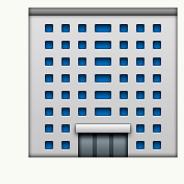


Tasting tests at Cookpad

@Kazu_cocoa



Kazuaki Matsuo(@Kazu_cocoa)

 : Cookpad Inc.

Test Engineer / Software Engineer in Quality

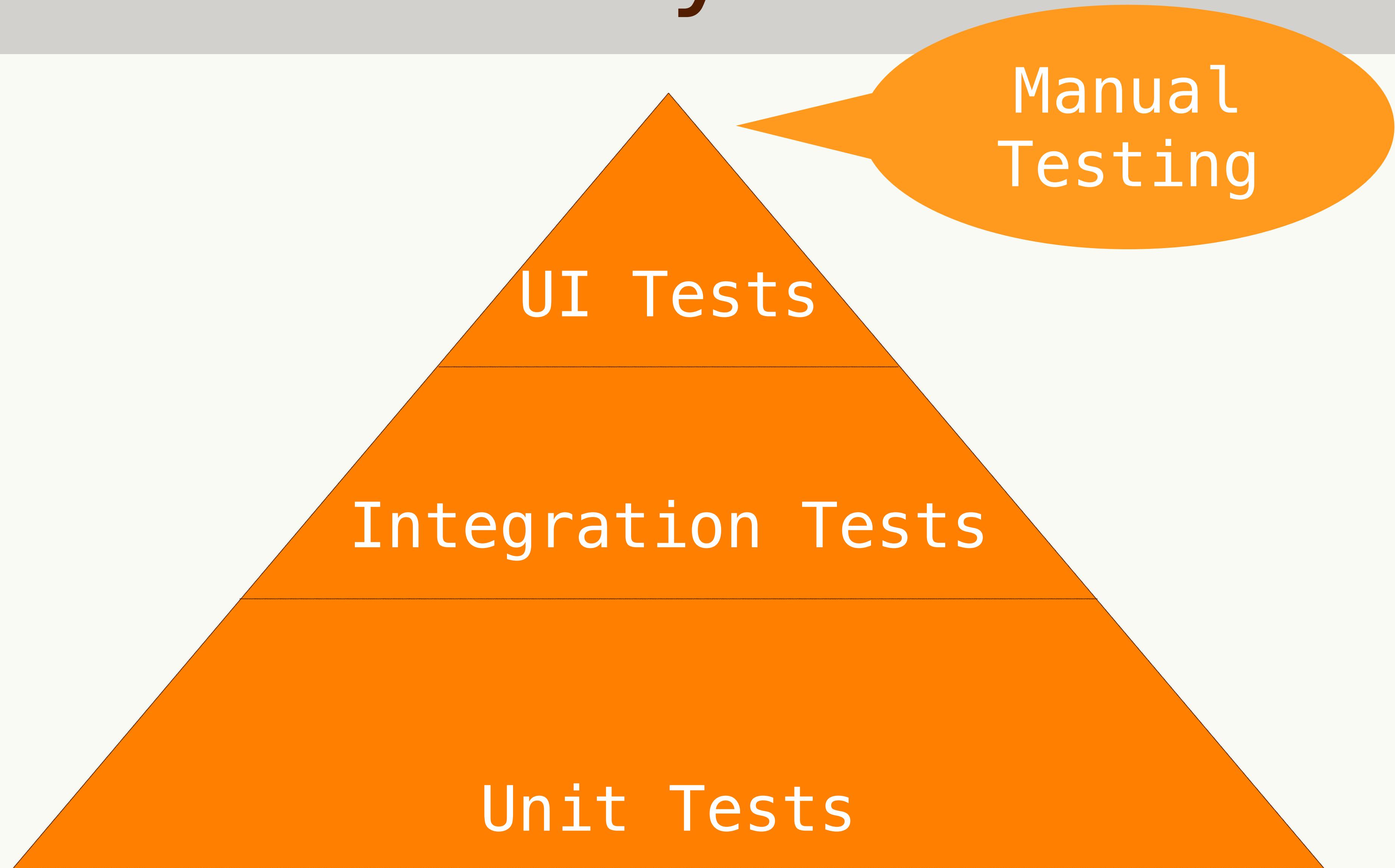
Lang:  /  /  / 

maintainer: Ruby Appium binding 



A bunch of themes in tests

Test Pyramid



How UI Tests support our development

We should know about
the test target

what is Cookpad?



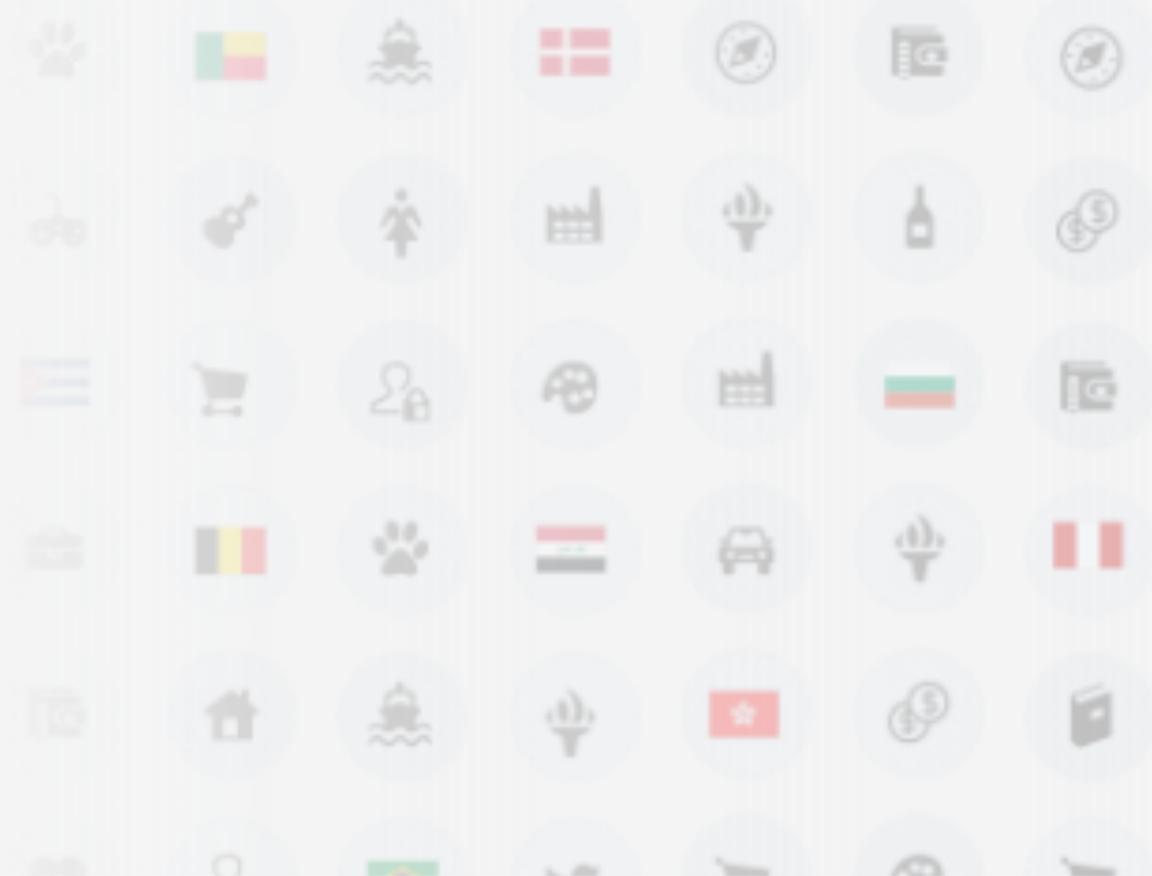
Top Websites

Top sites for Food And Drink > Cooking And Recipes in the world

Cooking and Recipes

Worldwide

Go



Showing up to 50 websites. [Upgrade to see the full list.](#)

