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Professional Angular Testing

Introduction



About Me...



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



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



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



Goal

- 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

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

A close-up photograph of a person's hands playing a keyboard. The hands are positioned over the keys, with fingers pressing them. One hand has a silver ring on the ring finger. A red bracelet is visible on the wrist of the hand on the right. The background is slightly blurred, showing more of the keyboard and some papers.

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?

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

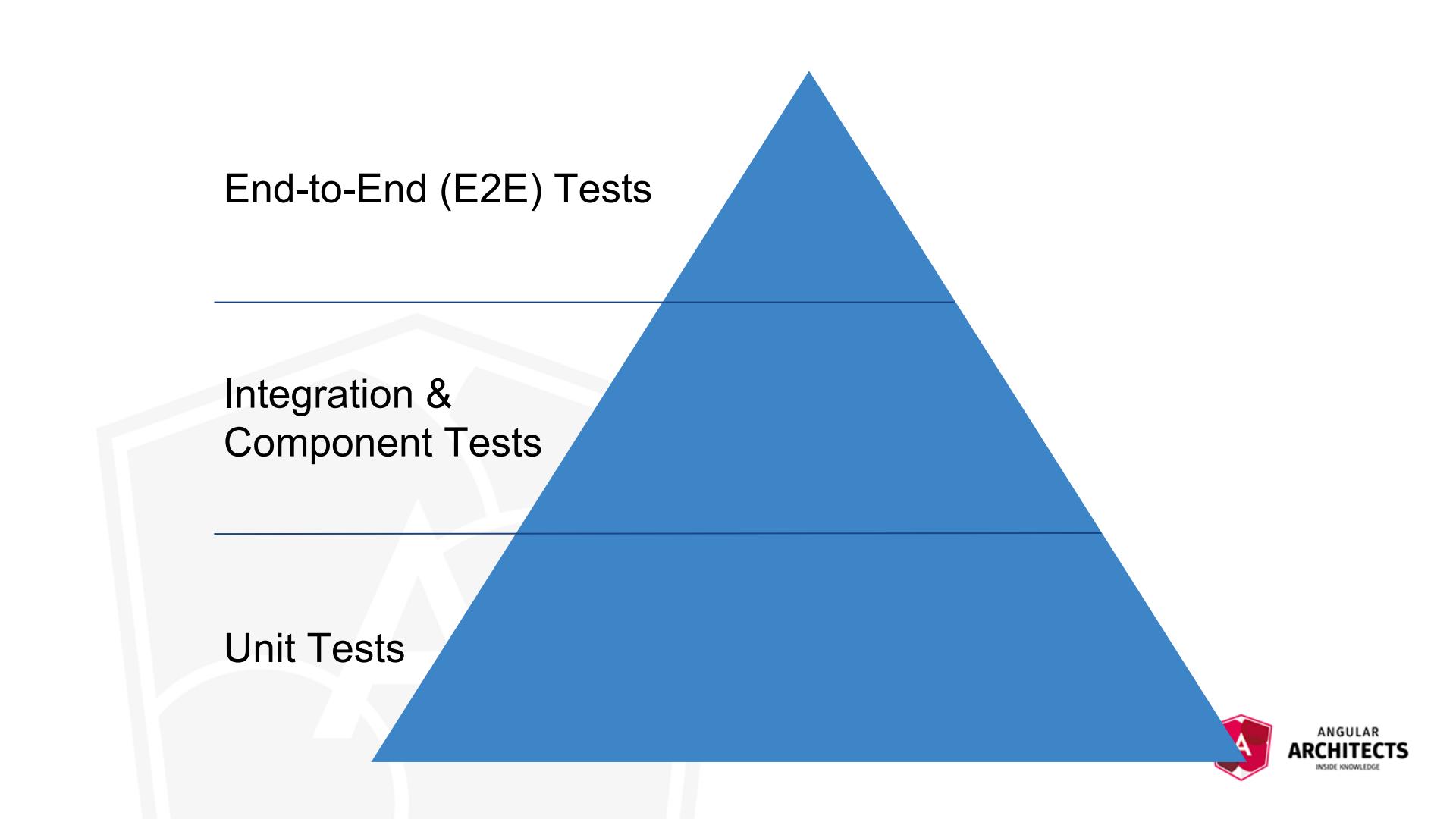
Integrated Tests

Unit Tests



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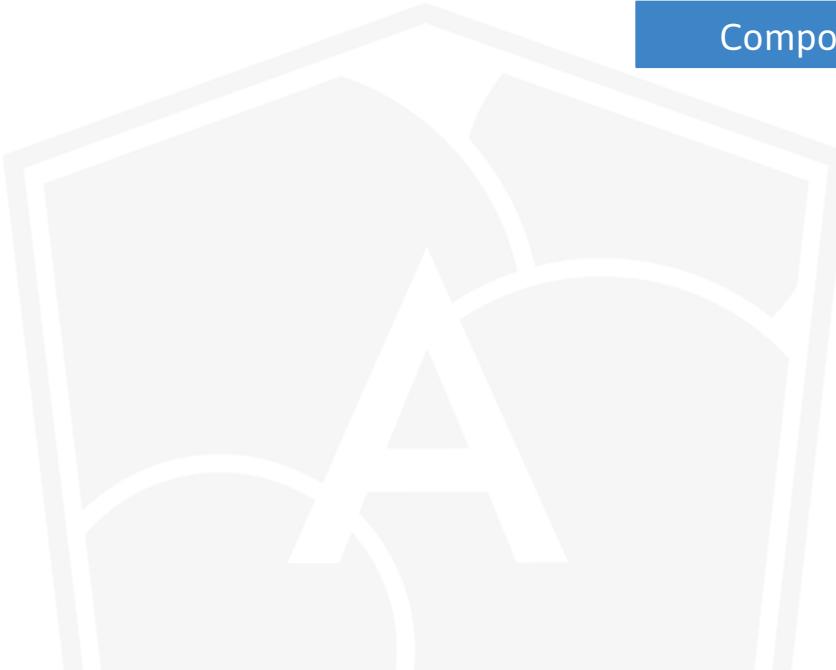


