Testing

ACCEPTANCE TESTING

ACCEPTANCE TEST DRIVEN DEVELOPMENT

TDD

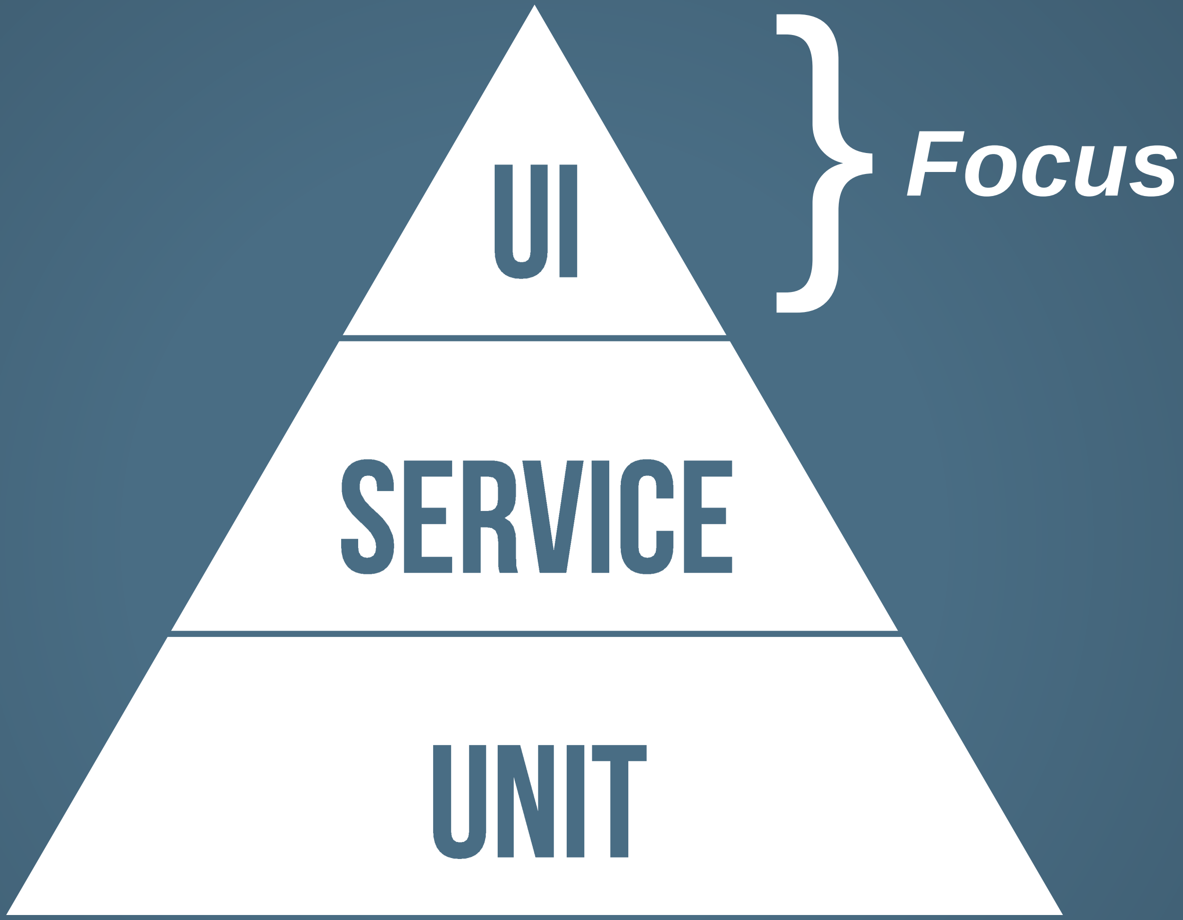
ATDD

BUILD THE THING RIGHT

TDD

ATDD

BUILD THE RIGHT THING



UI

SERVICE

UNIT

Focus

- MIKE COHN

GHERKIN

CUCUMBER

CALABASH & UITEST

GHERKIN

DSL

GIVEN

WHEN

THEN

FEATURES

and

SCENARIOS

GHERKIN

```
Feature: Some terse yet descriptive text of what is desired
  Textual description of the business value of this feature

  Scenario: Some determinable business situation
    Given some precondition
     When some action by the actor
     Then some testable outcome is achieved

  Scenario: A different situation
      ...
```

GHERKIN

```
Scenario: Some determinable business situation
  Given some precondition
    And some other precondition
   When some action by the actor
    And some other action
    But yet another action
   Then some testable outcome is achieved
    And something else we can check happens too
```

