

# Mobile Testing

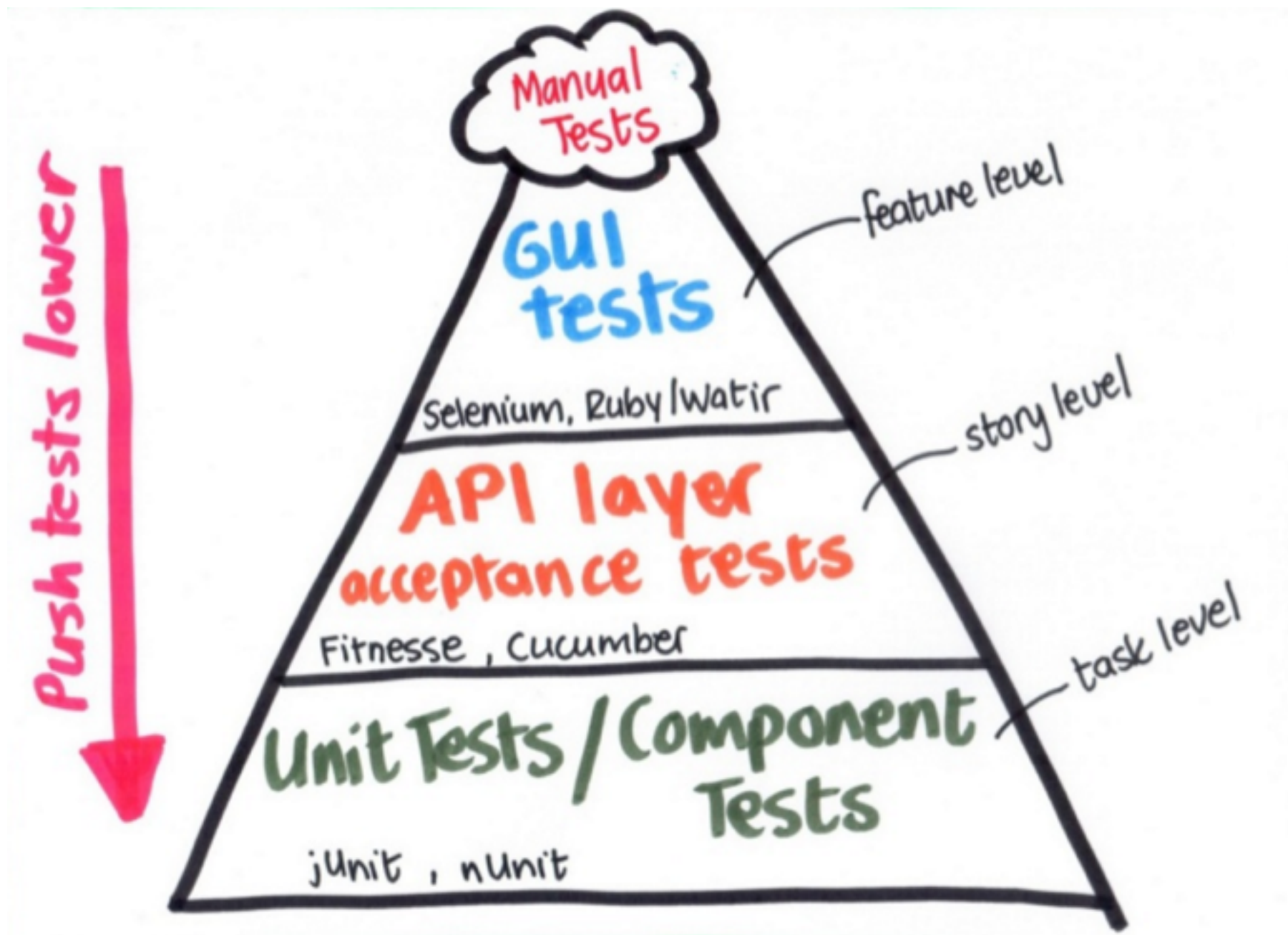




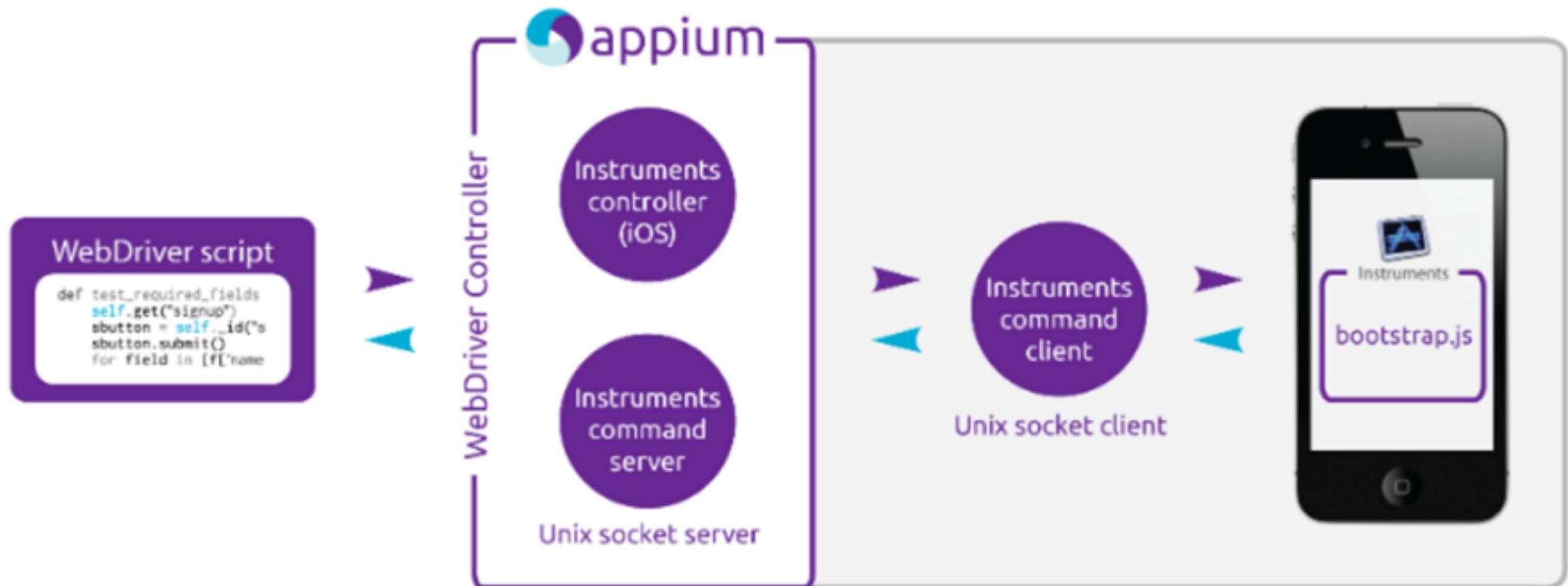
<http://appium.io/>



# iOS



# Appium architecture



# Installation

```