End-to-End (E2E) Tests

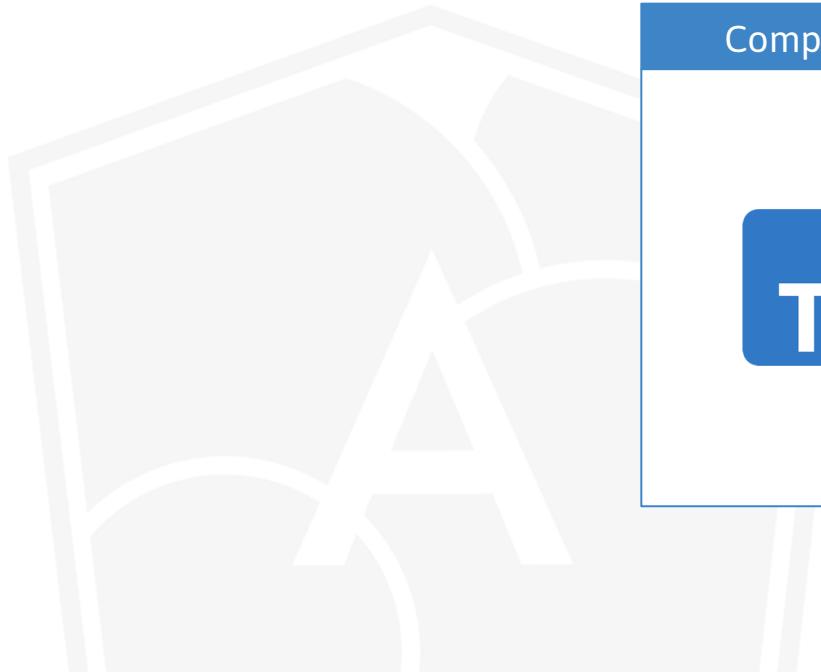
Integration &
Component Tests