GHERKIN

CUCUMBER

CALABASH & UITEST

CUCUMBER

HOOKS

```
Before do |scenario|
  scenario_tags = scenario.source_tag_names
  if scenario_tags.include?('@reinstall')
     || !INSTALLATION_STATE[:installed]
    uninstall_apps
    install_app(ENV['TEST_APP_PATH'])
    install_app(ENV['APP_PATH'])
    INSTALLATION_STATE[:installed] = true
  end

  start_test_server_in_background
end
```

```
After do |scenario|
 shutdown_test_server
end
```

HOOKS

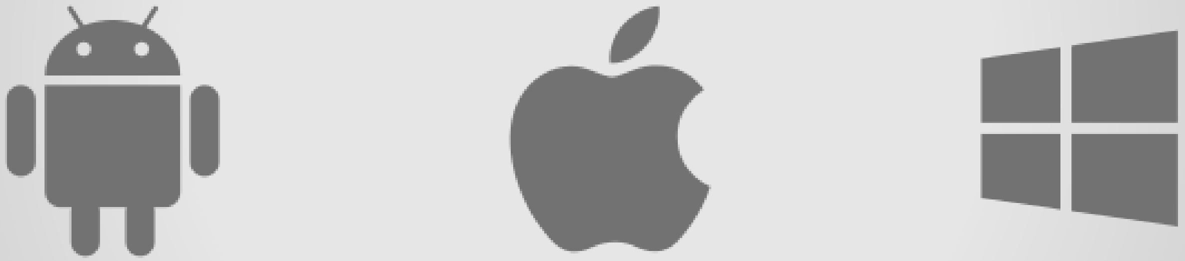
```
Before | scenario |
After | scenario |
Around do |scenario, block|
AfterStep do |scenario|
Before('@slow') do |scenario|
Before('@fast, @regression‘, ‘@automatic') do |scenario|
```