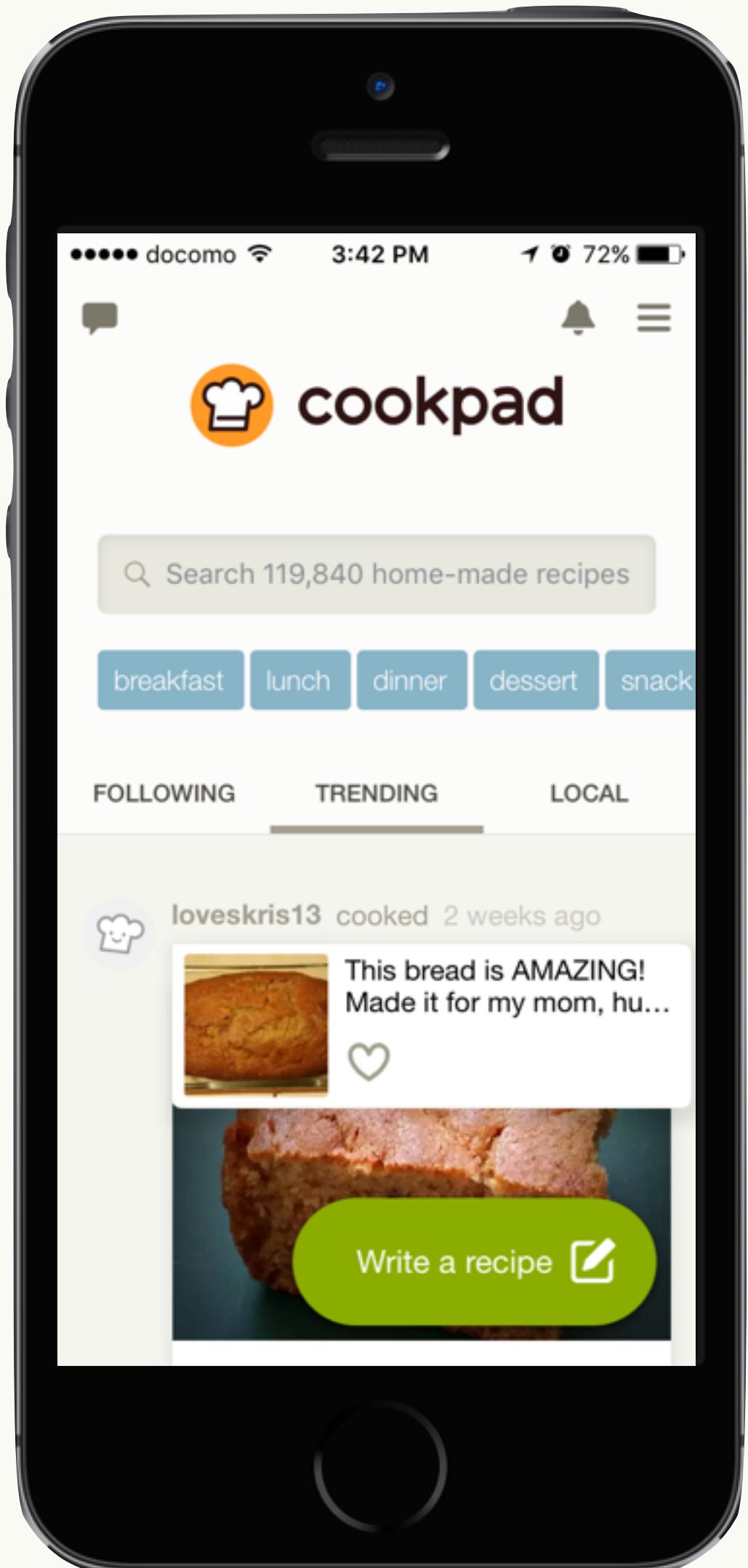
>Last updated: January 01, 2017

[Share](#)

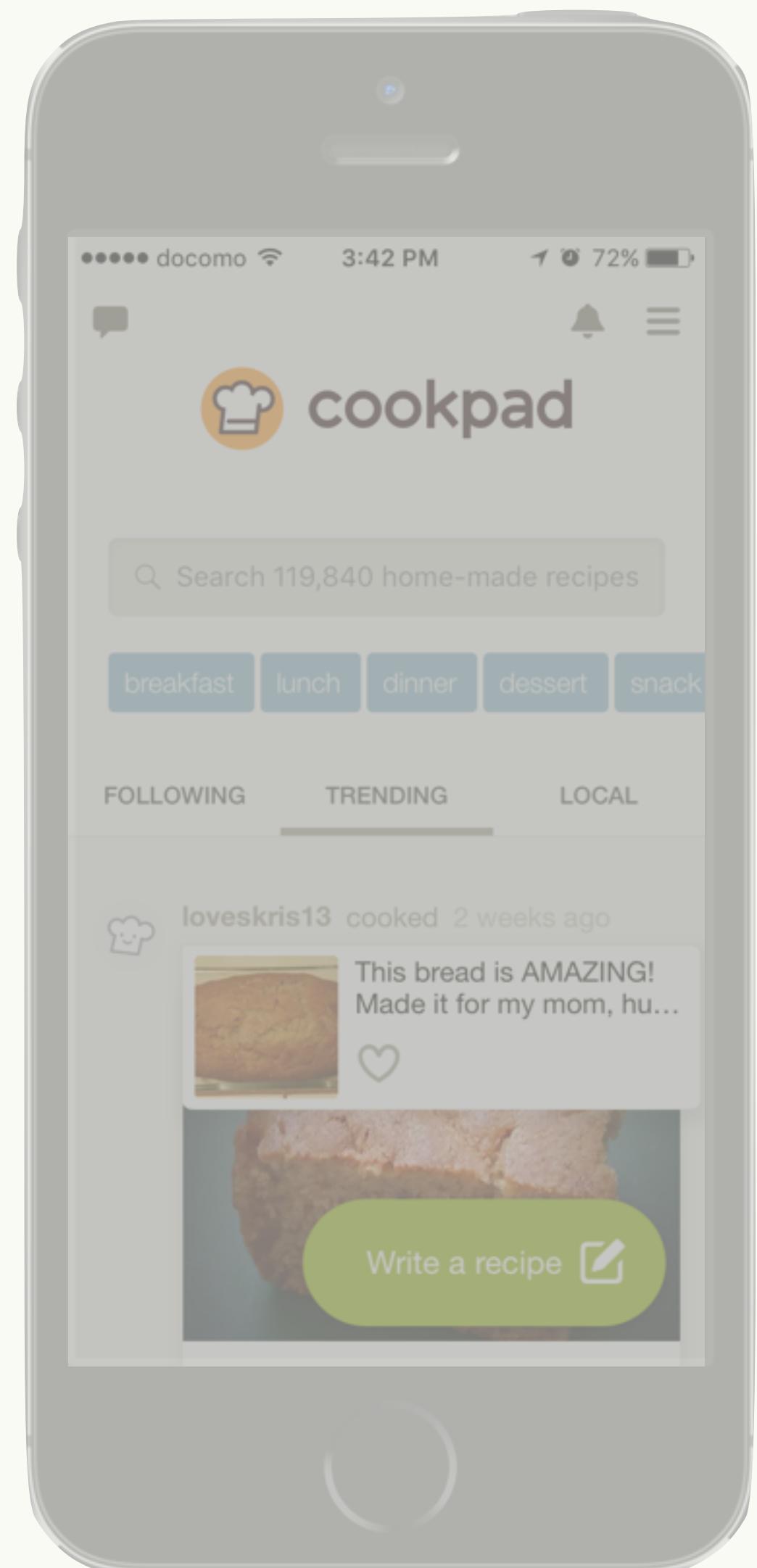
[Tweet](#)

Rank 	Website 	Category 	Change 	Avg. Visit Duration 	Pages / Visit 	Bounce Rate 
1	 cookpad.com	Food and Drink > Cooking and Recipes	=	00:04:20	4.63	36.34%
2	 allrecipes.com	Food and Drink > Cooking and Recipes	=	00:03:07	3.08	52.67%
3	 foodnetwork.com	Food and Drink > Cooking and Recipes	=	00:02:15	2.47	59.71%

Cookpad for iOS(Japan and Global)



Cookpad for iOS (Japan)



