Mobile: DevOps or not DevOps

Такие чудеса, Гораций, не снились нашим DevOps-ам.

My self

My self

- Vladimir Ivanov

My self

- Vladimir Ivanov
- EPAM Systems

You

DevOps Practices

DevOps Practices

- Secured process

DevOps Practices

- Secured process
- Continuous integration

DevOps Practices

- Secured process
- Continuous integration
- Continuous delivery

DevOps Practices

- Secured process
- Continuous integration
- Continuous delivery
- Frequent releases(Canary/BG deployments)

DevOps Practices

- Secured process
- Continuous integration
- Continuous delivery
- Frequent releases(Canary/BG deployments)
- Automated testing

DevOps Practices

- Secured process
- Continuous integration
- Continuous delivery
- Frequent releases(Canary/BG deployments)
- Automated testing
- Monitoring

DevOps Practices

- Secured process
- Continuous integration
- Continuous delivery
- Frequent releases(Canary/BG deployments)
- Automated testing
- Monitoring
- Automated rollback

- run Lint/Static Analysis on the Code

- run Lint/Static Analysis on the Code
- run Unit Tests

- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers

- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code

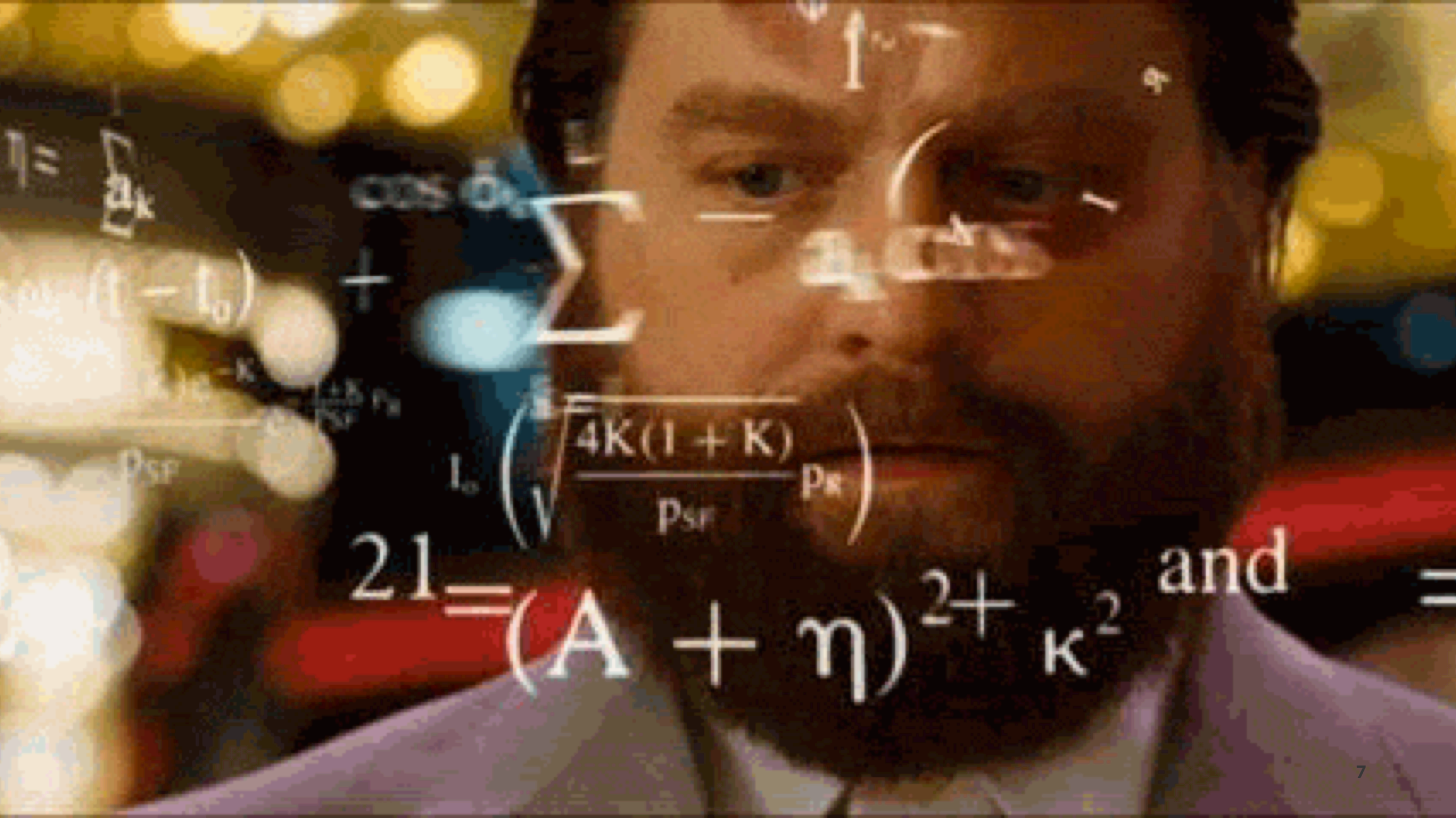
- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code
- deploy the App

- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code
- deploy the App
- notify about status

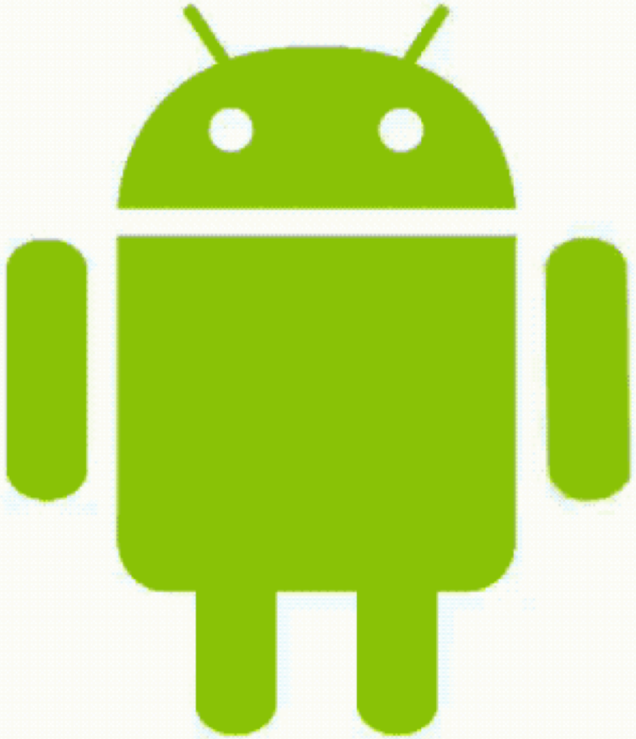
- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code
- deploy the App
- notify about status
- run e2e tests

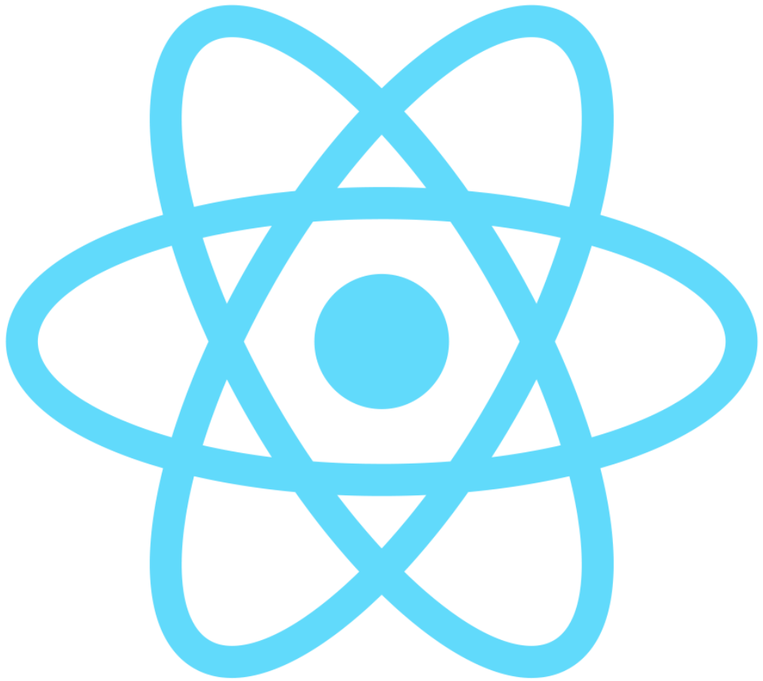
- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code
- deploy the App
- notify about status
- run e2e tests
- provide Logs, Artifacts & Build Reports

- run Lint/Static Analysis on the Code
- run Unit Tests
- maintain Build Numbers
- build the App from Code
- deploy the App
- notify about status
- run e2e tests
- provide Logs, Artifacts & Build Reports
- and actually many more


$I_o\left(\sqrt{\frac{4K(1+K)}{p_{sr}}p_k}\right)$
$21 = (A+\eta)^2 + \kappa^2$ and

Mobile Landscape

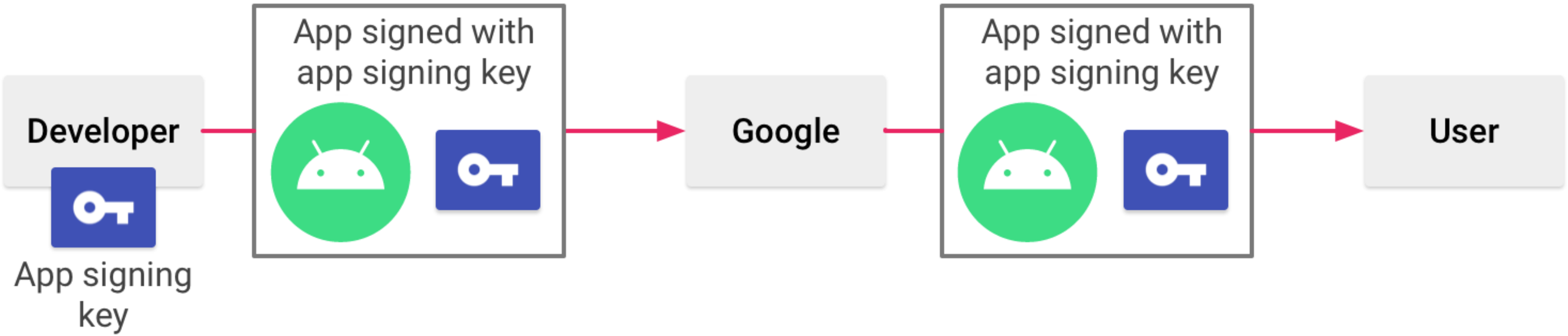




Secured process

Sign


android


Developer
App signing key
App signed with app signing key
Google
App signed with app signing key
User

Android Sign

Android Sign

- Keystore(Java Keystore)

