

From Robotium to Appium: Choose Your Journey

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Goals

Mobile End-to-End Testing:
What, Why, How and When

Robotium vs Appium
What are our goals?

Find Right E2E Tool For Your Team

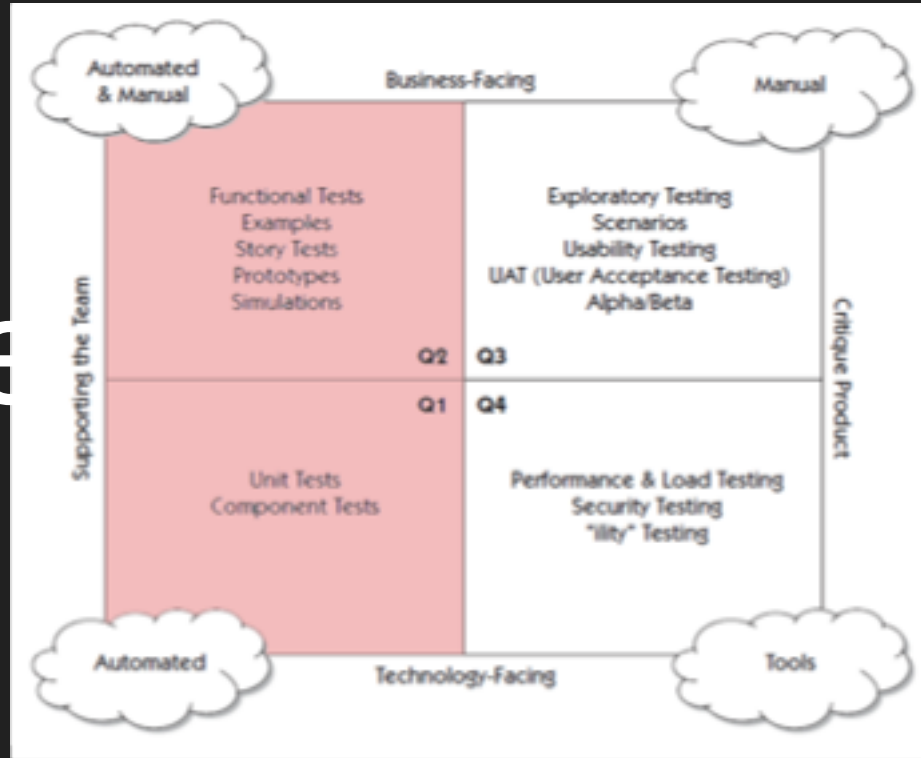
Do you write a unit of interest?

How do we organize
From the Top Level
QA Effort?

Hint: It has 4 sides

Agile Testing Quadrants

Test Quadrants

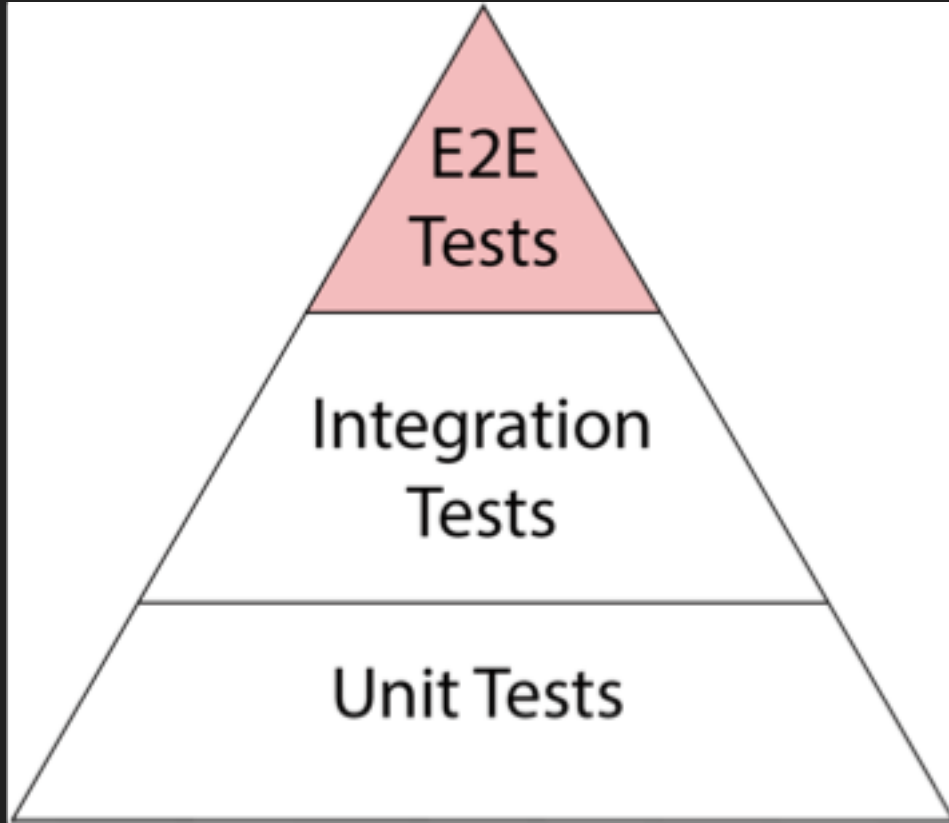


From "Agile Testing: A Practical Guide for Testers and Agile Teams"
by Lisa Crispin and Janet Gregory

How'd you morally test it?