GHERKIN

CUCUMBER

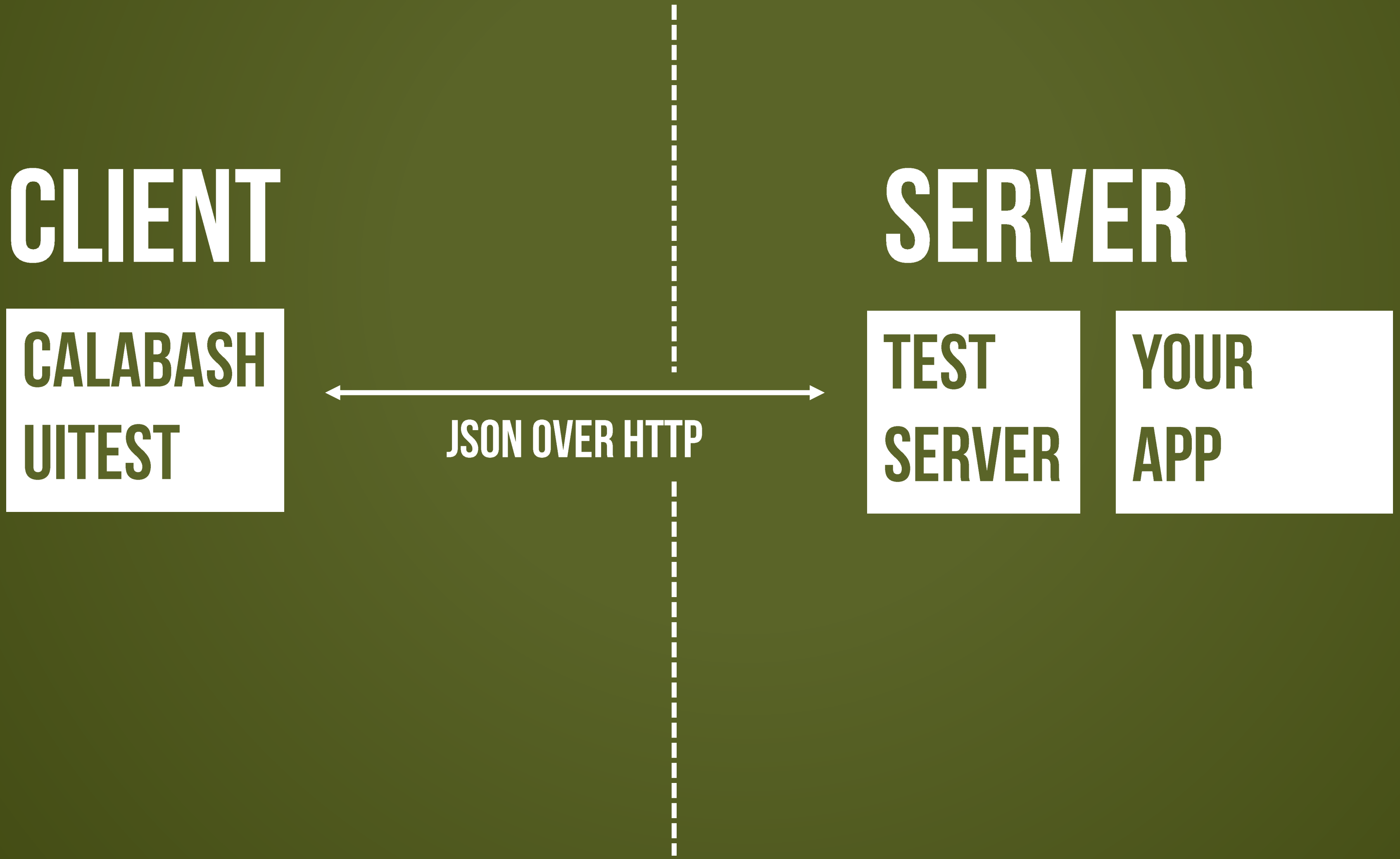
CALABASH & UITEST

HOW DOES IT WORK



IT DOESN’T

TESTING ON



CLIENT

CALABASH
UITEST

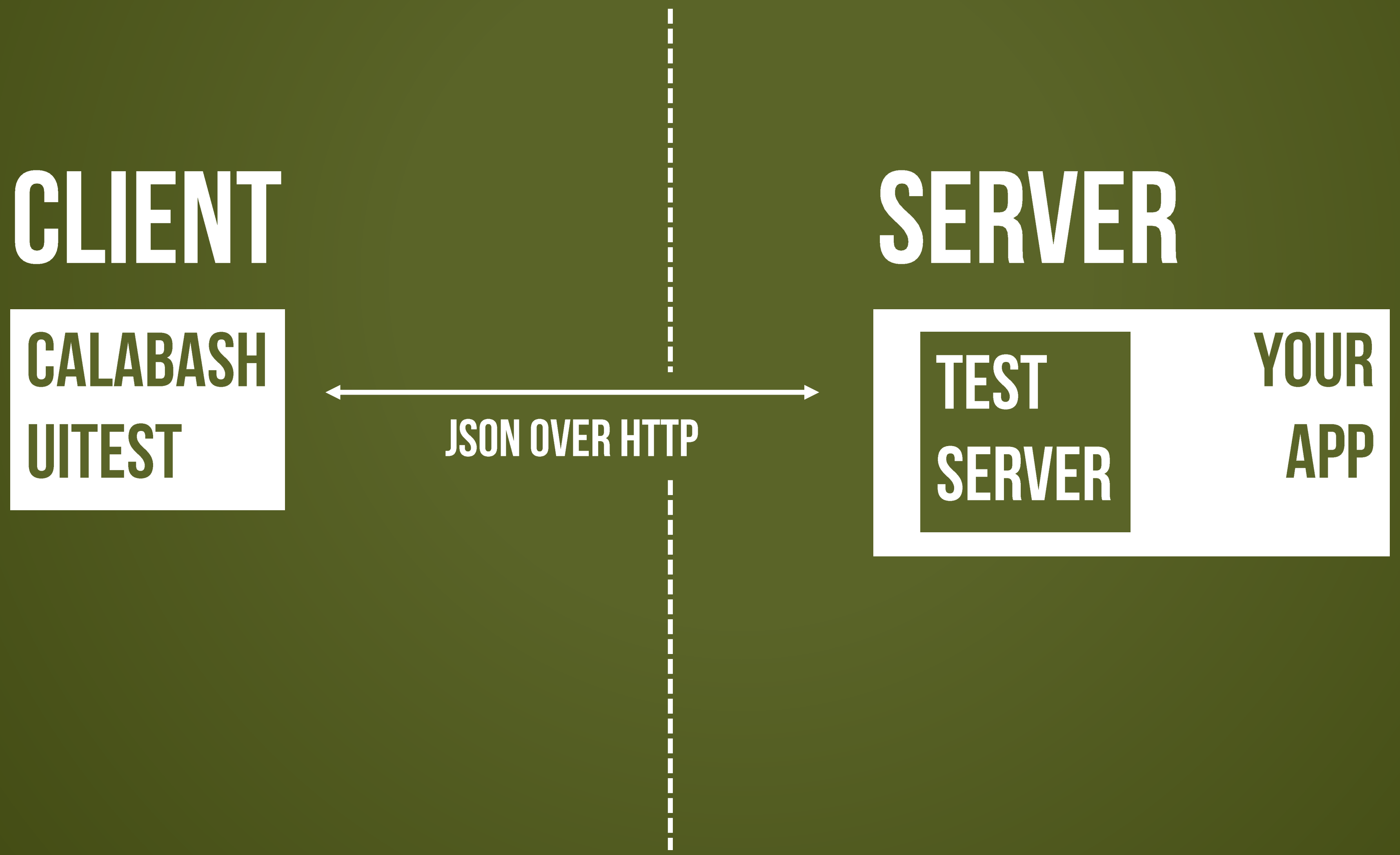
JSON OVER HTTP

SERVER

TEST
SERVER

YOUR
APP

TESTING ON



CLIENT

CALABASH
UITEST

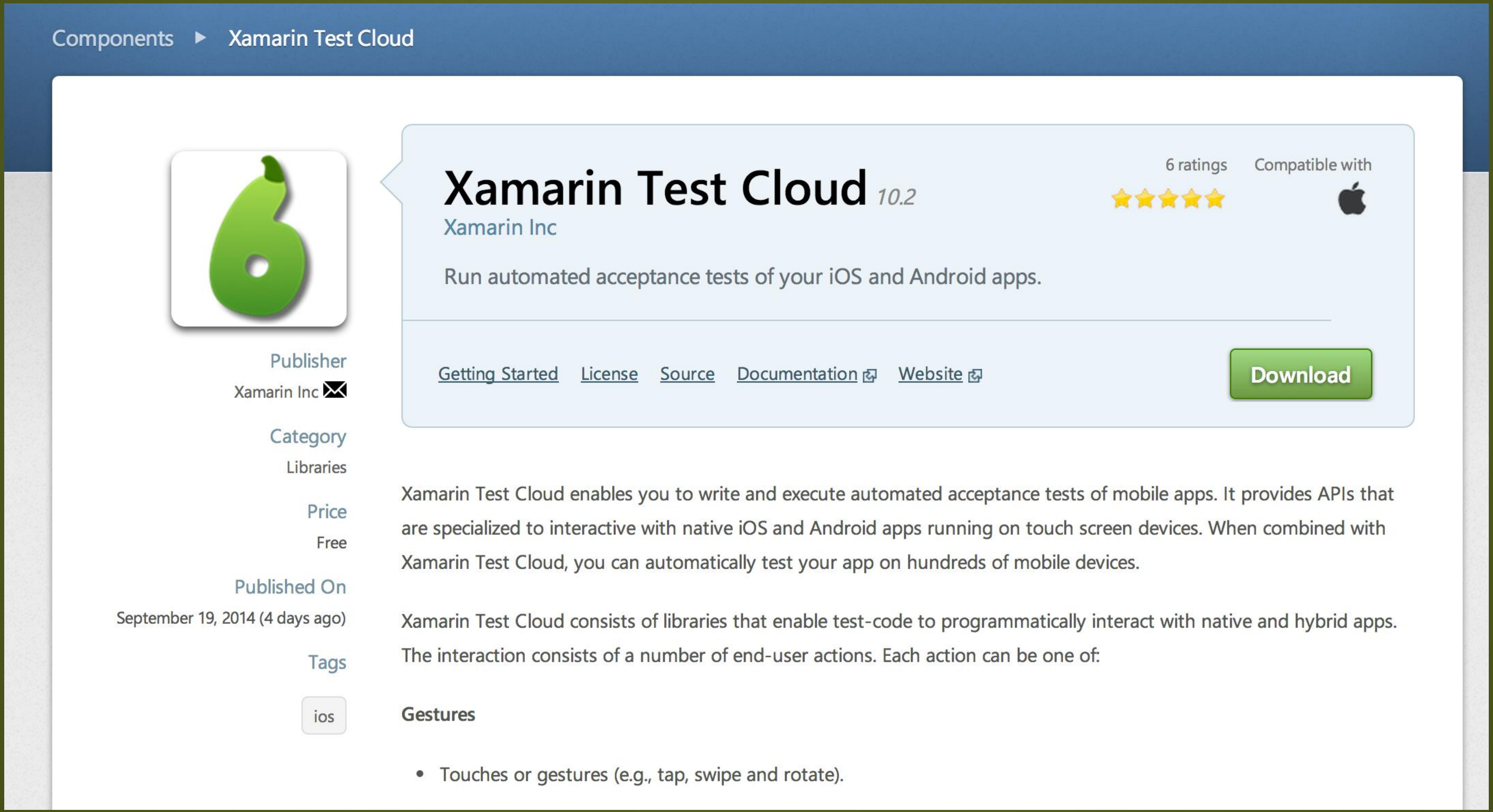
JSON OVER HTTP

SERVER

TEST
SERVER

YOUR
APP

TESTING ON



Components ▸ Xamarin Test Cloud

Xamarin Test Cloud *10.2*

