ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Professional Angular Testing

Introduction

About Me...

Rainer Hahnekamp

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

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

https://www.ng-news.com

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

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Goal

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

Caution: Live Coding Ahead

ANGULAR ARCHITECTS
INSIDE KNOWLEDGE

Housekeeping

- 9.00 - 16.30 CEST
- 15 minutes breaks in morning and afternoon session
- GitHub Repo
- Solution Branch

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

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

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Exercise-intensive workshop

Engage!

Introduction Round

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

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

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

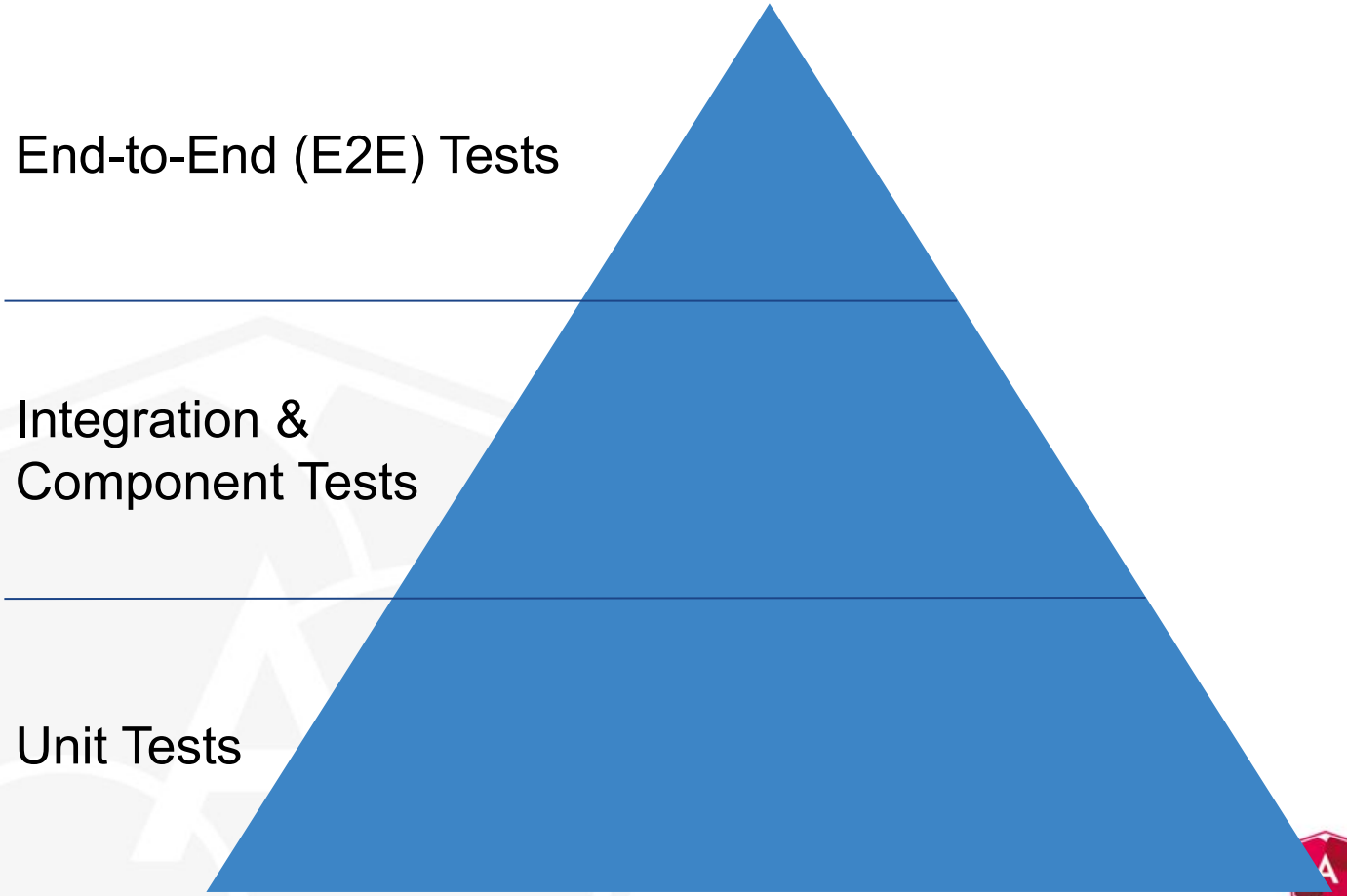
Flashlight Tests

Unit Tests

Integrated Tests

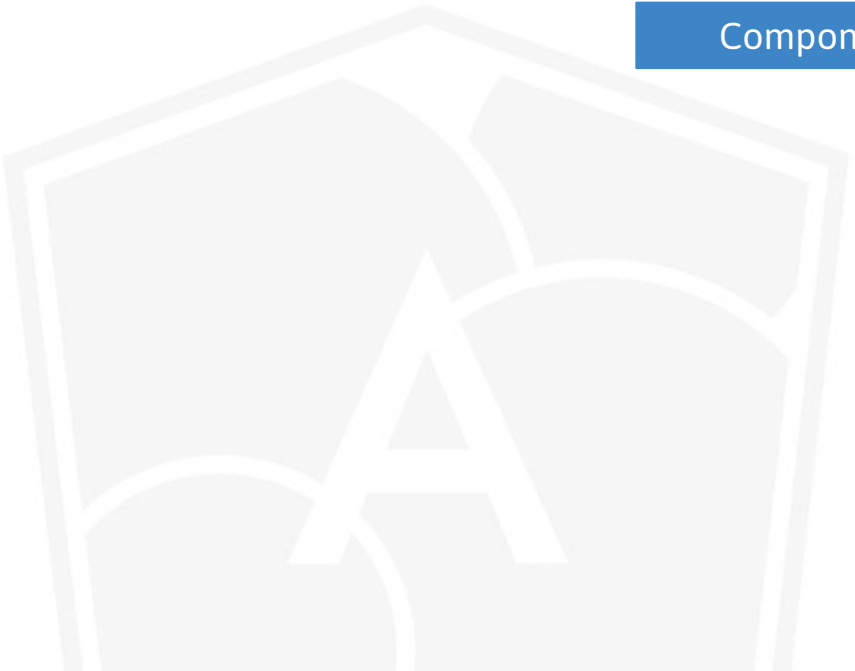
ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE



ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Component

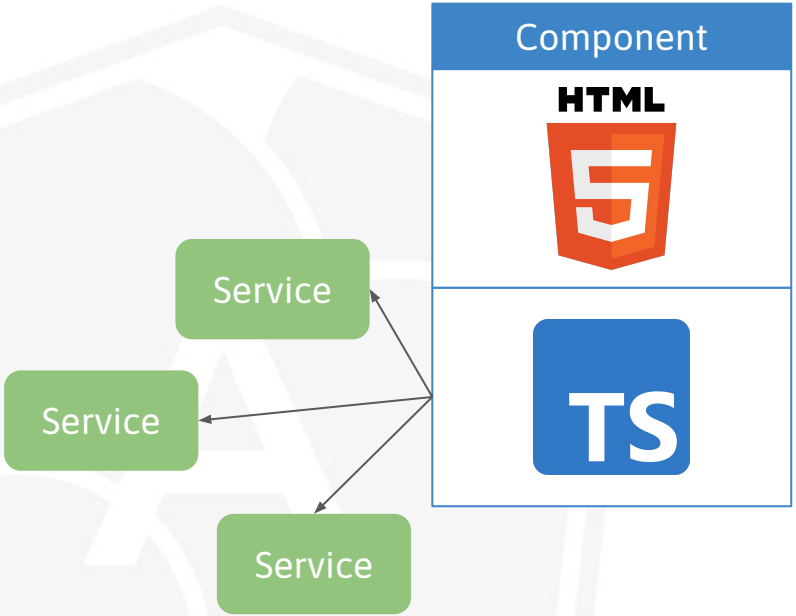


ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