Hint: It has 3 sides

Test Pyramid



↓ Fidelity

↑ Speed

↓ Cost

↑ Fidelity

↓ Speed

↑ Cost

Target Platforms

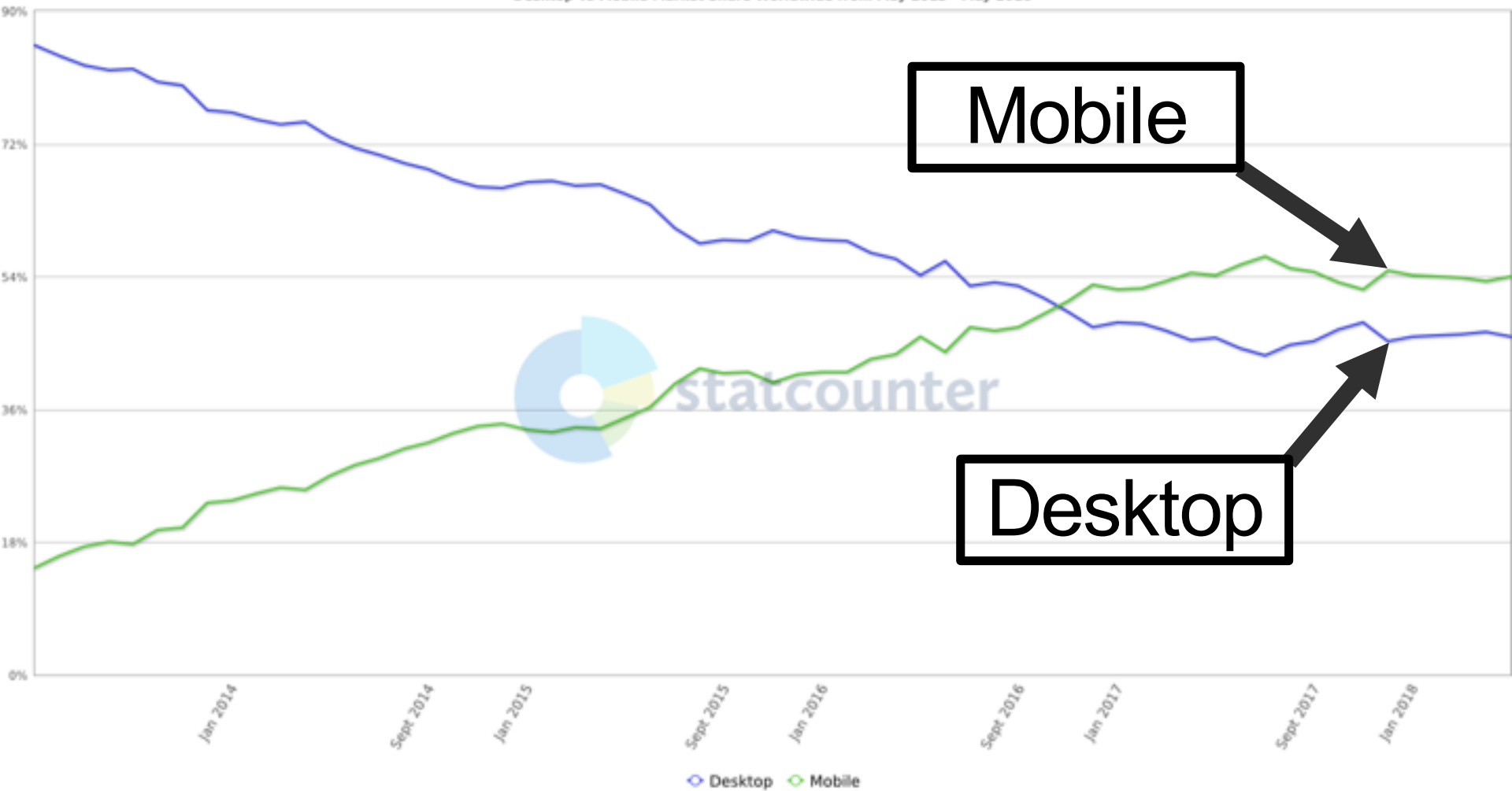
Android



iOS

StatCounter Global Stats

Desktop vs Mobile Market Share Worldwide from May 2013 - May 2018