A History for Cookpad iOS App



2012年1月

2013年1月

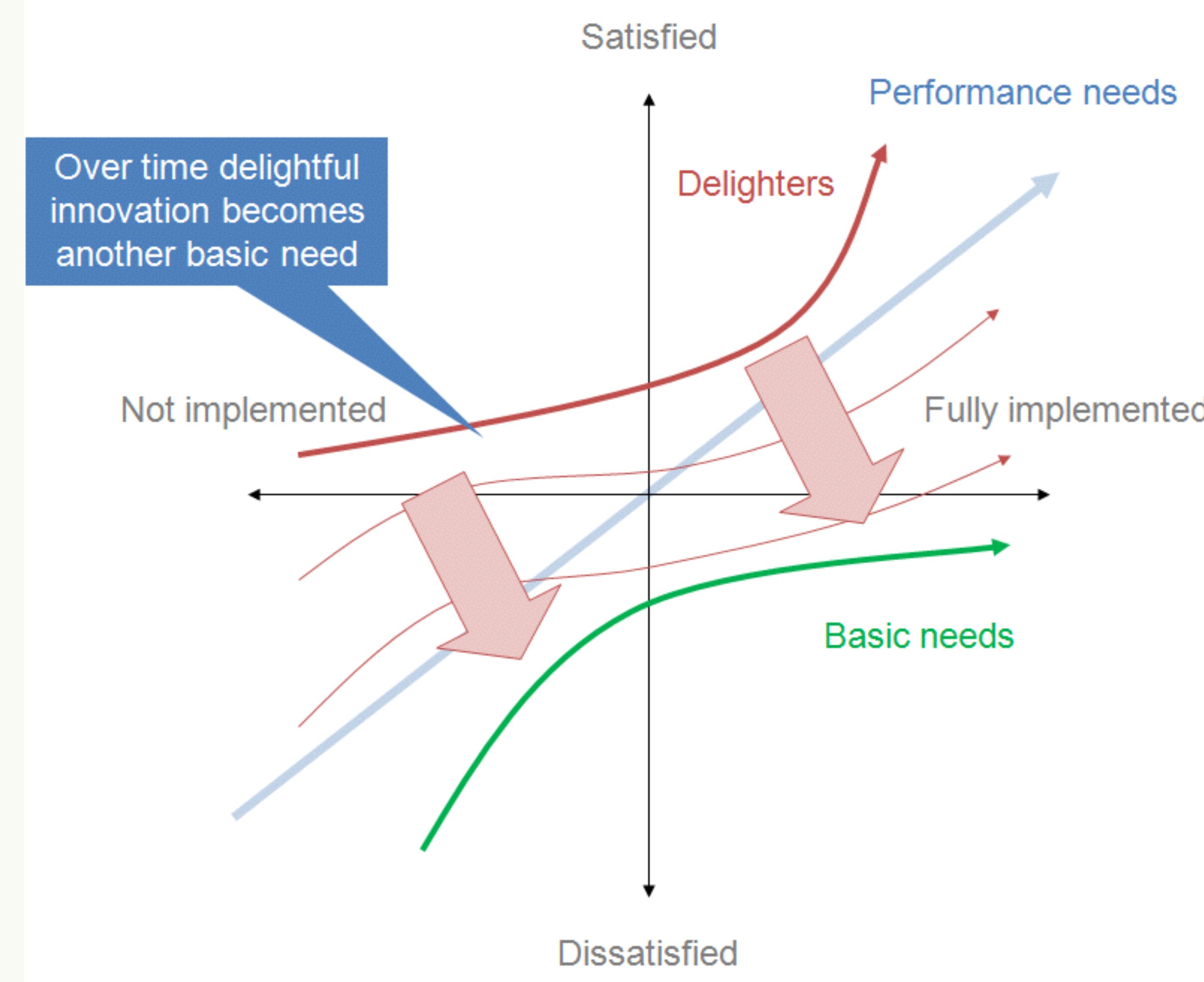
2014年1月

2015年1月

2016年1月

2017年

kano-model and Japan market

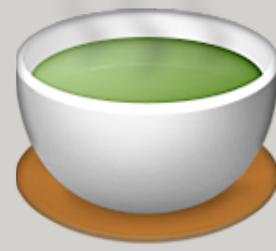


Diachronic Quality for Mobile

How often Cookpad app changes

Release cycle: 2week ~ 1month
Code changes: 5,000 ~ 10,000 lines
UI changes: Frequently(large or small)

take a break



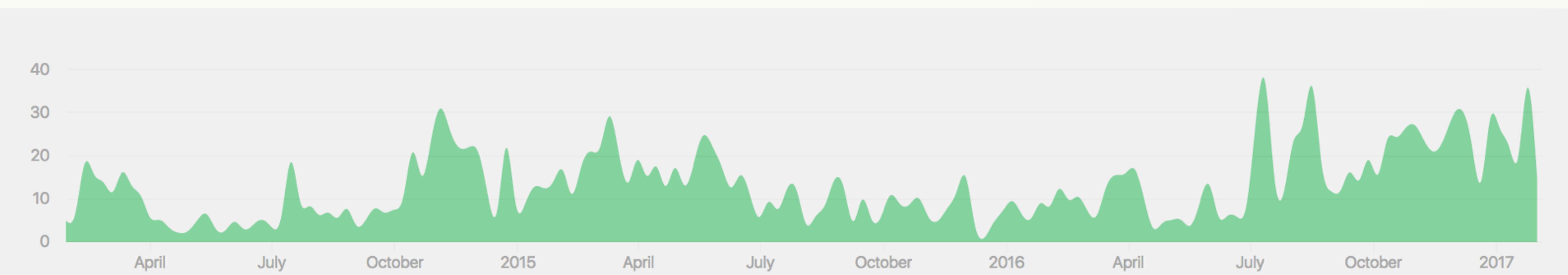
Tasting tests 😊

A History for UI Tests for Cookpad Apps

Feb 9, 2014 – Feb 16, 2017

Contributions to master, excluding merge commits

Contributions: Commits ▾



Why have we implemented
this UI tests? 

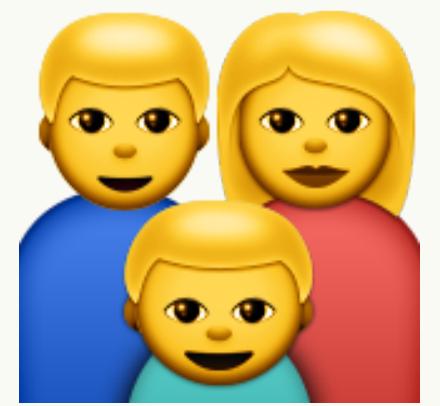
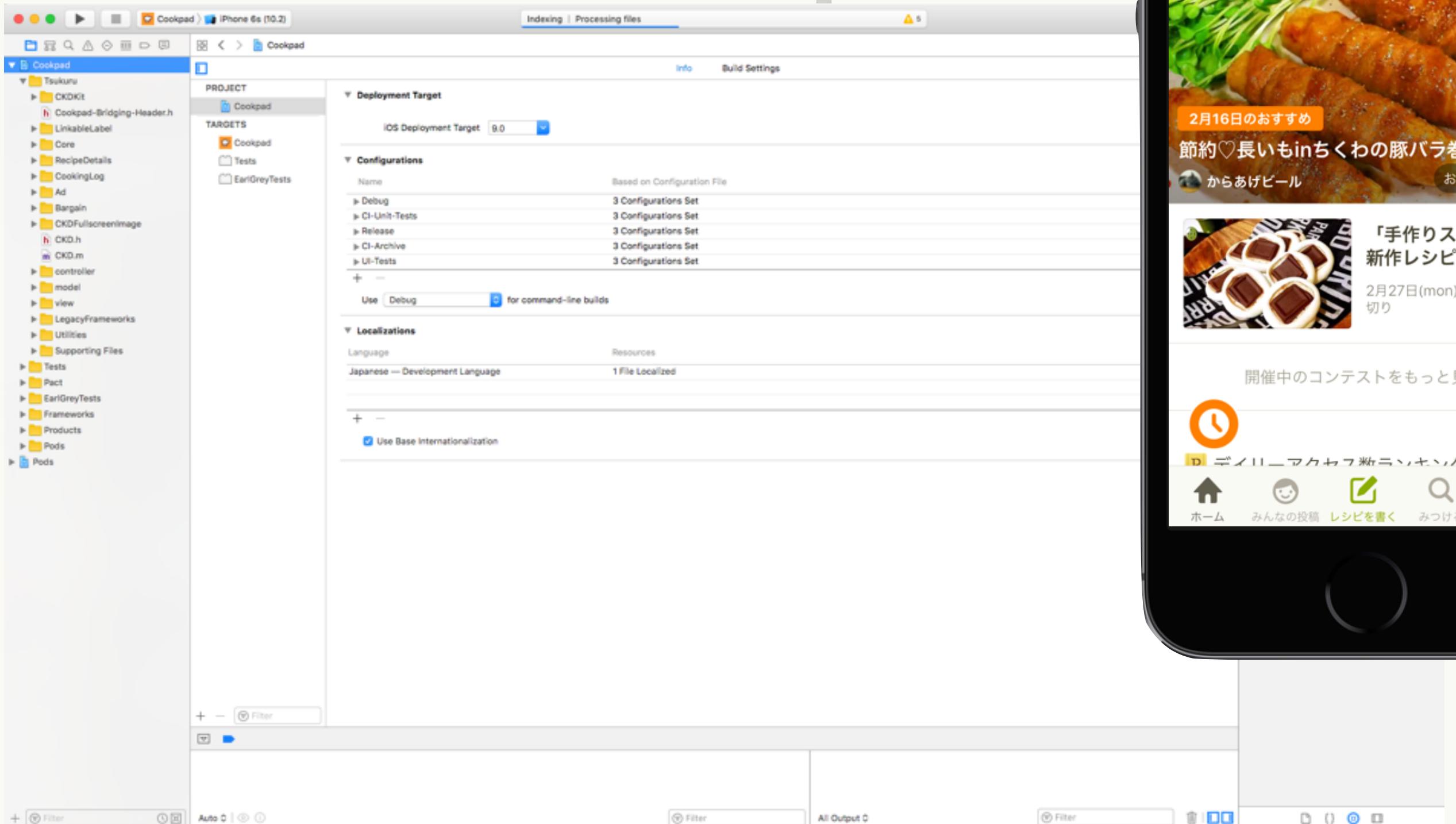
Should we taste from?

