



Professional Angular Testing



Introduction



About Me...



Rainer Hahnekamp



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ARCHITECTS
INSIDE KNOWLEDGE



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



<https://www.twitter.com/RainerHahnekamp>



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



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Goal

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



Housekeeping

- 4 Units per Day
- 15 minutes breaks
- 1 hour lunch break from 12.00 - 13.00
- GitHub Repo
- Solution Branch



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Agenda

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



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



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!



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**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

Sociable Tests

Behaviour-Driven Tests

Isolated Tests

Laser Tests

Component Tests

Solitary Tests

Flashlight Tests

Unit Tests

Integrated Tests



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End-to-End (E2E) Tests

Integration &
Component Tests

Unit Tests





Component



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Component



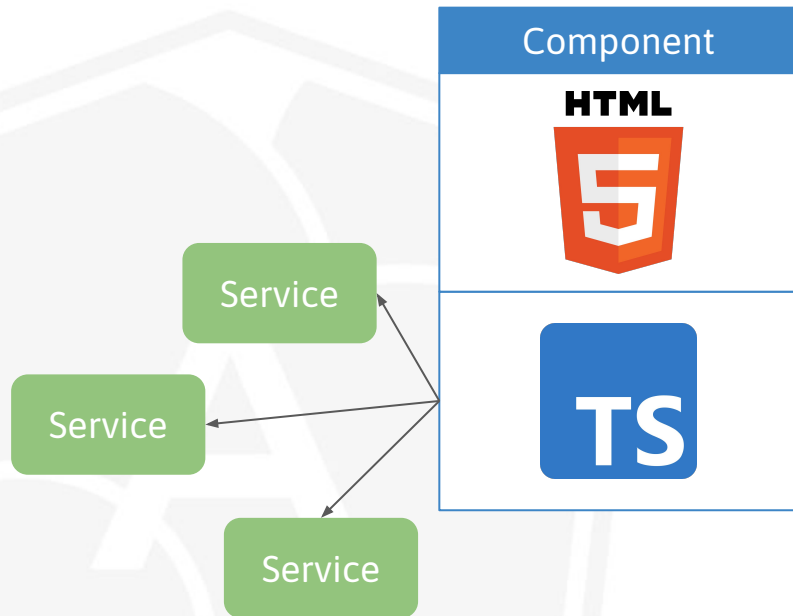
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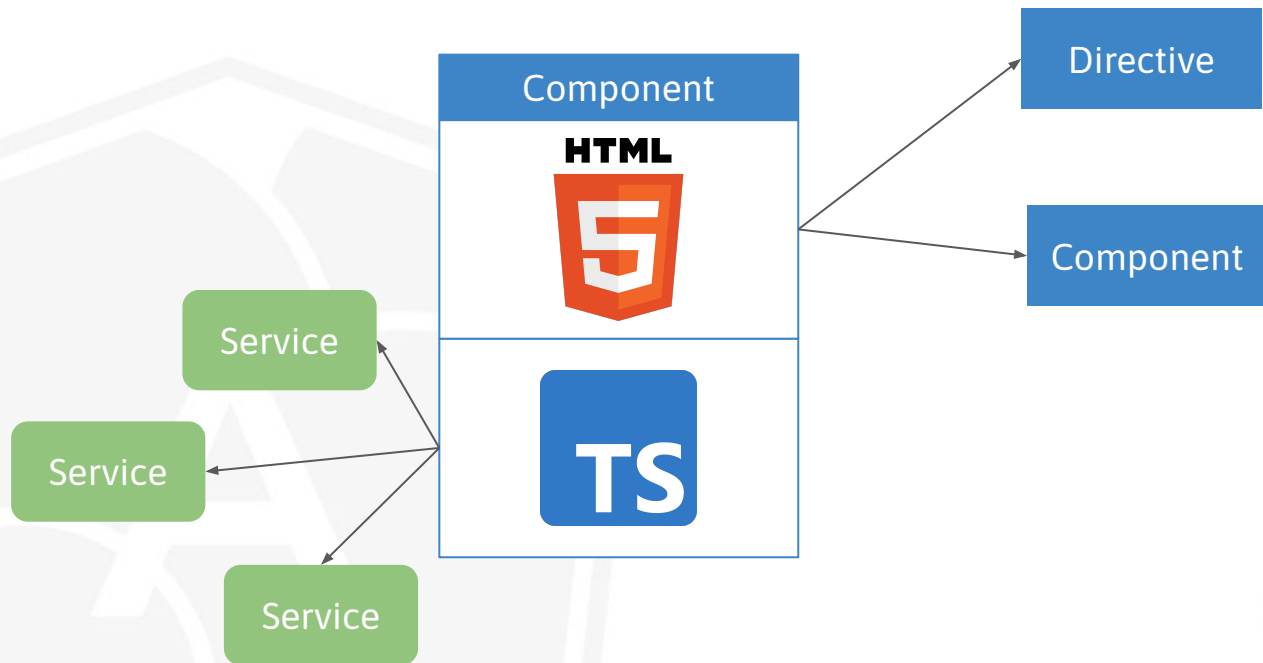
Component