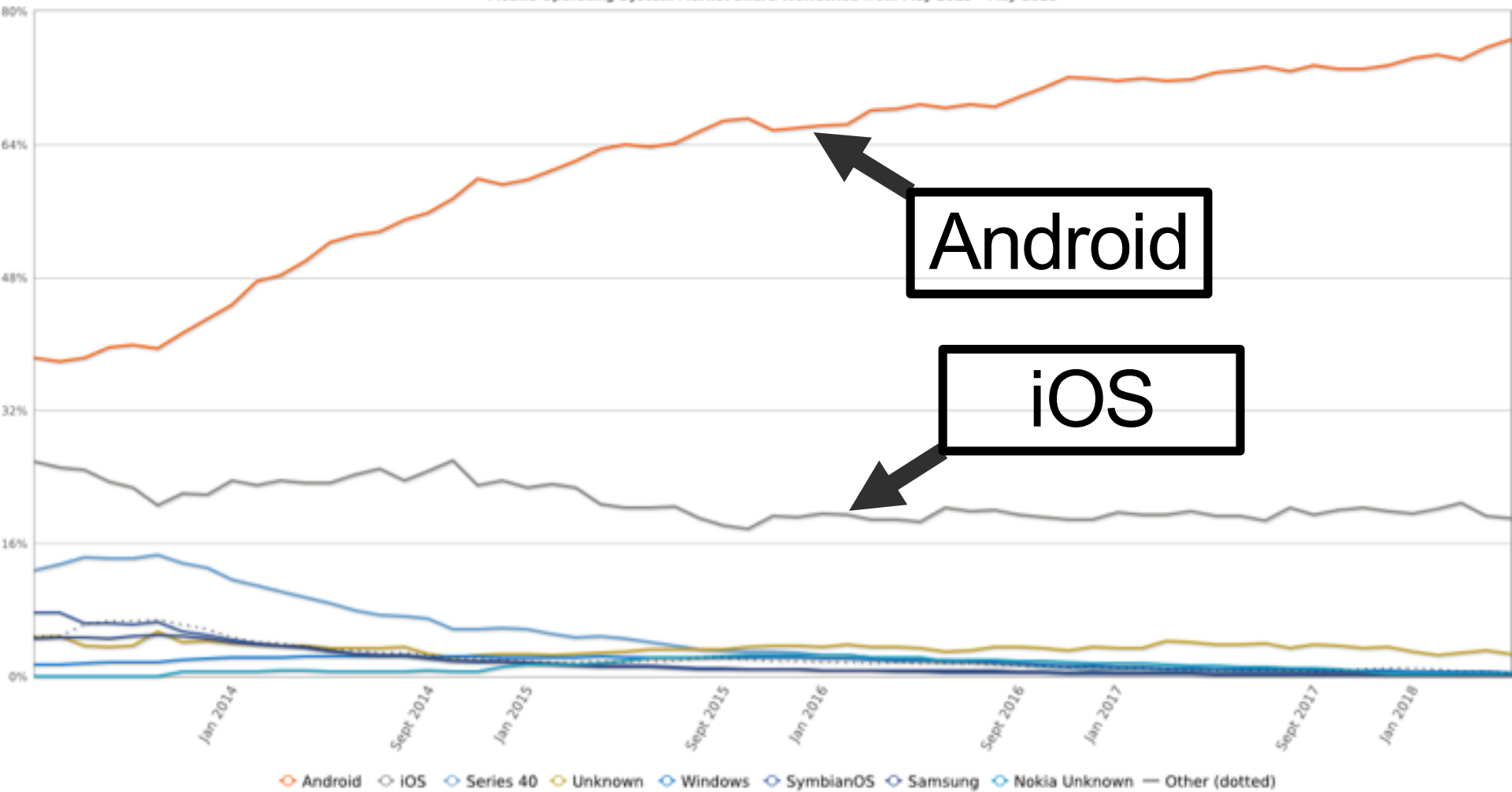
Mobile

Desktop



StatCounter Global Stats

Mobile Operating System Market Share Worldwide from May 2013 - May 2018

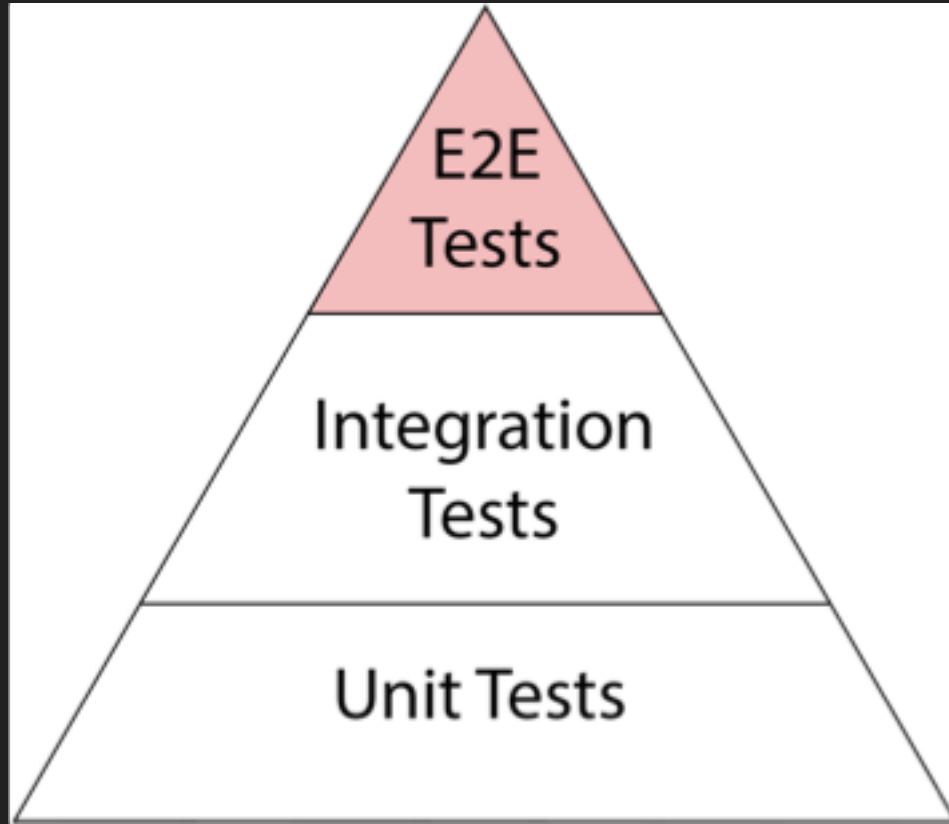


Android

iOS

Android Einführung

Test Pyramid



↓ Fidelity

↑ Speed

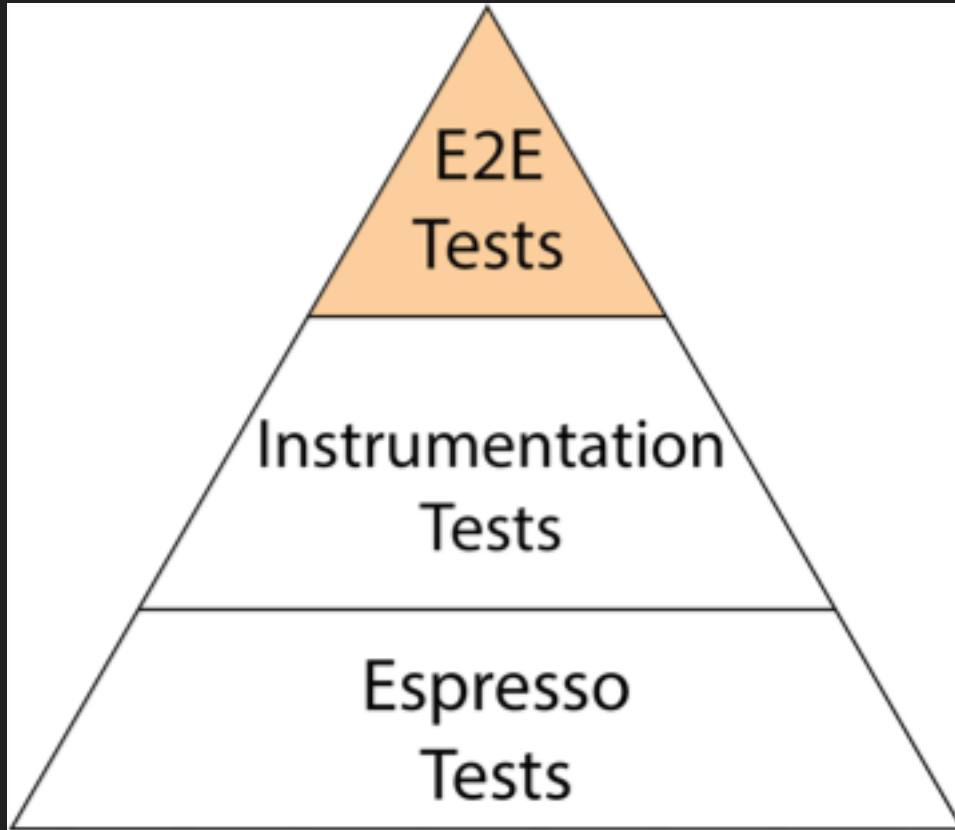