Writing unit tests before refactoring is sometimes impossible and often pointless.

Basic strategy



from
Internal

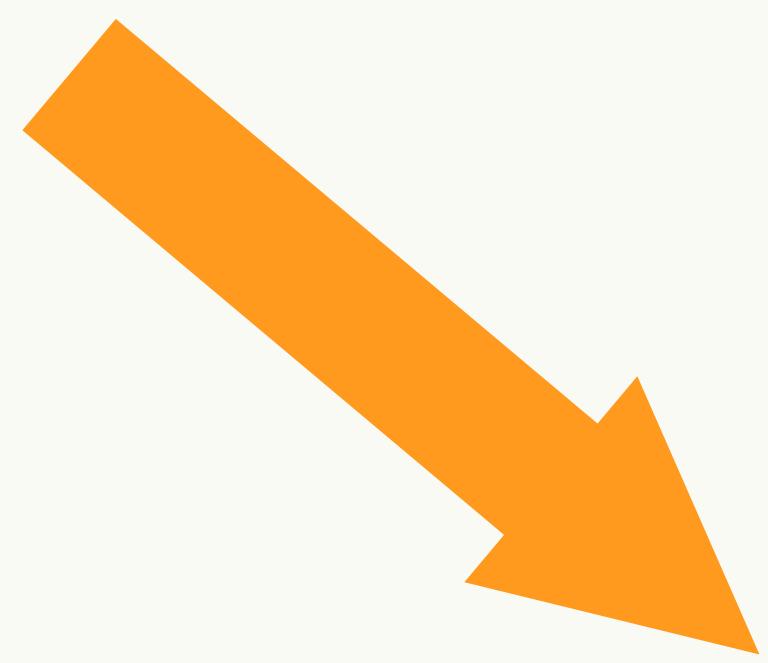
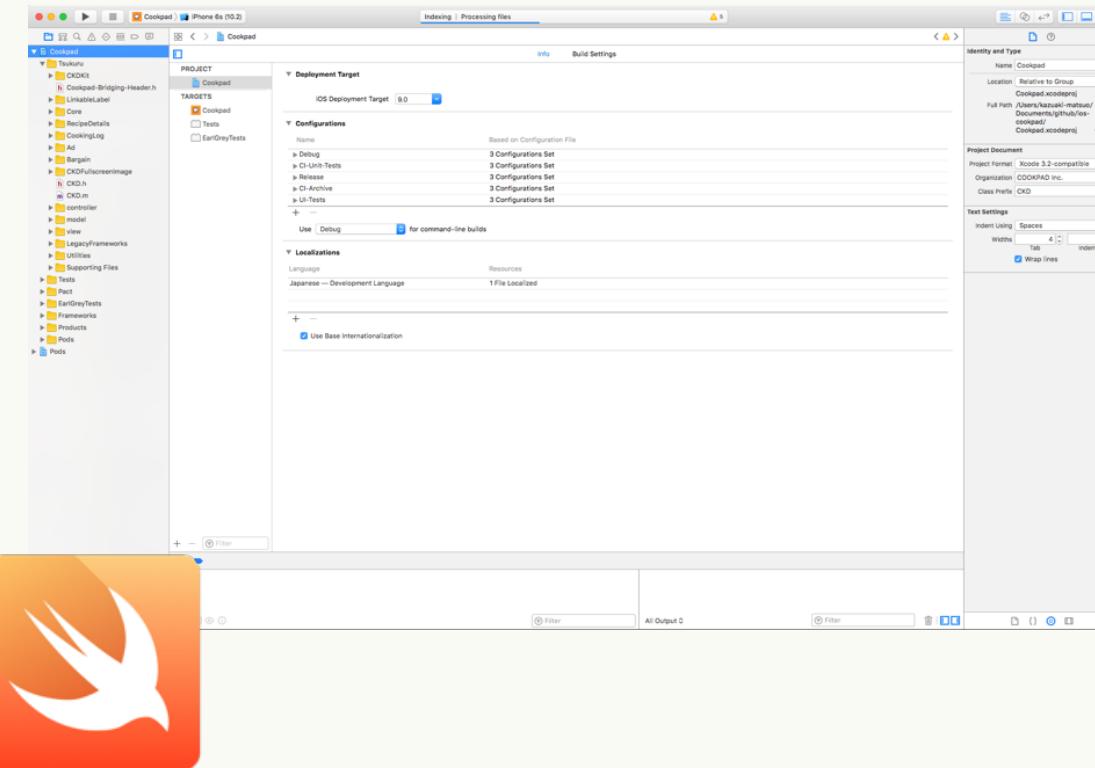


from
External

Make checkable from external to internal

Unit Tests

re-write/re-factor



UI Tests



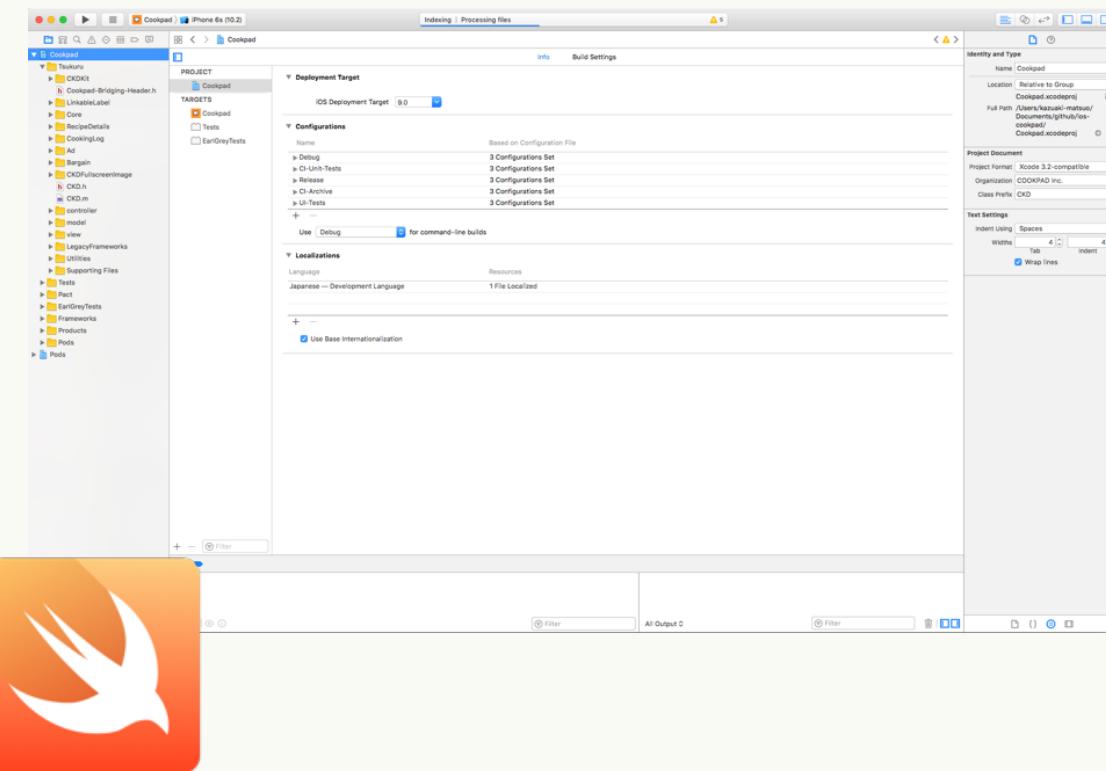
Make checkable from external to internal