Android Sign

- Keystore(Java Keystore)
- Store pass

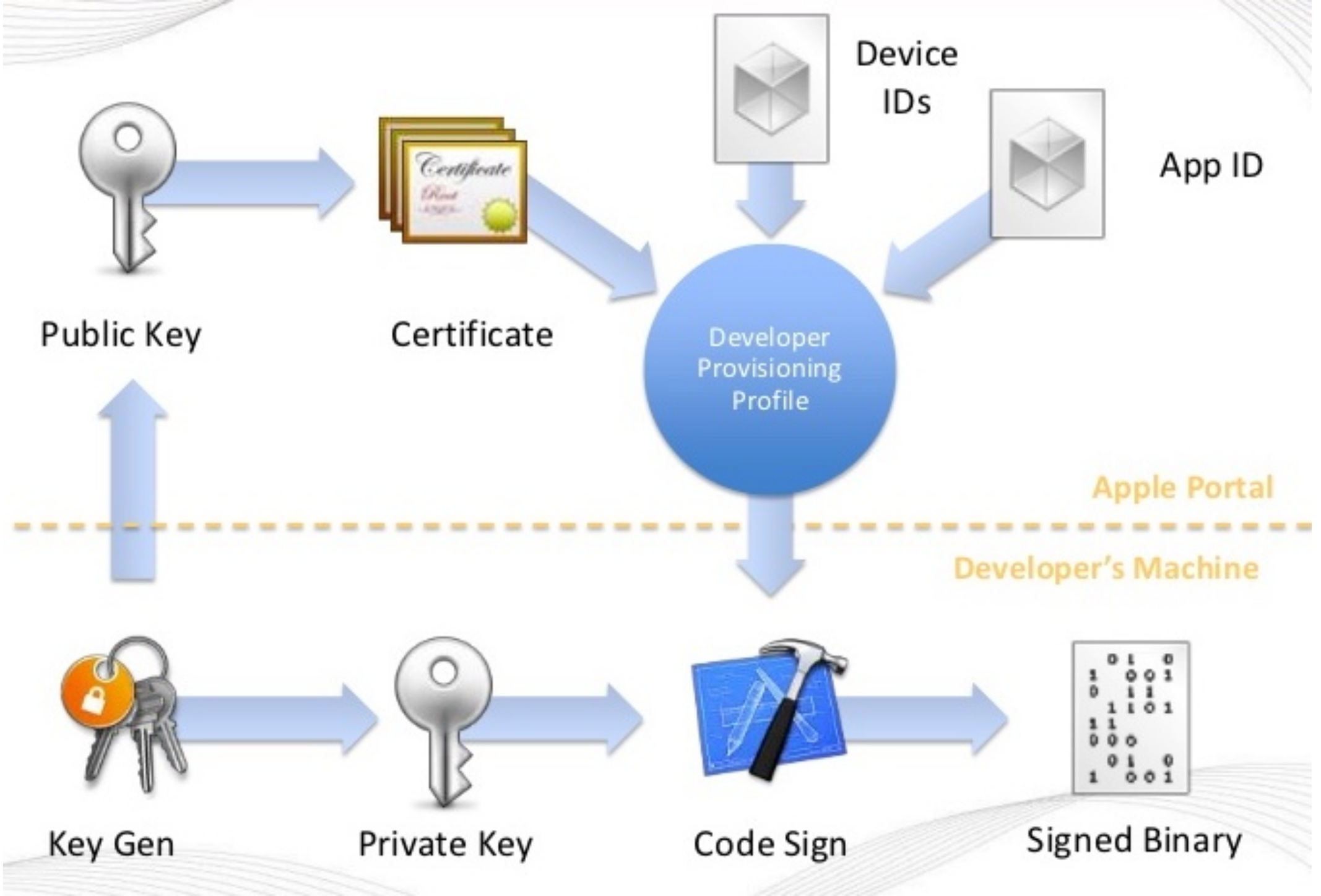
Android Sign

- Keystore(Java Keystore)
- Store pass
- Key alias

Android Sign

- Keystore(Java Keystore)
- Store pass
- Key alias
- Key pass

iOS


Device IDs
App ID
Public Key
Certificate
Developer Provisioning Profile
Apple Portal
Developer's Machine
Key Gen
Private Key
Code Sign
Signed Binary

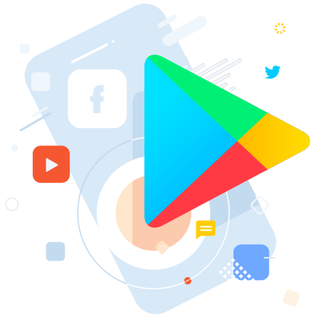

THIS IS FINE.

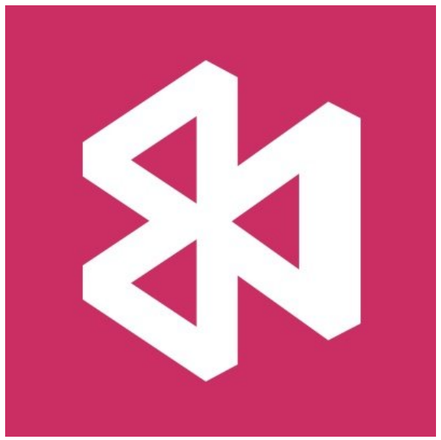
DevOps Practices

- Secured process ✅
- Continuous integration
- Continuous delivery
- Frequent releases(Canary/BG deployments)
- Automated testing
- Monitoring
- Automated rollback

Deploy


4GIFs.com






Test Fairy


deploygate


appaloosa
enterprise app store

Rollouts

Rollouts

- Internal testing, Alpha and Beta channels in Google Play

Rollouts

- Internal testing, Alpha and Beta channels in Google Play
- Internal testing, Public Testing in TestFlight

Rollouts

- Internal testing, Alpha and Beta channels in Google Play
- Internal testing, Public Testing in TestFlight
- Public releases support staged rollouts

Review

GP used to take 3-4 hours

AppStore used to take 2 weeks

GP takes 3-4 ~~hours~~ days

AppStore used to take 2 ~~weeks~~ days

DevOps Practices

- Secured process ✅
- Continuous integration ✅
- Continuous delivery ✅
- Frequent releases(Canary/BG deployments) ✅
- Automated testing
- Monitoring
- Automated rollback

e2e tests

Issues e2e tests

Issues e2e tests

- Takes a lot of time

Issues e2e tests

- Takes a lot of time
- Requires devices

How to cope with devices?

How to cope with devices?

- Buy our own(expensive)

How to cope with devices?

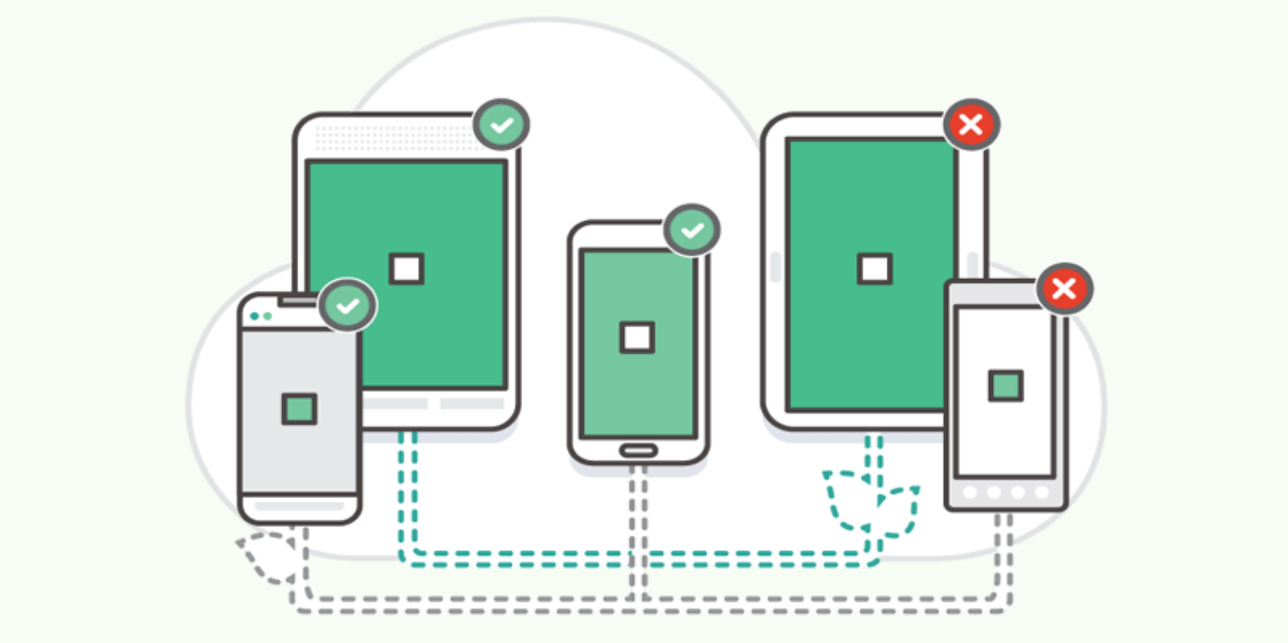
- Buy our own(expensive)
- Test on Emulators(bad quality)

How to cope with devices?