↓ Cost

↑ Fidelity

↓ Speed

↑ Cost

Mobile Test Pyramid



↑ Fidelity

↓ Speed

↑ Cost

↓ Fidelity

↑ Speed

↓ Cost

~~Calabash~~

~~KIF~~

Many E2E Testing Solutions

~~UIAutomator~~

~~MonkeyTalk~~

Android E2E Testing



Robotium

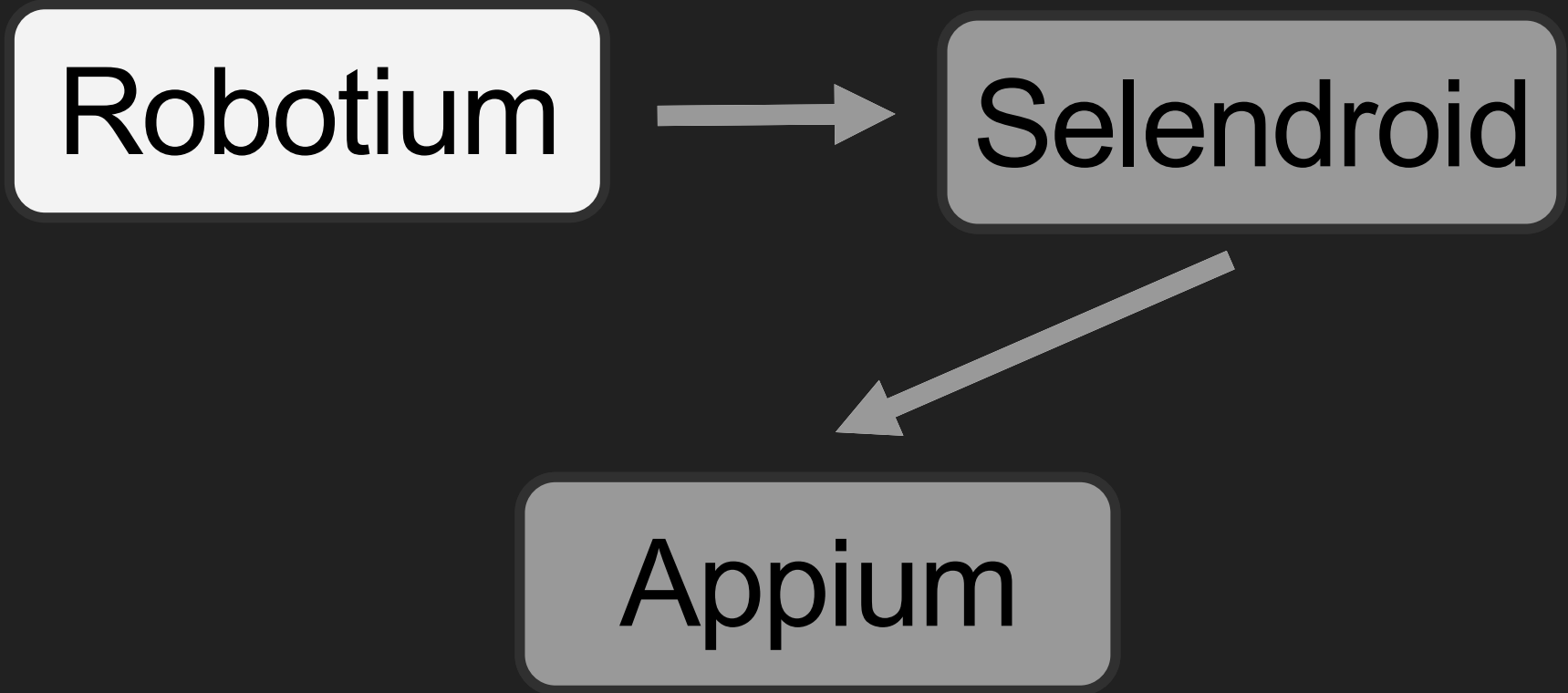