$brew install node
```

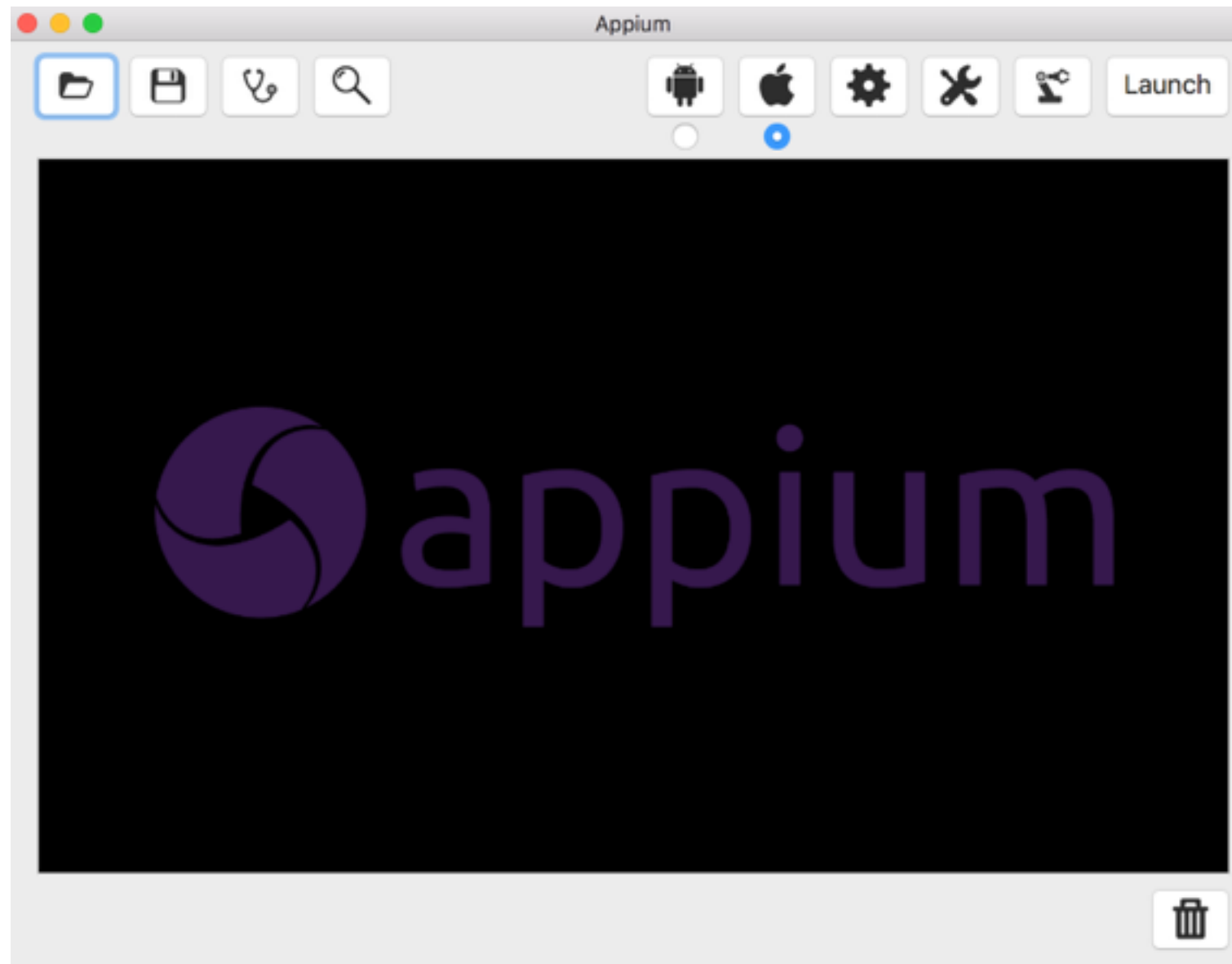
```
$npm install -g appium
```

```
$npm install wd
```

```
$appium
```