Internal

Unit Tests

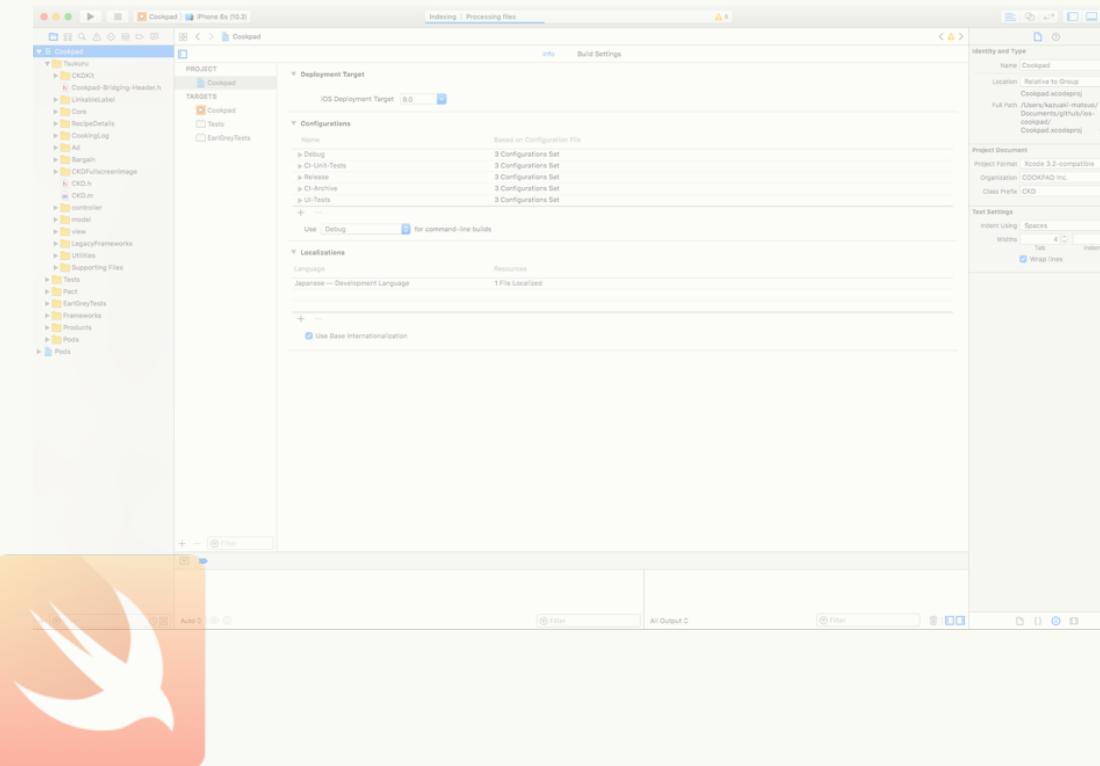
UI Tests

re-write/re-factor

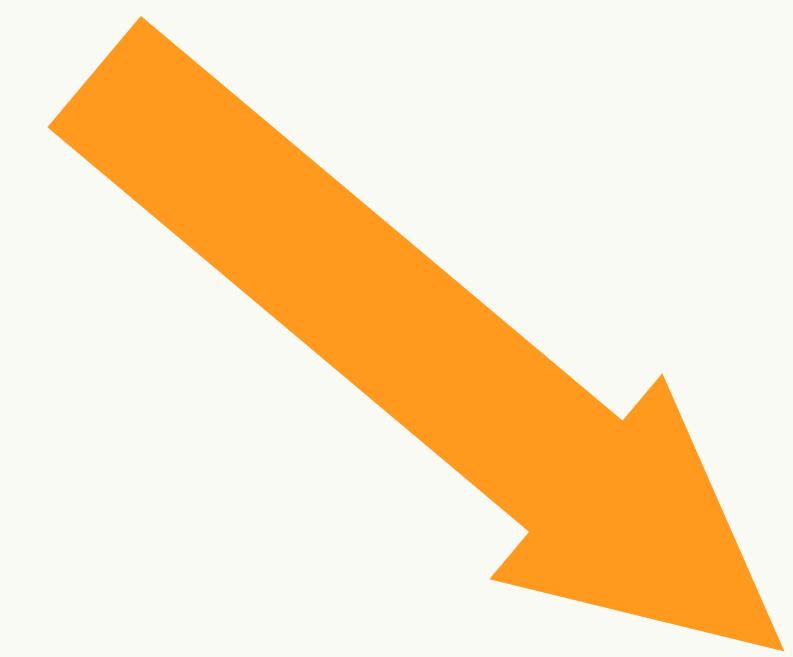


Make checkable from external to internal

re-write/re-factor



Unit Tests



External

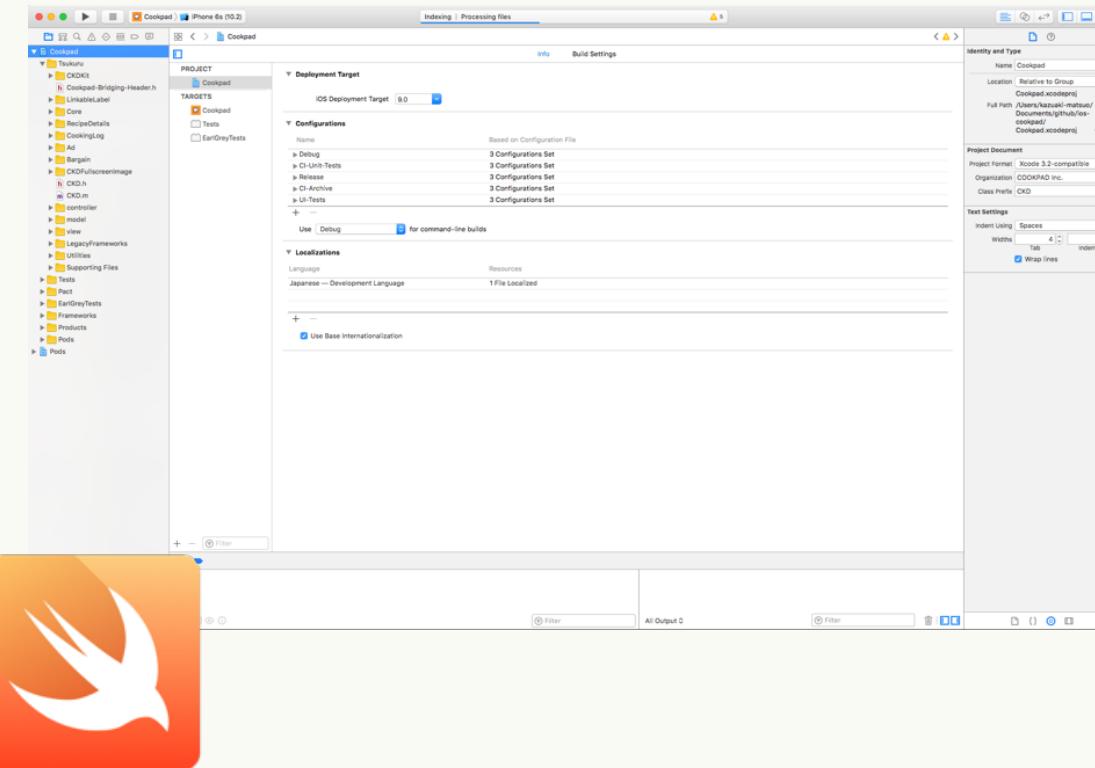
UI Tests



Make checkable from external to internal

Unit Tests

re-write/re-factor



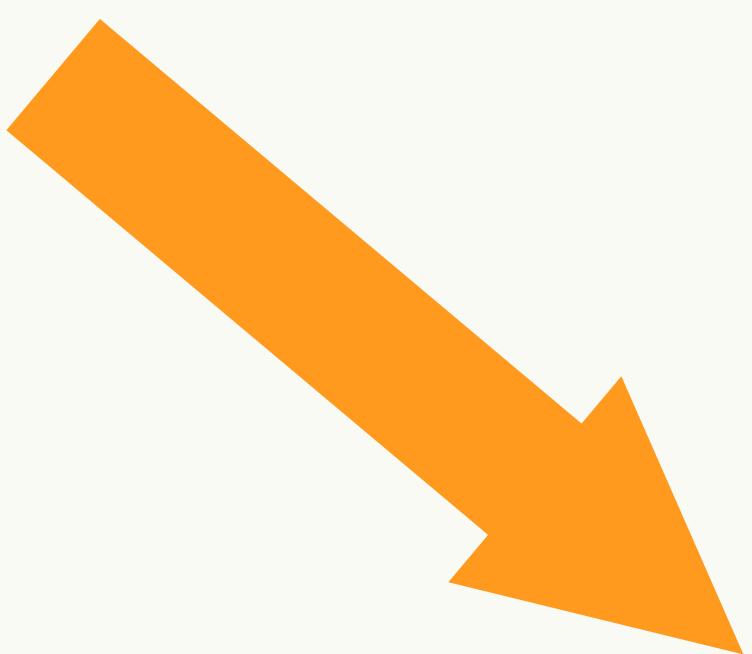