Selendroid



Appium

Our Testing Journey



Robotium: Architecture

Device

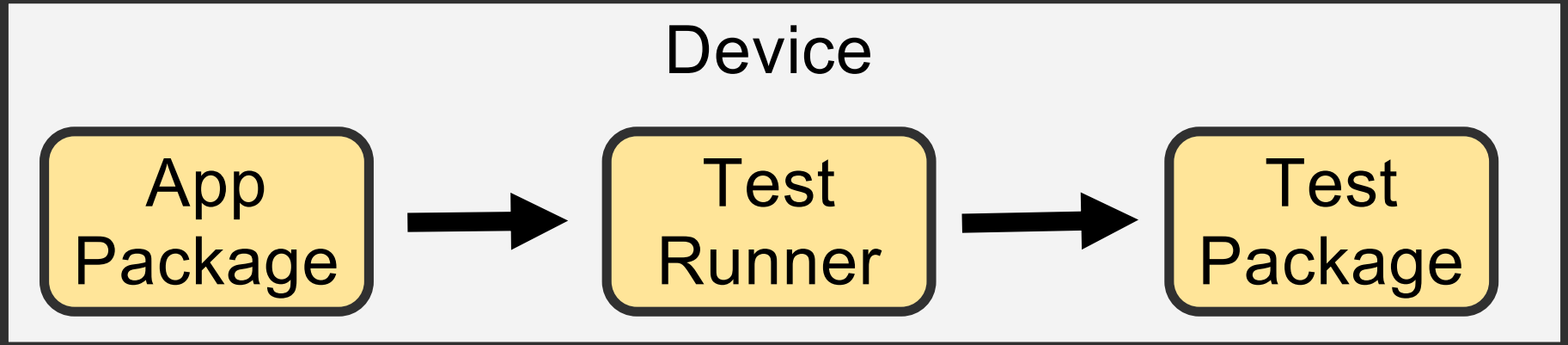
App
Package



Test
Runner



Test
Package



Android
Oriented

Blackbox
Testing

Robotium

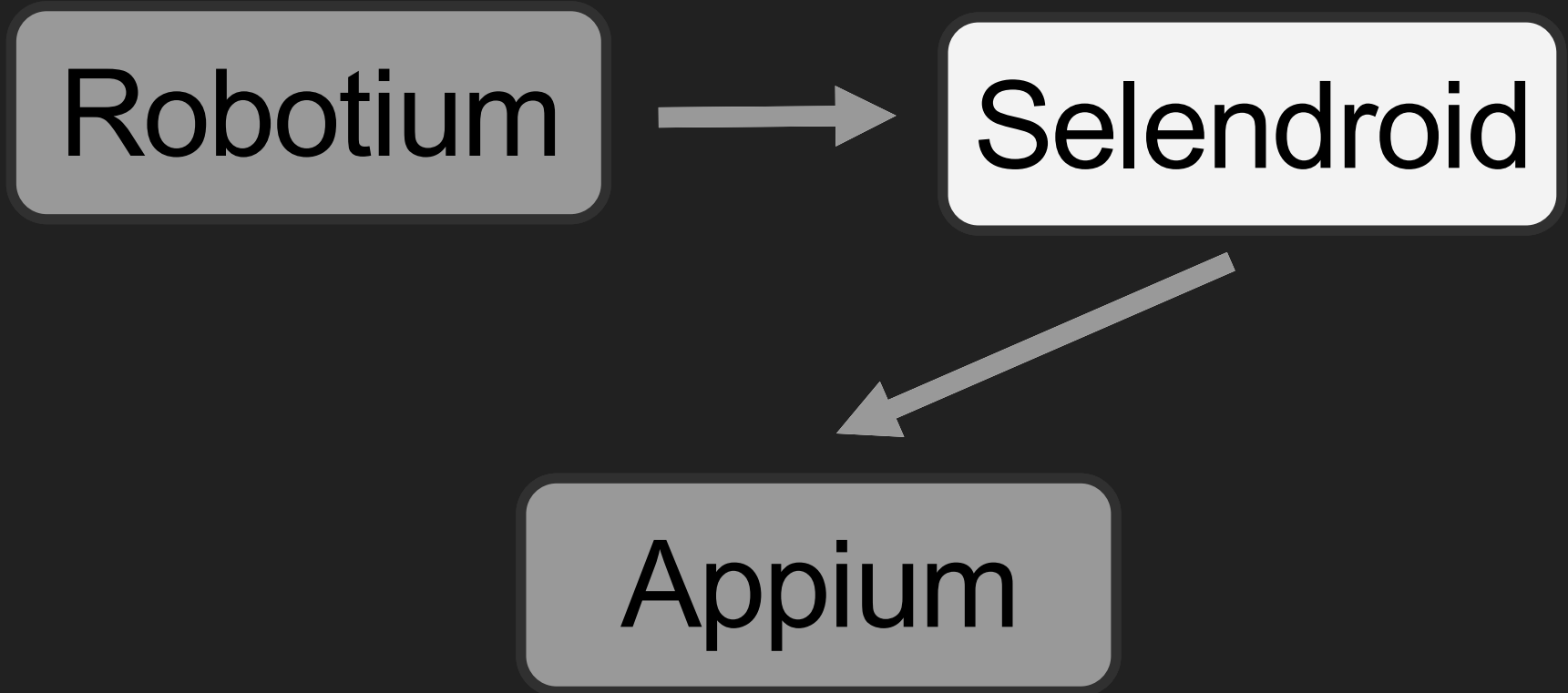
User
Centric

↓ Verbosity