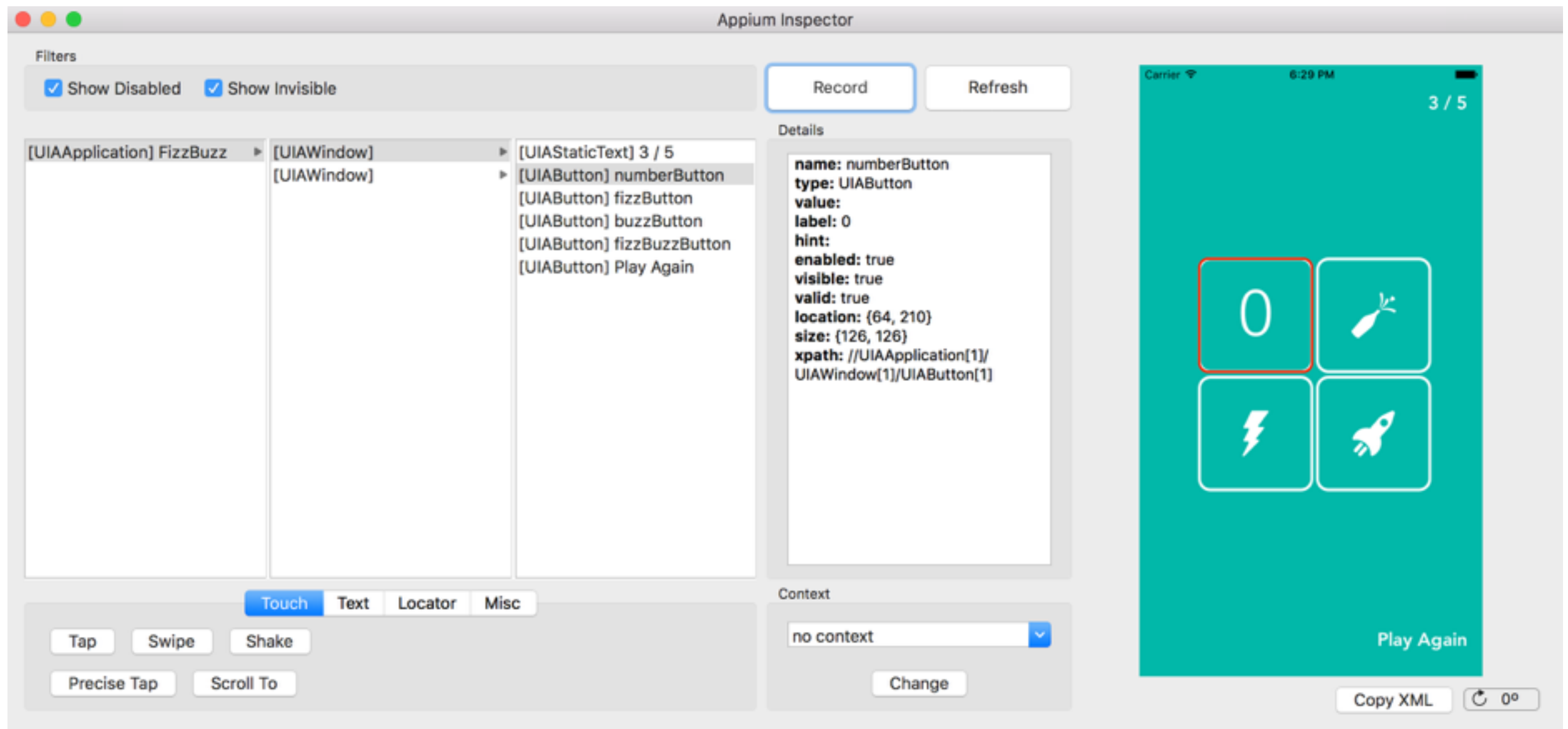
# Appium desktop apps



<http://appium.io/downloads.html>



# Appium inspector



<http://appium.io/downloads.html>





# Config appium

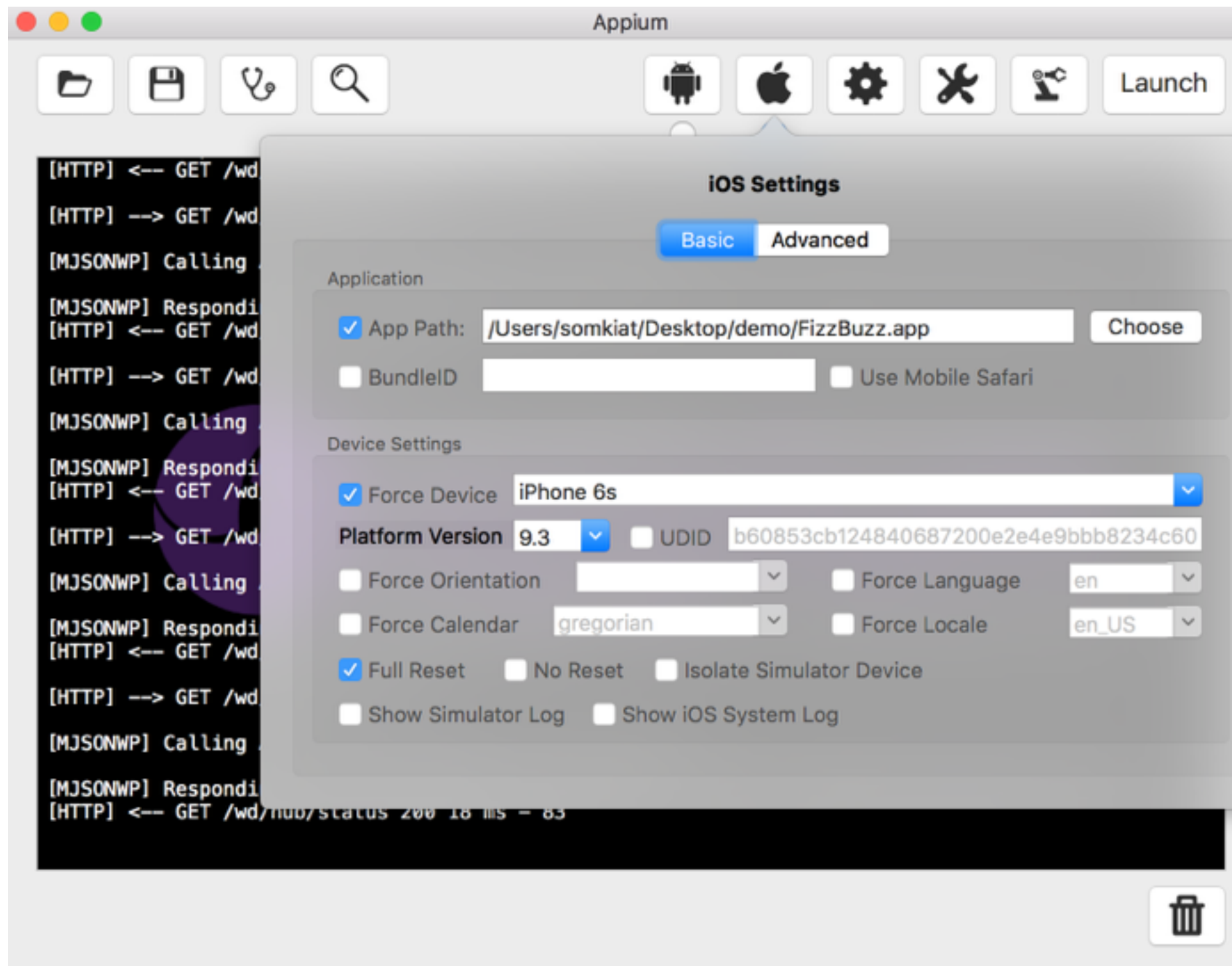
Run on Emulator

Run on Real device

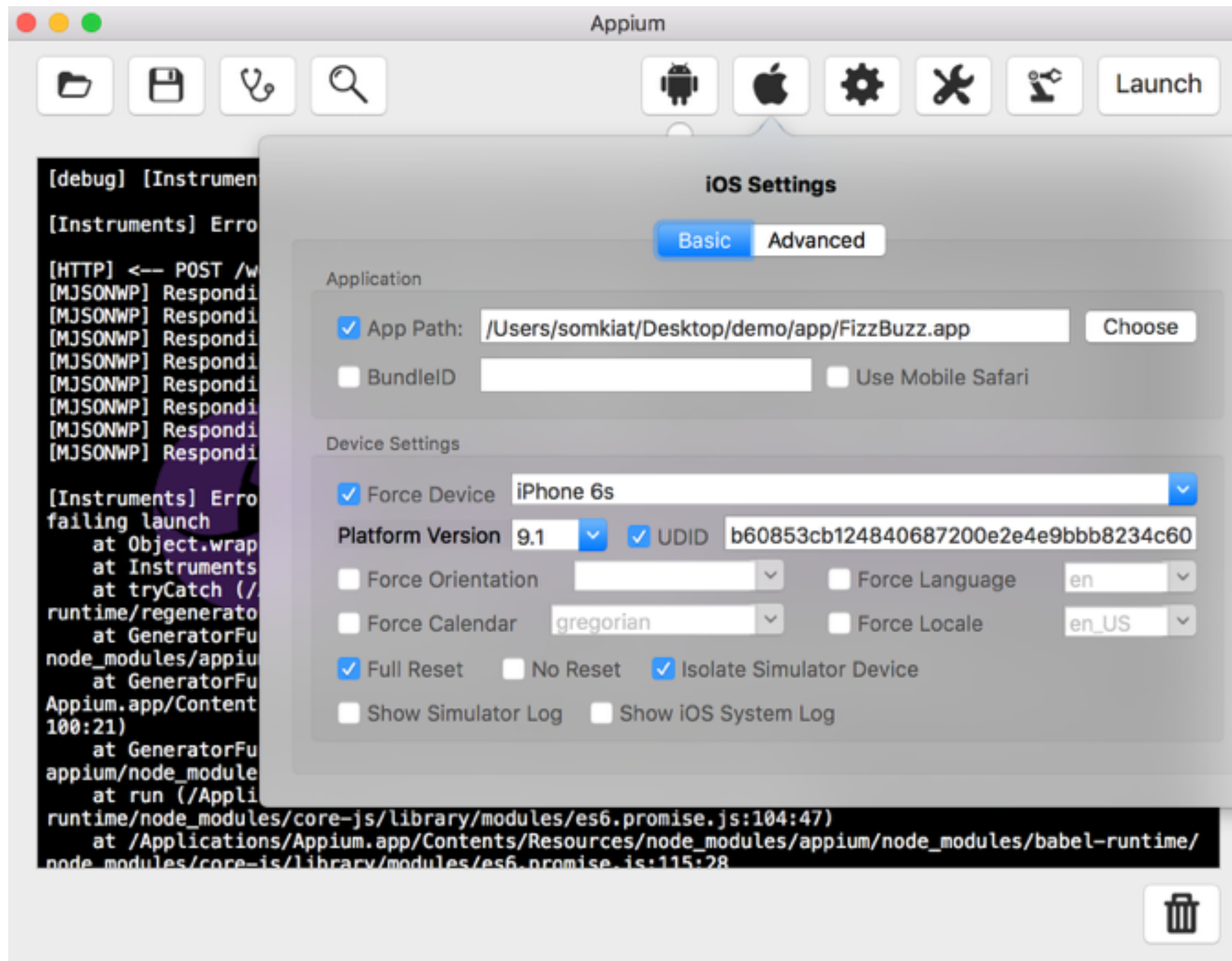




