



# Professional Angular Testing



## Introduction



# About Me...



## Rainer Hahnekamp



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**ARCHITECTS**  
INSIDE KNOWLEDGE



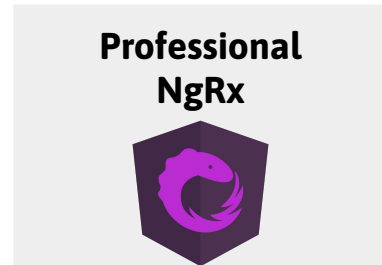
<https://www.youtube.com/@RainerHahnekamp>



<https://www.ng-news.com>



<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
- GitHub Repo
- Solution Branch



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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



# Exercise-intensive workshop

Theory (Slides) &  
Live Coding

Exercise Time  
~ 40 minutes

Discussion of the  
Solution



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# Engage!



# 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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End-to-End (E2E) Tests

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Integration &  
Component Tests

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Unit Tests





Component



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Component



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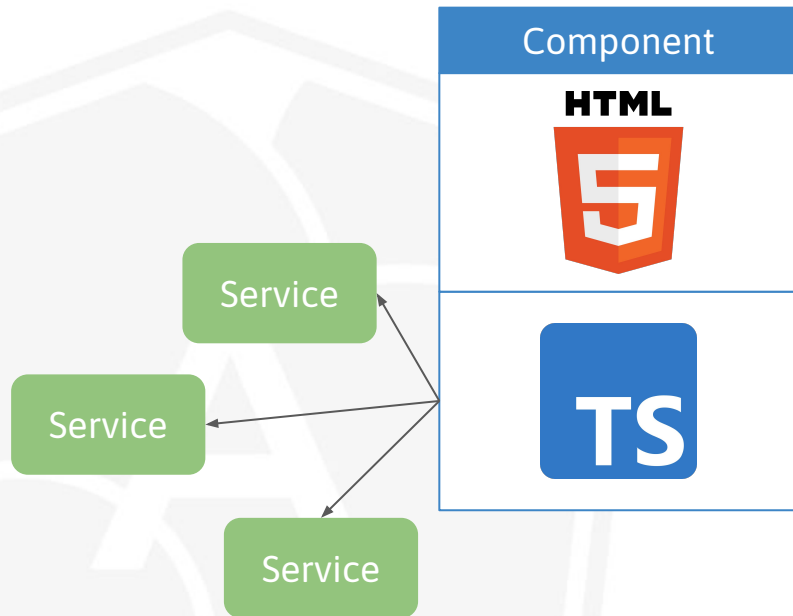
Component