- Buy our own(expensive)
- Test on Emulators(bad quality)
- Device Farms

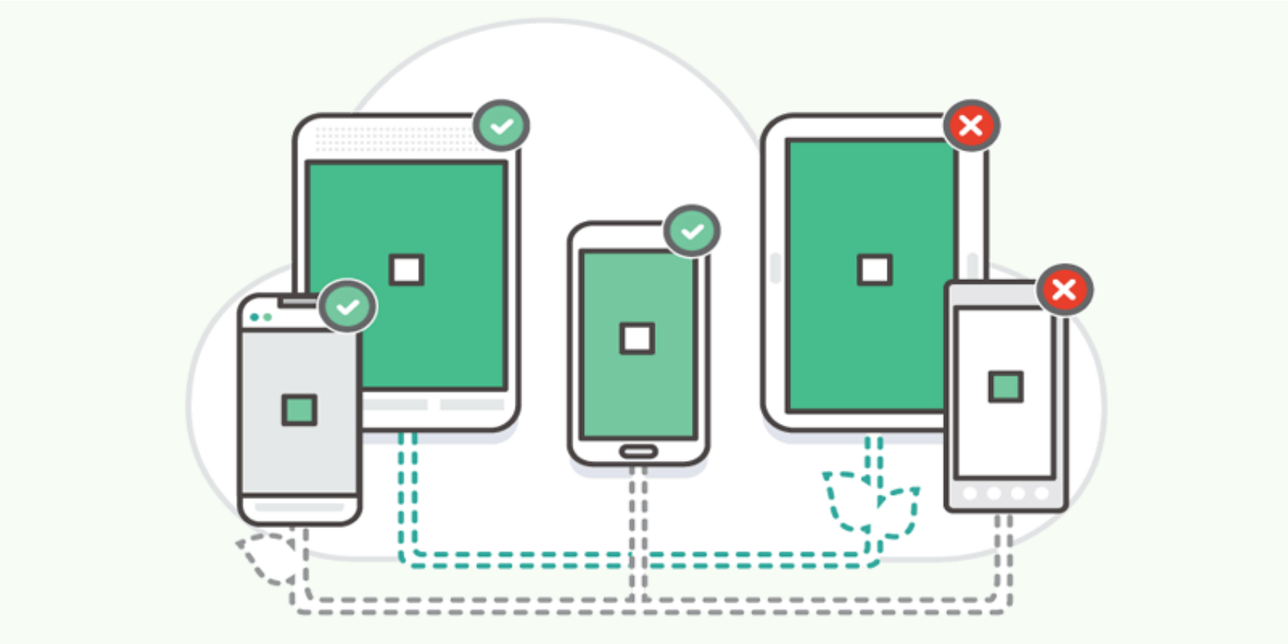

App Trailers
1680
iHeart Radio (Sponsored)
Anastasia Date
LG Electronics

Device Farms



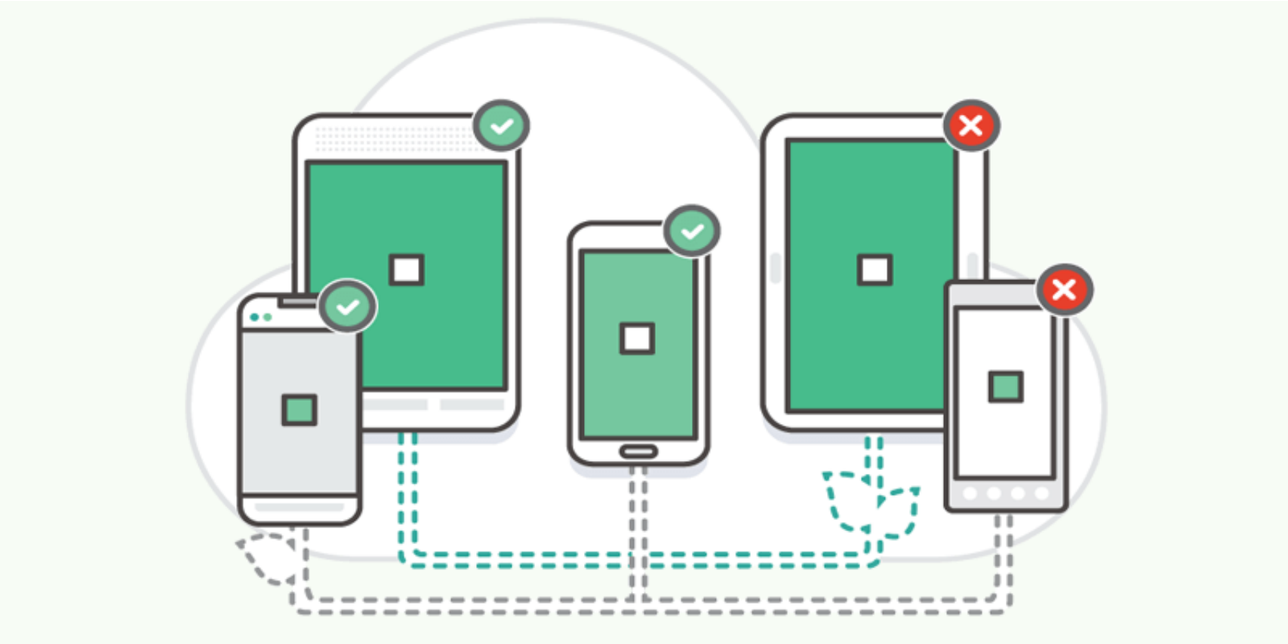
Device Farms

- AWS Device Farm



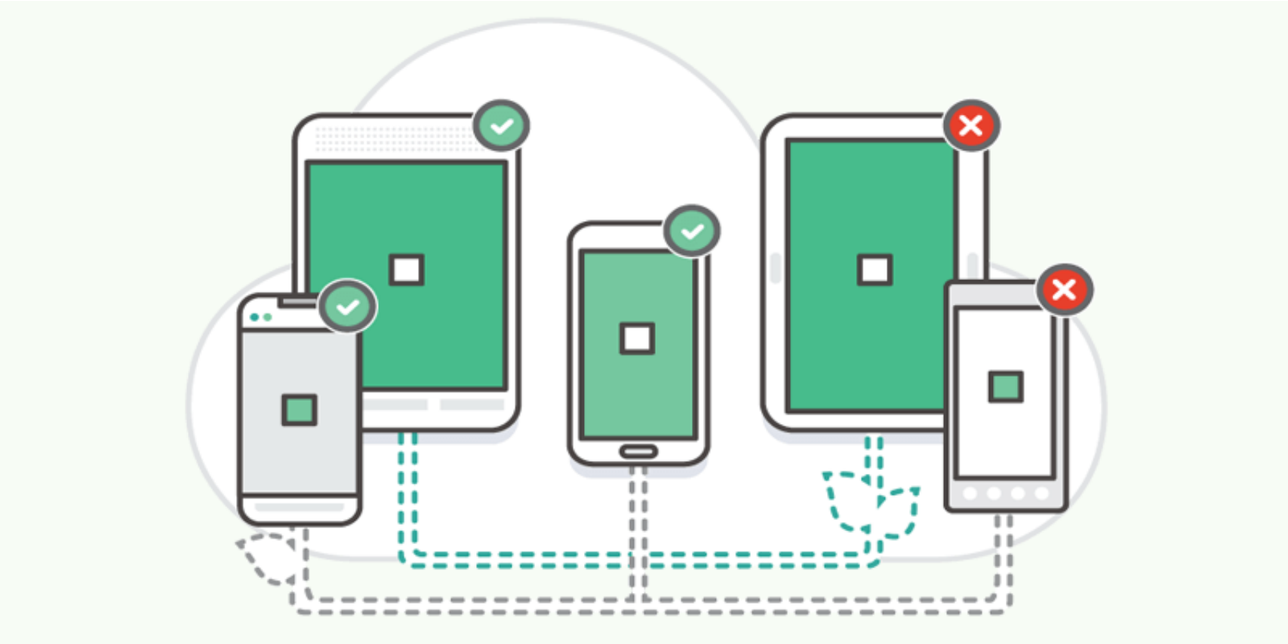
Device Farms

- AWS Device Farm
- Firebase device farm



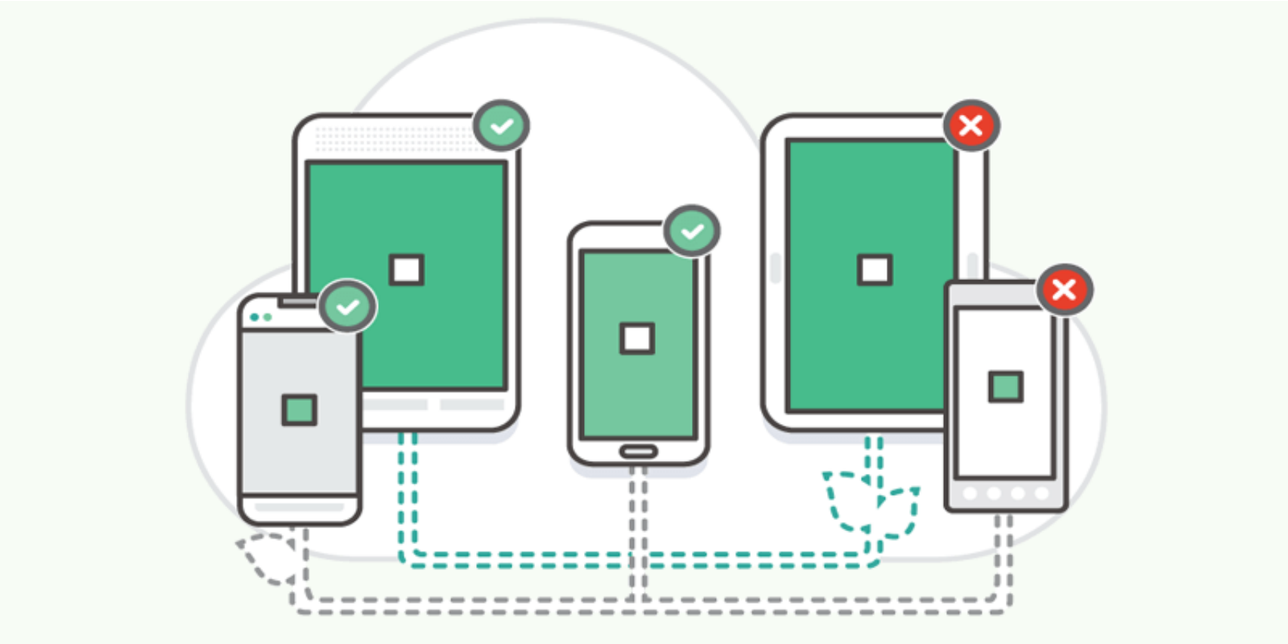
Device Farms

- AWS Device Farm
- Firebase device farm
- Azure Device Farm



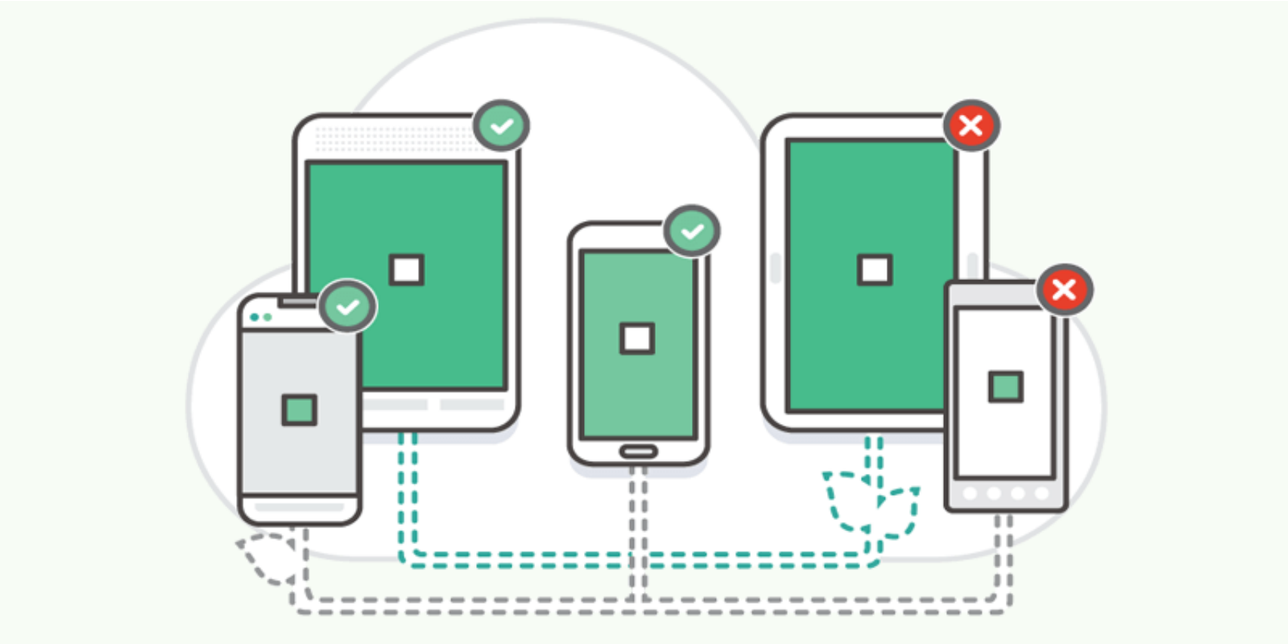
Device Farms

- AWS Device Farm
- Firebase device farm
- Azure Device Farm
- Others



Device Farms

- AWS Device Farm
- Firebase device farm
- Azure Device Farm
- Others
- Your own



Building your own

What would you need

What would you need

- Web Server

What would you need

- Web Server
- Logs Storage

What would you need

- Web Server
- Logs Storage
- Devices

What would you need

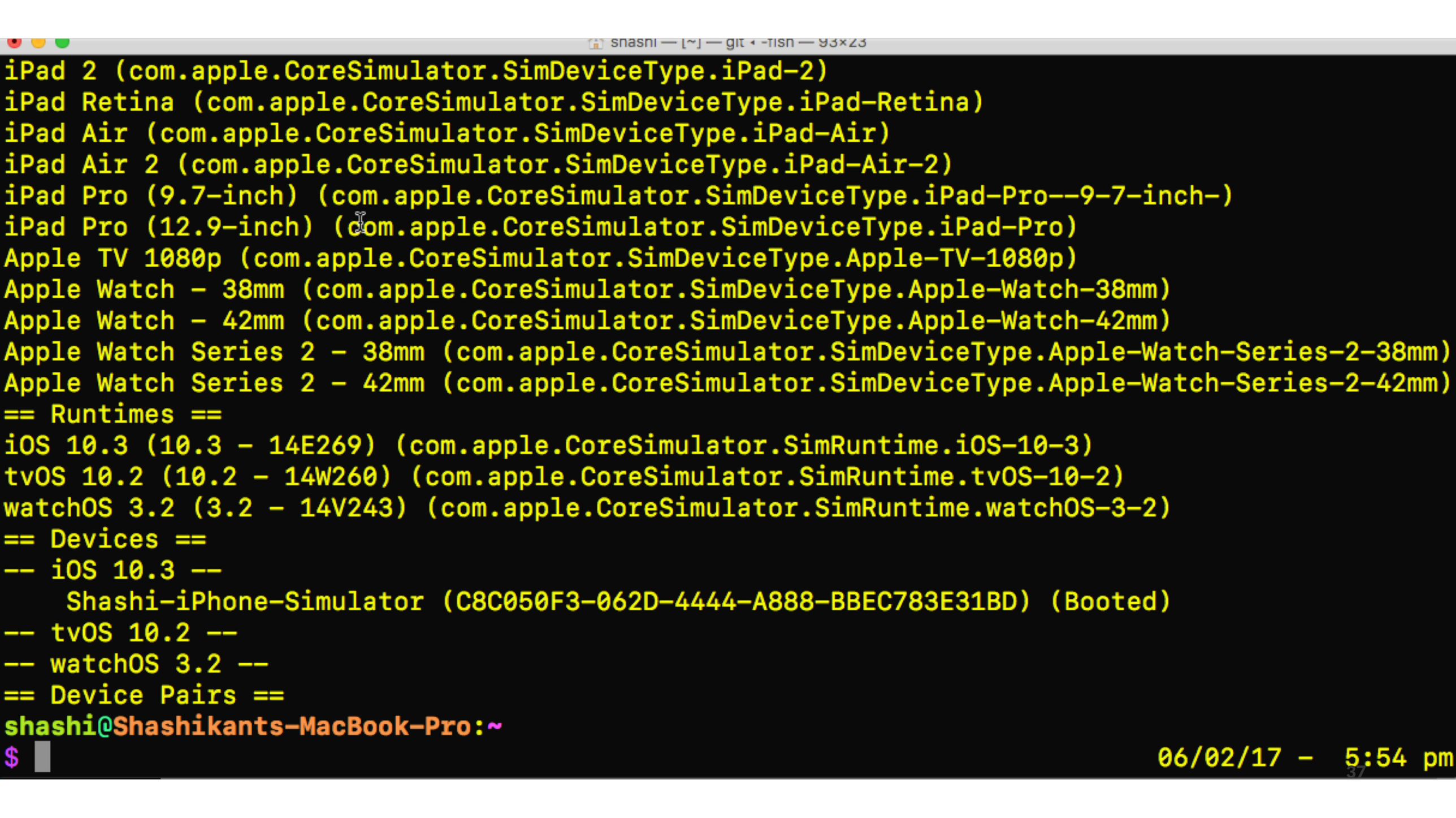
- Web Server
- Logs Storage
- Devices
- Media to connect to the devices(add, xcrun)

Easy part…

Easy part...

- List of devices

```
$ adb devices
$ xcrun simctl list
```


iPad 2 (com.apple.CoreSimulator.SimDeviceType.iPad-2)
iPad Retina (com.apple.CoreSimulator.SimDeviceType.iPad-Retina)
iPad Air (com.apple.CoreSimulator.SimDeviceType.iPad-Air)
iPad Air 2 (com.apple.CoreSimulator.SimDeviceType.iPad-Air-2)
iPad Pro (9.7-inch) (com.apple.CoreSimulator.SimDeviceType.iPad-Pro--9-7-inch-)
iPad Pro (12.9-inch) (com.apple.CoreSimulator.SimDeviceType.iPad-Pro)
Apple TV 1080p (com.apple.CoreSimulator.SimDeviceType.Apple-TV-1080p)
Apple Watch - 38mm (com.apple.CoreSimulator.SimDeviceType.Apple-Watch-38mm)
Apple Watch - 42mm (com.apple.CoreSimulator.SimDeviceType.Apple-Watch-42mm)
Apple Watch Series 2 - 38mm (com.apple.CoreSimulator.SimDeviceType.Apple-Watch-Series-2-38mm)
Apple Watch Series 2 - 42mm (com.apple.CoreSimulator.SimDeviceType.Apple-Watch-Series-2-42mm)
== Runtimes ==
iOS 10.3 (10.3 - 14E269) (com.apple.CoreSimulator.SimRuntime.iOS-10-3)
tvOS 10.2 (10.2 - 14W260) (com.apple.CoreSimulator.SimRuntime.tvOS-10-2)
watchOS 3.2 (3.2 - 14V243) (com.apple.CoreSimulator.SimRuntime.watchOS-3-2)
== Devices ==
-- iOS 10.3 --
Shashi-iPhone-Simulator (C8C050F3-062D-4444-A888-BBEC783E31BD) (Booted)
-- tvOS 10.2 --
-- watchOS 3.2 --
== Device Pairs ==
shashi@Shashikants-MacBook-Pro:~
$
06/02/17 - 5:54 pm

Easy part…

Easy part...

- List of devices

```
$ adb devices
$ xcrun simctl list
```

Easy part...

- List of devices

```
$ adb devices
$ xcrun simctl list
```

- Installation and uploading files

```
$ adb push selfie.png /sdcard0/Downloads
$ adb install -r myCoolApp.apk
$ xcrun altool --upload-app --type ios --file "path/
to/application.ipa" --username "YOUR_ITMC_USER" --
password "YOUR_ITMC_PASSWORD"
```