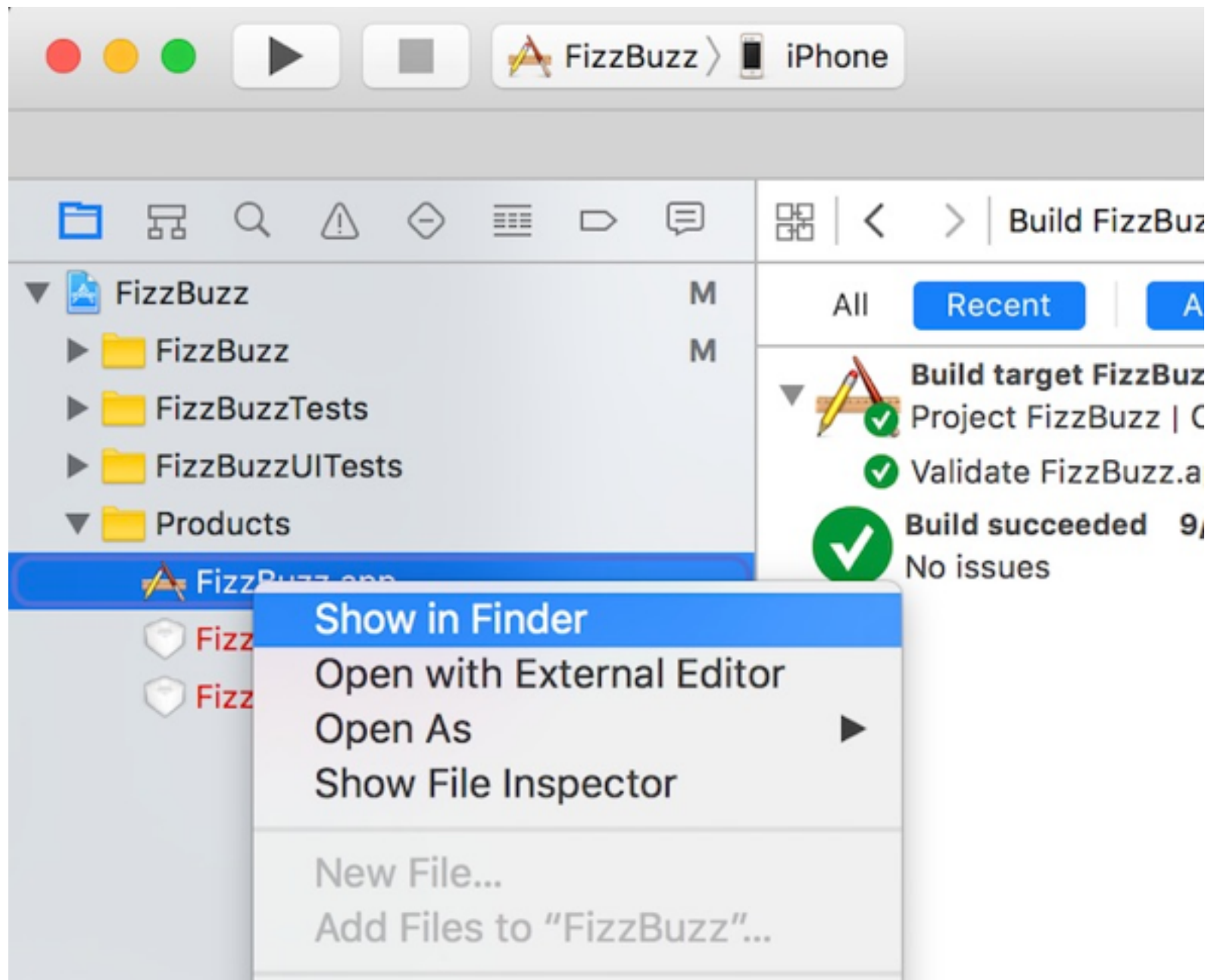
# Run on emulator



# Run on real device



# App Path for emulator



# Finder -> Go -> Enclosing Finder

Name	
▶	Debug-iphoneros
▼	Debug-iphonesimulator
	FizzBuzz
▶	FizzBuzz.swiftmodule
▼	Release-iphonesimulator