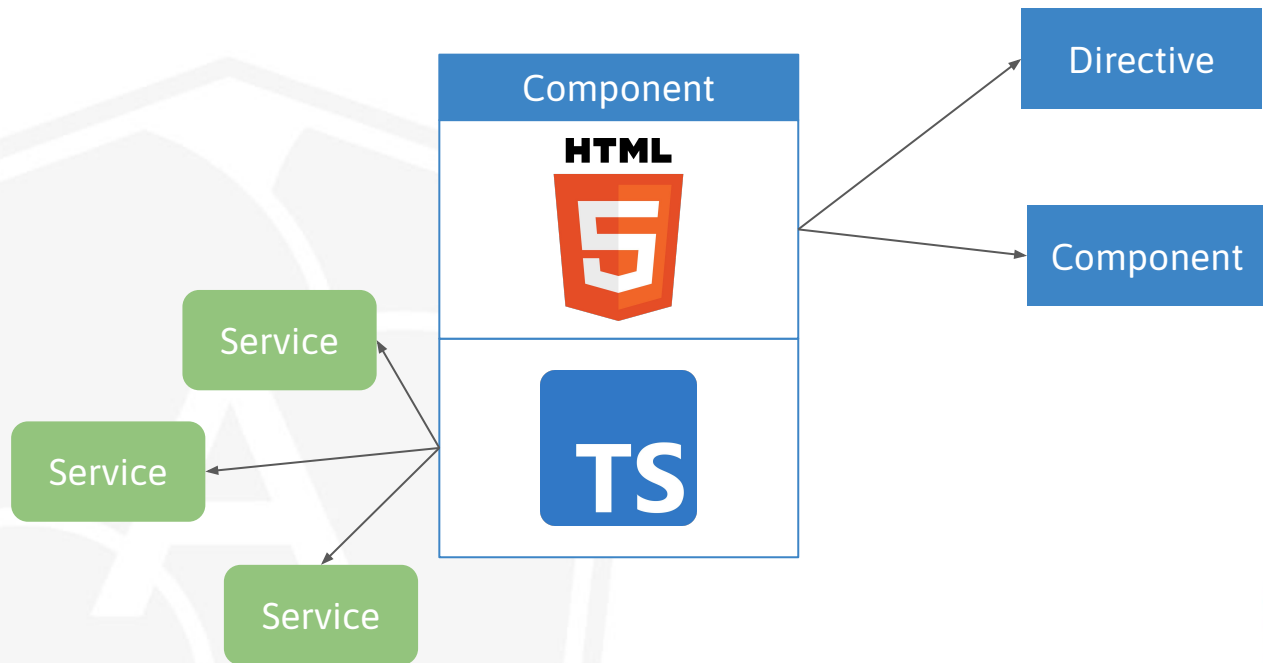
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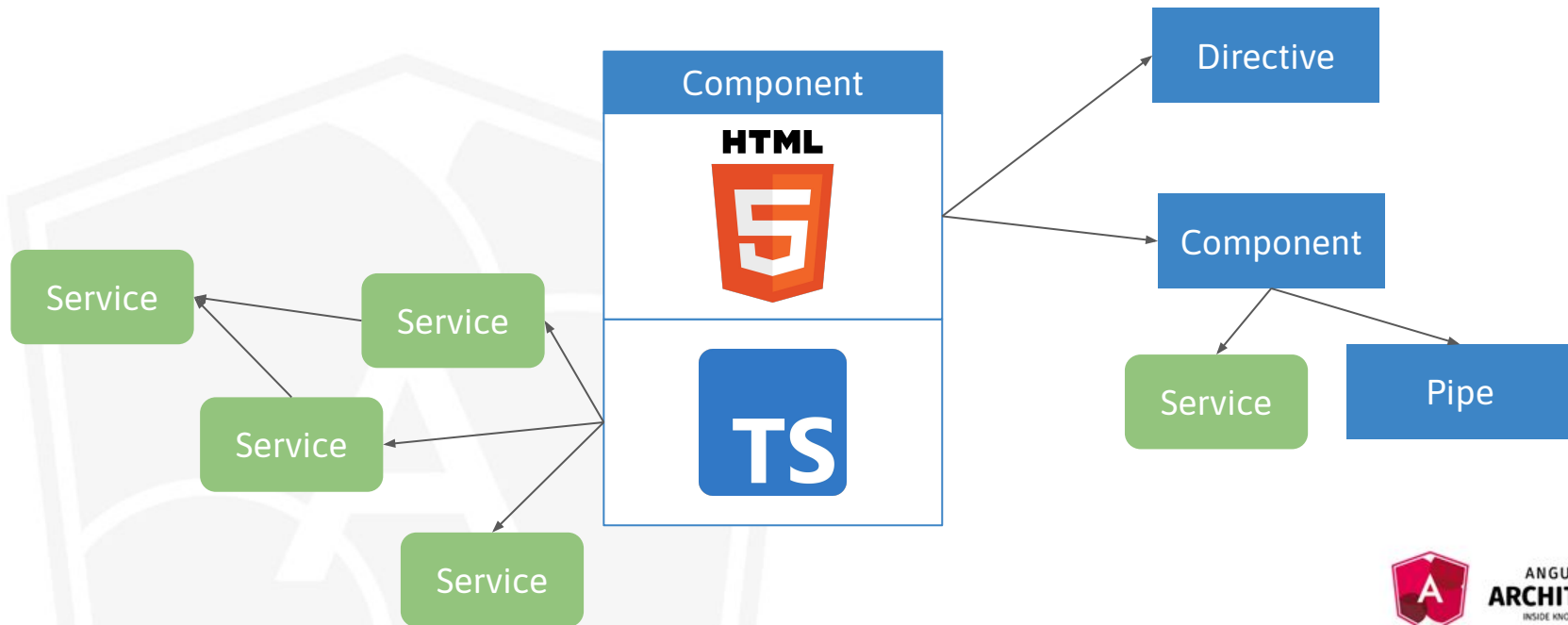