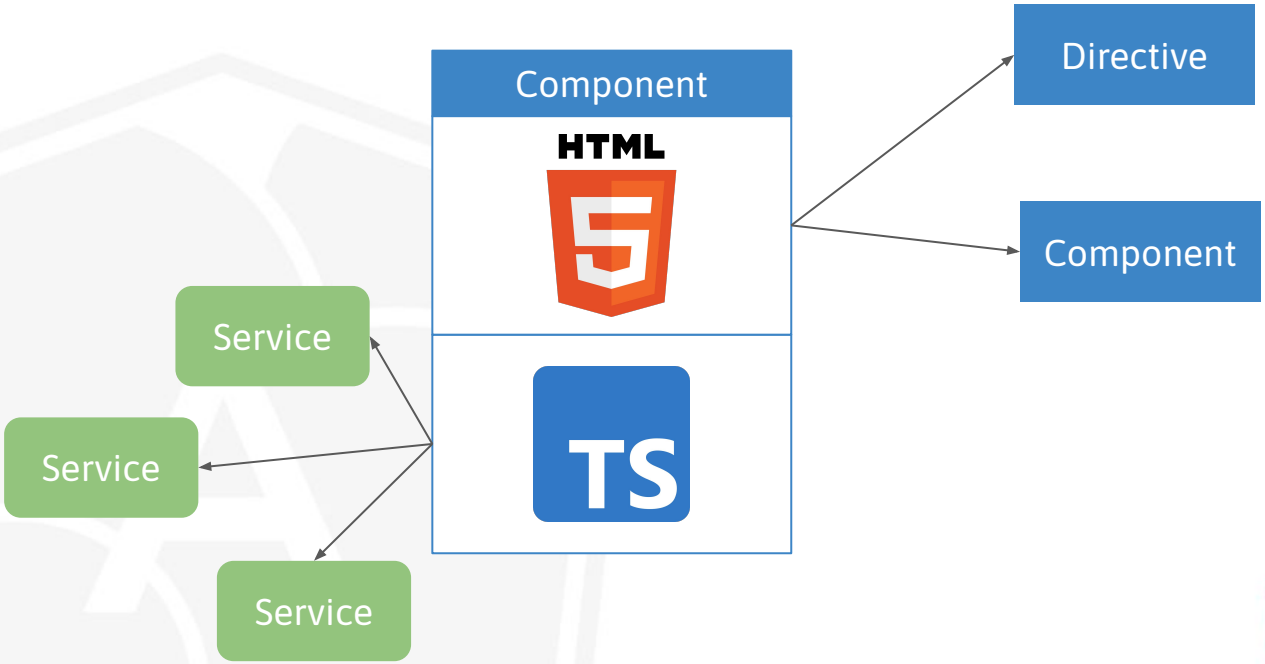
Component

ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

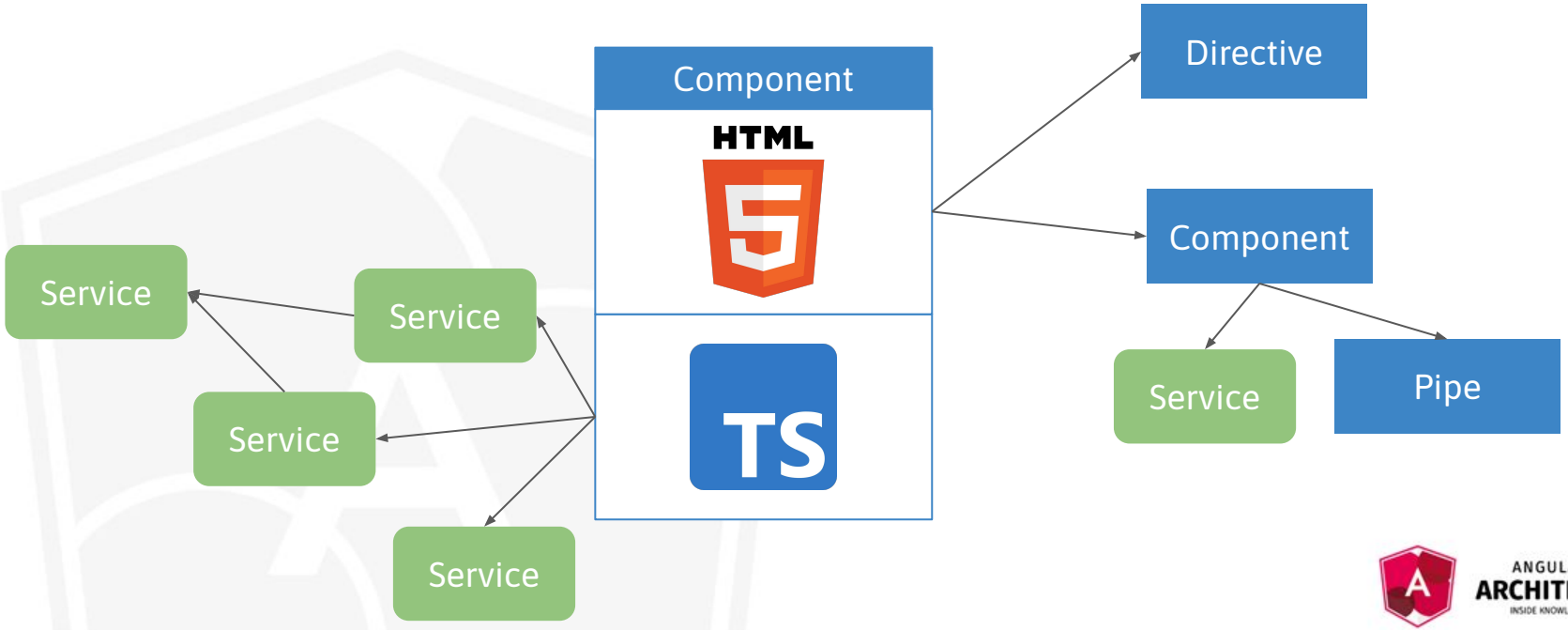