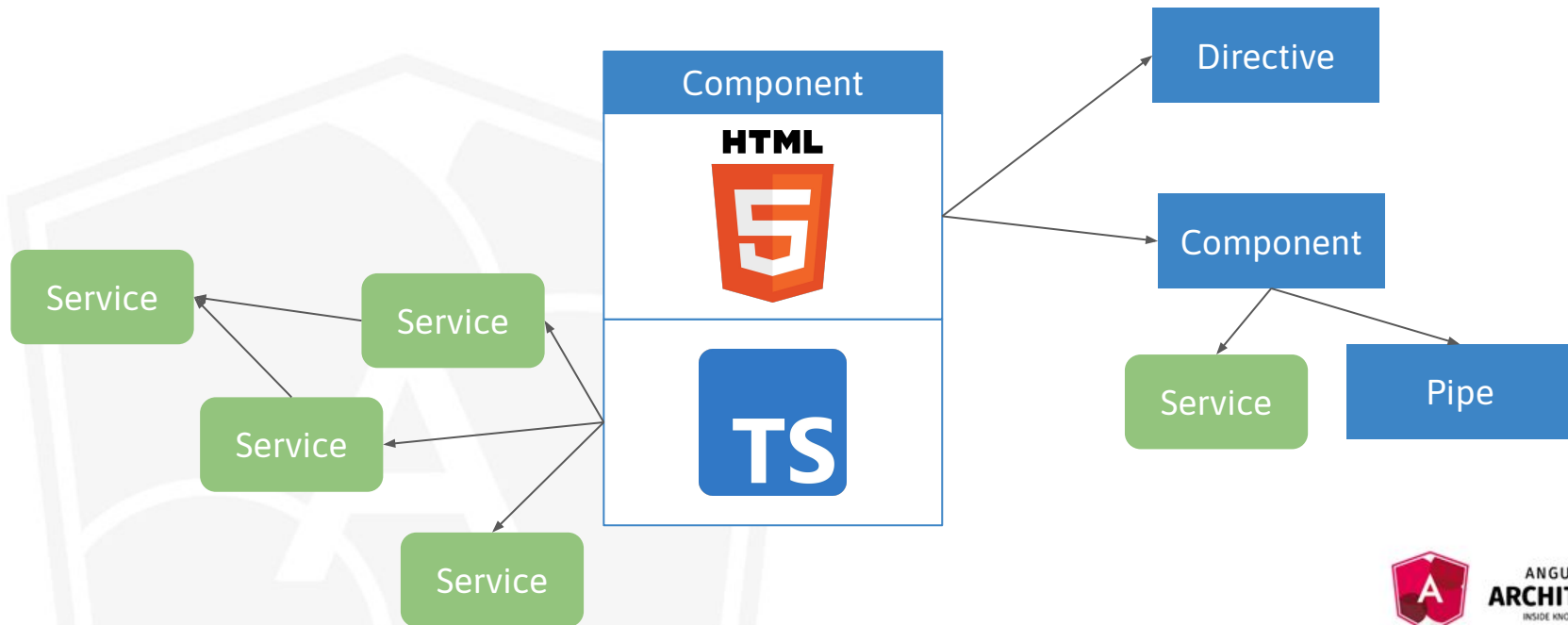
HTML