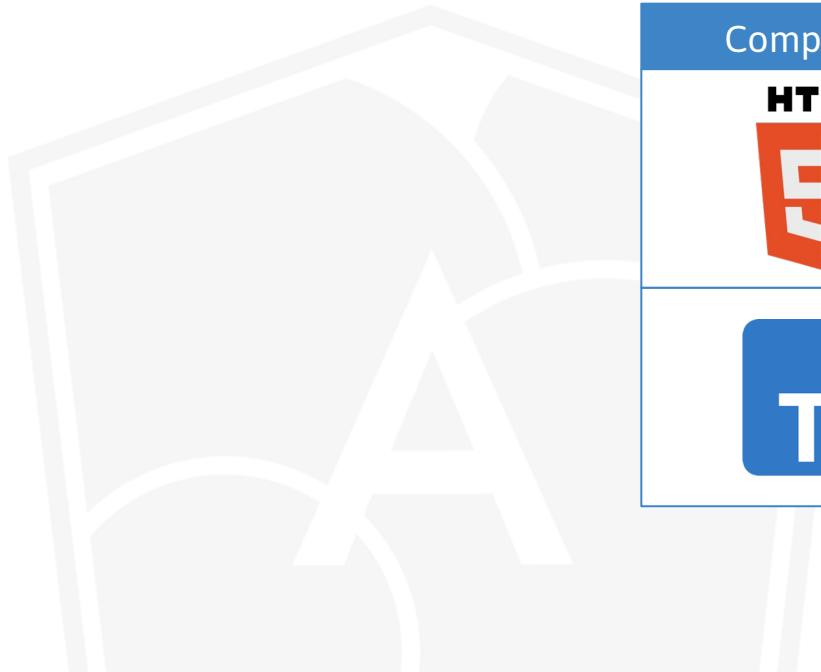
Unit Tests



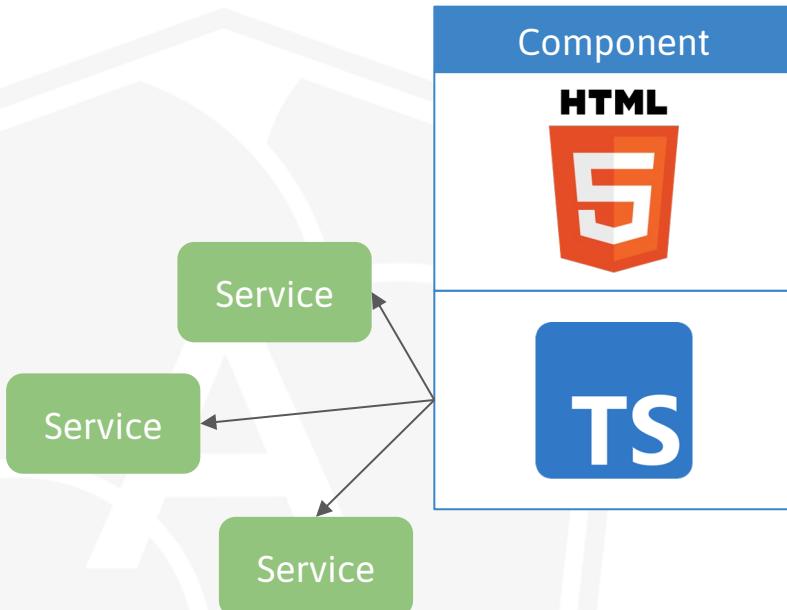