Xamarin Inc

6 ratings ★★★★★

Compatible with

Run automated acceptance tests of your iOS and Android apps.

Publisher
Xamarin Inc ✉

Category
Libraries

Price
Free

Published On
September 19, 2014 (4 days ago)

Tags
ios

Xamarin Test Cloud enables you to write and execute automated acceptance tests of mobile apps. It provides APIs that are specialized to interactive with native iOS and Android apps running on touch screen devices. When combined with Xamarin Test Cloud, you can automatically test your app on hundreds of mobile devices.

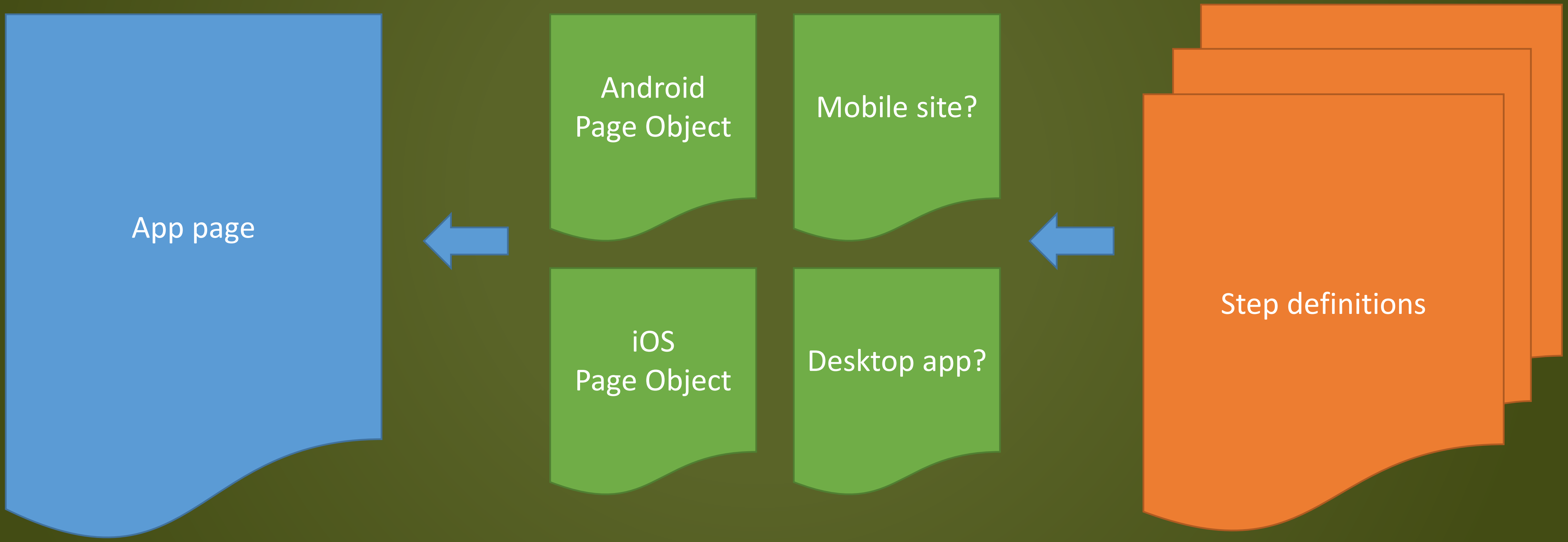
Xamarin Test Cloud consists of libraries that enable test-code to programmatically interact with native and hybrid apps. The interaction consists of a number of end-user actions. Each action can be one of:

Gestures

- Touches or gestures (e.g., tap, swipe and rotate).

CROSS-PLATFORM?