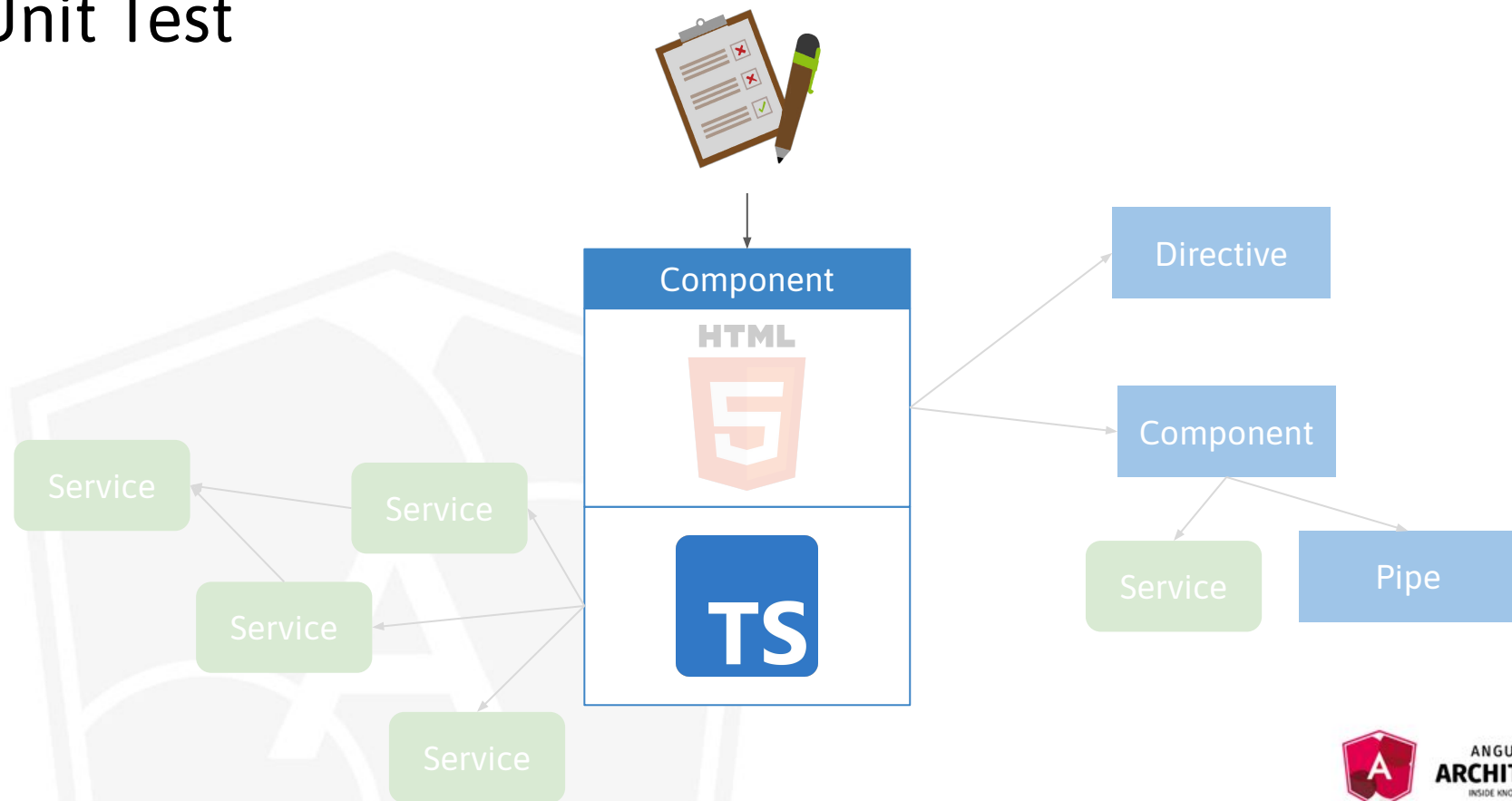
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