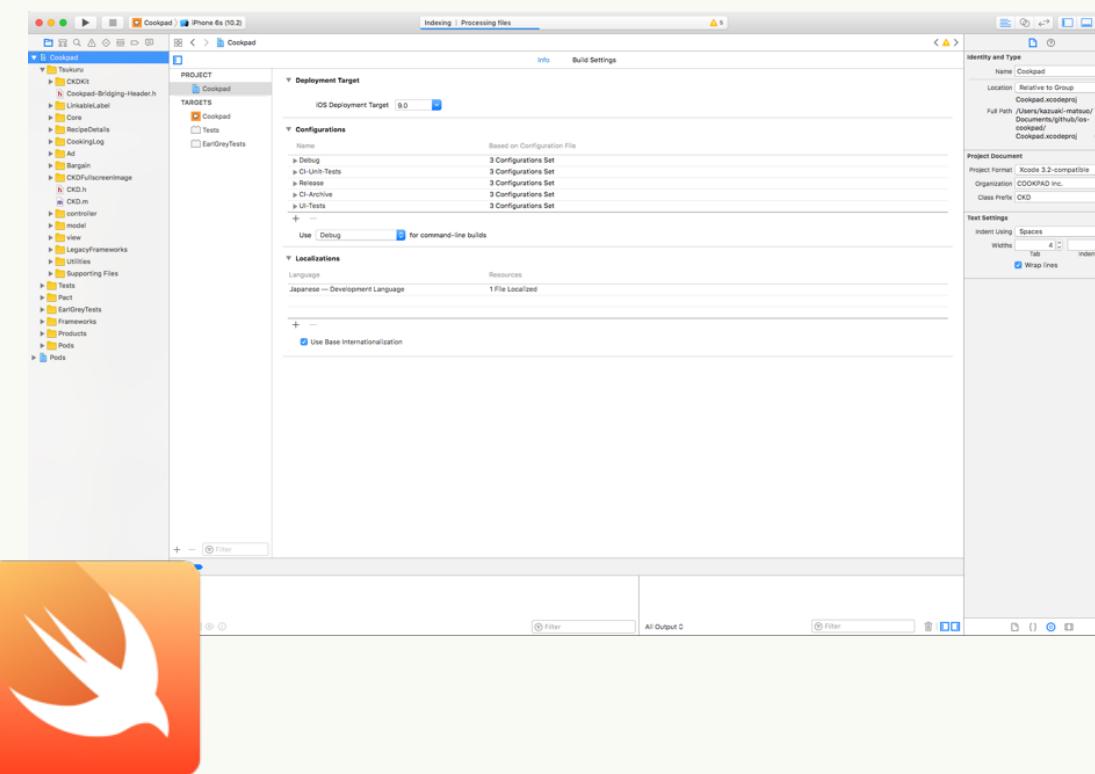
UI Tests



Make checkable from external to internal

Unit Tests

re-write/re-factor



UI Tests



Unit tests for Re-Engineering

*Most developers would agree that unit test
should be fully automated,*

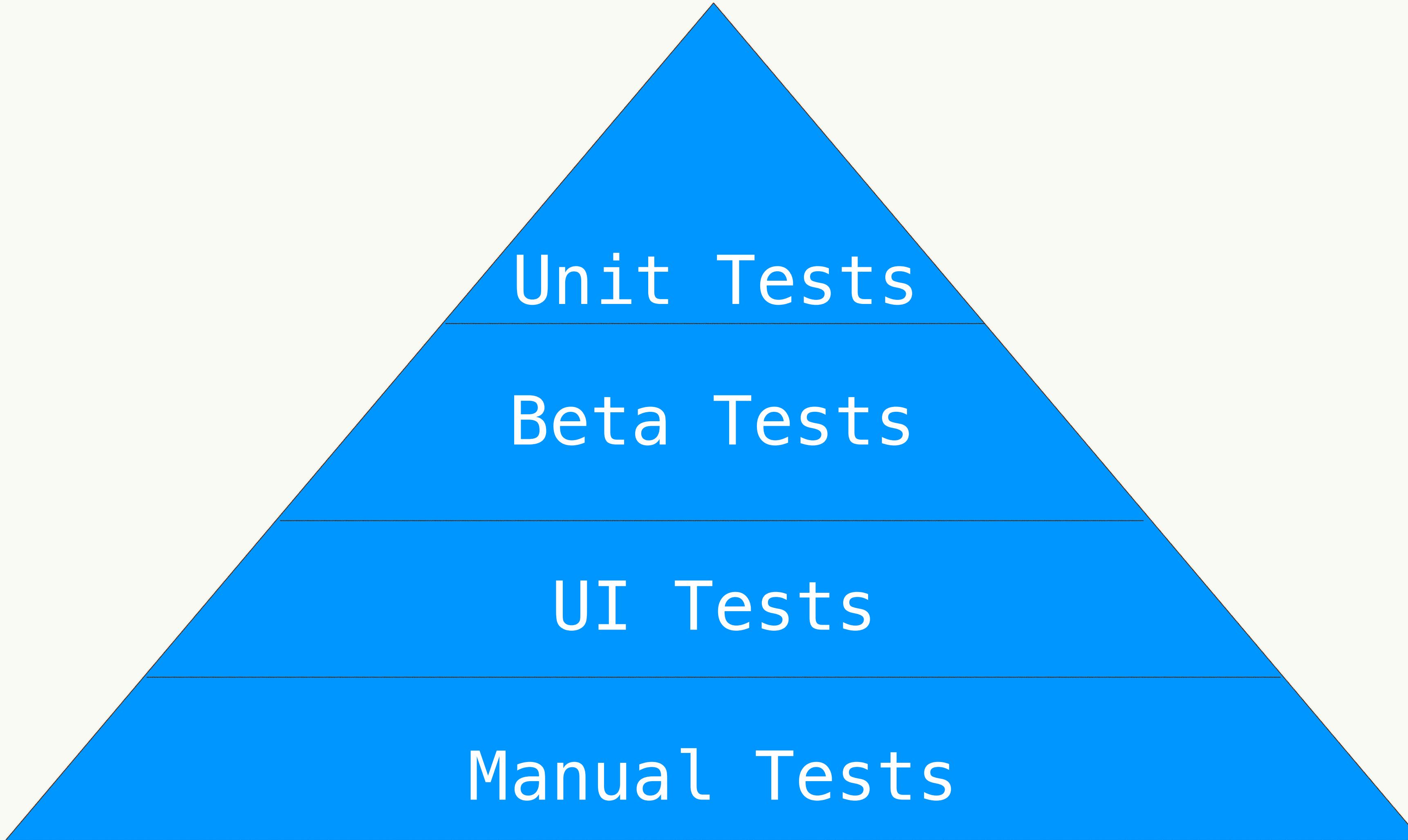
Unit tests are not a silver bullet

but the level of automation for other kind of tests(such as integration tests) is often much lower.