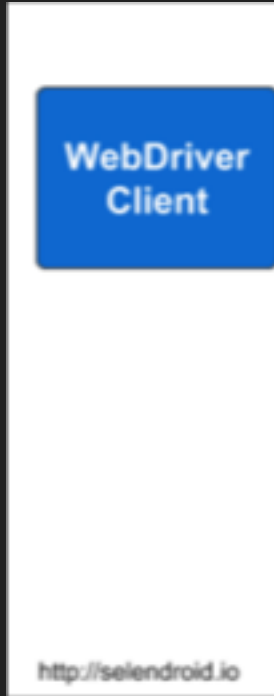
Robotium: Demo

Robotium

Our Testing Journey



Selenium: Architecture



Selenium

**Selenium
Based**

**Multiple
Devices**

Selendroid

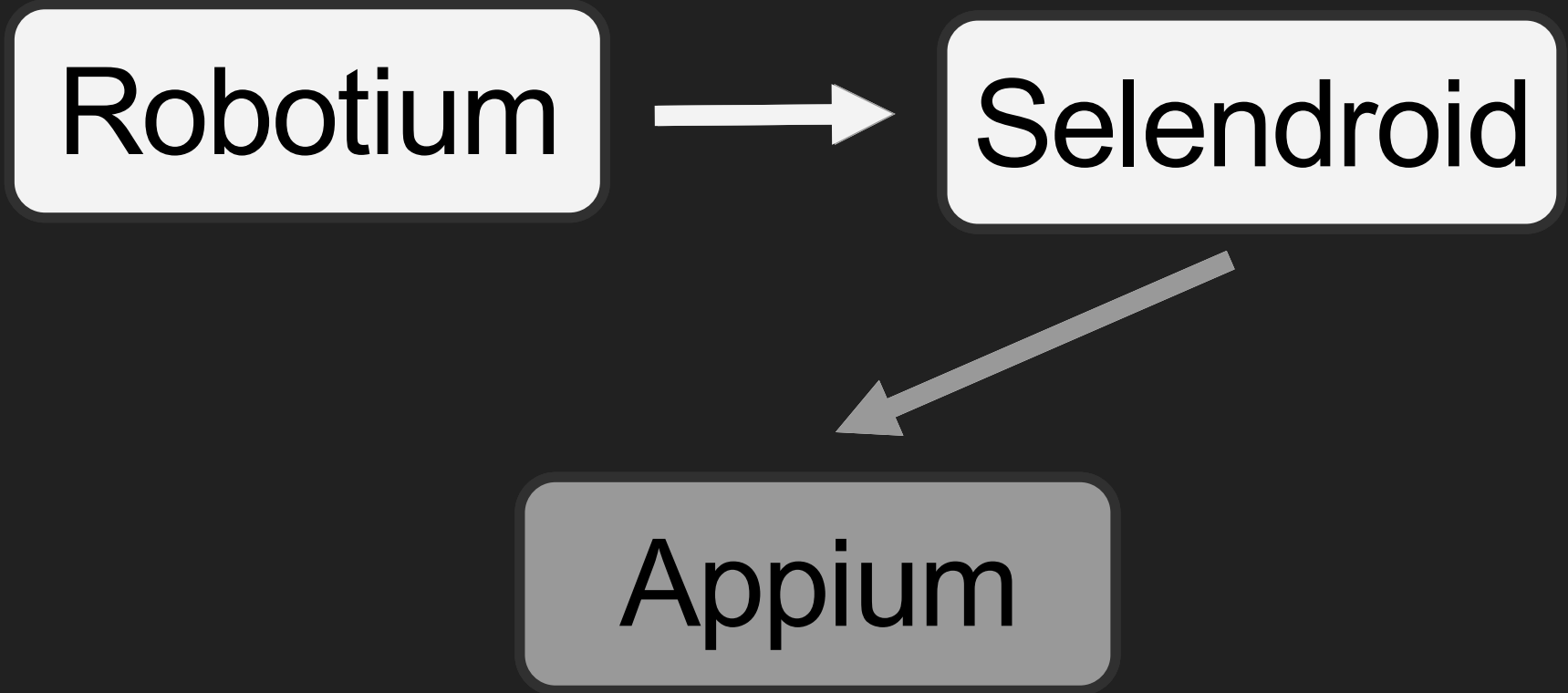
**Gesture
Support**

**Older
Android API**

Selendroid: Demo