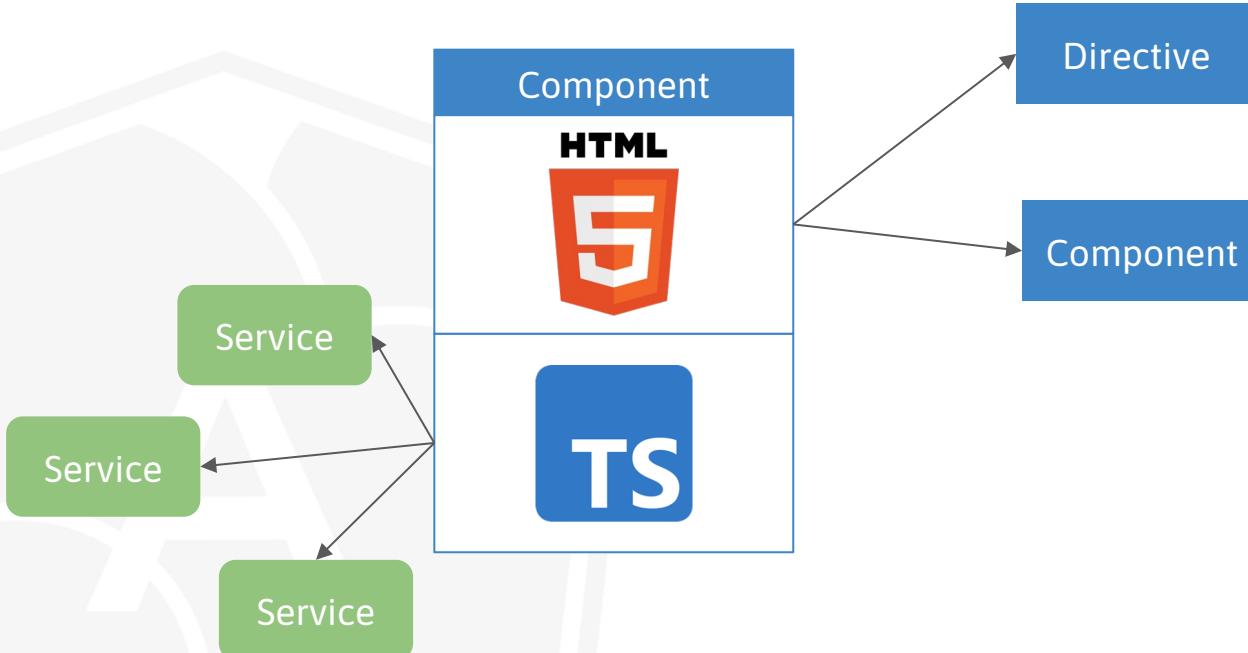
Component

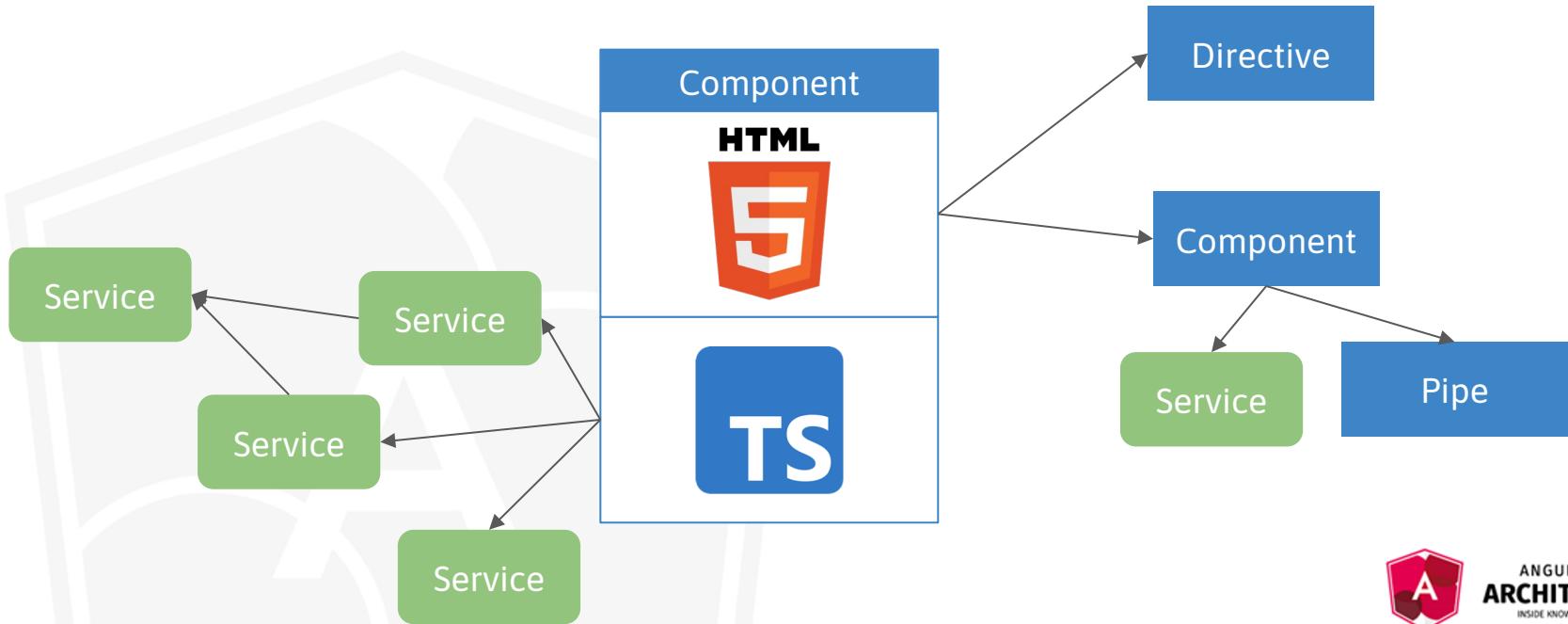




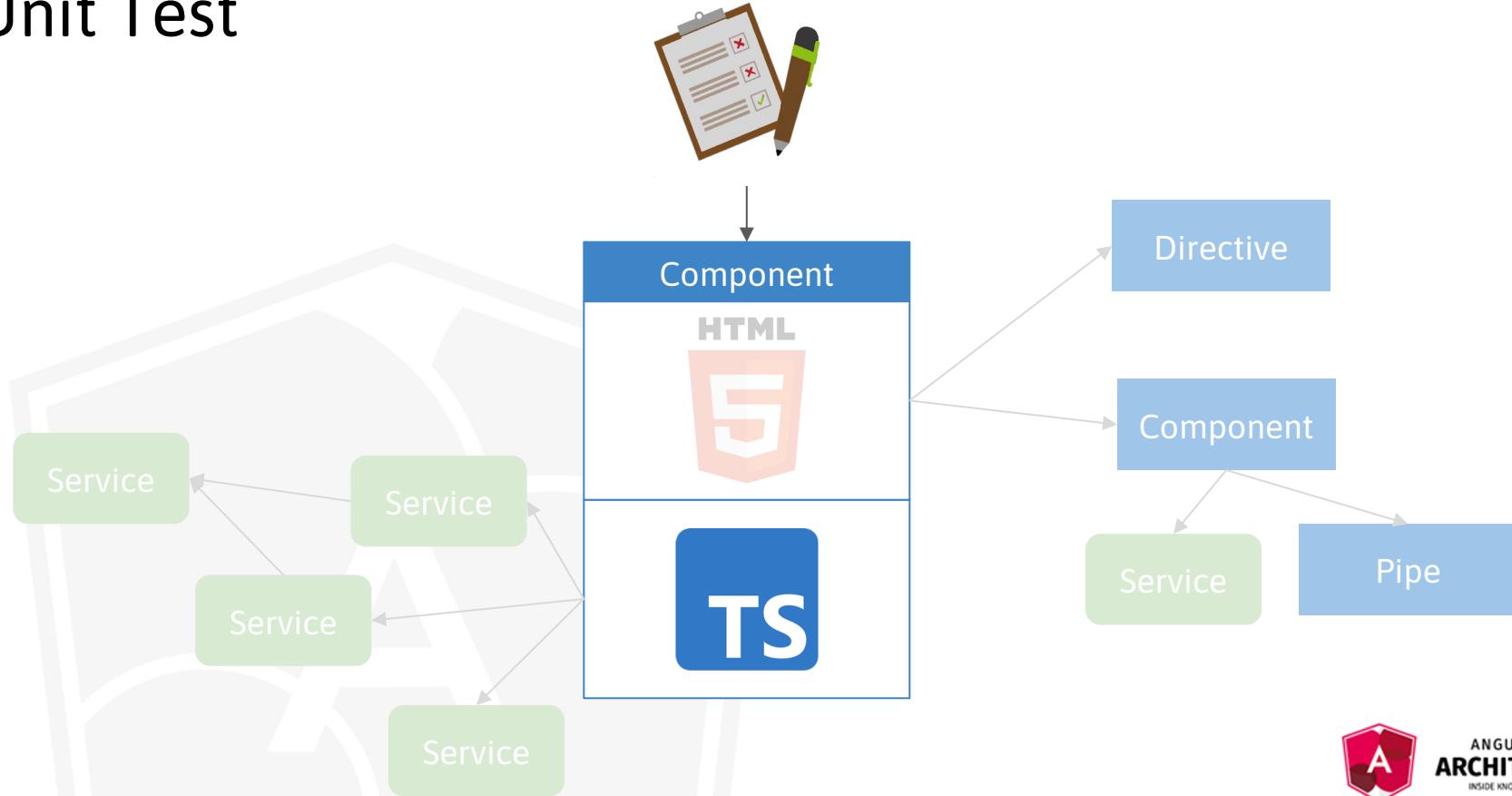