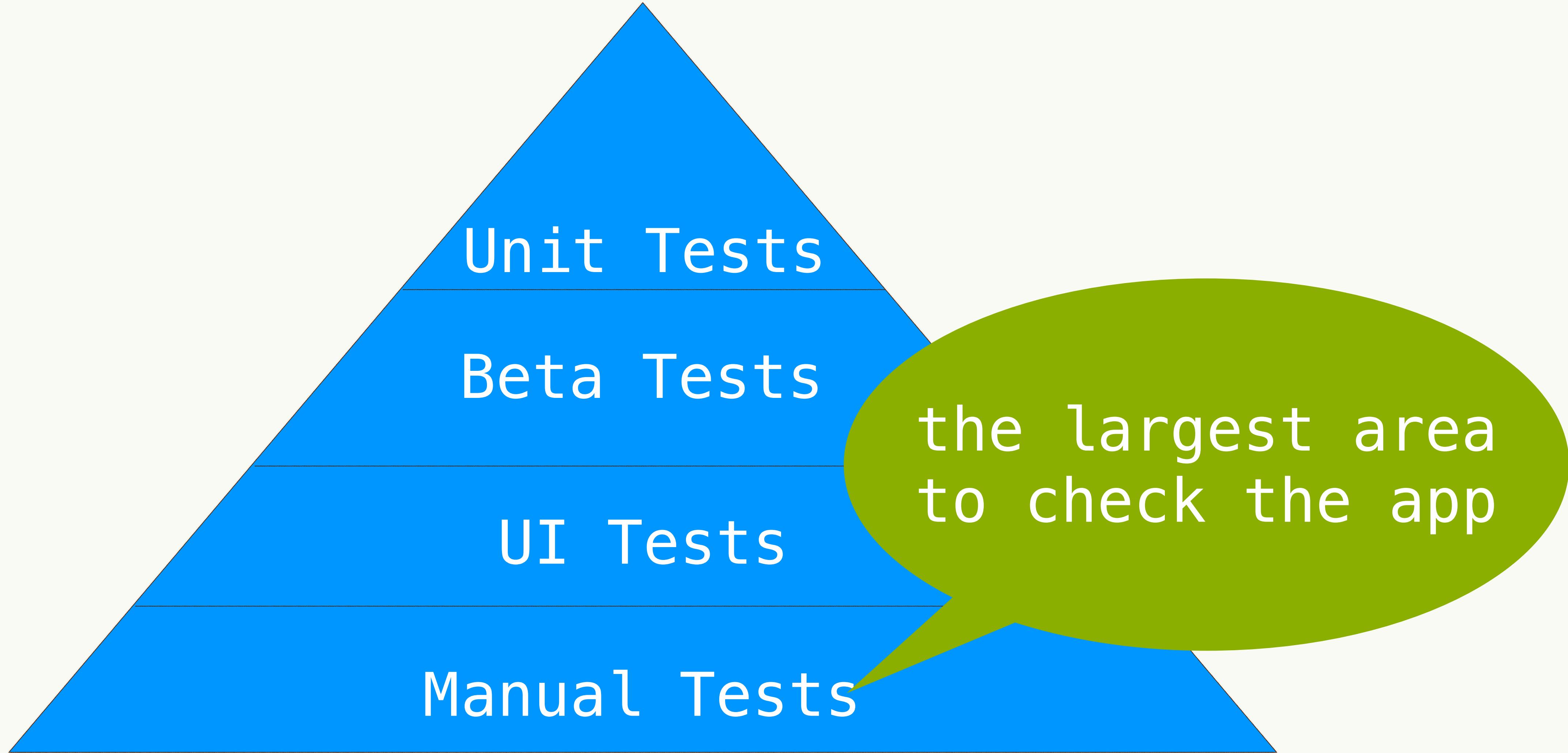
UI Test should be automated

One area that cries out for automation is UI testing.

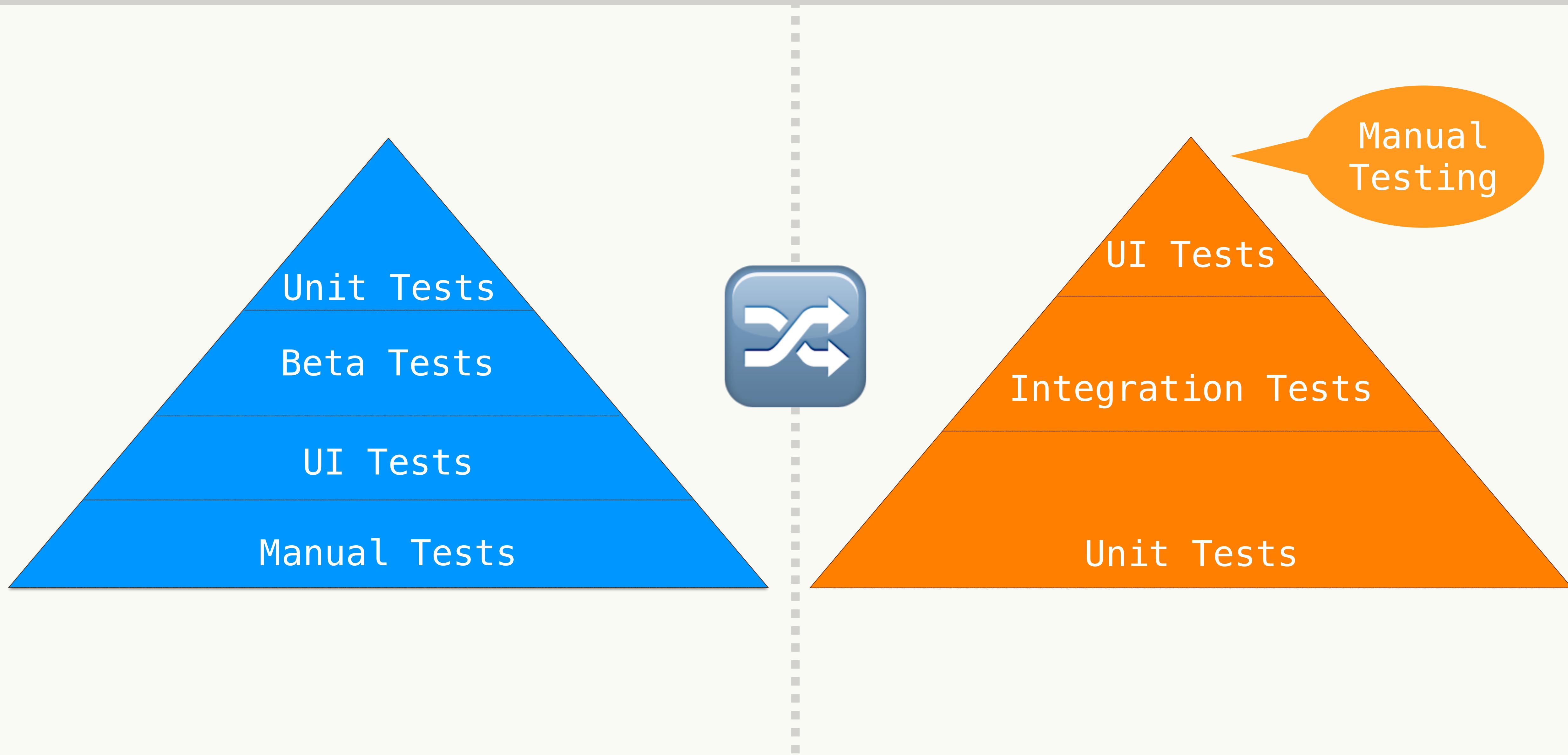
Flipped pyramid make development cycle slow