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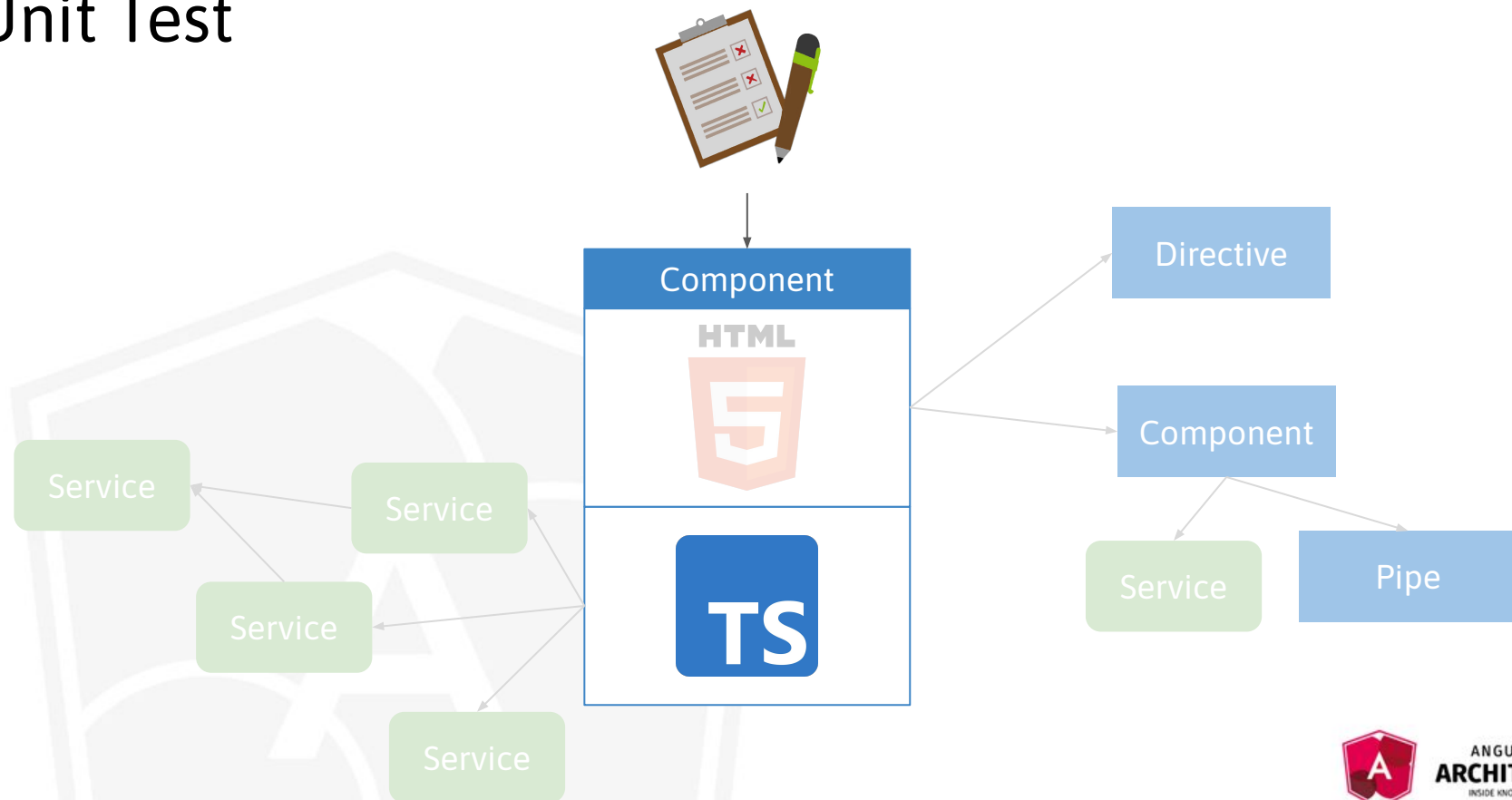