ANGULAR ARCHITECTS
INSIDE KNOWLEDGE



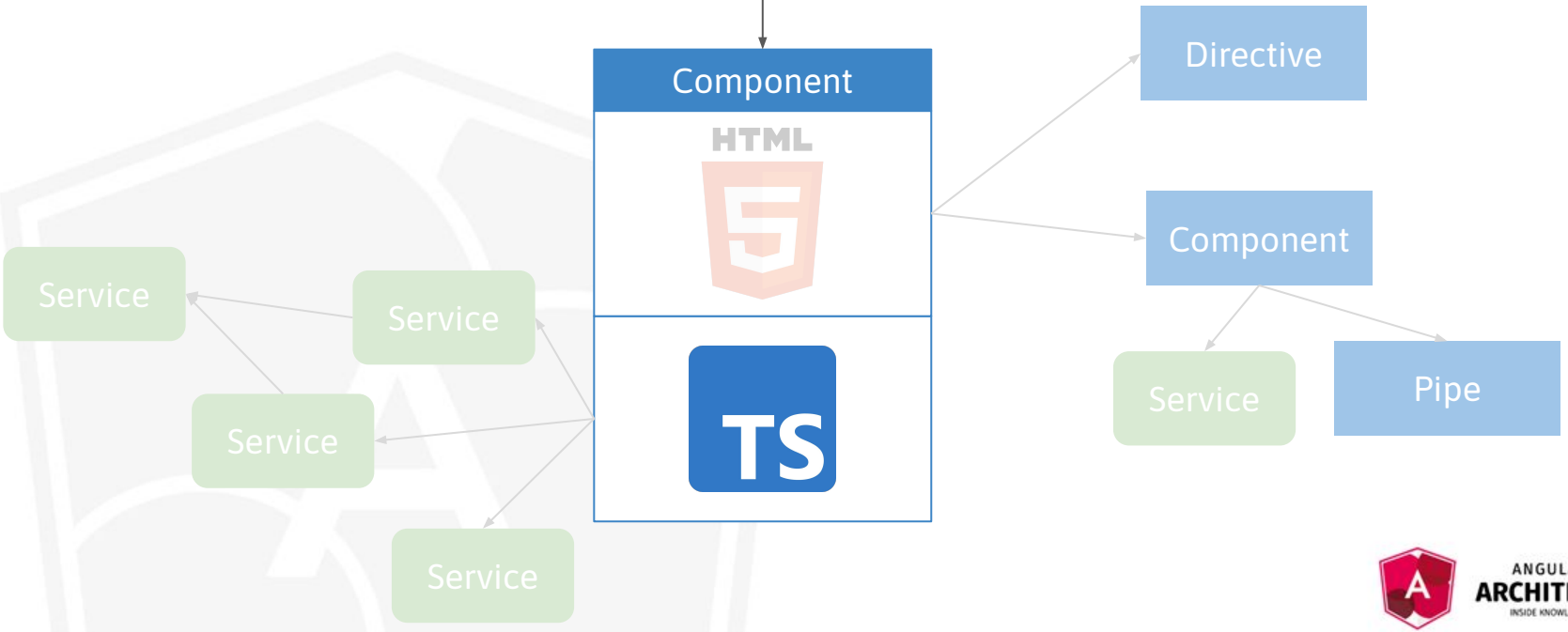
ANGULAR ARCHITECTS
INSIDE KNOWLEDGE



ANGULAR ARCHITECTS
INSIDE KNOWLEDGE