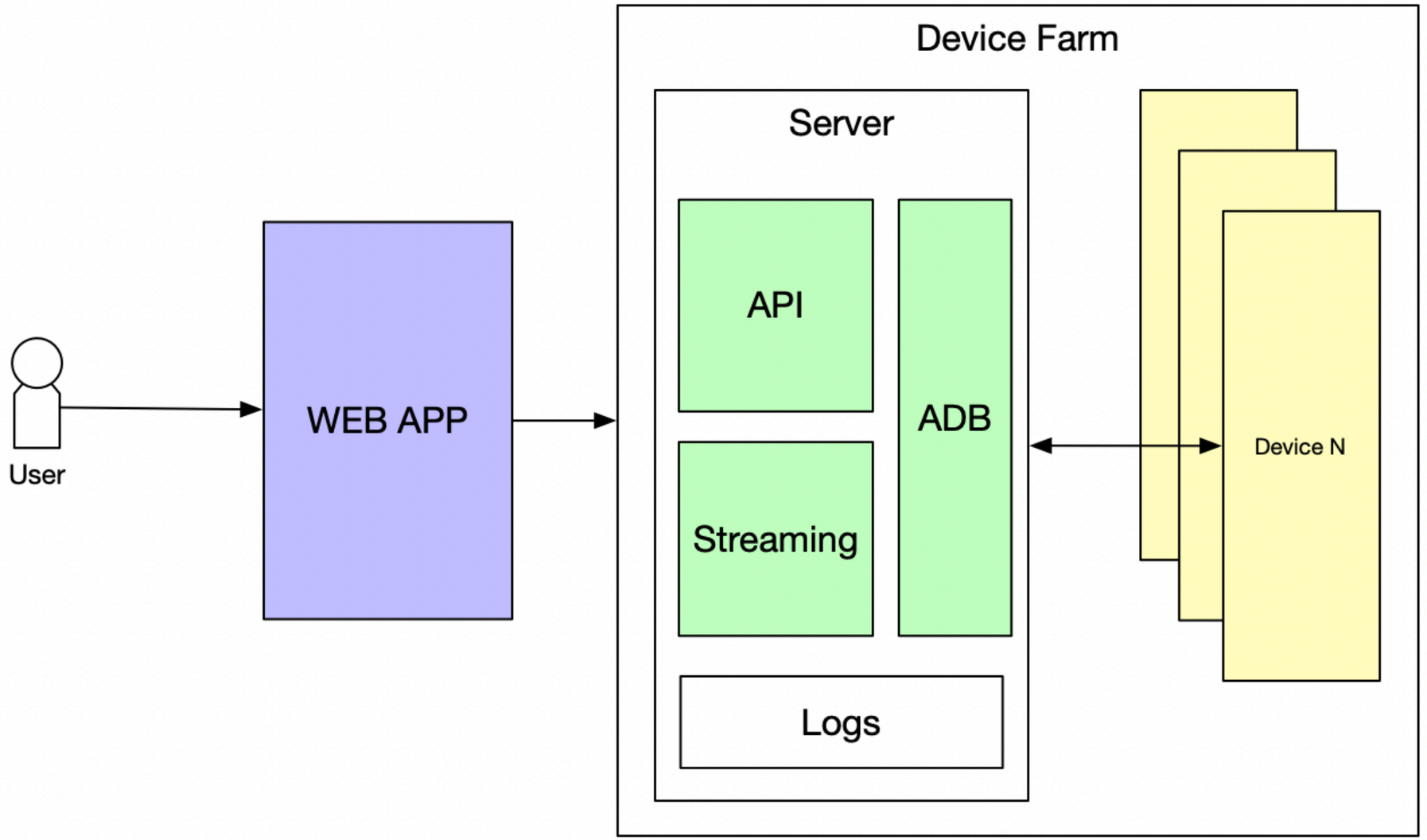
Complex thing

Complex thing

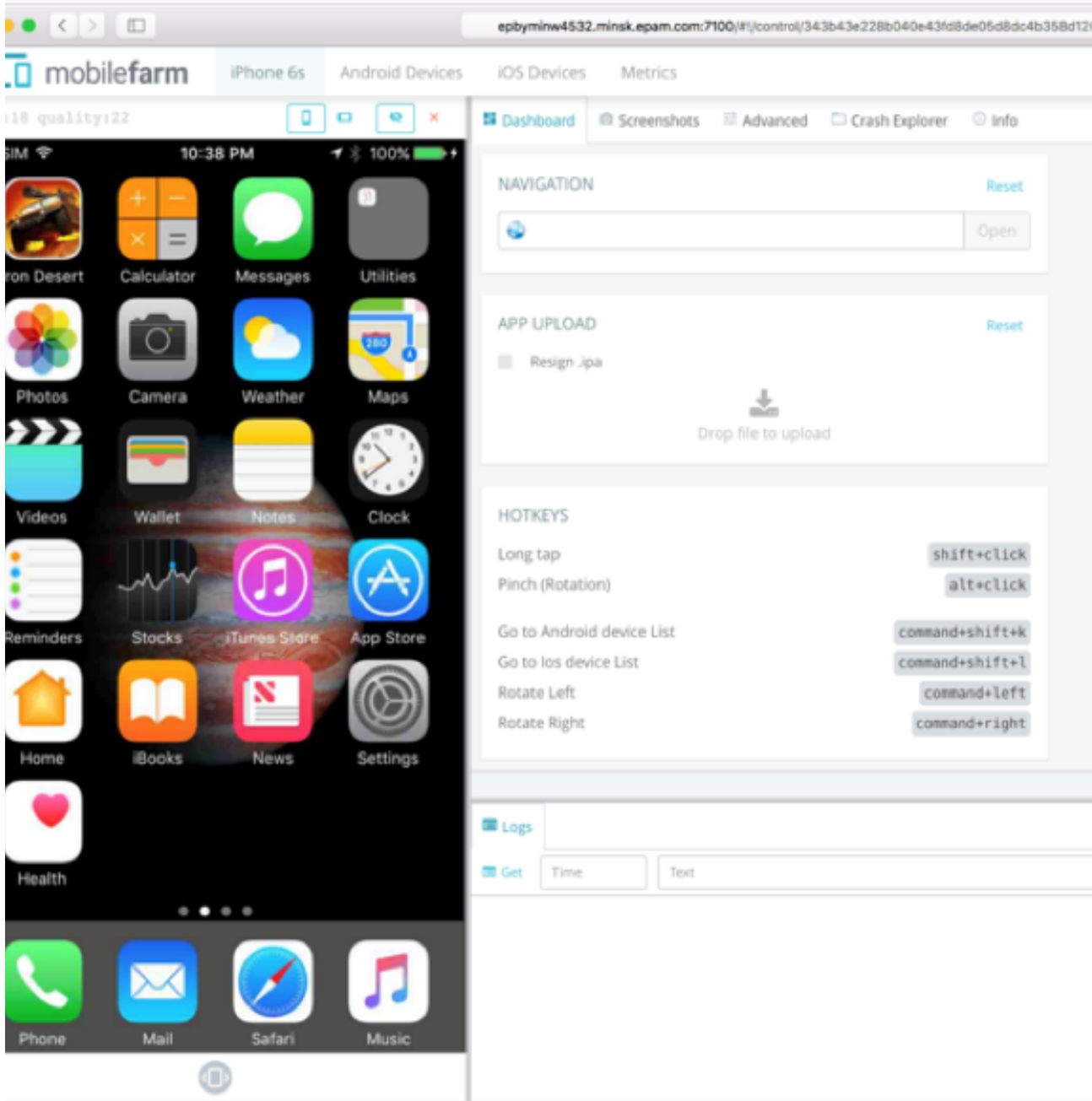
- Streaming

  Android: adb, scrcpy[2] tool
  iOS: xcrun

[2] https://blog.rom1v.com/2018/03/introducing-scrcpy/

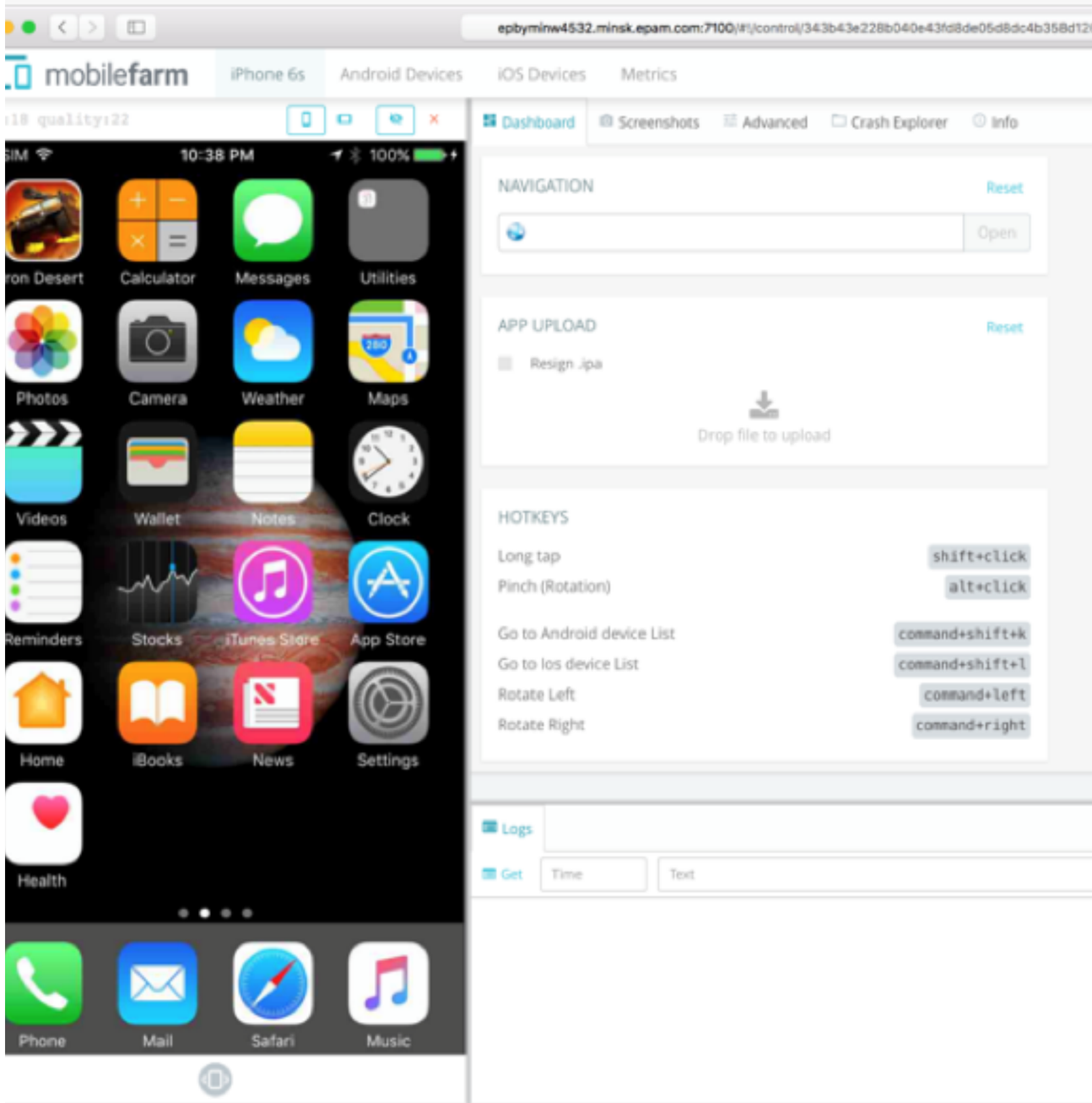

Device Farm
Server
API
ADB
Streaming
Logs
WEB APP
User
Device N

In EPAM


mobilefarm
iPhone 6s
Android Devices
iOS Devices
Metrics
Dashboard
Screenshots
Advanced
Crash Explorer
Info
10:38 PM
100%
Calculator
Messages
Utilities
Photos
Camera
Weather
Maps
Videos
Wallet
Notes
Clock
Reminders
Stocks
iTunes Store
App Store
Home
iBooks
News
Settings