PAGE OBJECTS



PAGE OBJECTS

Android
Page Object

```
require 'calabash-android/abase'

 class MainPage < Calabash::ABase

  def trait
   “android.widget.TextViewtext:'Card'"
  end

 end
```

iOS
Page Object

```
require 'calabash-cucumber/ibase'

 class MainPage < Calabash::ABase

   def trait
    “* text:'Validate Credit 7:Card'"
   end

 end
```

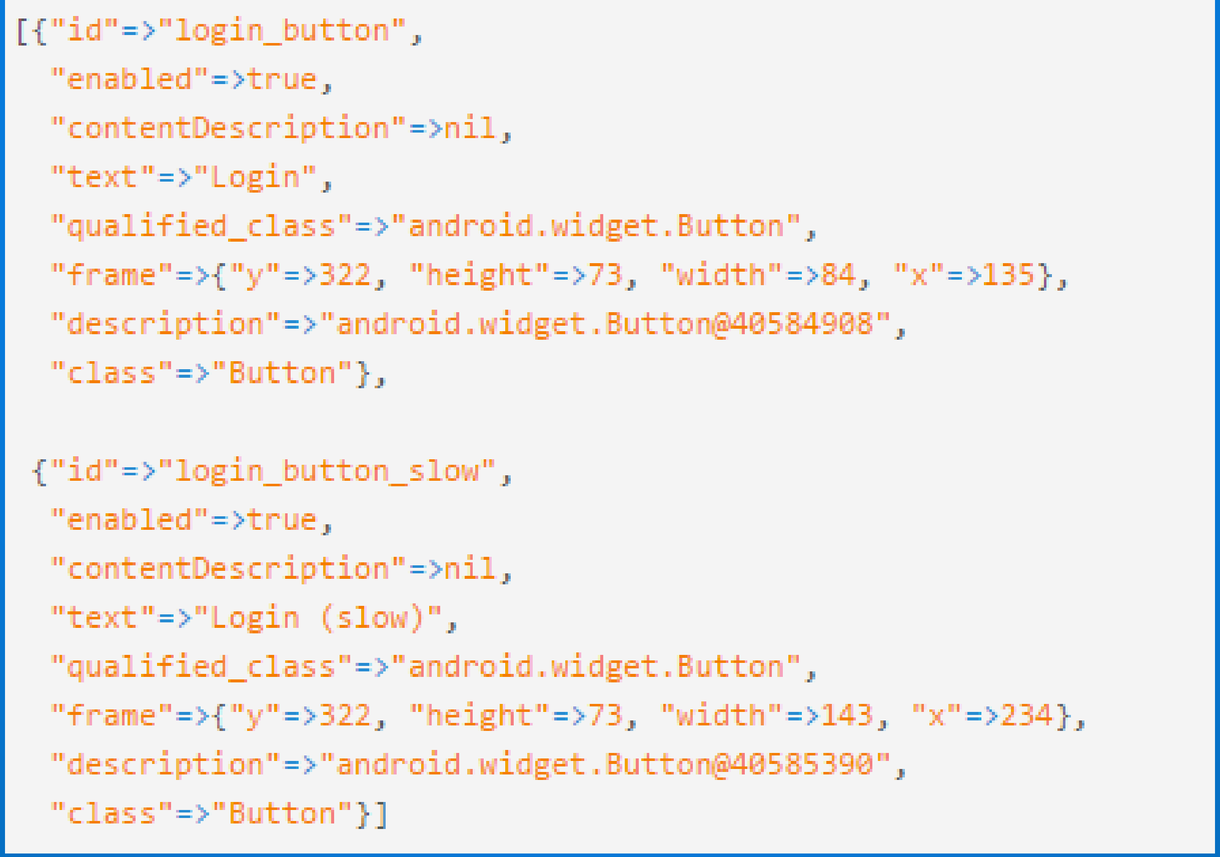
CROSS-PLATFORM

1. Only use custom steps (Calabash only)
2. A page object interface for each screen
3. Implement all page objects for each platform
4. Rejoice and profit!

CALABASH

QUERY SYNTAX

query("button")



```
[{"id"=>"login_button",
  "enabled"=>true,
  "contentDescription"=>nil,
  "text"=>"Login",
  "qualified_class"=>"android.widget.Button",
  "frame"=>{"y"=>322, "height"=>73, "width"=>84, "x"=>135},
  "description"=>"android.widget.Button@40584908",
  "class"=>"Button"},

 {"id"=>"login_button_slow",
  "enabled"=>true,
  "contentDescription"=>nil,
  "text"=>"Login (slow)",
  "qualified_class"=>"android.widget.Button",
  "frame"=>{"y"=>322, "height"=>73, "width"=>143, "x"=>234},
  "description"=>"android.widget.Button@40585390",
  "class"=>"Button"}]
```