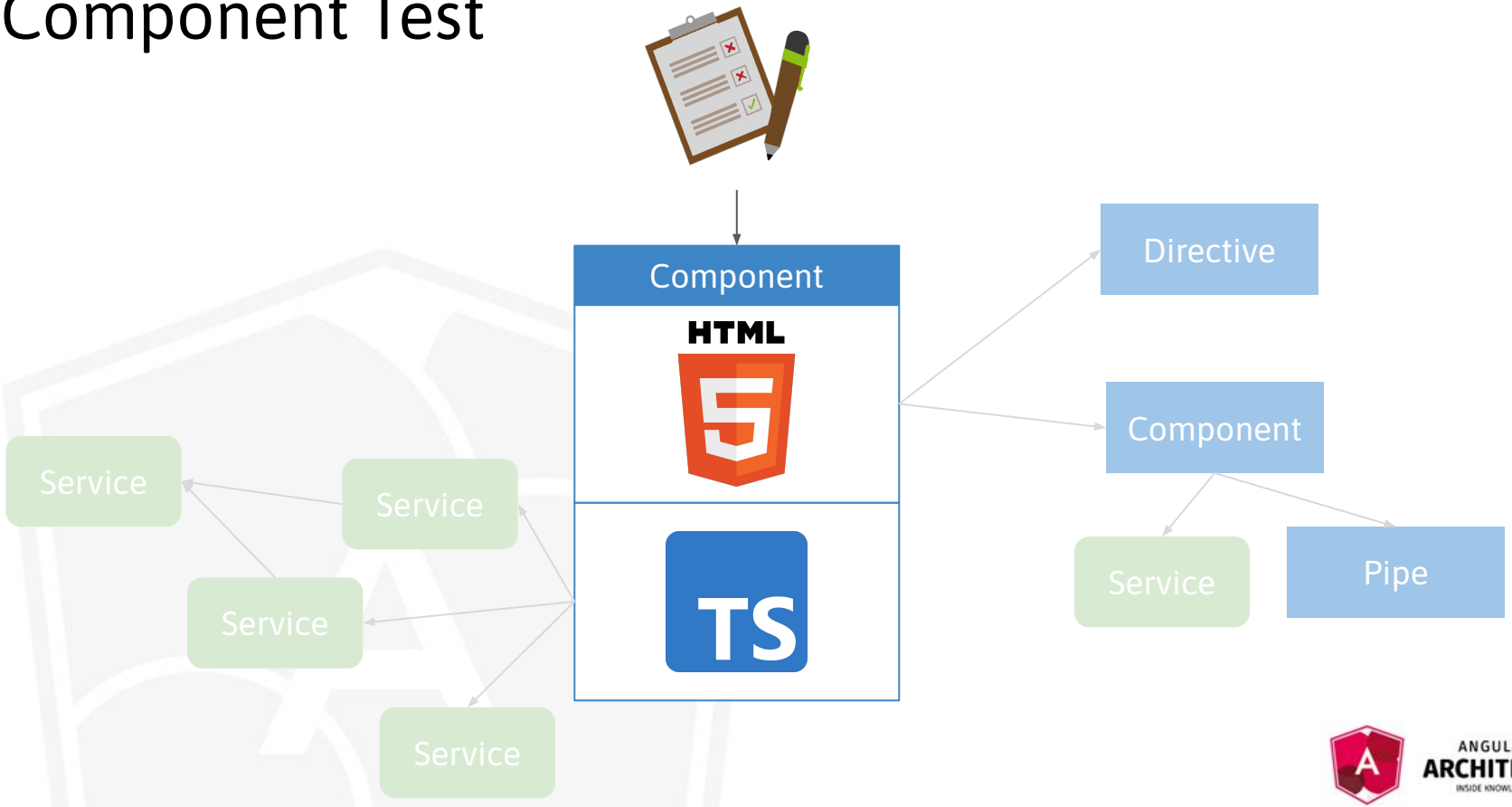

Component
HTML
TS
Directive
Component
Service
Pipe
Service
Service
Service
Service
ANGULAR
ARCHITECTS
INSIDE KNOWLEDGE