Health
Phone
Mail
Safari
Music
NAVIGATION
Reset
Open
APP UPLOAD
Reset
Resign .ipa
Drop file to upload
HOTKEYS
Long tap
shift+click
Pinch (Rotation)
alt+click
Go to Android device List
command+shift+k
Go to Ios device List
command+shift+l
Rotate Left
command+left
Rotate Right
command+right
Logs
Get
Time
Text

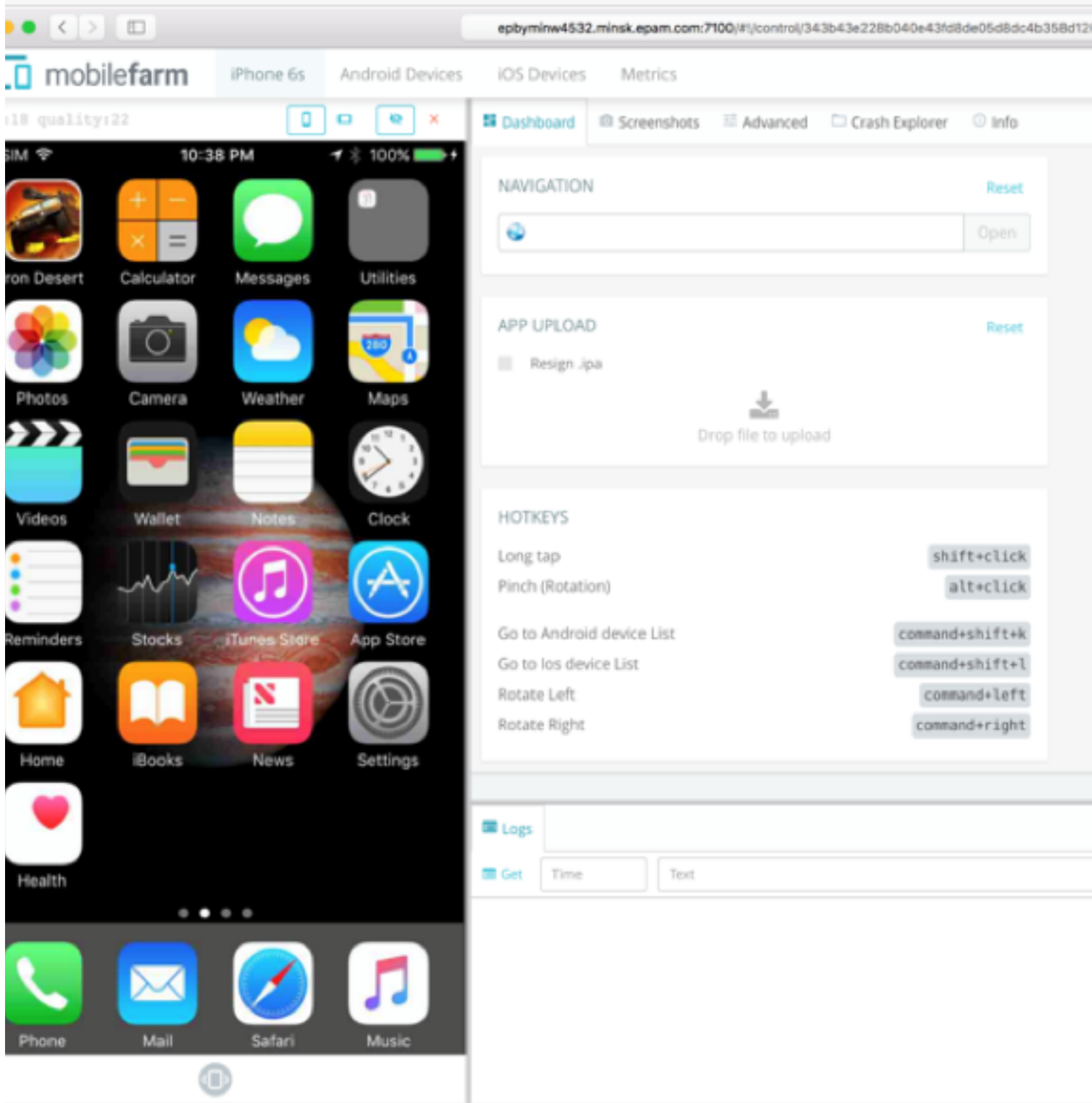
In EPAM

- Mobile farm for Mobile CC



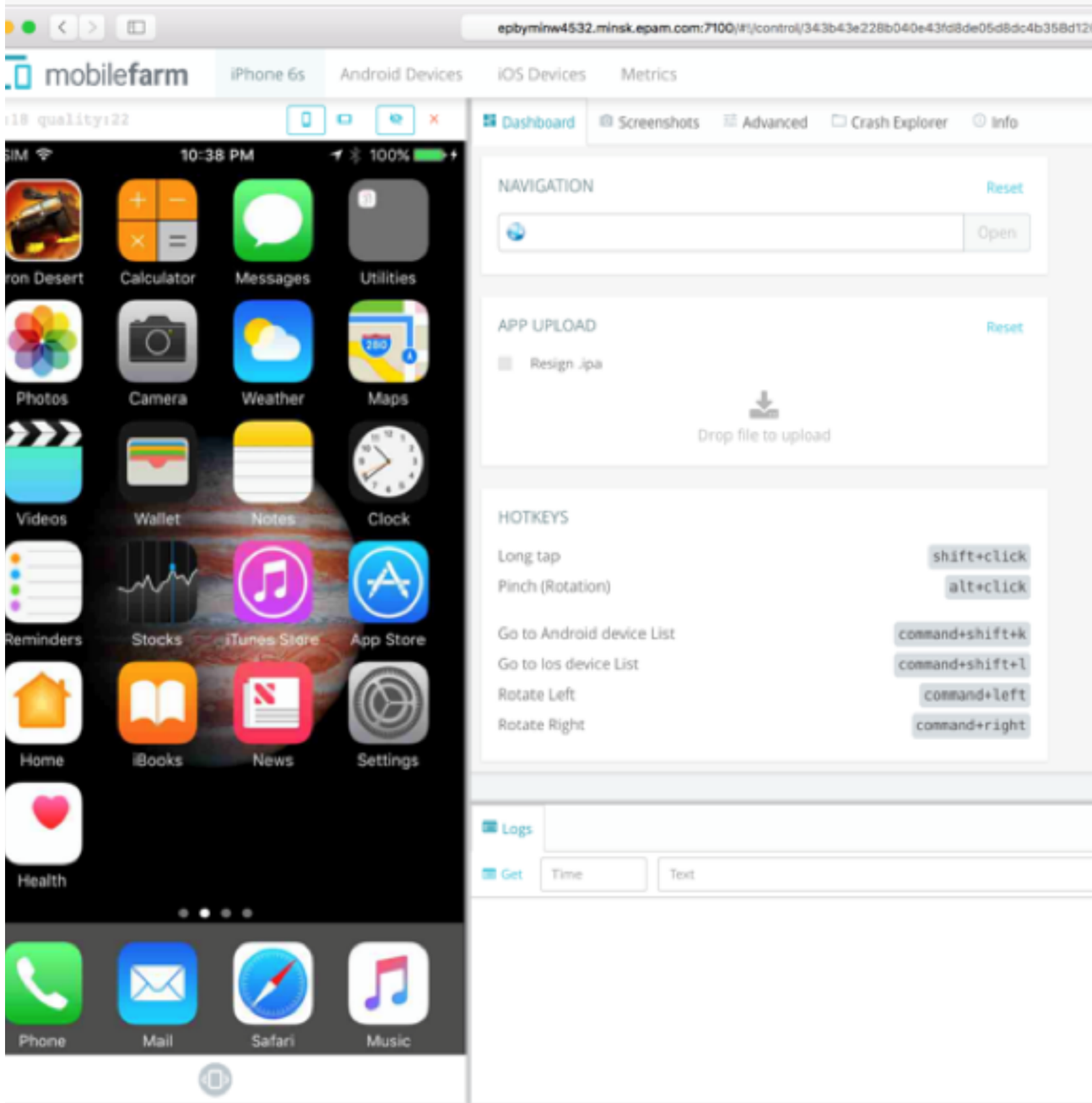
In EPAM

- Mobile farm for Mobile CC
- Free for the projects at the moment



In EPAM

- Mobile farm for Mobile CC
- Free for the projects at the moment
- Plans for commercial offerings