QUERY SYNTAX

```
Query(“* e0 e1 e2 ... etc“)
```

ClassName

```
Android: Query(“android.widget.Button“)
    iOS: Query(“view:'MyClass'“)
```

Filtering

```
Query(“button marked:'Login'“)
```

QUERY SYNTAX

Direction

```
Query(“* descendant child sibling parent“)
```

Predicate

```
Query(“label {text BEGINSWITH 'Cell 1'}“)
```

WebView Support

```
Query(“webView css:'#header'“)
```

ADVANCED

Methods

```
Query(“* marked:’list’“, :setSelection => 0)
```

Backdoor

```
Backdoor(“yourMethodName”, “string parameter”)
```

EXPLORING THE APP

Calabash

```
calabash-android console myApp.apk
```

UITest

```
Iapp.Rpl()
```

DEMO TIME

LET US TASTE THAT FRUIT

Best of all

IT'S FREE OPEN

Xamarin.UITEST

LINQ SYNTAX

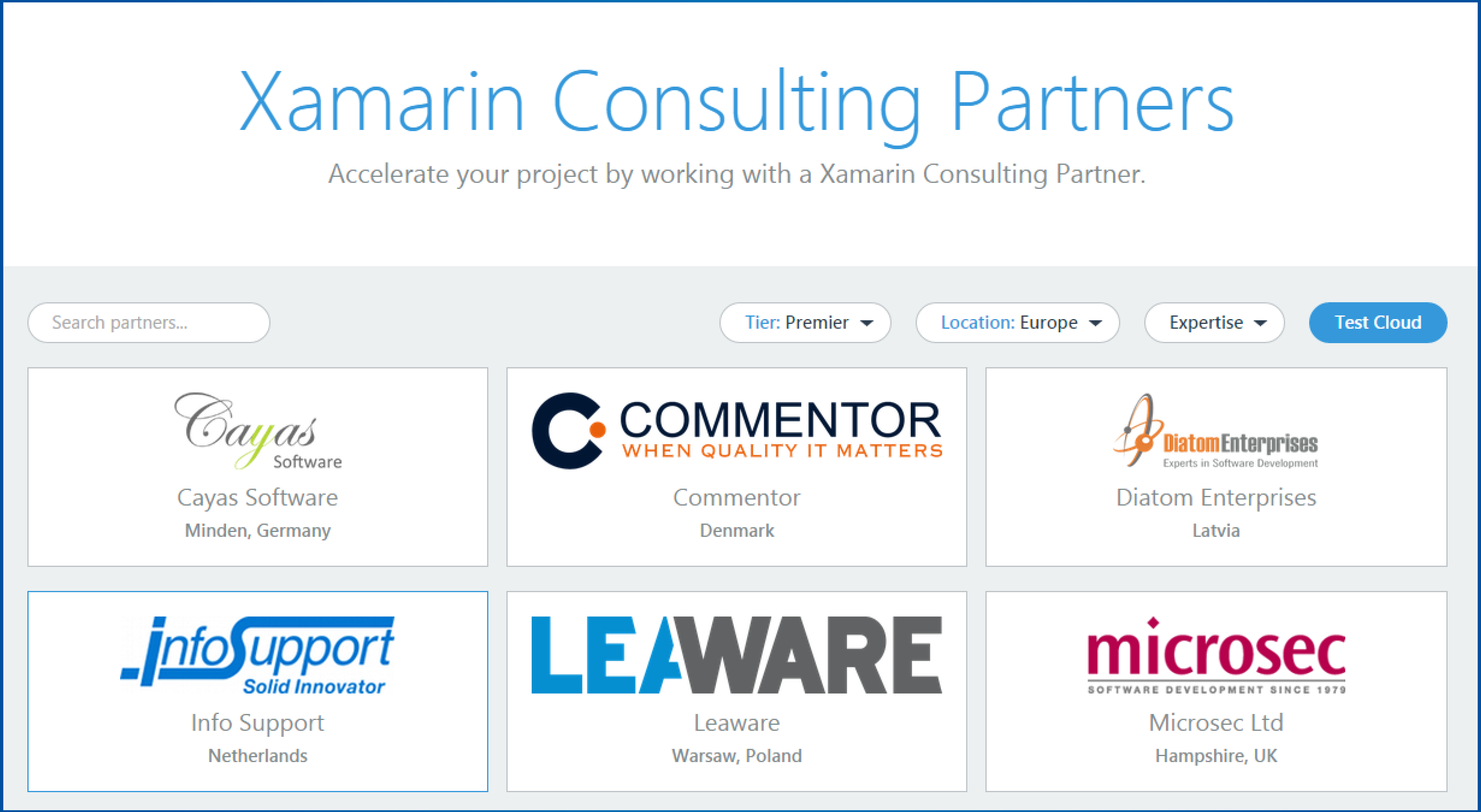
Same api as Calabash in a different form

Just different client

```
app.Query(e => e.Id("userName").Decendants())
App.Invoke(“yourMethod”)
```

HANDS ON

XAMARIN
TEST CLOUD



Xamarin Consulting Partners

Accelerate your project by working with a Xamarin Consulting Partner.