Unit Test



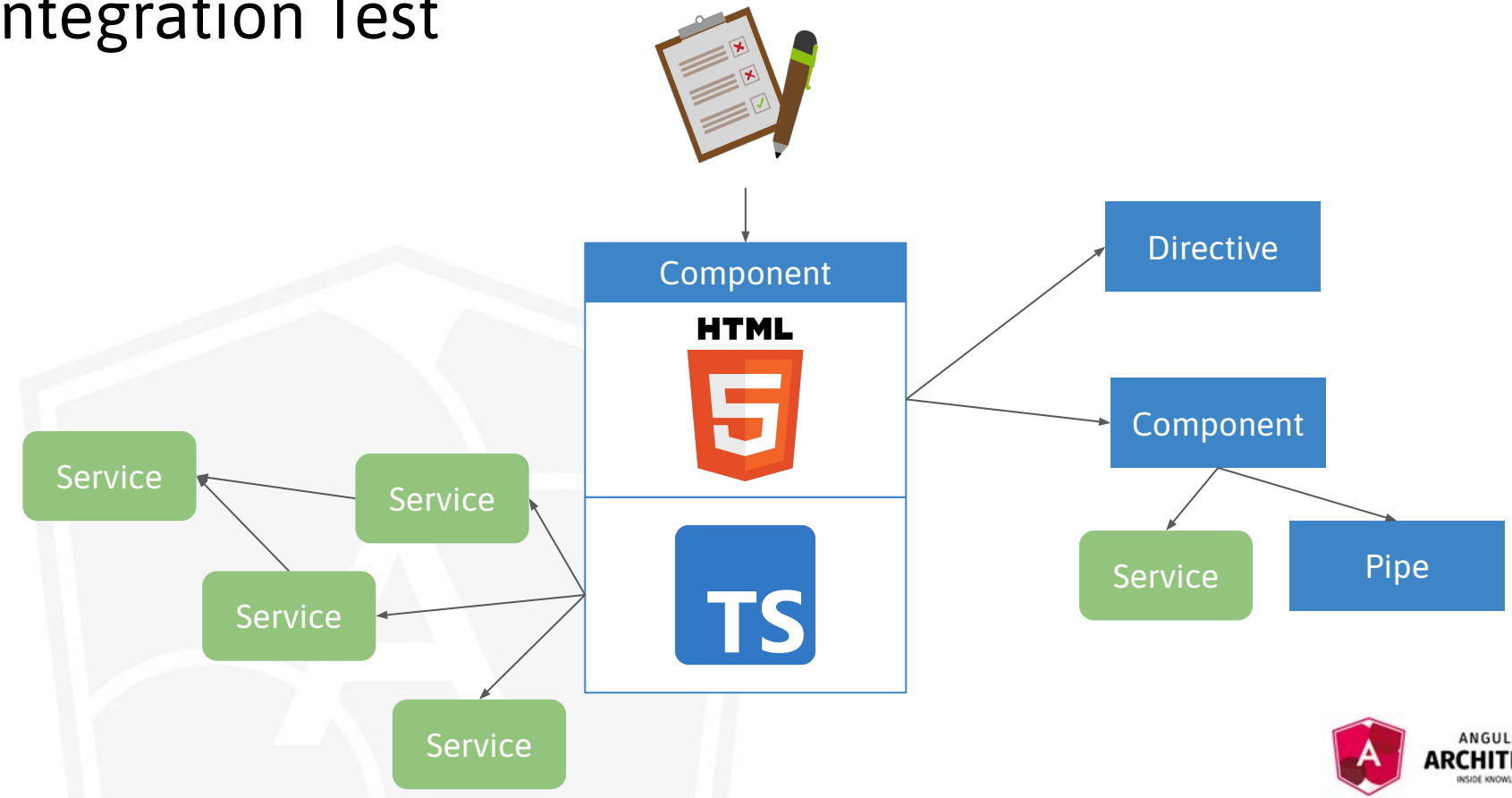
ANGULAR ARCHITECTS
INSIDE KNOWLEDGE

~Component Test



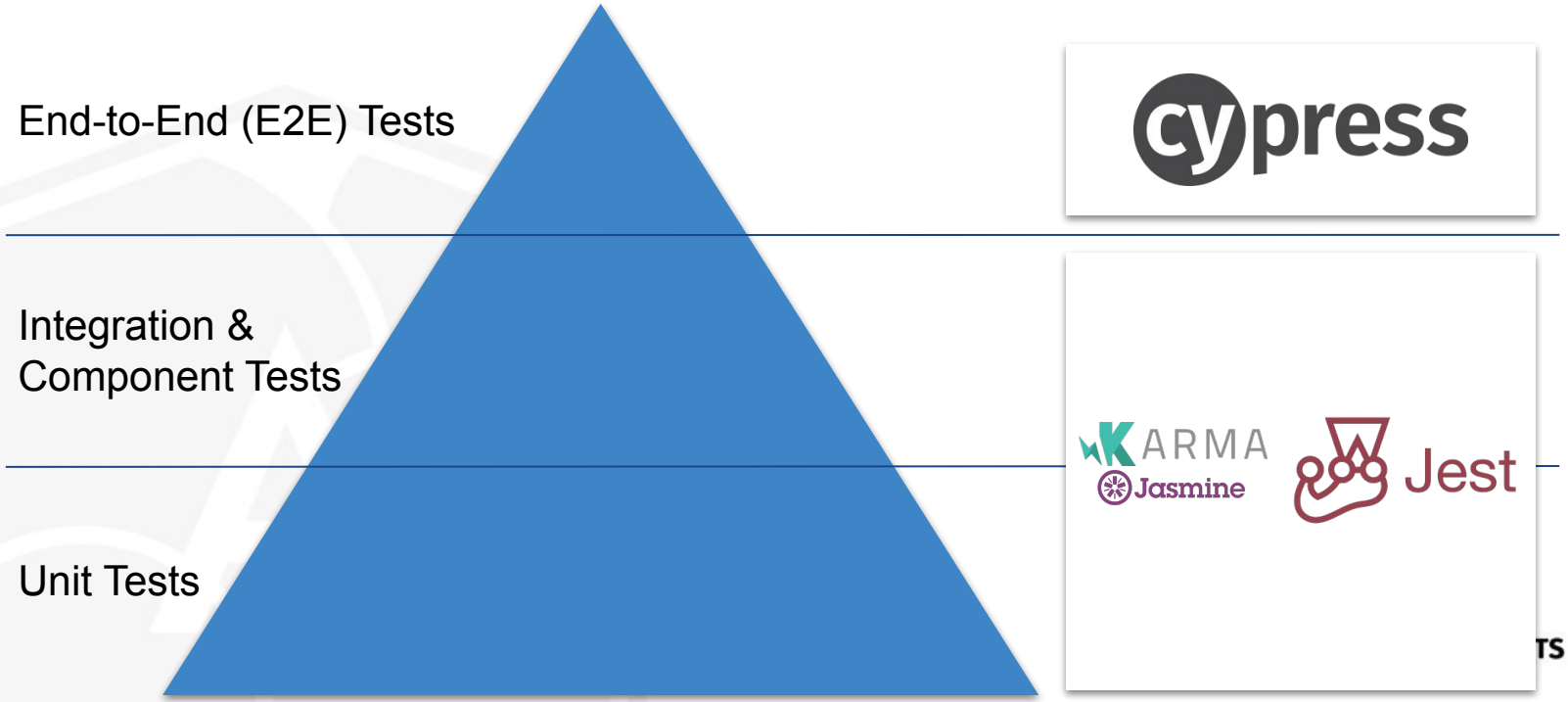
ANGULAR ARCHITECTS
