Automated Acceptance Testing

mdevcon 2013
Pete Hodgson
@ph1
we are hiring
examples are iOS
same principles across platforms
Straw Poll
Straw Poll

AppCode

~ or ~

XCode
Straw Poll

IntelliJ

~ or ~

Eclipse
we all test
why do we test?
does it work?
does it still work?
does it work on ___________?
testing provides feedback
why don’t we test?
manual testing can be expensive
manual testing can be tedious
“Computers are designed to do simple repetitive tasks. The second you have humans doing repetitive tasks, all the computers get together late at night and laugh at you...”

- Neal Ford
so automate your tests

(where it makes sense)
testing
provides
feedback
Automated testing provides better feedback.
automated testing provides faster feedback
automated testing provides broader feedback
automated testing provides uniform feedback
types of automated testing
End User

Mobile App

Unit Test

Backend Services
Integration Test

End User

Mobile App

Backend Services
Acceptance Test
Acceptance

Integration

Unit
demo!
I love it!
How do I do it?
iOS

Frank
Calabash
KIF
Appium
UIAutomation
Mobile Web

iPhoneDriver/AndroidDriver
chromedriver
headless WebDriver
webdriver-user-agent
the UI testing triad
select a bit of UI
select a bit of UI

simulate interaction with it
select
a bit of UI

simulate interaction with it

inspect state of it
select

interact

inspect

UI
username
password
Login
Welcome back!
Welcome back!
interact

select

UI

inspect
user simulation

touch(...)
type_into_keyboard(...)
set_orientation(...)
double_tap(...)
tap_and_hold(...)
drag_with_initial_delay(...)
simulating gestures
select

interact

UI

inspect
select

UI

interact
inspect
touch(...)
touch(...)

what?
view selectors
view selectors

a little language to specify which views you are interested in

e.g. CSS or XPath
demo!
good view selectors
==
sustainable tests
accessibility is your best friend
record-and-playback test suites are not sustainable
demo!
putting it all together
demo!
thanks.
questions?
feedback: rate.thepete.net
this deck: slides.thepete.net
more questions?
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me, at the bar