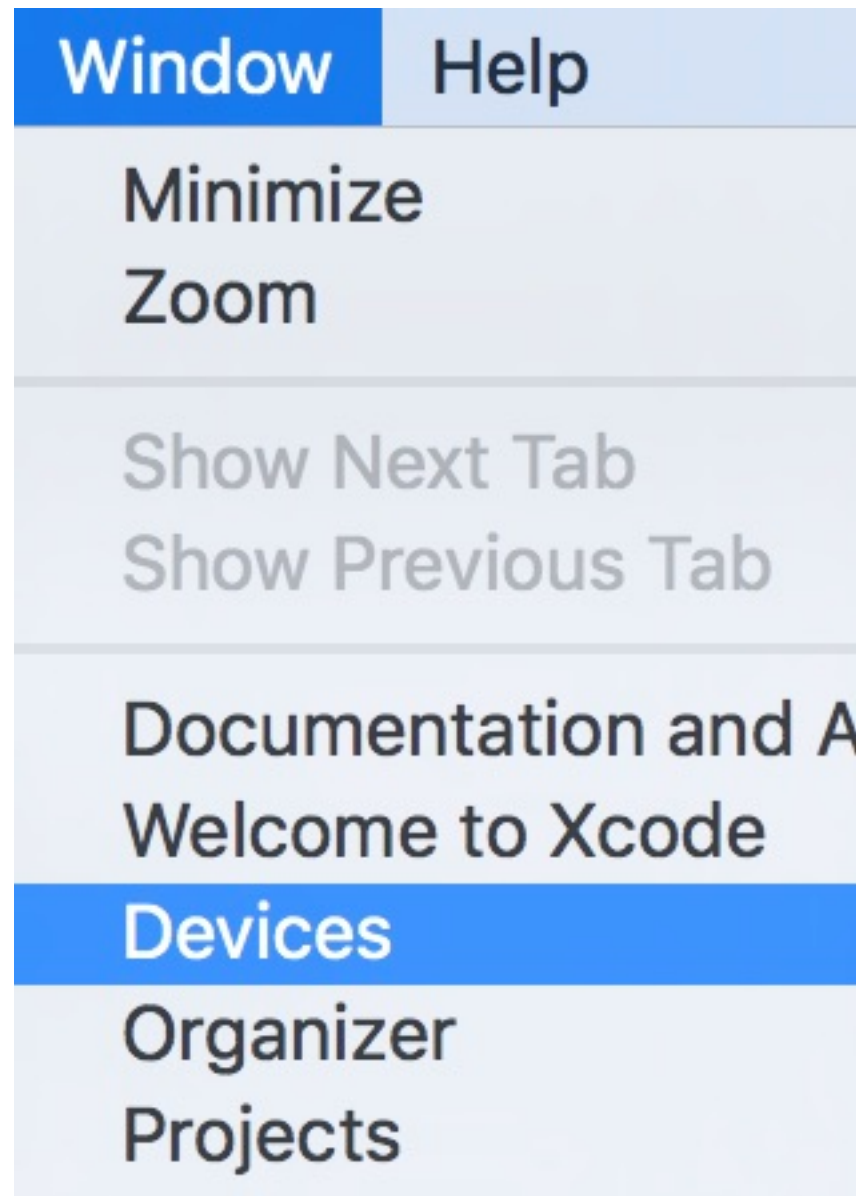
# Device UDID

\$ instruments -s devices

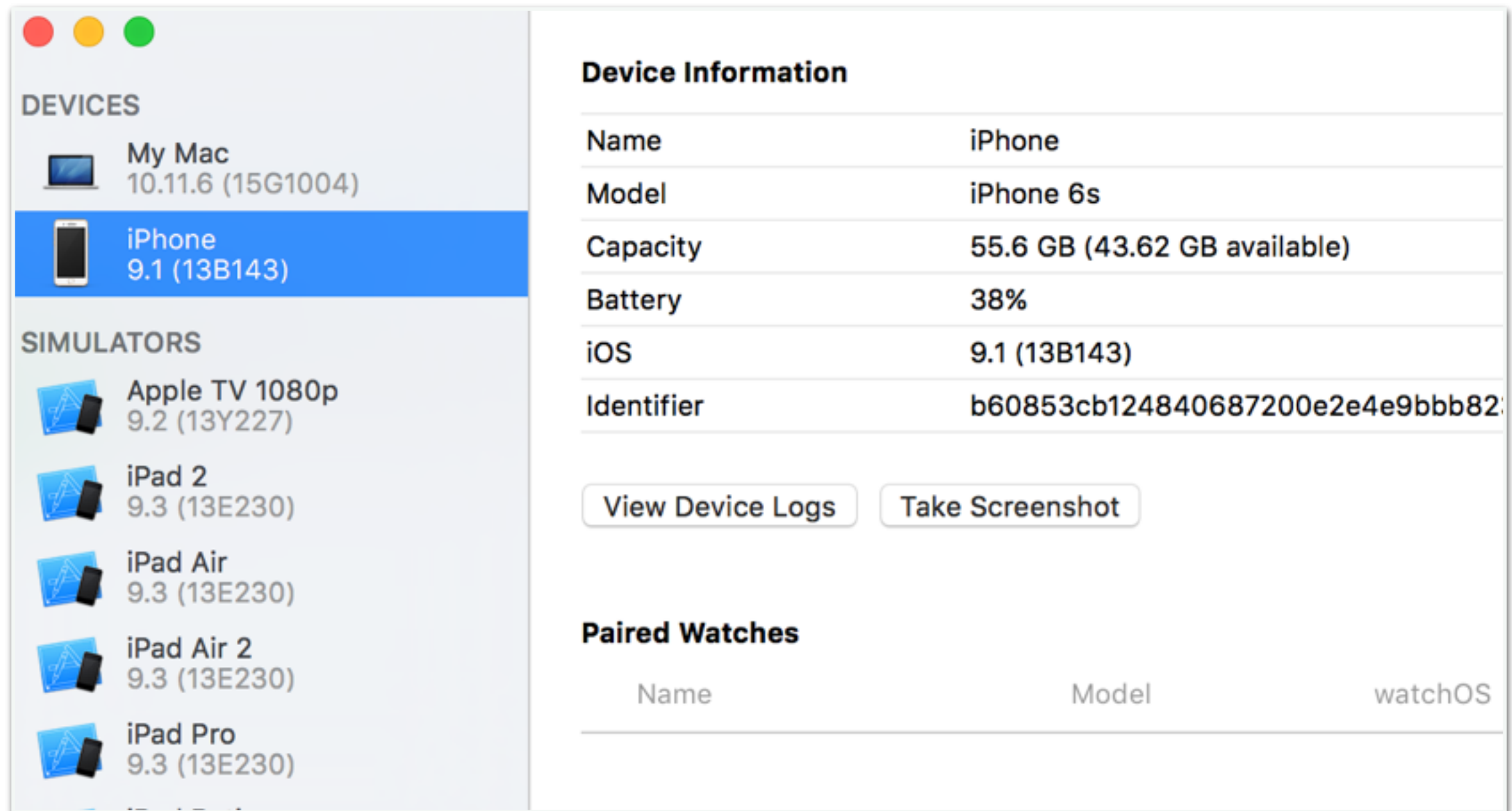
```
MacBook Pro [13CA0EB5-E6C7-5FC4-B3CF-E0572816CA]  
iPhone (9.1) [b60853cb124840687200e2e4e9bbb8234]  
Apple TV 1080p (9.2) [C6576318-0B48-4002-A4D5-C]  
iPad 2 (9.3) [C61DBED4-F796-4793-A680-E30A29B1B]  
iPad Air (9.3) [5990D523-C34C-496D-9FE2-47093B6]  
iPad Air 2 (9.3) [16ED67C3-FDA3-48EA-81DD-5CCA1]  
iPad Pro (9.3) [27938C50-FE02-410F-A497-C04C20C]  
iPad Retina (9.3) [129D2D6A-E4A0-4960-8D1A-1049]  
iPhone 4s (9.3) [3F5E47A3-0089-4F9A-8836-FD20EB]  
iPhone 5 (9.3) [04CFFD66-03B8-4DC2-B9B6-E9737BA]  
iPhone 5s (9.3) [F20271AC-8920-4966-82B5-D1B35F]  
iPhone 6 (9.3) [45283668-558D-407F-9604-2663673]  
iPhone 6 Plus (9.3) [6C67B0E9-8A4A-481E-BFB9-AD]
```



# Device UDID



# Device UDID



The screenshot shows the Xcode interface with the 'DEVICES' and 'SIMULATORS' panels on the left and the 'Device Information' panel on the right. The 'iPhone 9.1 (13B143)' simulator is selected. The 'Device Information' panel displays the following details:

Device Information	
Name	iPhone
Model	iPhone 6s
Capacity	55.6 GB (43.62 GB available)
Battery	38%
iOS	9.1 (13B143)
Identifier	b60853cb124840687200e2e4e9bbb82

Below the table, there are two buttons: 'View Device Logs' and 'Take Screenshot'.