Selendroid

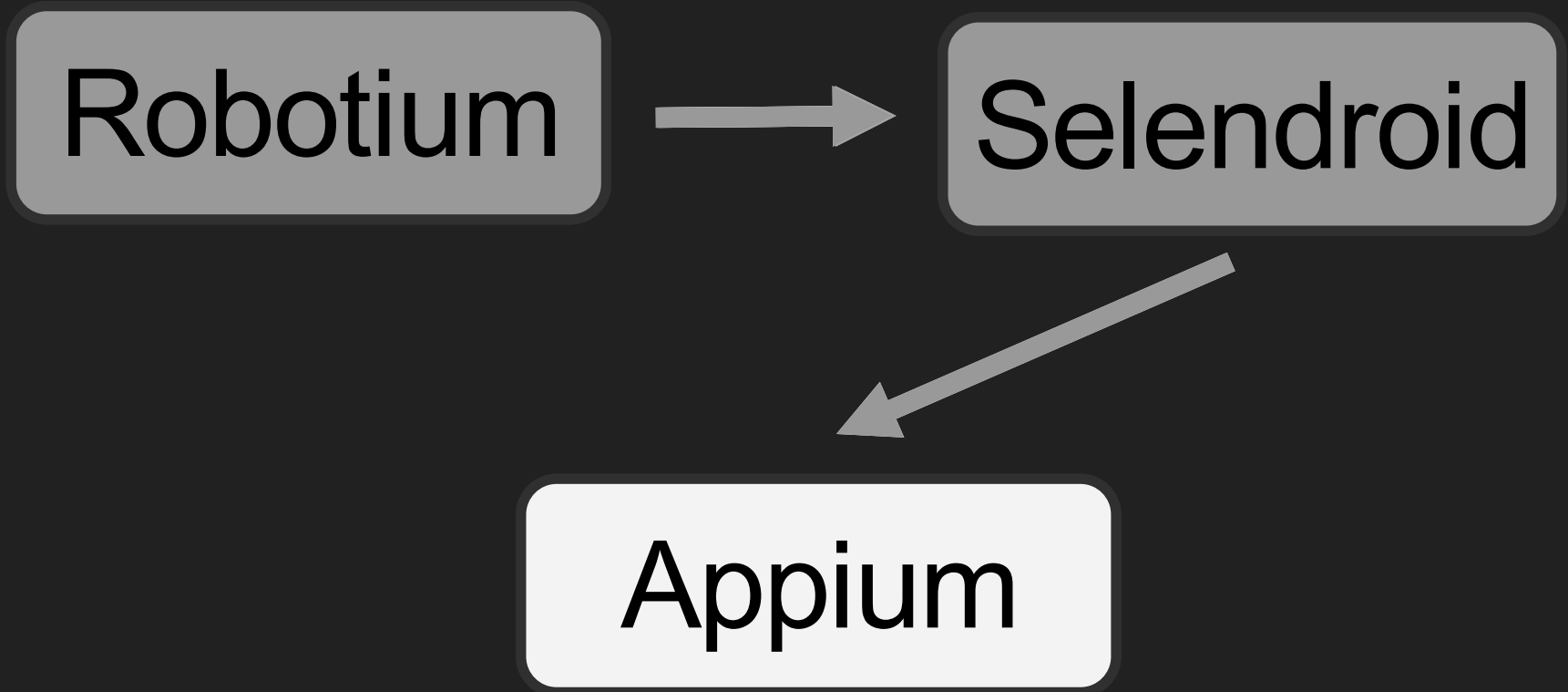
Our Testing Journey



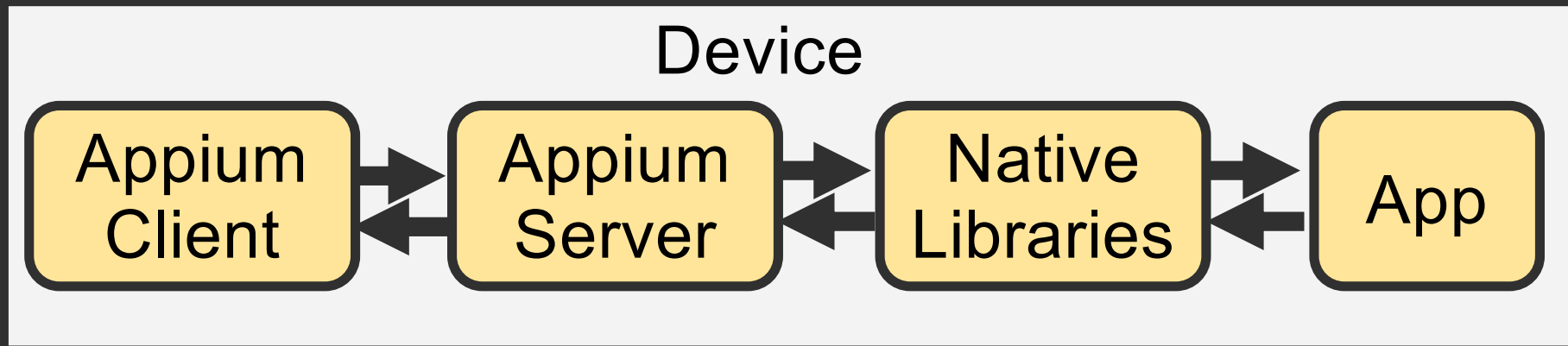
Robotium vs Selendroid

Robotium	Category	Selendroid
Activity	Architecture	App
By Android IDs	Locator Strategy	By Selenium Locators
Limited	Gesture Support	Extensive