INSIDE KNOWLEDGE

Integration Test

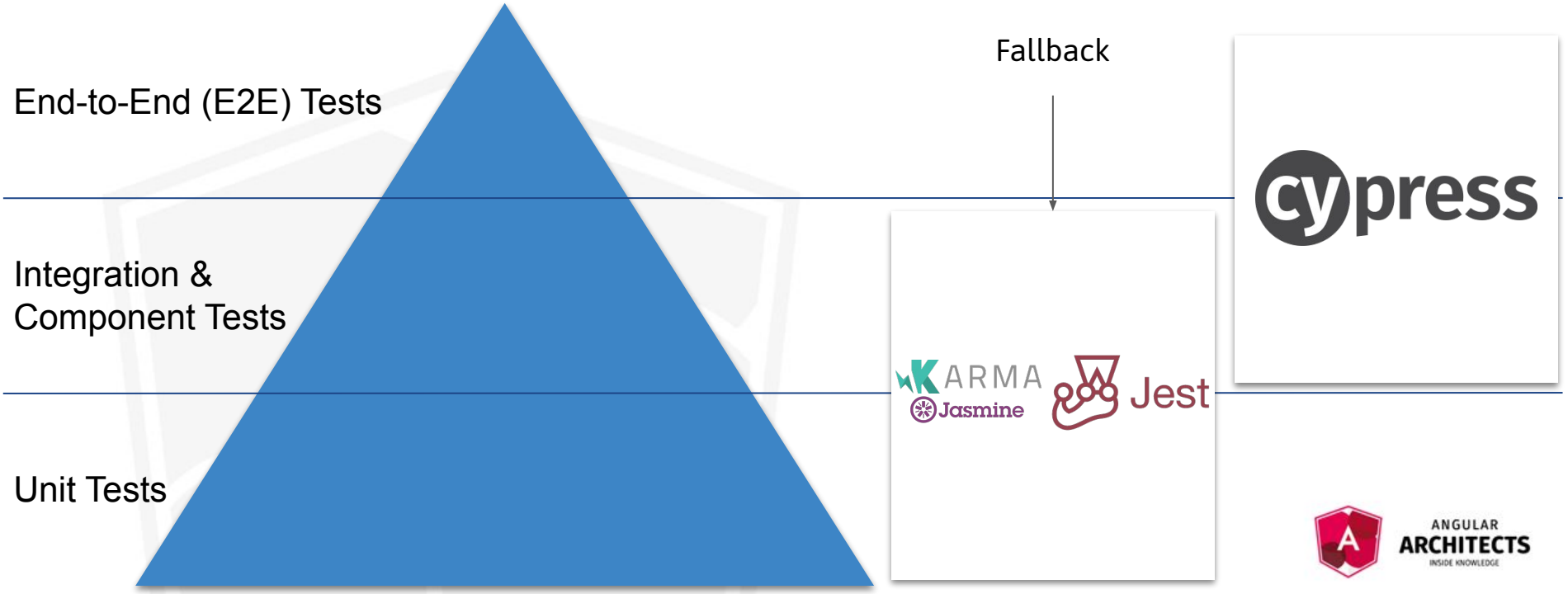


ANGULAR ARCHITECTS
INSIDE KNOWLEDGE

Classic testing pyramide



Testing pyramide with Cypress