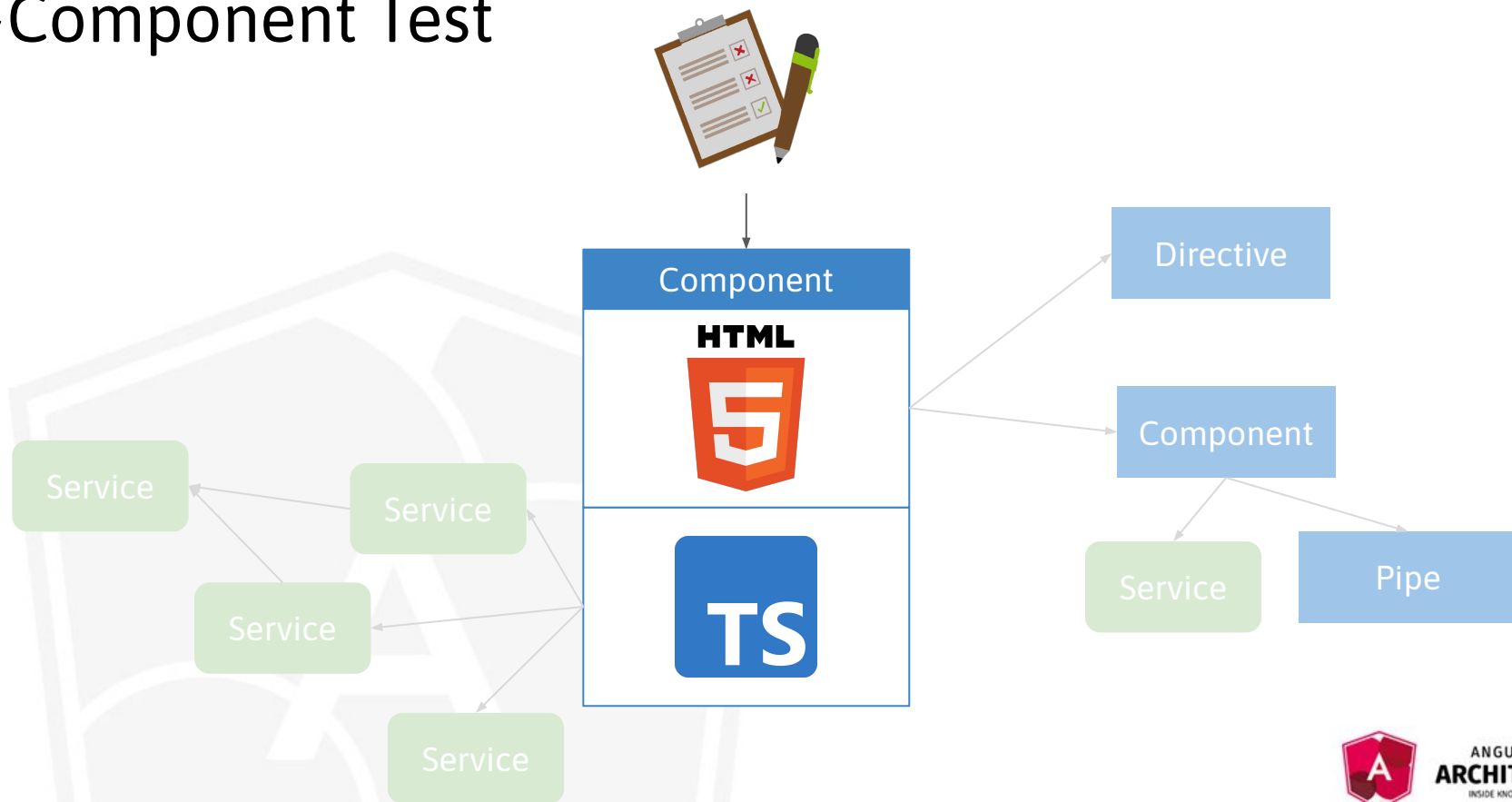