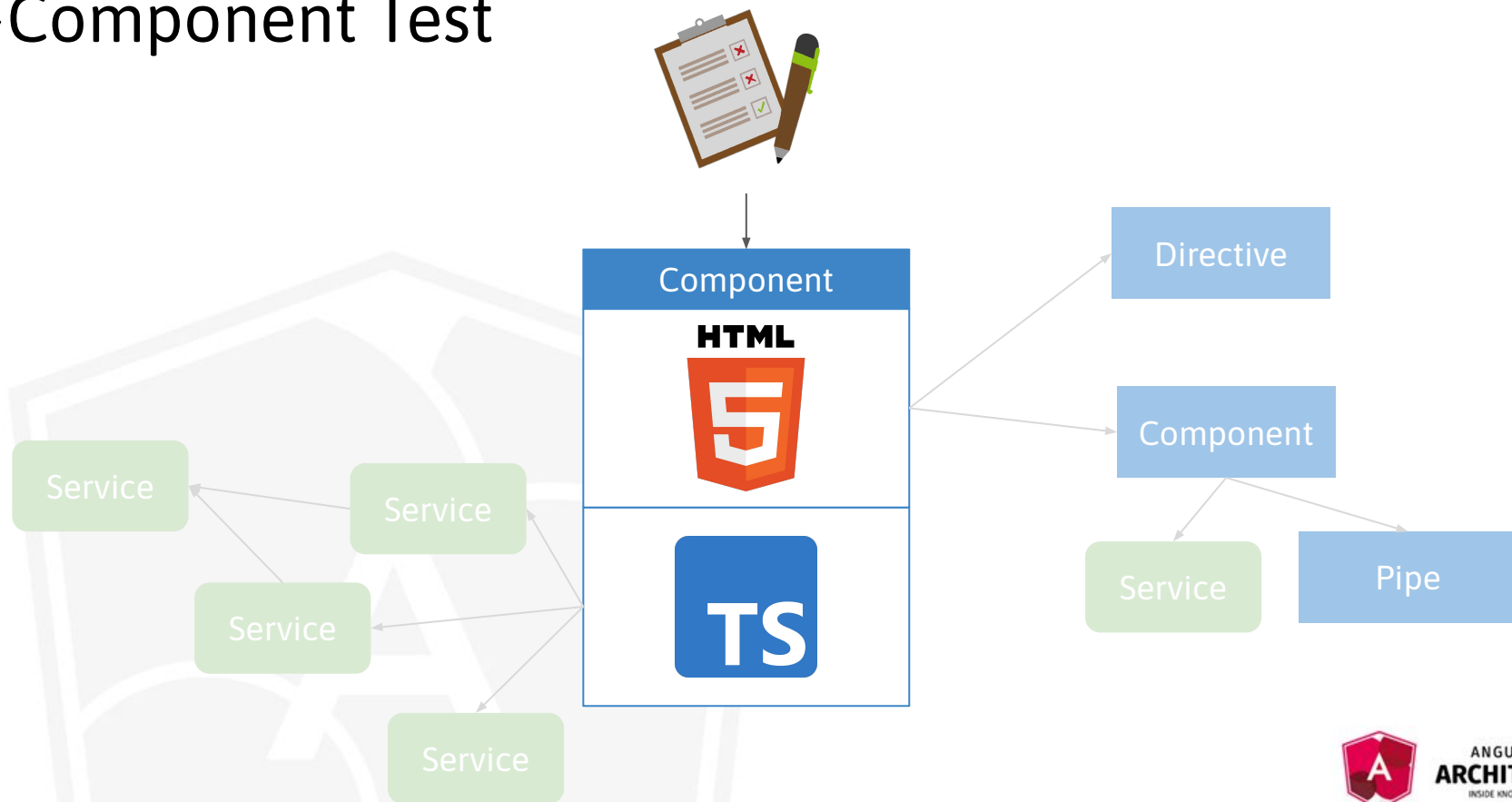




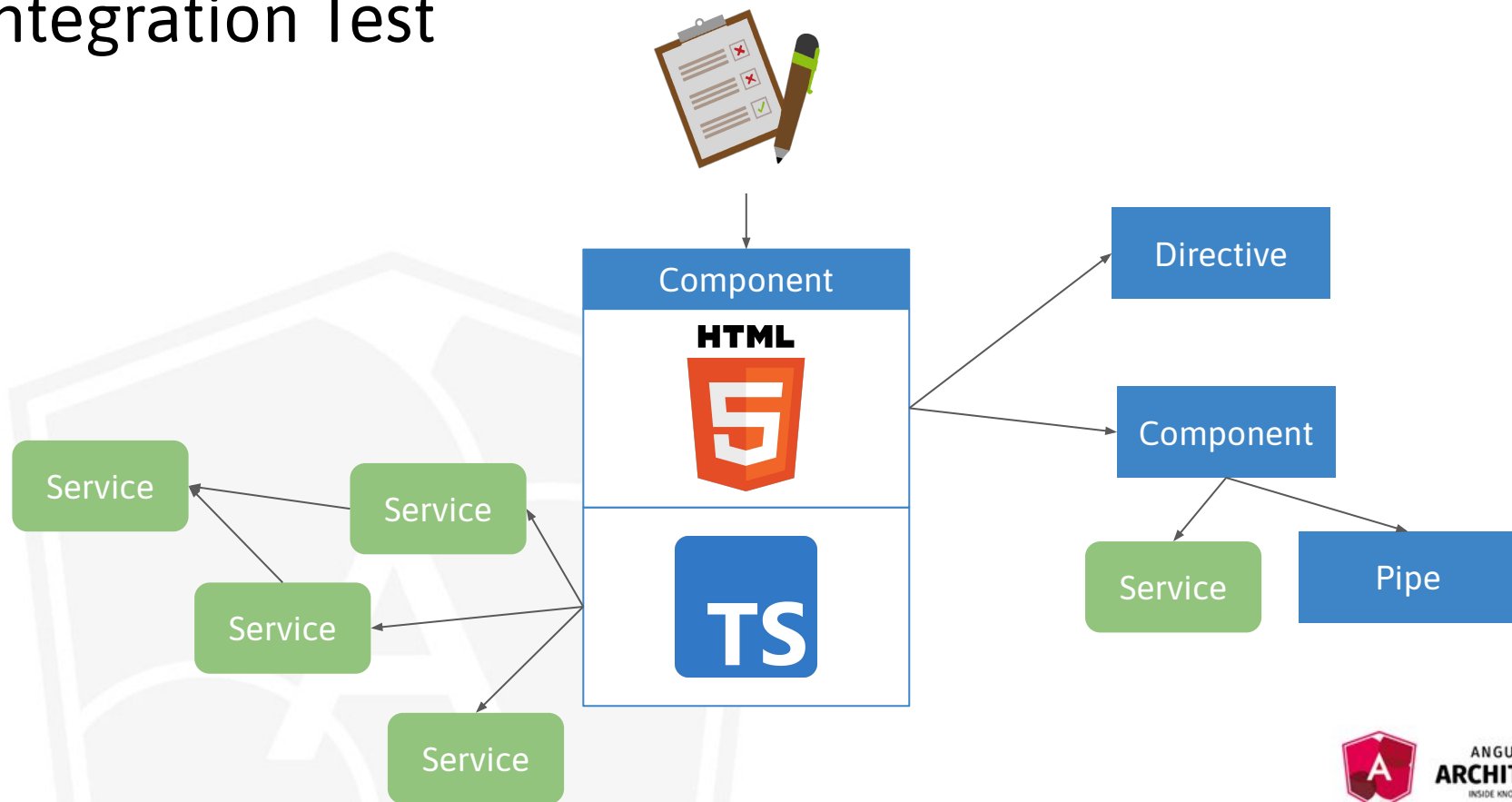
# Unit Test



# ~Component Test



# Integration Test





# Classic testing pyramide

End-to-End (E2E) Tests

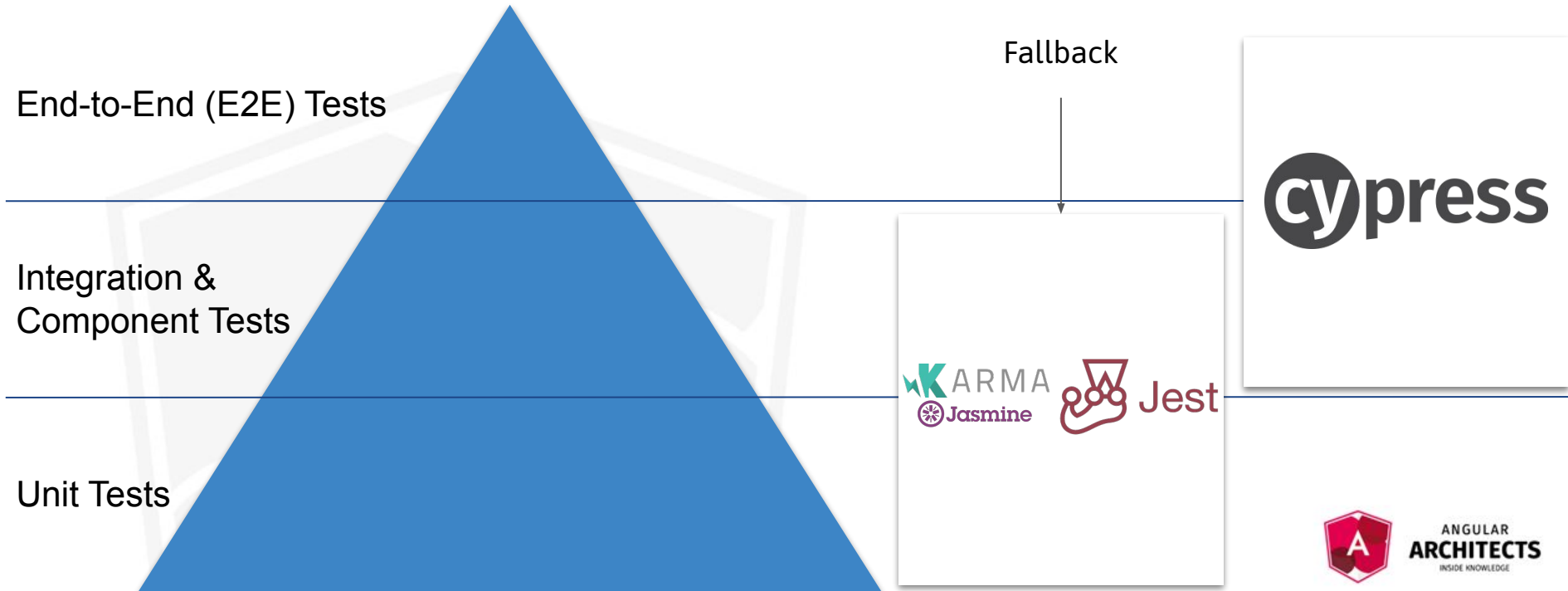


Integration &  