The 'Paired Watches' section is also visible, showing a table with columns for Name, Model, and watchOS.





# Install app to real device

```
$brew install ideviceinstaller
```



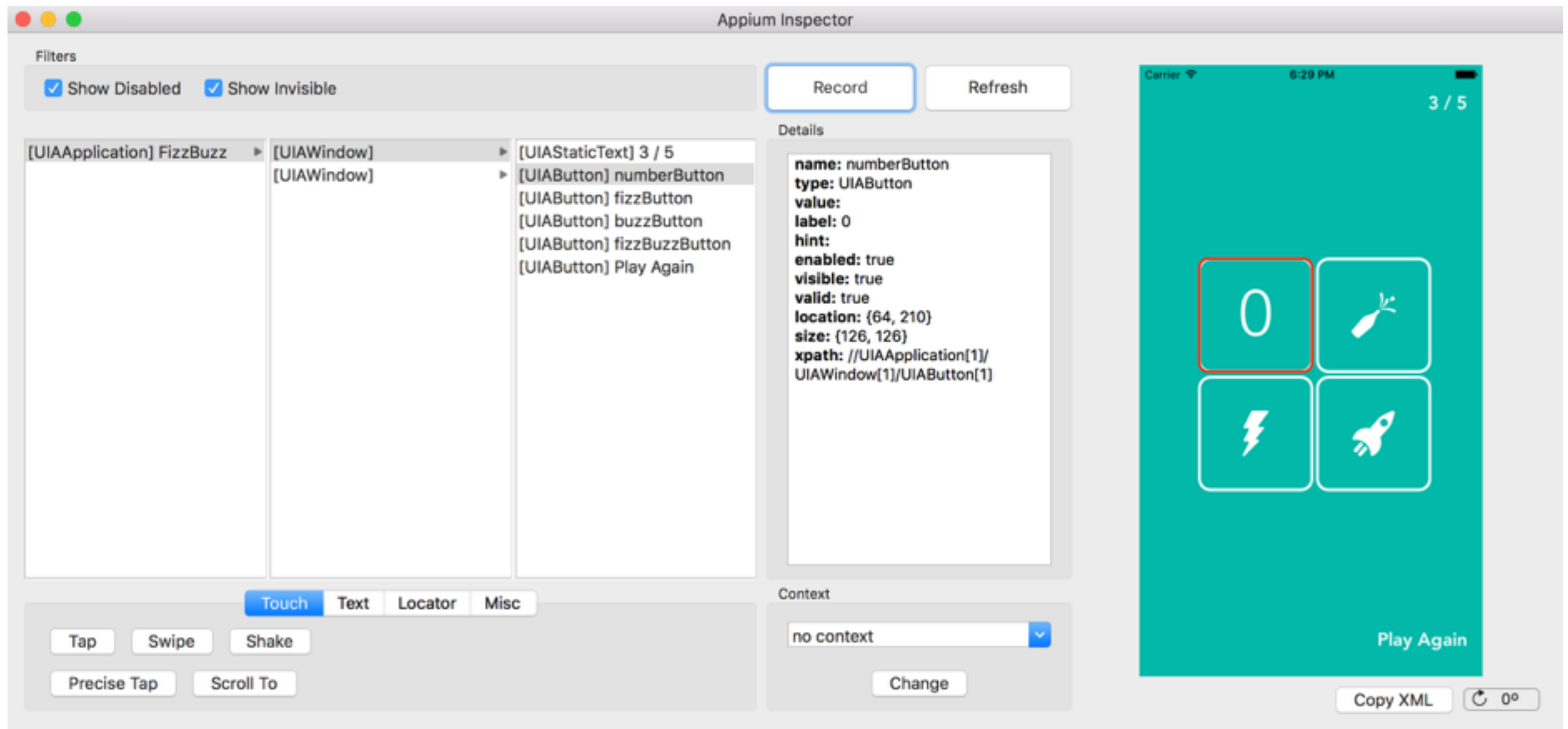
# Error !!