DevOps Practices

- Secured process ✅
- Continuous integration ✅
- Continuous delivery ✅
- Frequent releases(Canary/BG deployments) ✅
- Automated testing ✅
- Monitoring
- Automated rollback

Monitoring

Monitoring

- Mobile apps run on the user devices and deployed through stores which make them unmanageable

Monitoring

- Mobile apps run on the user devices and deployed through stores which make them unmanageable
- However observability is still in place

Crash Reporting and Analytics

Crash Reporting and Analytics

- Firebase Analytics

Crash Reporting and Analytics

- Firebase Analytics
- AppCenter

Crash Reporting and Analytics

- Firebase Analytics
- AppCenter
- Sentry

Crash Reporting and Analytics

- Firebase Analytics
- AppCenter
- Sentry
- Bugsnag

Crash Reporting and Analytics

- Firebase Analytics
- AppCenter
- Sentry
- Bugsnag
- ACRA

What can be gathered

What can be gathered

- Free device memory

What can be gathered

- Free device memory
- Free process memory

What can be gathered

- Free device memory
- Free process memory
- Device, OS Version

What can be gathered

- Free device memory
- Free process memory
- Device, OS Version
- Active users

What can be gathered

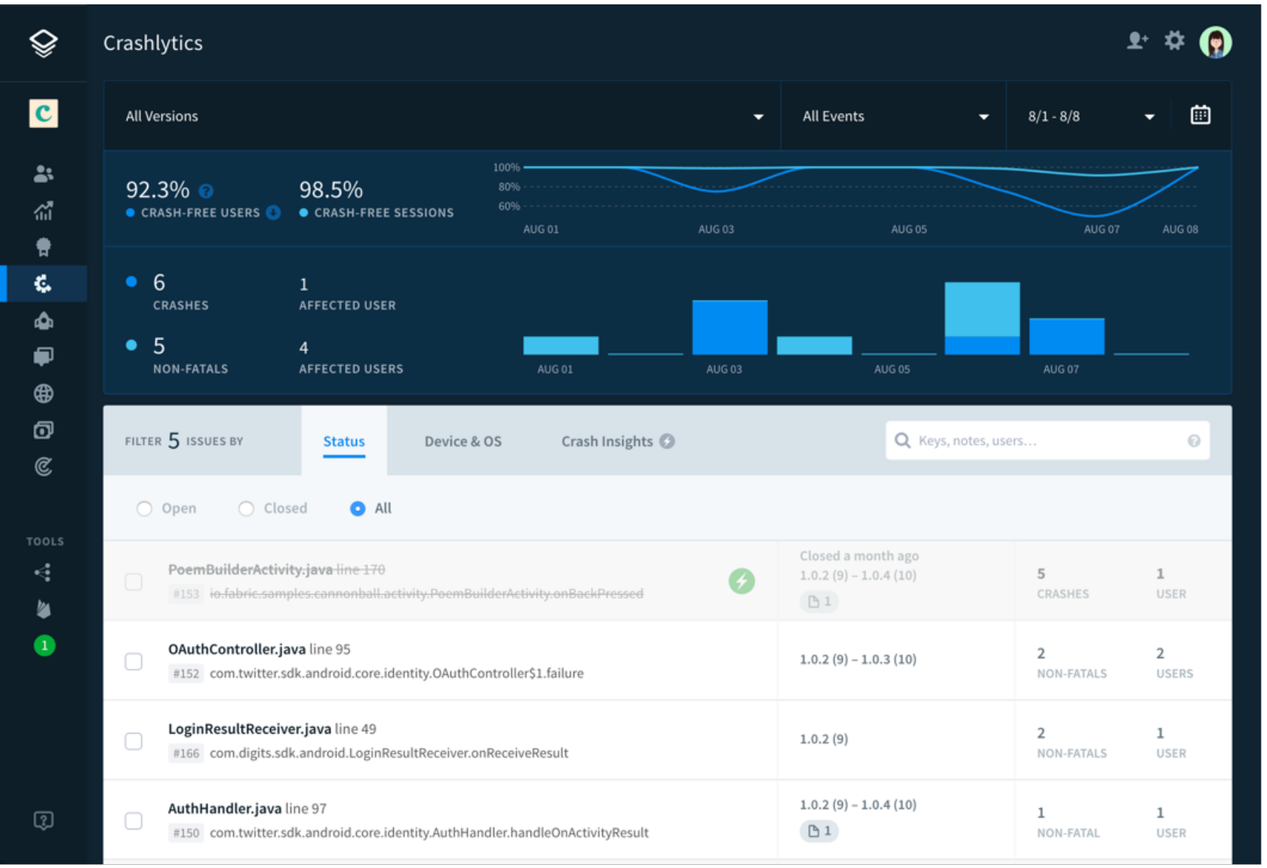
- Free device memory
- Free process memory
- Device, OS Version
- Active users
- Session lengths

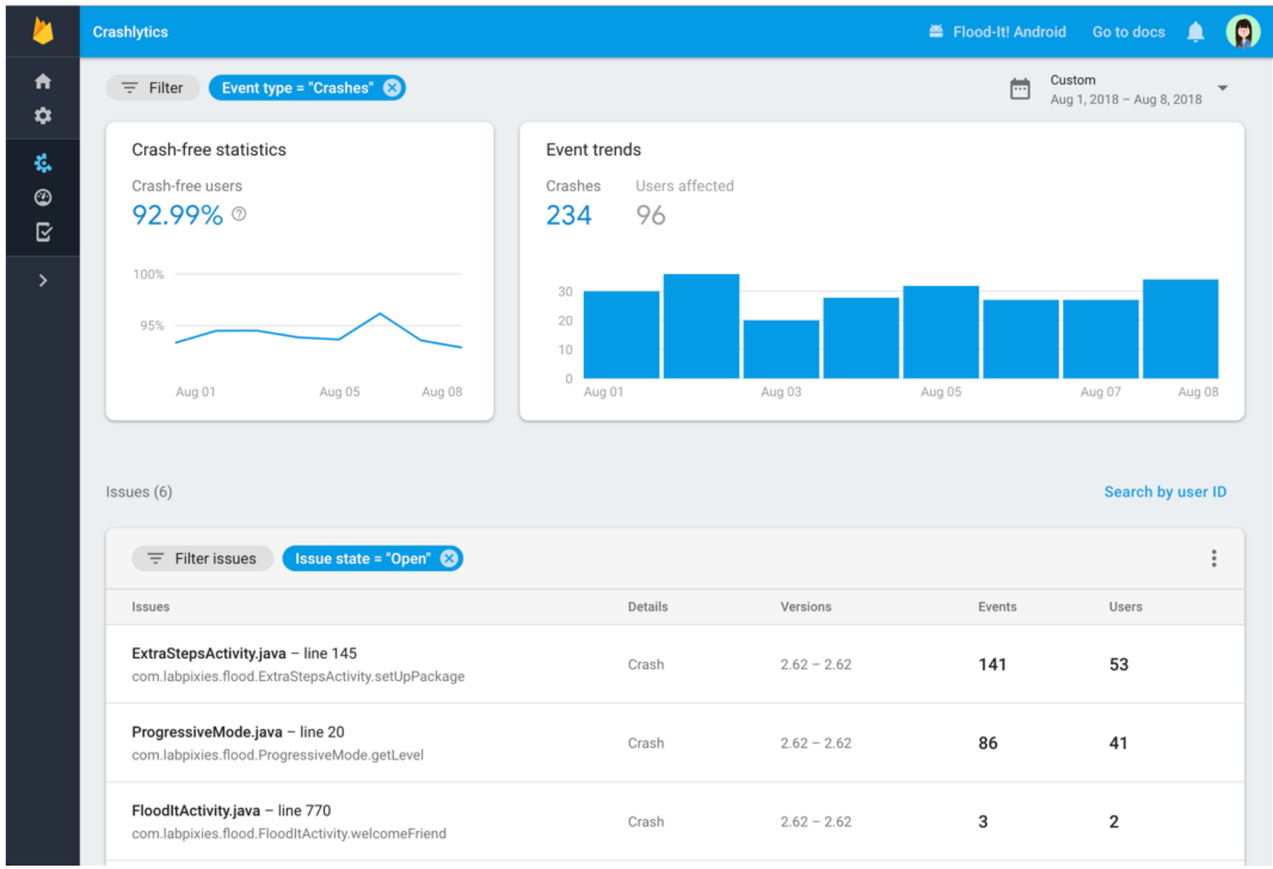
What can be gathered

- Free device memory
- Free process memory
- Device, OS Version
- Active users
- Session lengths
- Thread dump