Component Test Runner



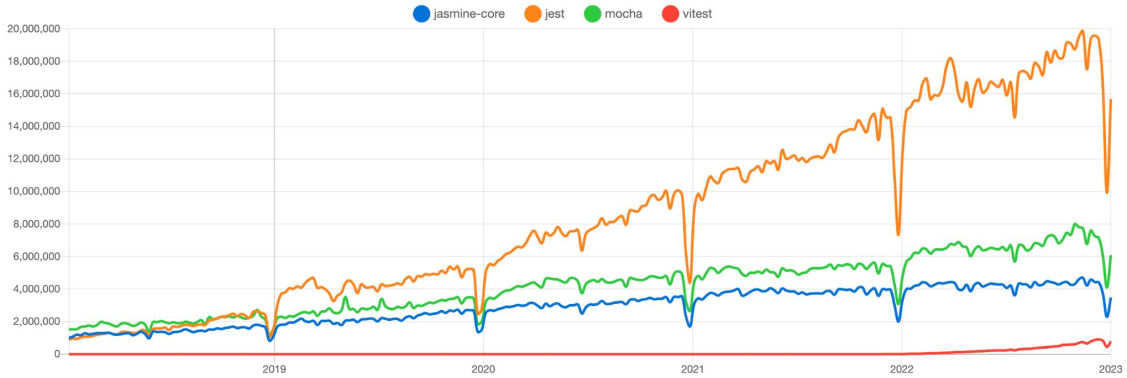
npm trends

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

ANGULAR ARCHITECTS
INSIDE KNOWLEDGE