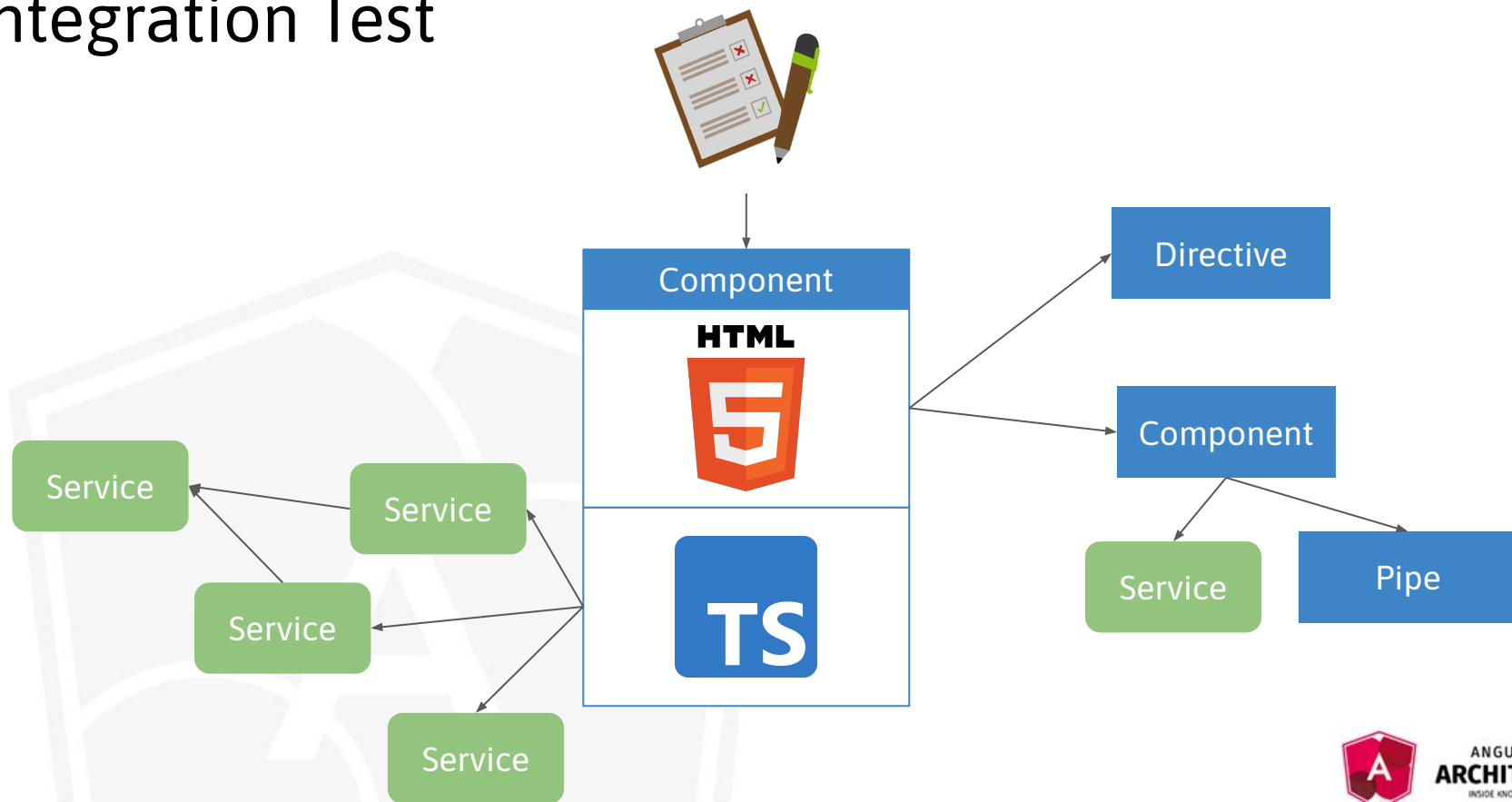
Unit Test



~Component Test



Integration Test



Classic testing pyramide

End-to-End (E2E) Tests

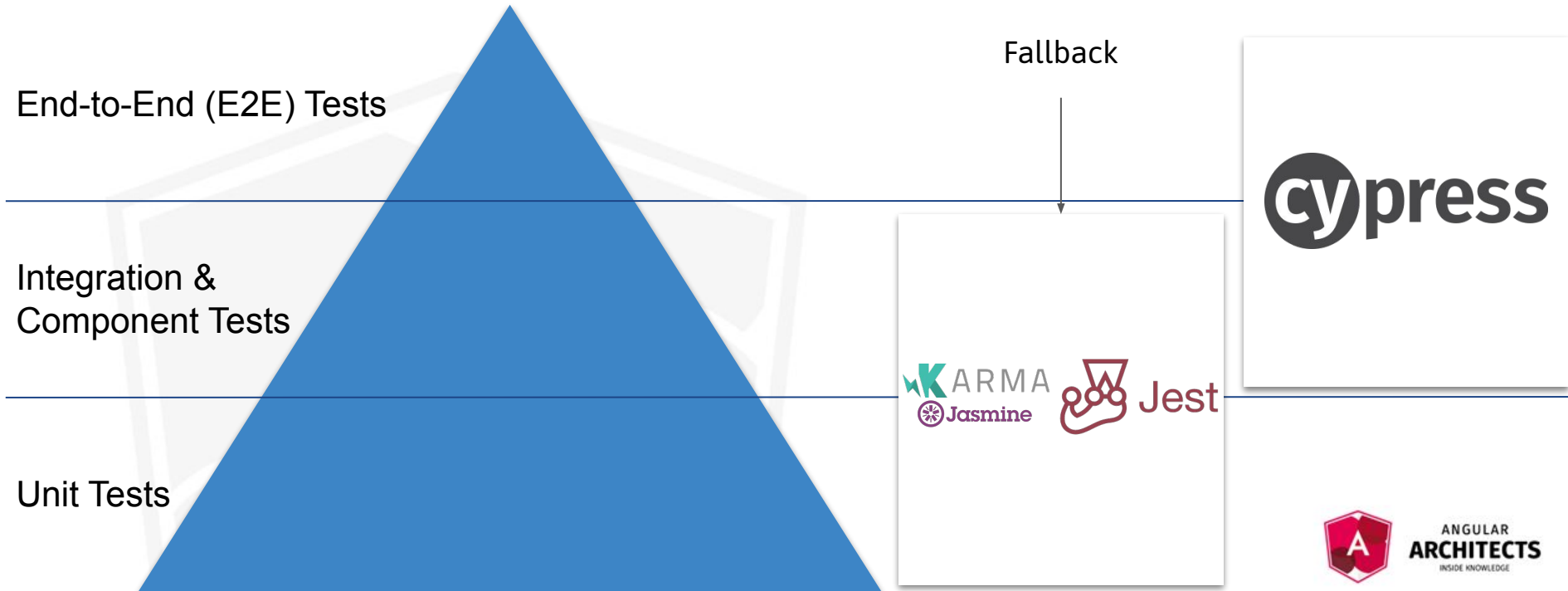


Integration &
Component Tests



Unit Tests