What can be gathered

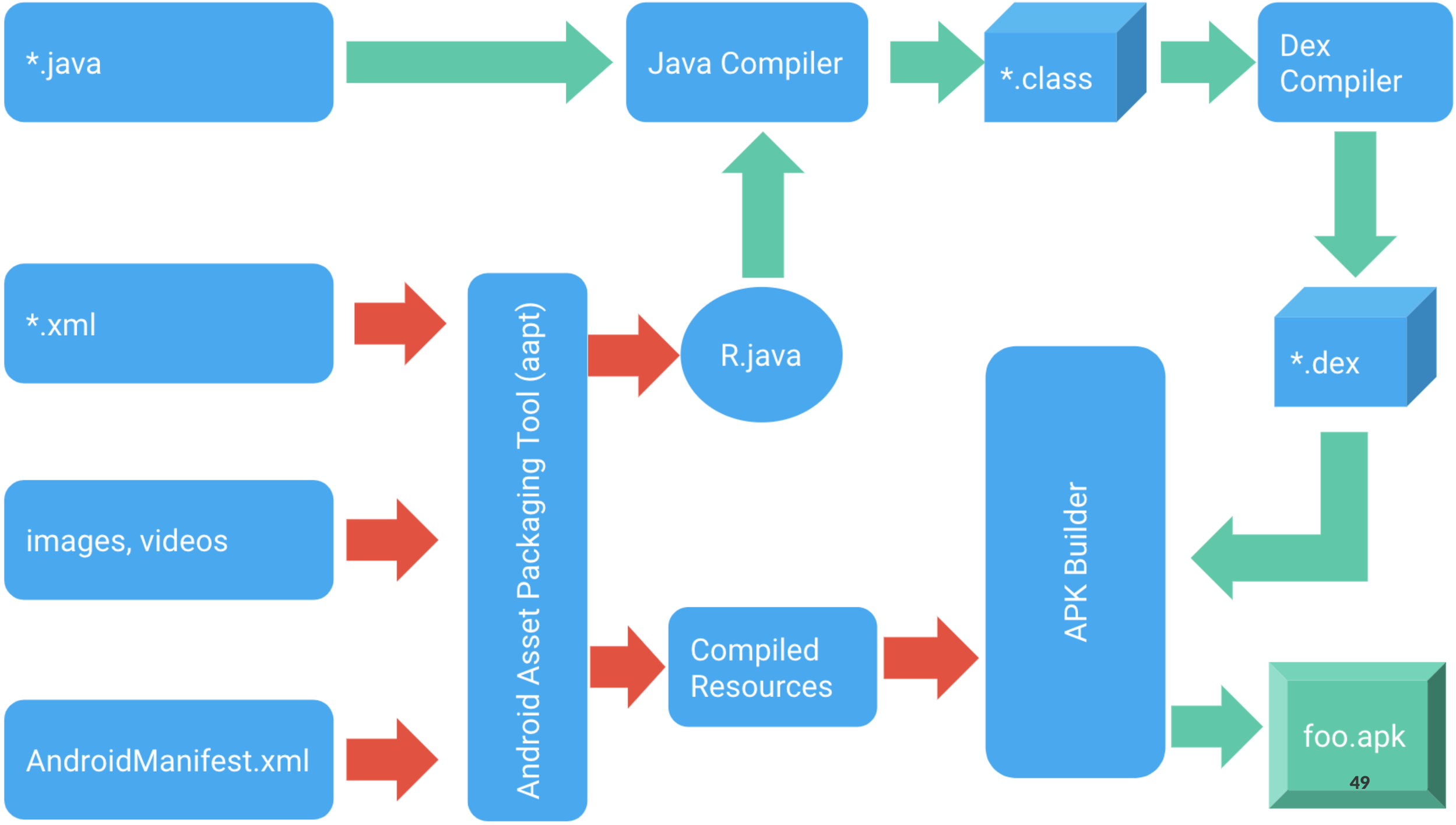
- Free device memory
- Free process memory
- Device, OS Version
- Active users
- Session lengths
- Thread dump
- Stacktrace

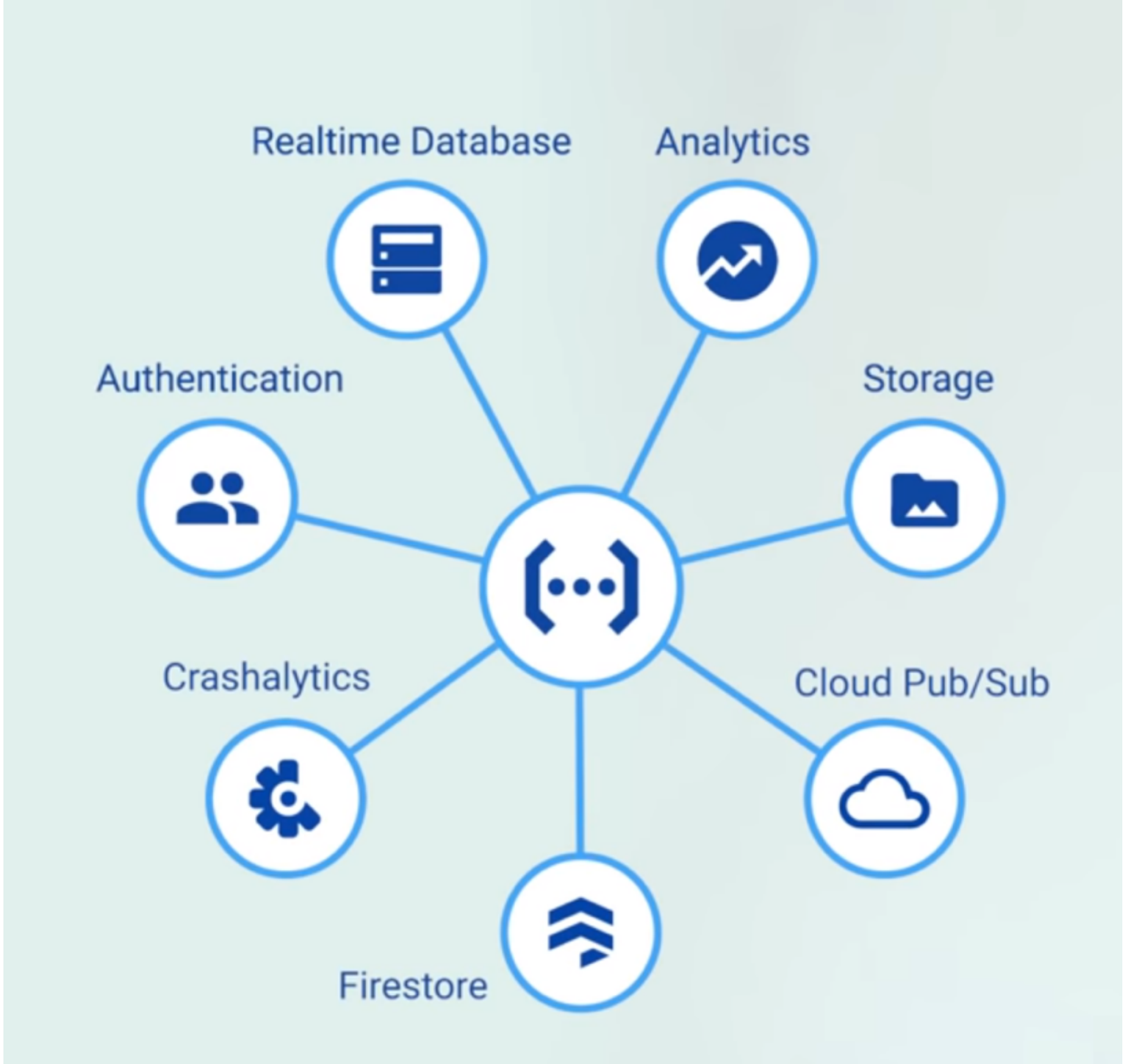

Crashlytics
All Versions
All Events
8/1 - 8/8
92.3%
CRASH-FREE USERS
98.5%
CRASH-FREE SESSIONS
100%
80%
60%
AUG 01
AUG 03
AUG 05
AUG 07
AUG 08
6
CRASHES
1
AFFECTED USER
5
NON-FATALS
4
AFFECTED USERS
FILTER 5 ISSUES BY
Status
Device & OS
Crash Insights
Keys, notes, users...
Open
Closed
All
TOOLS
PoemBuilderActivity.java line 170
#153 io.fabric.samples.cannonball.activity.PoemBuilderActivity.onBackPressed
Closed a month ago
1.0.2 (9) – 1.0.4 (10)
5
CRASHES
1
USER
OAuthController.java line 95
#152 com.twitter.sdk.android.core.identity.OAuthController$1.failure
1.0.2 (9) – 1.0.3 (10)
2
NON-FATALS
2
USERS
LoginResultReceiver.java line 49
#166 com.digits.sdk.android.LoginResultReceiver.onReceiveResult
1.0.2 (9)
2
NON-FATALS
1
USER
AuthHandler.java line 97
#150 com.twitter.sdk.android.core.identity.AuthHandler.handleOnActivityResult
1.0.2 (9) – 1.0.4 (10)
1
NON-FATAL
1
USER

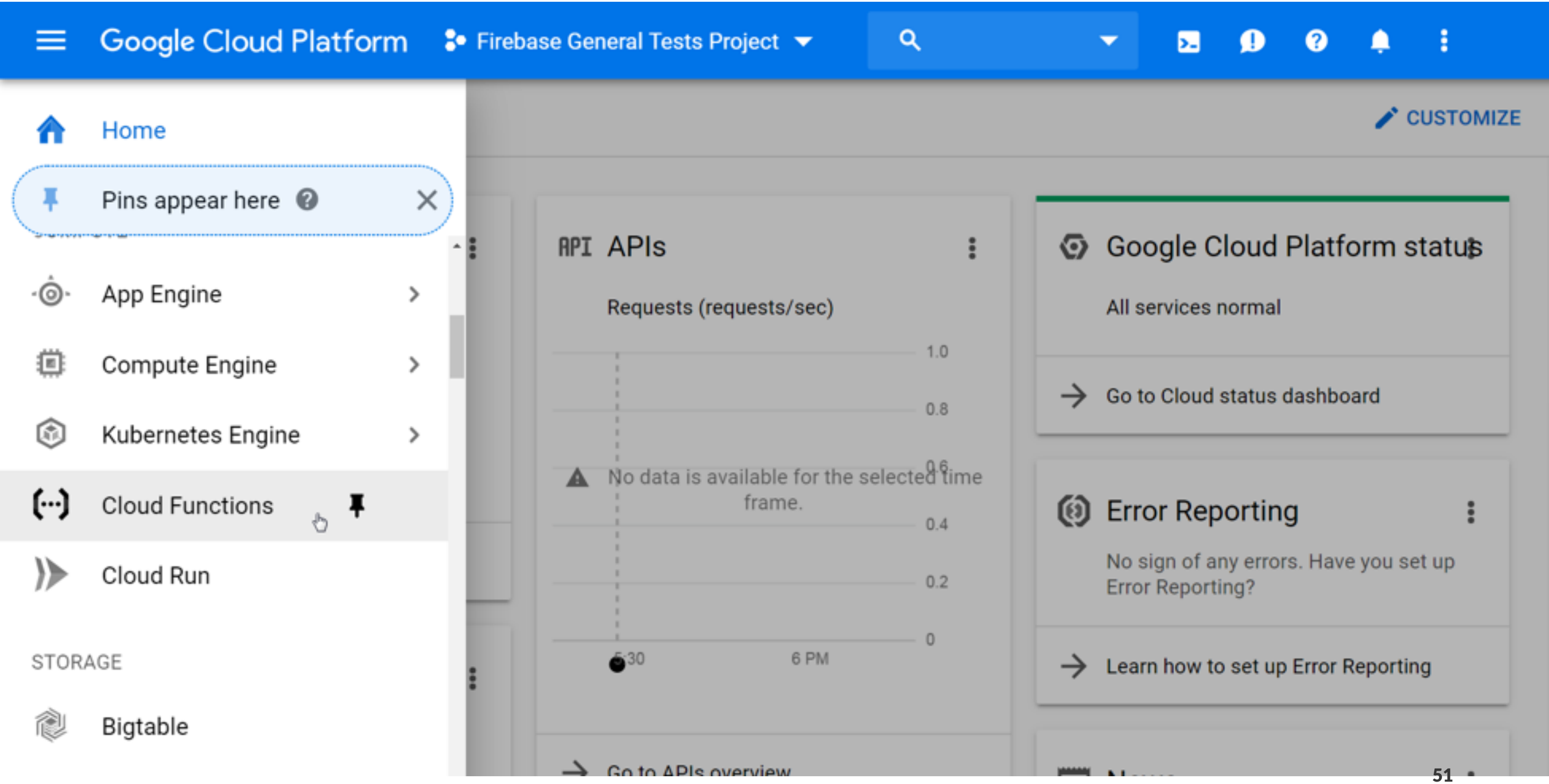

Crashlytics
Flood-It! Android
Go to docs
Filter
Event type = "Crashes"
Custom
Aug 1, 2018 – Aug 8, 2018
Crash-free statistics
Crash-free users
92.99%
100%
95%
Aug 01
Aug 05
Aug 08
Event trends
Crashes
234
Users affected
96
30
20
10
0
Aug 01
Aug 03
Aug 05
Aug 07
Aug 08
Issues (6)
Search by user ID
Filter issues
Issue state = "Open"
Issues
Details
Versions
Events
Users
ExtraStepsActivity.java – line 145
com.labpixies.flood.ExtraStepsActivity.setUpPackage
Crash
2.62 – 2.62
141
53
ProgressiveMode.java – line 20
com.labpixies.flood.ProgressiveMode.getLevel
Crash
2.62 – 2.62
86
41
FloodItActivity.java – line 770
com.labpixies.flood.FloodItActivity.welcomeFriend
Crash
2.62 – 2.62
3
2