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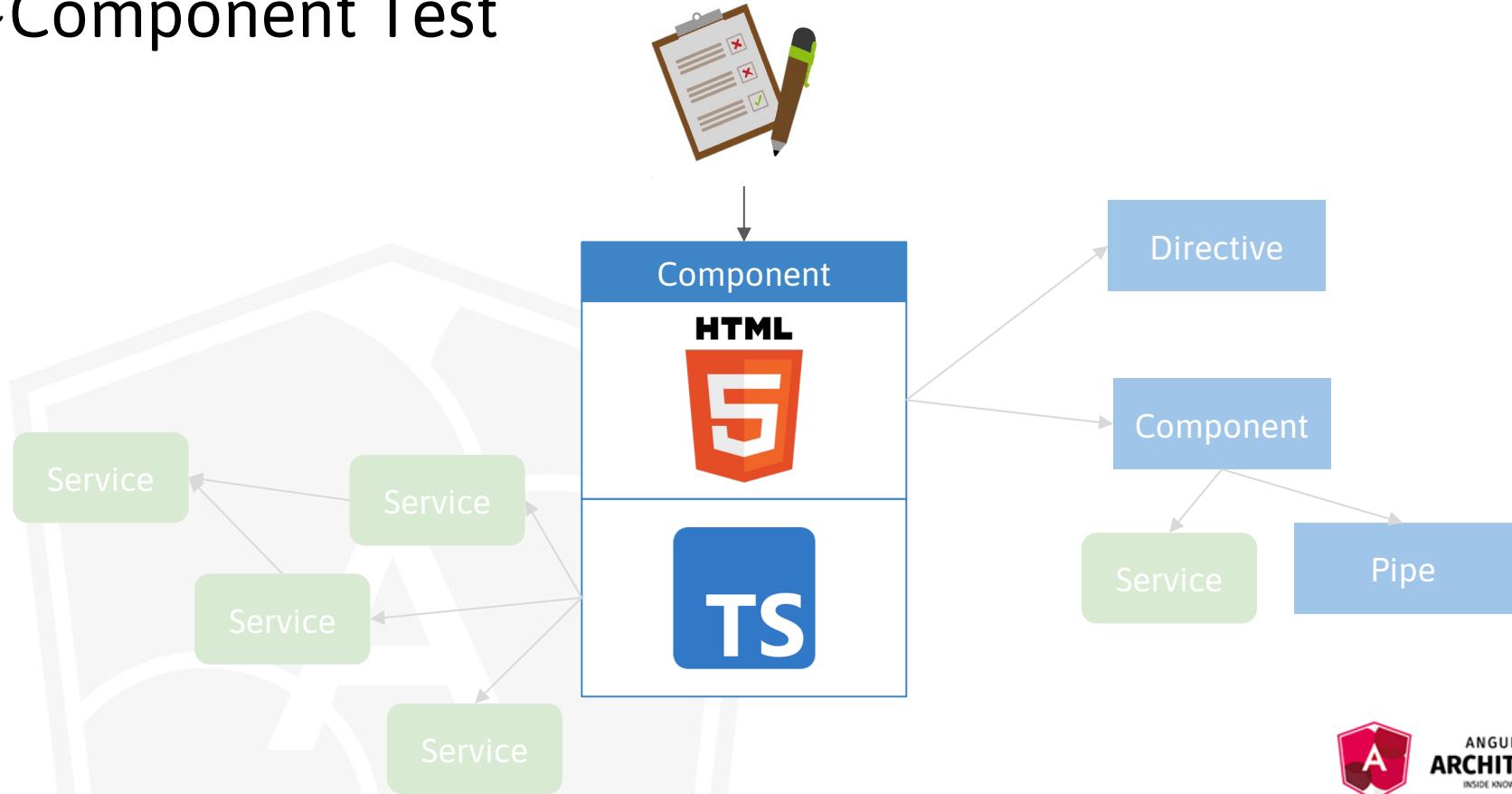