Component Tests

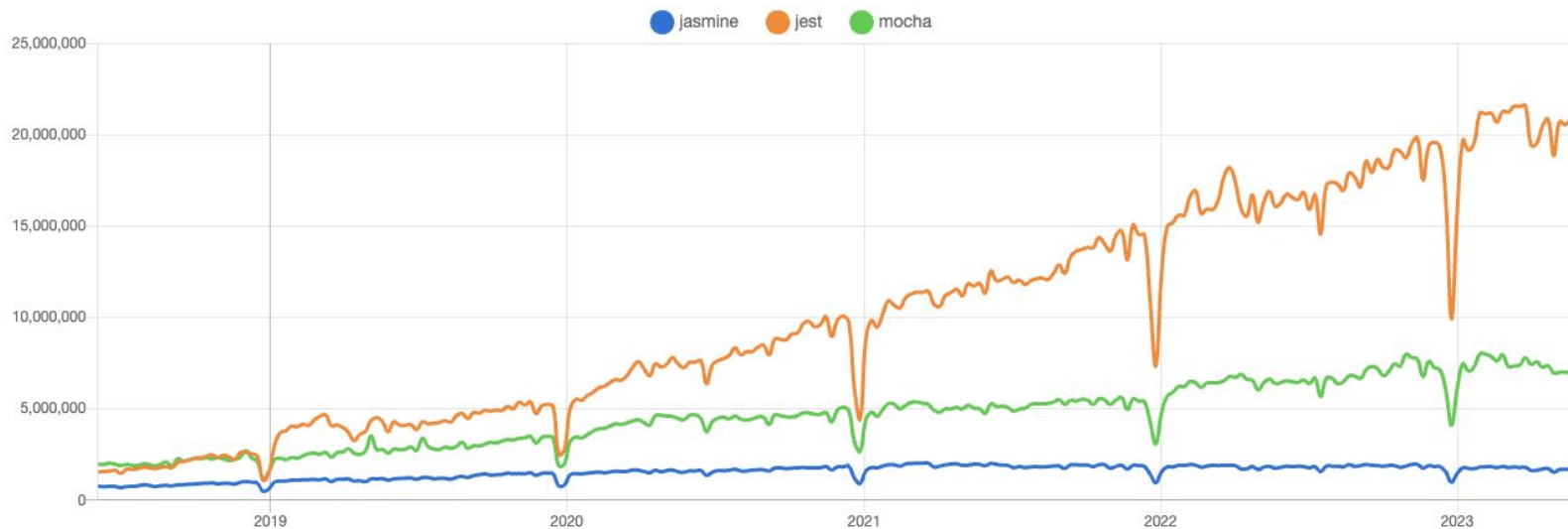


Unit Tests













# Testing pyramide with Cypress Component Test Runner



Downloads in past 5 Years ▾



## Stats

			Stars	Issues	Version	Updated <sup>?</sup>	Created <sup>?</sup>	Size
	jasmine	  	368	5	5.0.0	23 days ago	9 years ago	minzipped size <span>54.5 KB</span>
	jest	  	42,067	536	29.5.0	3 months ago	11 years ago	minzipped size <span>568.3 KB</span>
	mocha	  	22,031	296	10.2.0	6 months ago	12 years ago	minzipped size <span>62.5 KB</span>