Flipped pyramid make development cycle slow



Flipped again



implement the strategy

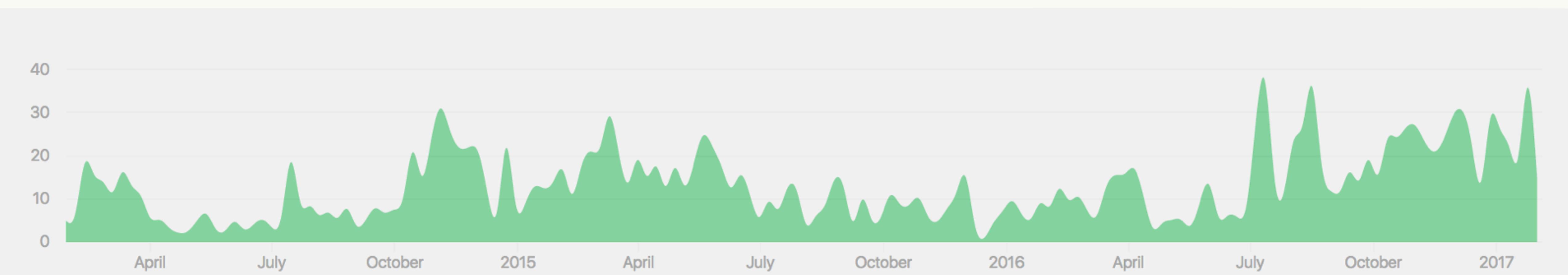
Automated UI Test with Appium from 2014

UI Tests

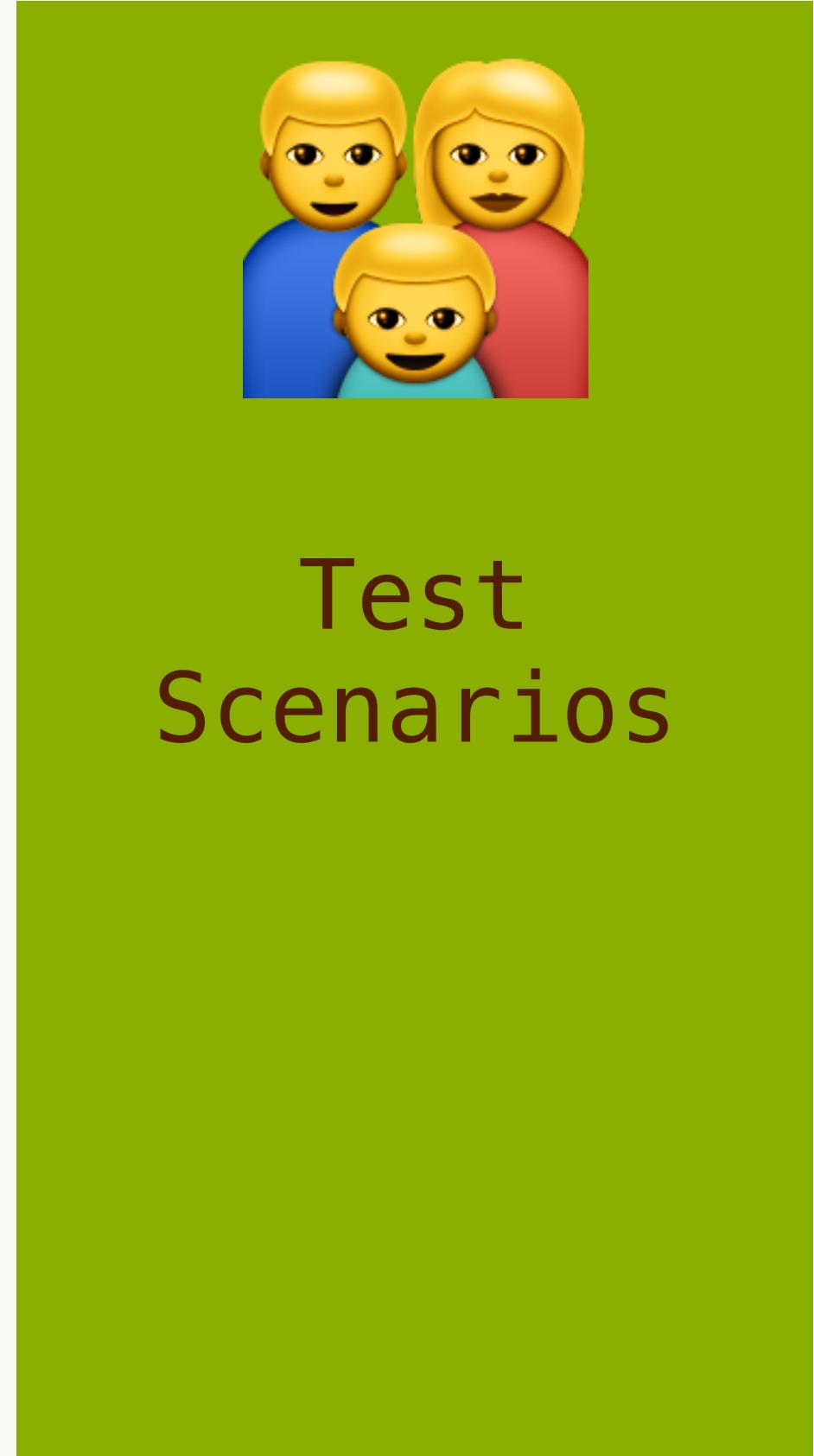
Feb 9, 2014 – Feb 16, 2017

Contributions to master, excluding merge commits

Contributions: Commits ▾



Architecture for UI Tests



Focus on User Scenario



Convert scenarios to Ruby code



Appium/other utils
Focus on iOS side



Scenarios(英語にする)

feature: A user can search several words via search field

background:

given 'iPhone' で試験を行う

scenario_outline: ユーザは自分のログイン状態によって変化する検索結果を見ることができる

when <user_status> ユーザでログインする

when <search_words> と検索欄から検索する

then 私は '3' 回下側にスクロールする

then 画面に 'xxx' が表示されている

example:

user_status	search_words
'ps'	'ヤシガニ'
'non-ps'	'月食'
'guests'	'カワエビ'
'guest'	'テナガエビ'

🔍Seasoning🍜

Reduce dependency from internal product code



```
find_element :xpath,  
    “//UIAApplication[1]/UIAWindow[1]/UIATableView[1]/UIATableCell[1]”
```

Reduce dependency from internal product code



```
find_element :xpath,  
    “//UIAApplication[1]/UIAWindow[1]/UIATableView[1]/UIATableCell[1]”
```

Strongly depends on view structures

Reduce dependency from internal product code



```
find_element :xpath,  
    “//UIAApplication[1]/UIAWindow[1]/UIATableView[1]/UIATableCell[1]”
```



```
find_element :accessibility_id, “an arbitrary identifier”
```

Don't conduct tests
for all boundaries

more

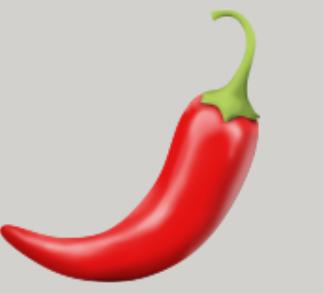
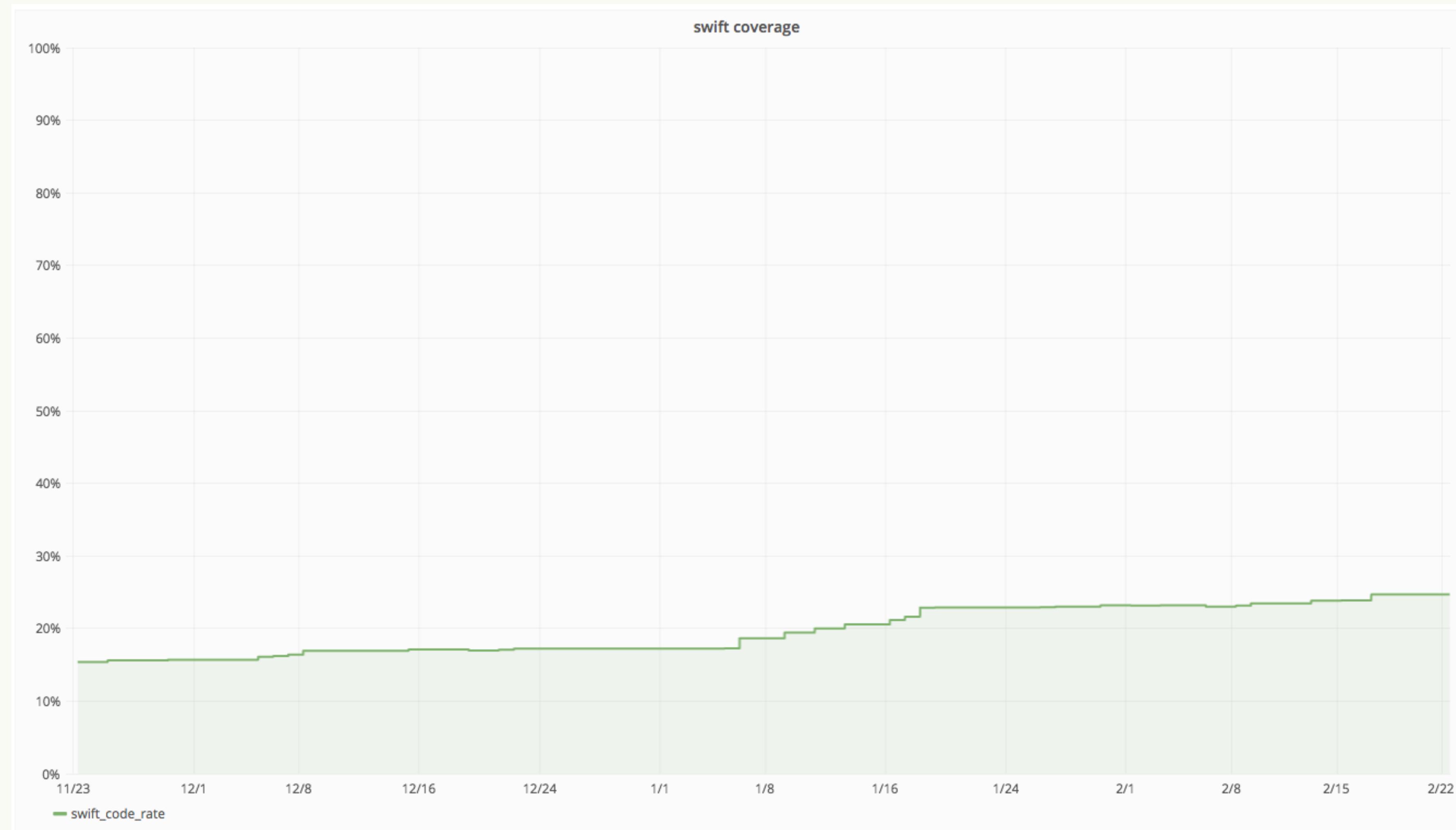


image diff



Re-Engineering
re-write/re-factor without fear
for developers

introduce Swift



faster  and more stable

Conclusion

Quality, Environment and Services change
frequently in Mobile

How automated UI Tests support re-engineering

Do you get motivations
to implement
automated UI Tests?

Thanks

同僚のicons + Thanks