Unit Test



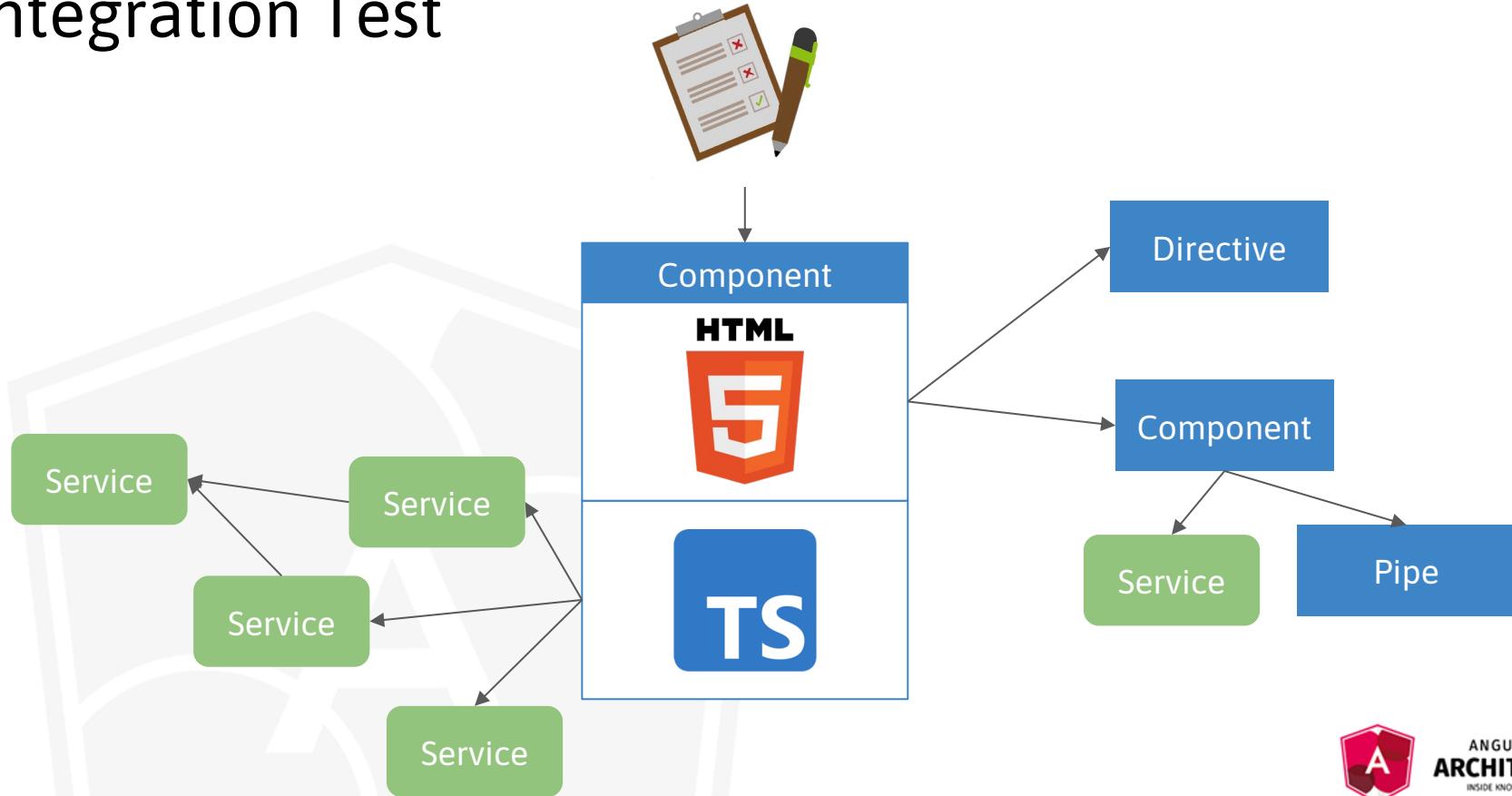
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~Component Test