Testing pyramide with Cypress Component Test Runner

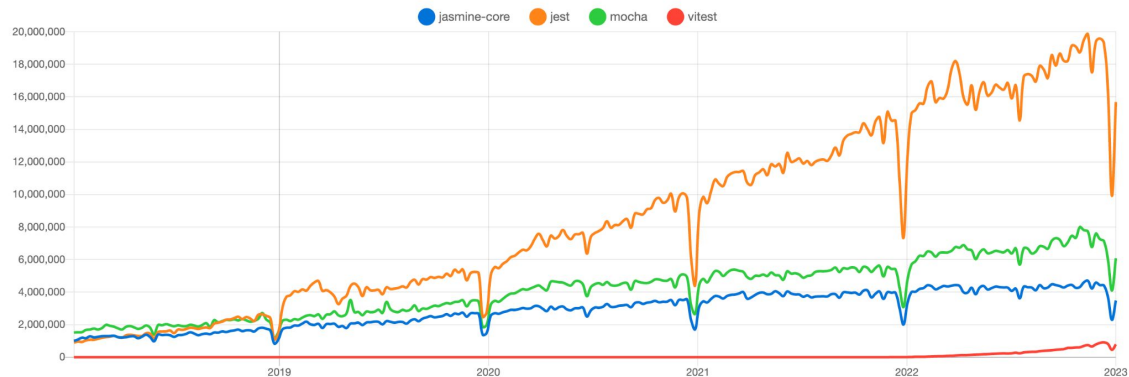


jasmine-core vs jest vs mocha vs vitest

















Enter an npm package...

jasmine-core x jest x mocha x vitest x + 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

