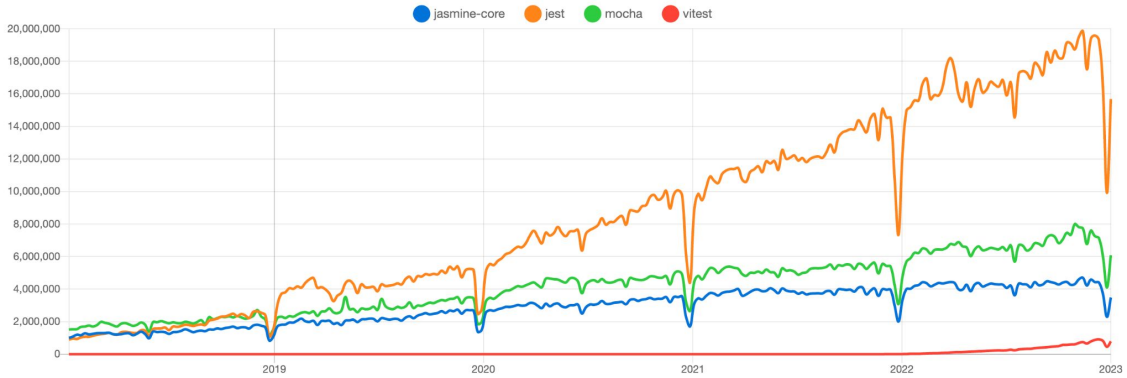
npm trends

jasmine-core vs jest vs mocha vs vitest

Enter an npm package...

jasmine-core × jest × mocha × vitest × + jasmine + qunit + ava

Downloads in past 5 Years



Stats

	Stars	Issues	Version	Updated	Created	Size
jasmine-core	15,484	31	4.5.0	2 months ago	9 years ago	
jest	41,086	920	29.3.1	2 months ago	11 years ago	minzipped size 556.7 KB
mocha	21,840	285	10.2.0	a month ago	11 years ago	minzipped size 62.5 KB
vitest	7,481	183	0.27.0	2 days ago	a year ago	bundlephobia 429

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