Tier: Premier

Location: Europe

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Minden, Germany

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Latvia

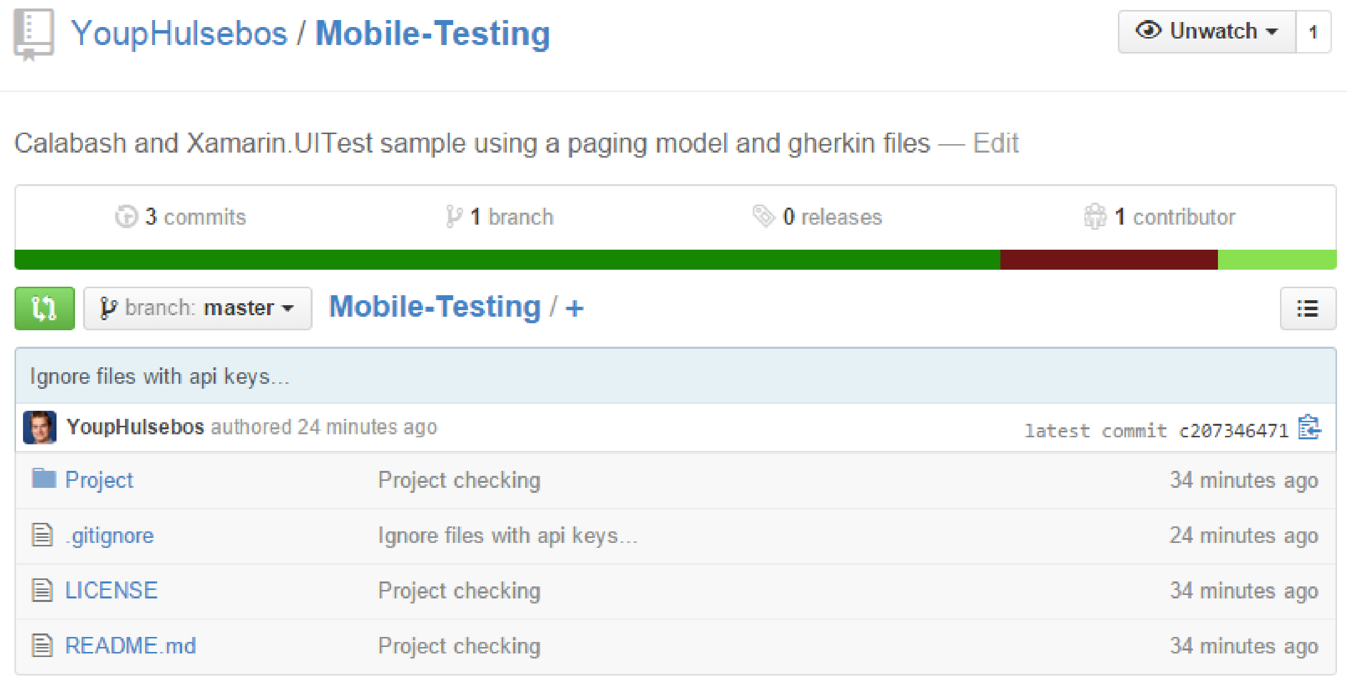
Info Support
Netherlands

Leaware
Warsaw, Poland

Microsec Ltd
Hampshire, UK

https://github.com/YoupHulsebos/Mobile-Testing

http://tinyurl.com/IskaTestCloud



YoupHulsebos / Mobile-Testing

Calabash and Xamarin.UITest sample using a paging model and gherkin files — Edit

3 commits · 1 branch · 0 releases · 1 contributor

Mobile-Testing / +

Ignore files with api keys…

YoupHulsebos authored 24 minutes ago · latest commit c207346471

Project	Project checking	34 minutes ago
.gitignore	Ignore files with api keys…	24 minutes ago
LICENSE	Project checking	34 minutes ago
README.md	Project checking	34 minutes ago

THANKS

KARL KRUKOW - @KARLKRUKOW
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