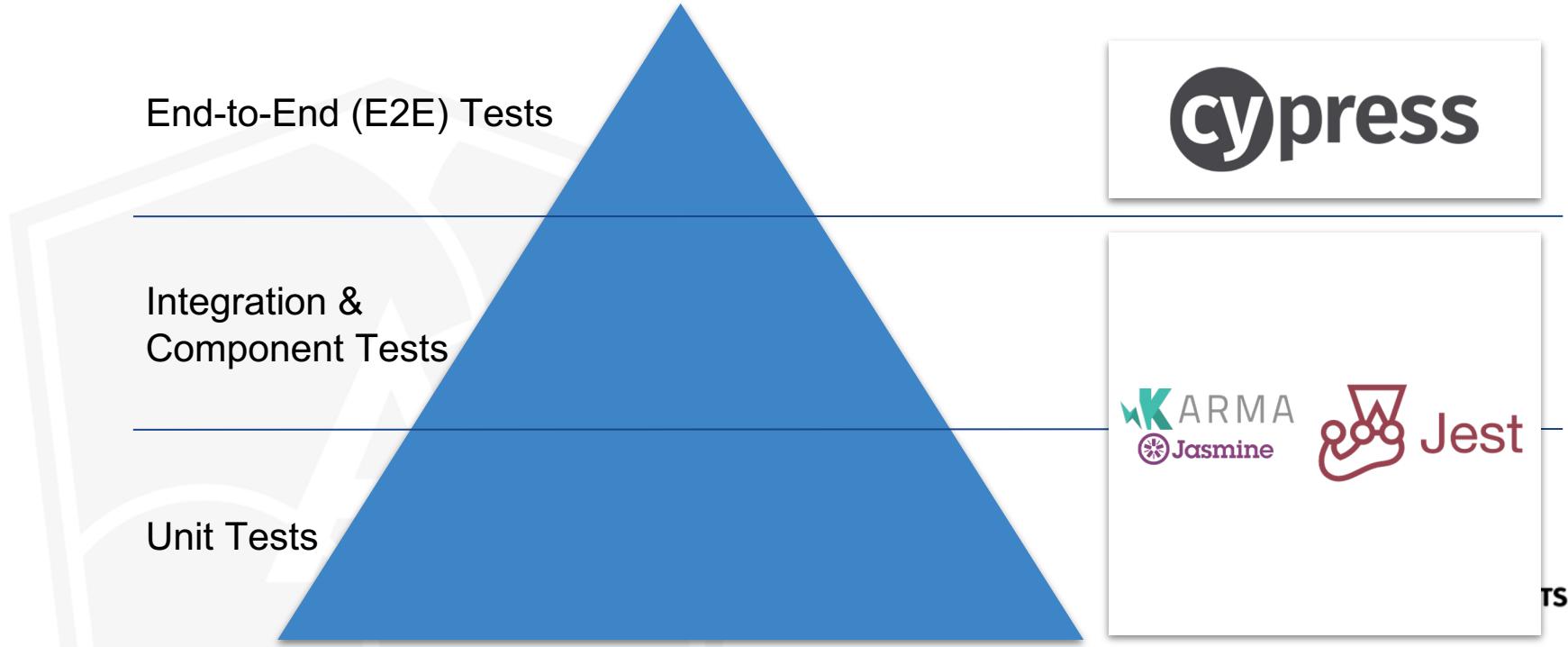


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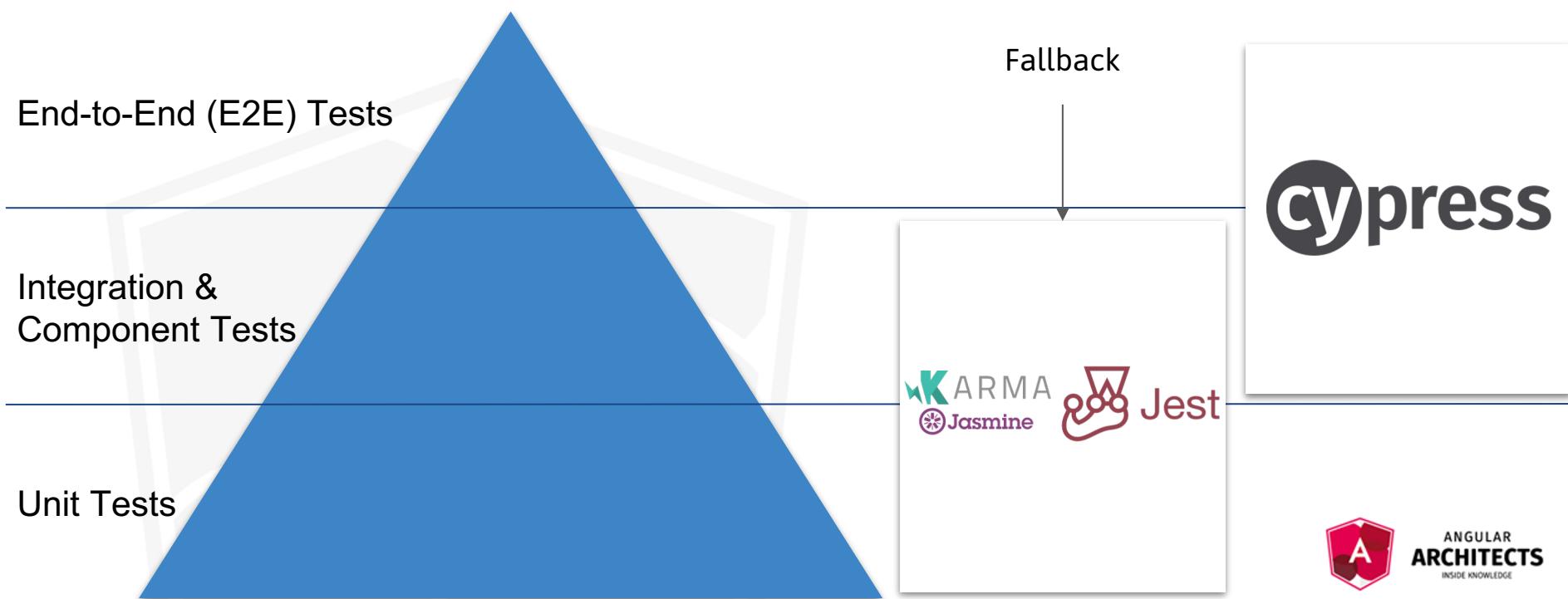
Integration Test



Classic testing pyramide



Testing pyramid with Cypress Component Test Runner



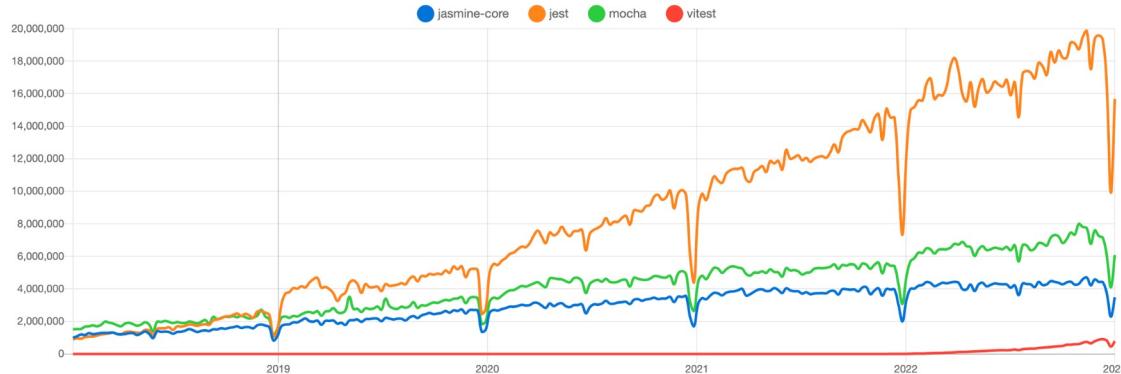


jasmine-core vs jest vs mocha vs vitest

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	npm	15,484	31	4.5.0	2 months ago	9 years ago
	jest	npm	41,086	920	29.3.1	2 months ago	11 years ago
	mocha	npm	21,840	285	10.2.0	a month ago	11 years ago
	vitest	npm	7,481	183	0.27.0	2 days ago	a year ago