Error launching instruments: Instruments  
crashed on startup

*Restart*



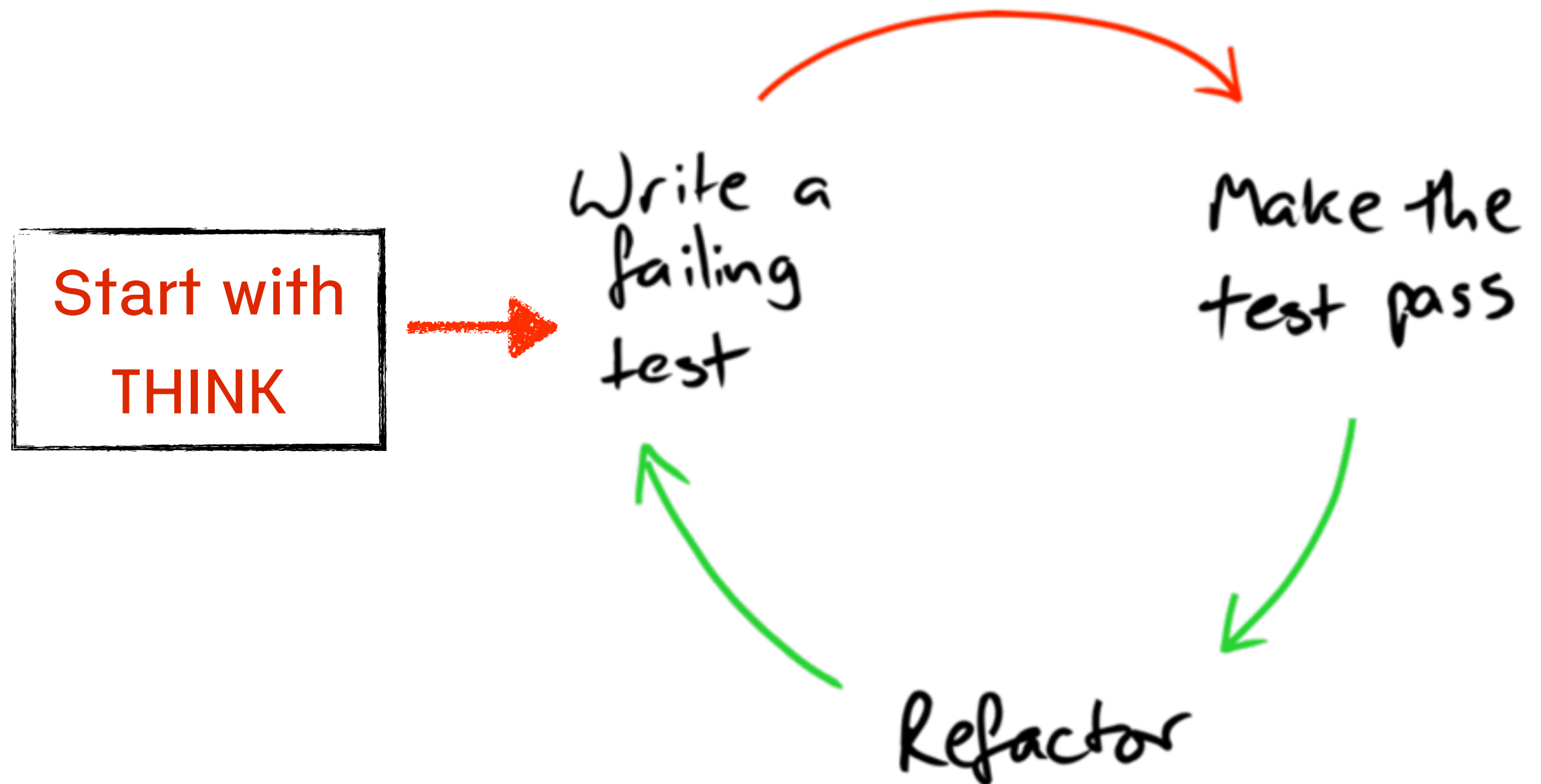
# Appium inspector



<http://appium.io/downloads.html>



# Improve TDD Cycle



# Simple TDD Rules

**Write a failing automated test before**  
you write any code

**Remove duplication**



# Appium client

Ruby

Python

Java

JavaScript

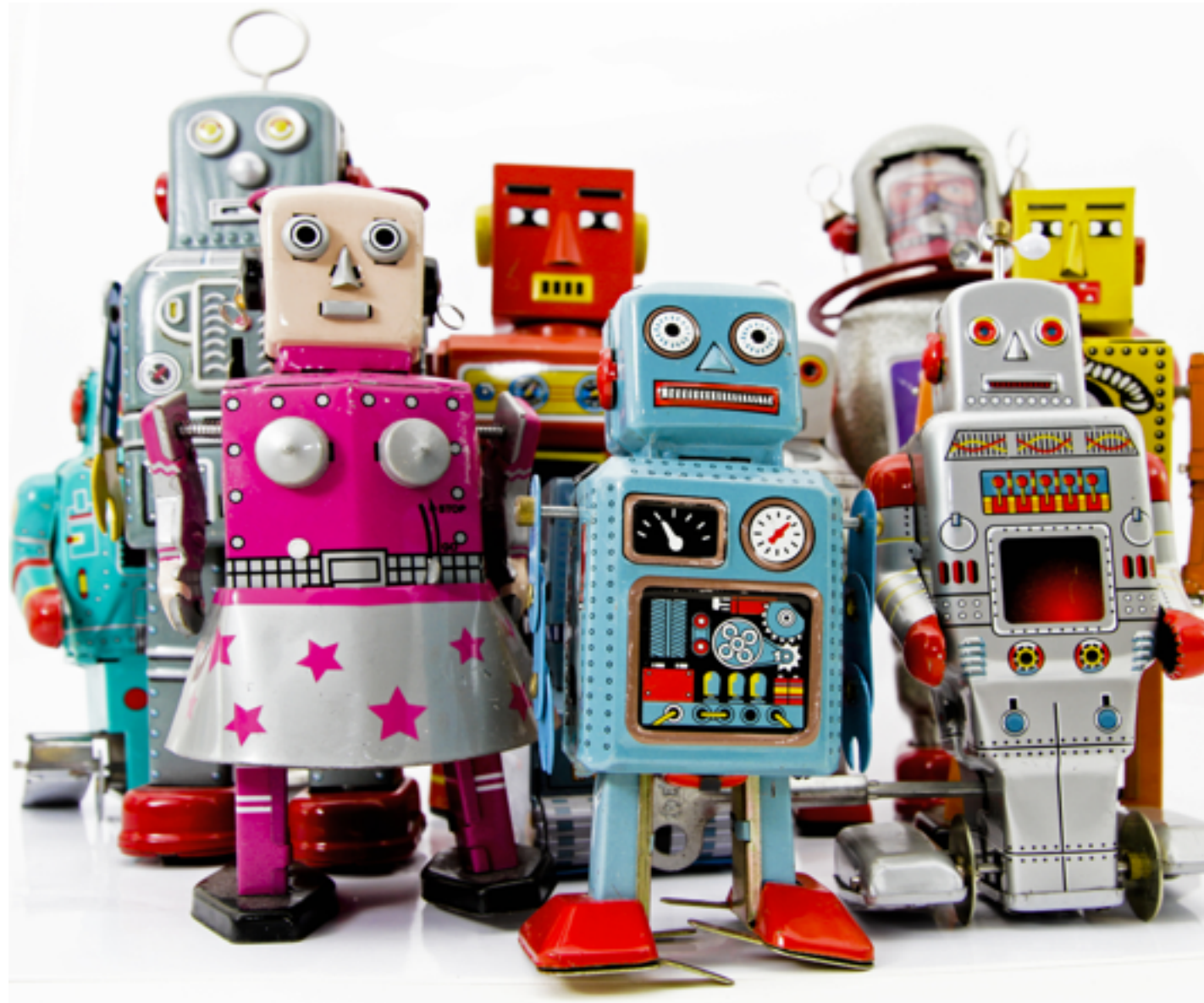
PHP

C#

**RobotFramework**



# Let's start



<https://github.com/serhatbolsu/robotframework-appiumlibrary>





# Installation

```
$pip install robotframework
```

```
$pip install robotframework-appiumlibrary
```



# Start

\*\*\* Settings \*\*\*

Library

AppiumLibrary

\*\*\* Variables \*\*\*

\*\*\* Testcases \*\*\*

\*\*\* Keywords \*\*\*



# Run test

```
$pybot <filename>.robot
```



# Report

## Fizzbuzz ios Emulator Test Log

Generated  
20160912 22:50:16 GMT +07:00  
8 minutes 34 seconds ago

### Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:01:09	<div></div>
All Tests	1	1	0	00:01:09	<div></div>

Statistics by Tag	Total	Pass	Fail	Elapsed	Pass / Fail
dev	1	1	0	00:01:09	<div></div>

Statistics by Suite	Total	Pass	Fail	Elapsed	Pass / Fail
<a href="#">Fizzbuzz ios Emulator</a>	1	1	0	00:01:09	<div></div>

### Test Execution Log

-

SUITE

Fizzbuzz ios Emulator

Full Name:

Fizzbuzz ios Emulator

Source:

[/Users/somkiat/data/slide/mobile-testing/demo/robotframework/fizzbuzz\\_ios\\_emulator.robot](/Users/somkiat/data/slide/mobile-testing/demo/robotframework/fizzbuzz_ios_emulator.robot)

Start / End / Elapsed:

20160912 22:49:07.939 / 20160912 22:50:16.946 / 00:01:09.007

Status:

1 critical test, 1 passed, 0 failed  
1 test total, 1 passed, 0 failed

-

TEST

Count 15

Full Name:

Fizzbuzz ios Emulator.Count 15

Tags:

dev

Start / End / Elapsed:

20160912 22:49:08.089 / 20160912 22:50:16.946 / 00:01:08.857

Status:

PASS

(critical)

+

SETUP

Open APP

+

KEYWORD

AppiumLibrary.Click Element

accessibility id=numberButton



# Error

## Test Execution Log

### - SUITE Fizzbuzz Ios Emulator

Full Name: Fizzbuzz Ios Emulator

Source: [/Users/somkiat/data/slide/mobile-testing/demo/robotframework/fizzbuzz\\_ios\\_emulator.robot](/Users/somkiat/data/slide/mobile-testing/demo/robotframework/fizzbuzz_ios_emulator.robot)

Start / End / Elapsed: 20160912 23:14:35.637 / 20160912 23:15:30.027 / 00:00:54.390

Status: 1 critical test, 0 passed, **1 failed**  
1 test total, 0 passed, **1 failed**

### - TEST Count 15

Full Name: Fizzbuzz Ios Emulator.Count 15

Tags: dev

Start / End / Elapsed: 20160912 23:14:35.784 / 20160912 23:15:30.025 / 00:00:54.241

Status: **FAIL** (critical)

Message: Text 'dsfsdf' did not appear in 5 seconds

#### + SETUP Open APP

+ KEYWORD AppiumLibrary.Click Element accessibility\_id=numberButton

+ KEYWORD AppiumLibrary.Click Element accessibility\_id=numberButton

- KEYWORD AppiumLibrary.Wait Until Page Contains dsfsdf

Documentation: Waits until `text` appears on current page.

Start / End / Elapsed: 20160912 23:15:14.070 / 20160912 23:15:22.449 / 00:00:08.379



# Error

+ **KEYWORD** AppiumLibrary.Capture Page Screenshot

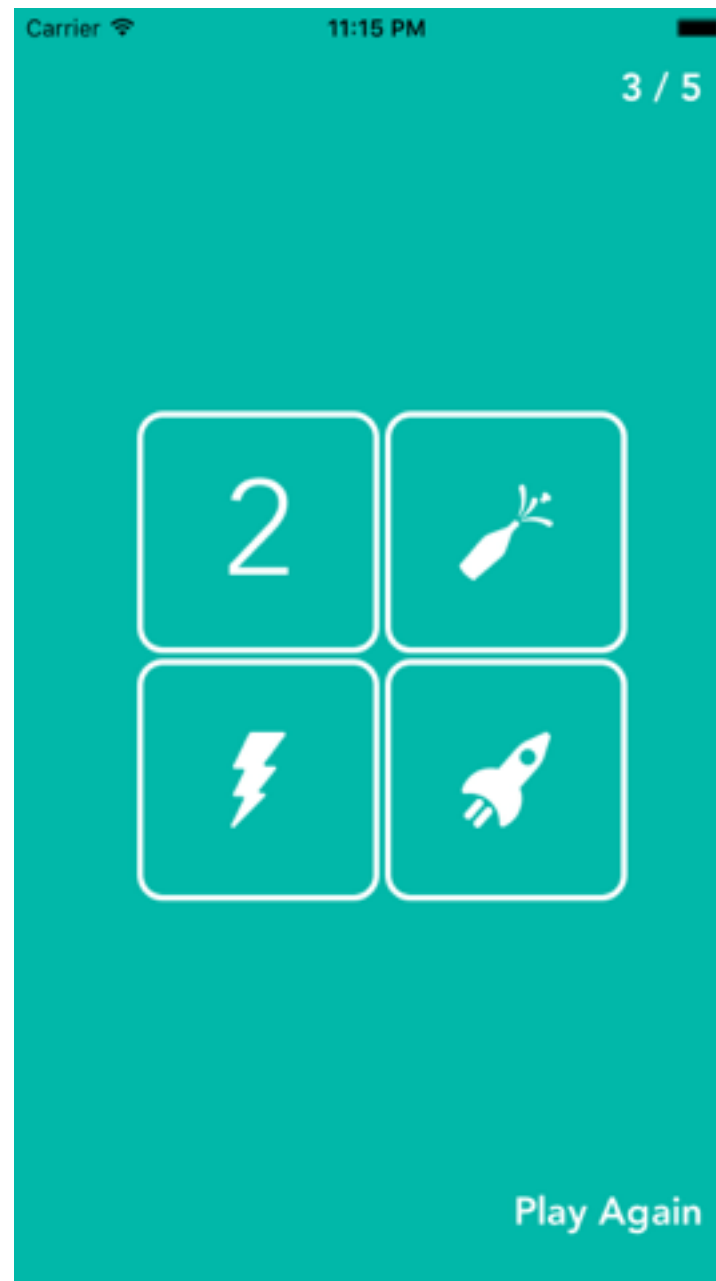
23:15:20.348

INFO

```
<?xml version="1.0" encoding="UTF-8"?>
<AppiumAUT>
  <UIAApplication name="FizzBuzz" label="FizzBuzz" value="" dom="" enabled="true" val
x="0" y="0" width="375" height="667">
    <UIAWindow name="" label="" value="" dom="" enabled="true" valid="true" visible
width="375" height="667">
      <UIAStaticText name="3 / 5" label="3 / 5" value="3 / 5" dom="" enabled="tru
path="/0/0/0" x="315.5" y="28" width="43.5" height="27.5">
        </UIAStaticText>
        <UIAButton name="numberButton" label="2" value="" dom="" enabled="true" val
x="64" y="210" width="126" height="126">
          </UIAButton>
          <UIAButton name="fizzButton" label="champagne" value="" dom="" enabled="tru
path="/0/0/2" x="193" y="210" width="126" height="126">
            </UIAButton>
            <UIAButton name="buzzButton" label="lightning" value="" dom="" enabled="tru
path="/0/0/3" x="64" y="339" width="126" height="126">
              </UIAButton>
              <UIAButton name="fizzBuzzButton" label="space" value="" dom="" enabled="tru
path="/0/0/4" x="193" y="339" width="126" height="126">
                </UIAButton>
                <UIAButton name="Play Again" label="Play Again" value="" dom="" enabled="tr
path="/0/0/5" x="260" y="607" width="99" height="40">
                  </UIAButton>
                </UIAWindow>
              <UIAWindow name="" label="" value="" dom="" enabled="true" valid="true" visible
width="375" height="667">
                <UIAStatusBar name="" label="" value="" dom="" enabled="true" valid="true"
y="0" width="375" height="20">
                  <UIAElement name="Swipe down with three fingers to reveal the notificat
reveal the control center, Double-tap to scroll to top" label="" value="" dom="" enable
hint="Swipe down with three fingers to reveal the notification center. Swipe up with 4
```



# Error





“Quality is the responsibility of everybody.”