Our Testing Journey



Appium: Architecture



Selenium
Based

Platform
Agnostic

Appium

Language
Agnostic

Developer
Oriented

Appium: Demo

Appium

Appium: Four Pillars

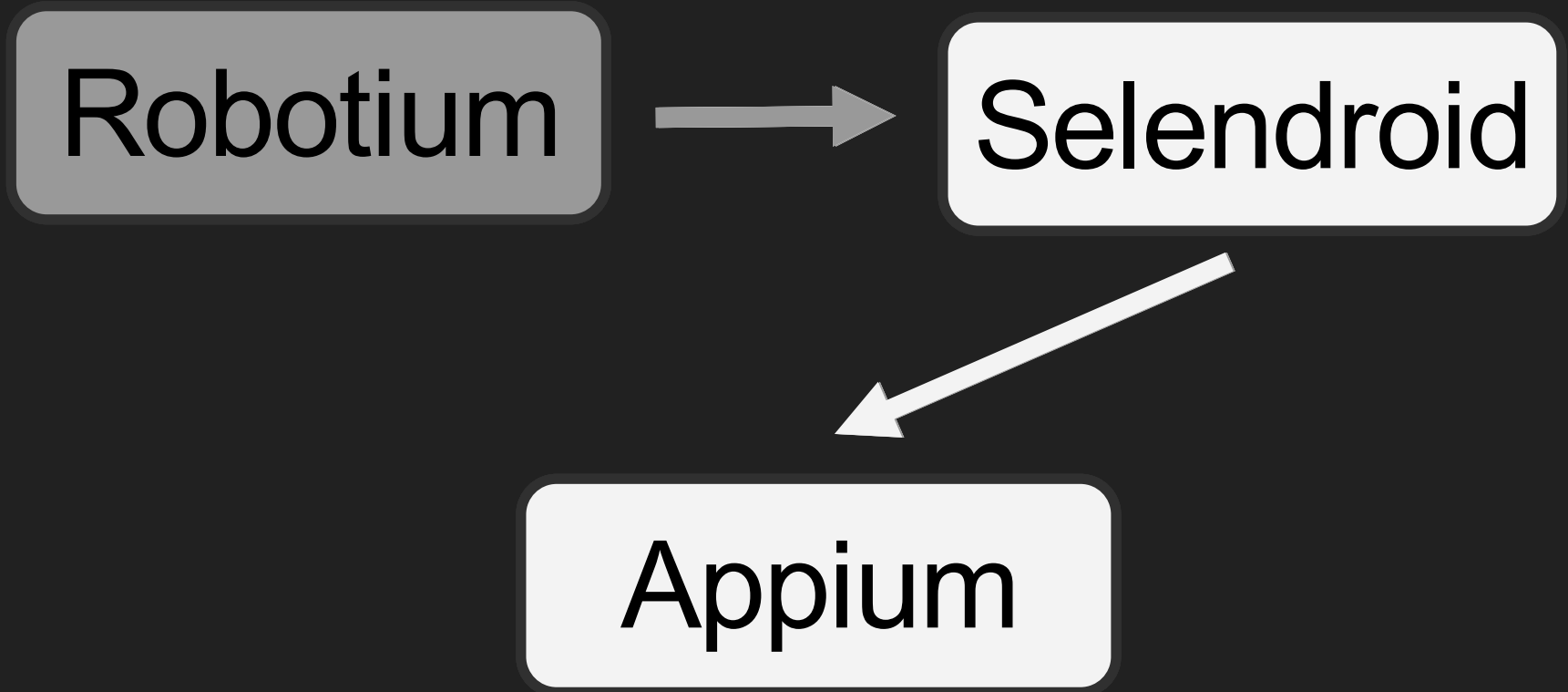
Production ->
Test Ready

Loose
Coupling

Standards
Driven

Open
Source

Our Testing Journey



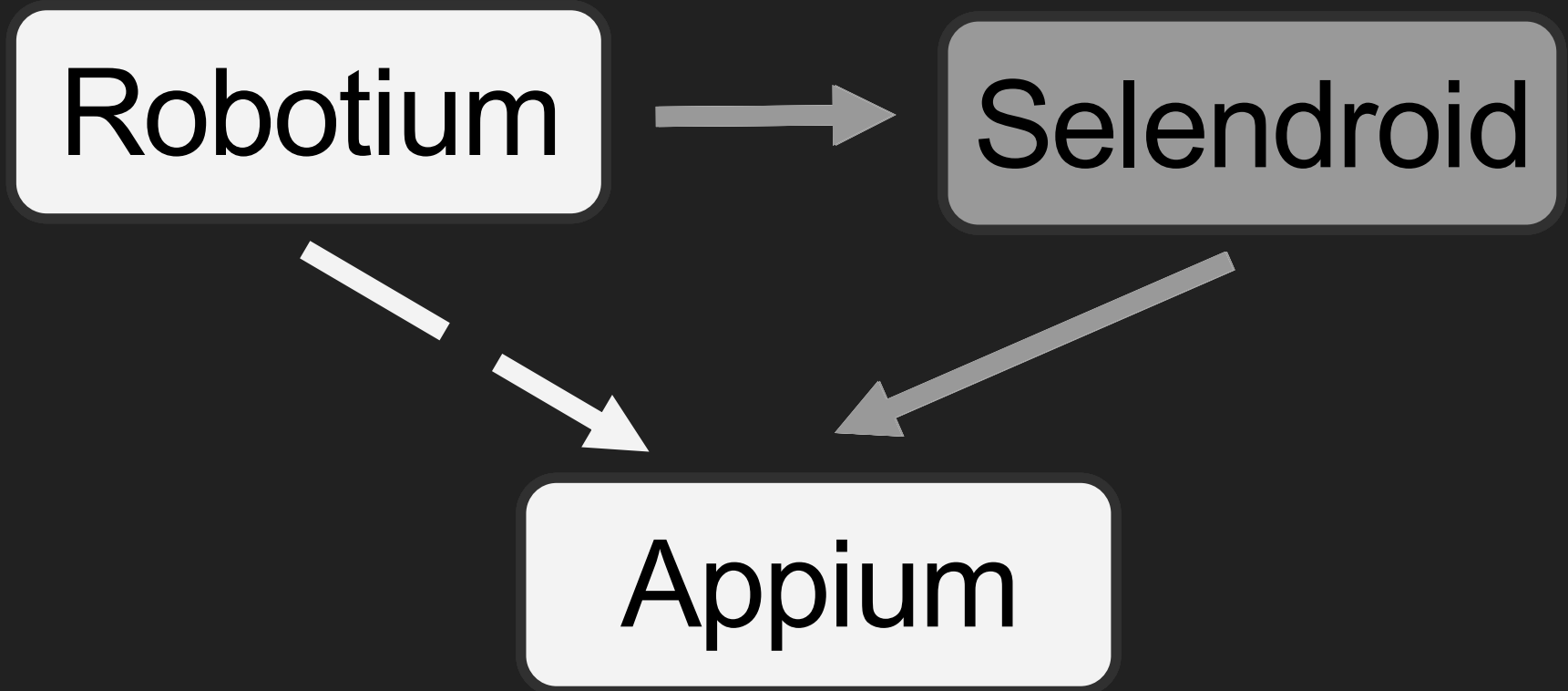
Selendroid vs Appium

S

Selendroid	Category	Appium
Android	Platform	Any*
All*	Android API Version	Post API16
Limited	Advanced Web Tests	Extensive

BAut d'OSdais ilreæðirtgnt

Our Testing Journey



Robotium vs Appium

R

Robotium	Category	Appium
Tight	Coupling	Loose
Single Device	Device Support	Multiple Devices
Paid Plugin	Record & Play	Free, Desktop App

Right Tool for the Right Problem

No DDD

↑ Complexity

Avoid Tool Mixups

No Common
Language

Github
Repos

Twitter
Activity

How to Choose?

External
Integrations

POC

Flexibility

But More Importantly

Use Case

Cost of
Transition

ROI

Flexibility

Ability to
Customize

Ability to
Replace

Flexibility

But More Importantly

Use Case

**Team
Expertise**

**Application
Framework**

Use Case

**Test
Infrastructure**

BrowserStack

SauceLabs

Going Forward
Simplifying

Devices

OS

Version

Evaluate Test
Architecture

Unify Test
Strategy

Call For Action

Adapt to
Change

Experiment!

Q/A

About Speaker

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