Compilation/Obfuscation, my ass

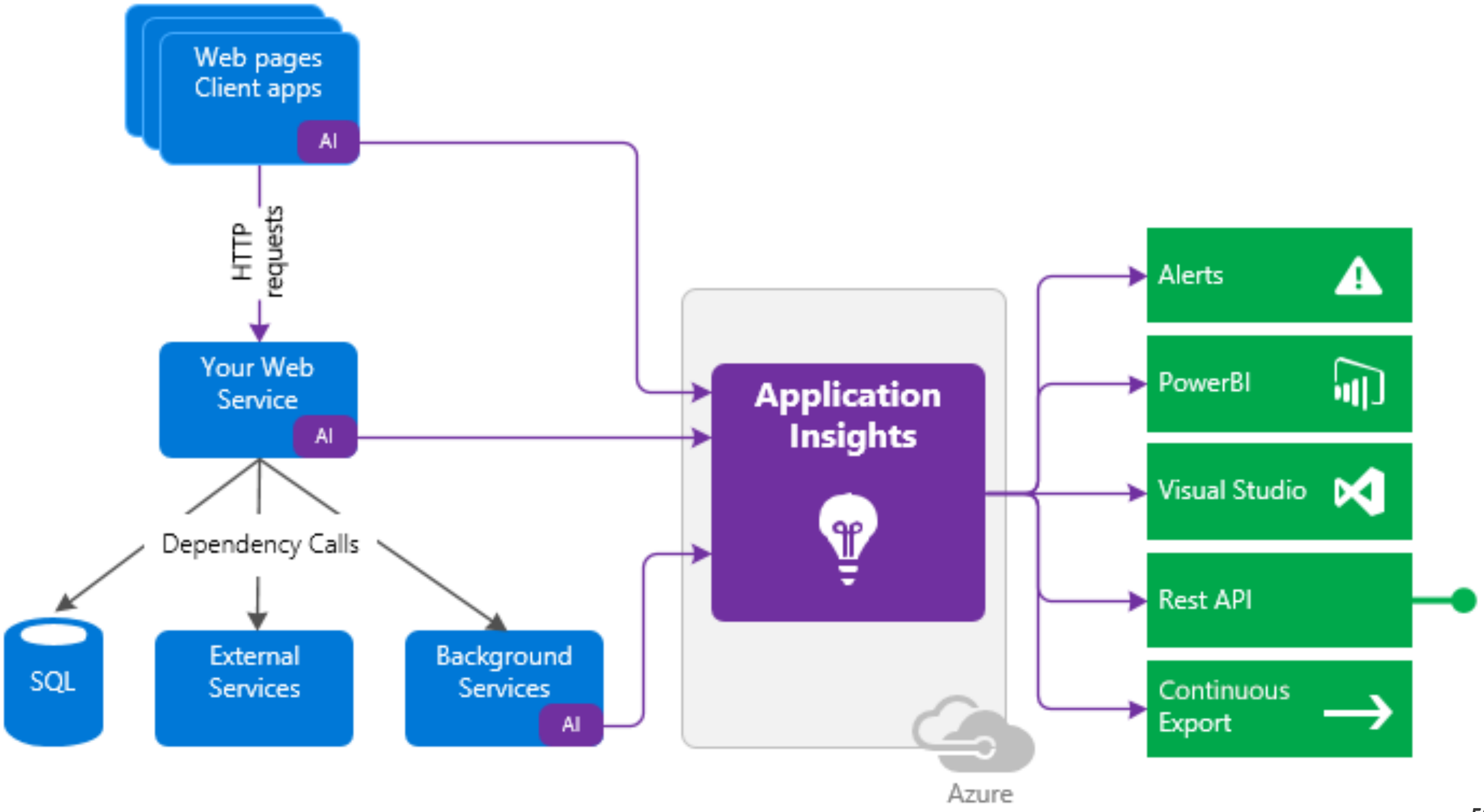

SWIFT
m
BC
My Great App.app
BC
My Great App.dsym
My Great App.xcarchive
My Great App.app
My Great App.dsym


*.java
Java Compiler
*.class
Dex Compiler
*.xml
Android Asset Packaging Tool (aapt)
R.java
*.dex
images, videos
Compiled Resources
APK Builder
AndroidManifest.xml
foo.apk


Realtime Database
Analytics
Authentication
Storage
Crashalytics
Cloud Pub/Sub
Firestore


Google Cloud Platform
Firebase General Tests Project
CUSTOMIZE
Home
Pins appear here
App Engine
Compute Engine
Kubernetes Engine
Cloud Functions
Cloud Run
STORAGE
Bigtable
APIs
Requests (requests/sec)
1.0
0.8
0.6
0.4
0.2
0
No data is available for the selected time frame.
5:30
6 PM
Go to APIs overview
Google Cloud Platform status
All services normal
Go to Cloud status dashboard
Error Reporting
No sign of any errors. Have you set up Error Reporting?
Learn how to set up Error Reporting

AppCenter


Web pages
Client apps
AI
HTTP requests
Your Web Service
AI
Dependency Calls
SQL
External Services
Background Services
AI
Application Insights
Azure
Alerts
PowerBI
Visual Studio
Rest API
Continuous Export

DevOps Practices

- Secured process ✅
- Continuous integration ✅
- Continuous delivery ✅
- Frequent releases(Canary/BG deployments) ✅
- Automated testing ✅
- Monitoring ✅
- Automated rollback

Unfortunately

No rollbacks of unsuccessful releases

You need to build a new version and deploy it instead

Possible solutions

Possible solutions

- Feature flags and server configs

Possible solutions

- Feature flags and server configs
- Usage of React-Native or other js based technologies

DevOps Practices

- Secured process ✅
- Continuous integration ✅
- Continuous delivery ✅
- Frequent releases(Canary/BG deployments) ✅
- Automated testing ✅
- Monitoring ✅
- Automated rollback ❌

Caveats

Hardware

Hardware

- Android can be built anywhere

Hardware

- Android can be built anywhere
- iOS - only on Mac machines

Long buildtimes

- Identifying slow code parts

- Identifying slow code parts
- Caching dependencies

- Identifying slow code parts
- Caching dependencies
- Modularization

- Identifying slow code parts
- Caching dependencies
- Modularization
- Build systems hacks

- Identifying slow code parts
- Caching dependencies
- Modularization
- Build systems hacks
- And more[10]

[10] https://medium.com/@joshgare/8-tips-to-speed-up-your-swift-build-and-compile-times-in-xcode-73081e1d84ba

Caching

iOS

iOS

- CocoaPods

iOS

- CocoaPods
- Carthage

iOS

- CocoaPods
- Carthage
- SwiftPM

Android

Android

- Gradle

Android

- Gradle
- Bazel/BUCK for companies with BIG apps

Caching Gradle dependencies might decrease build times. Give it a try if you haven't already.

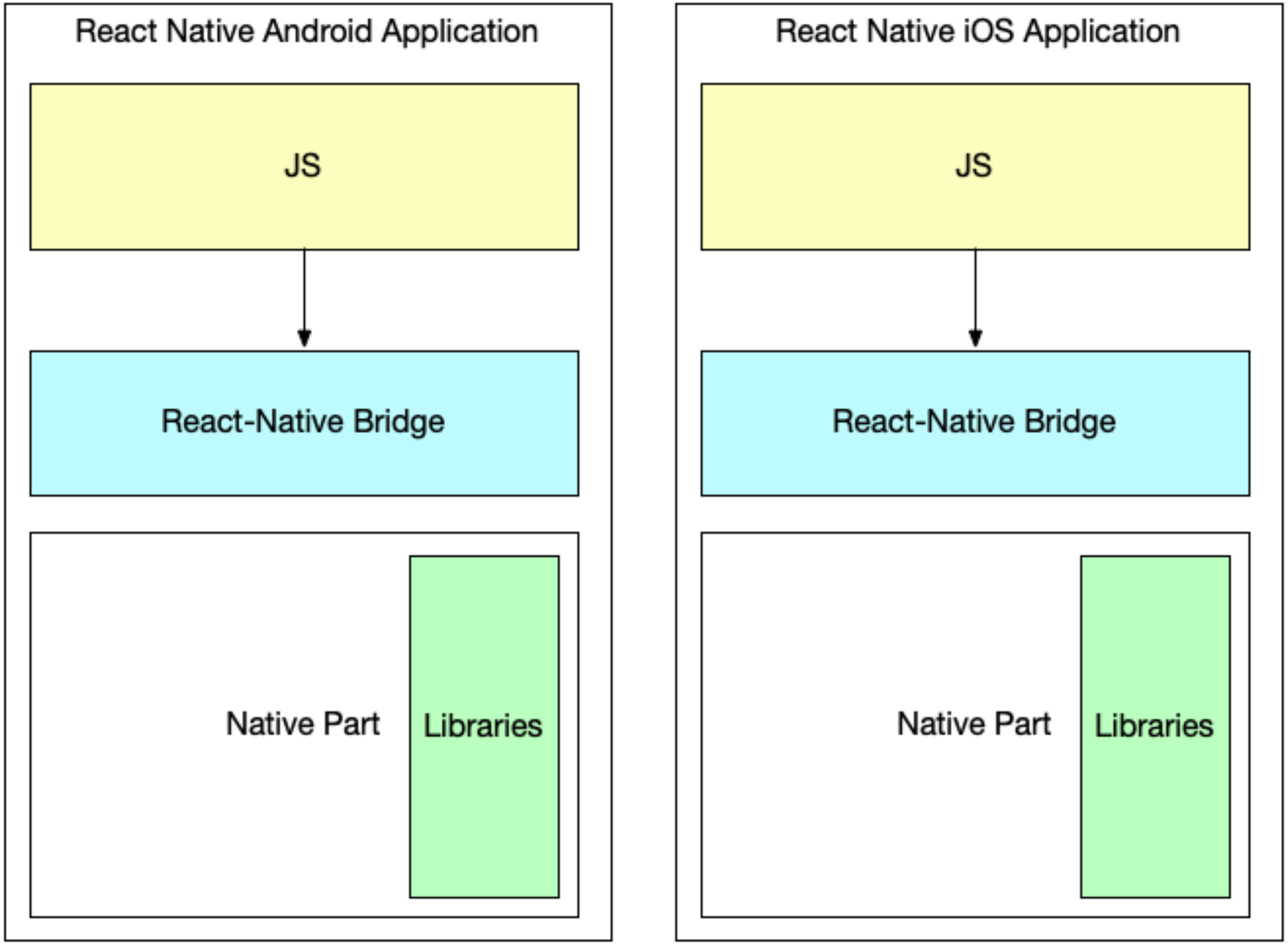
Setup

1. Put the `Cache:Pull` step after the `Git Clone` step
2. Put the `Cache:Push` step to the very end of the Workflow

If you use v1.0 or newer of the `Cache` steps and the latest Gradle Runner step then that's all you have to do.

React-Native doesn't benefit from caching

But does benefit from building two apps within a single run


React Native Android Application
JS
React-Native Bridge
Native Part
Libraries
React Native iOS Application
JS
React-Native Bridge
Native Part
Libraries

- Checkout the code

- Checkout the code
- Install the dependencies

- Checkout the code
- Install the dependencies
- Compile Android

- Checkout the code
- Install the dependencies
- Compile Android
- Compile iOS

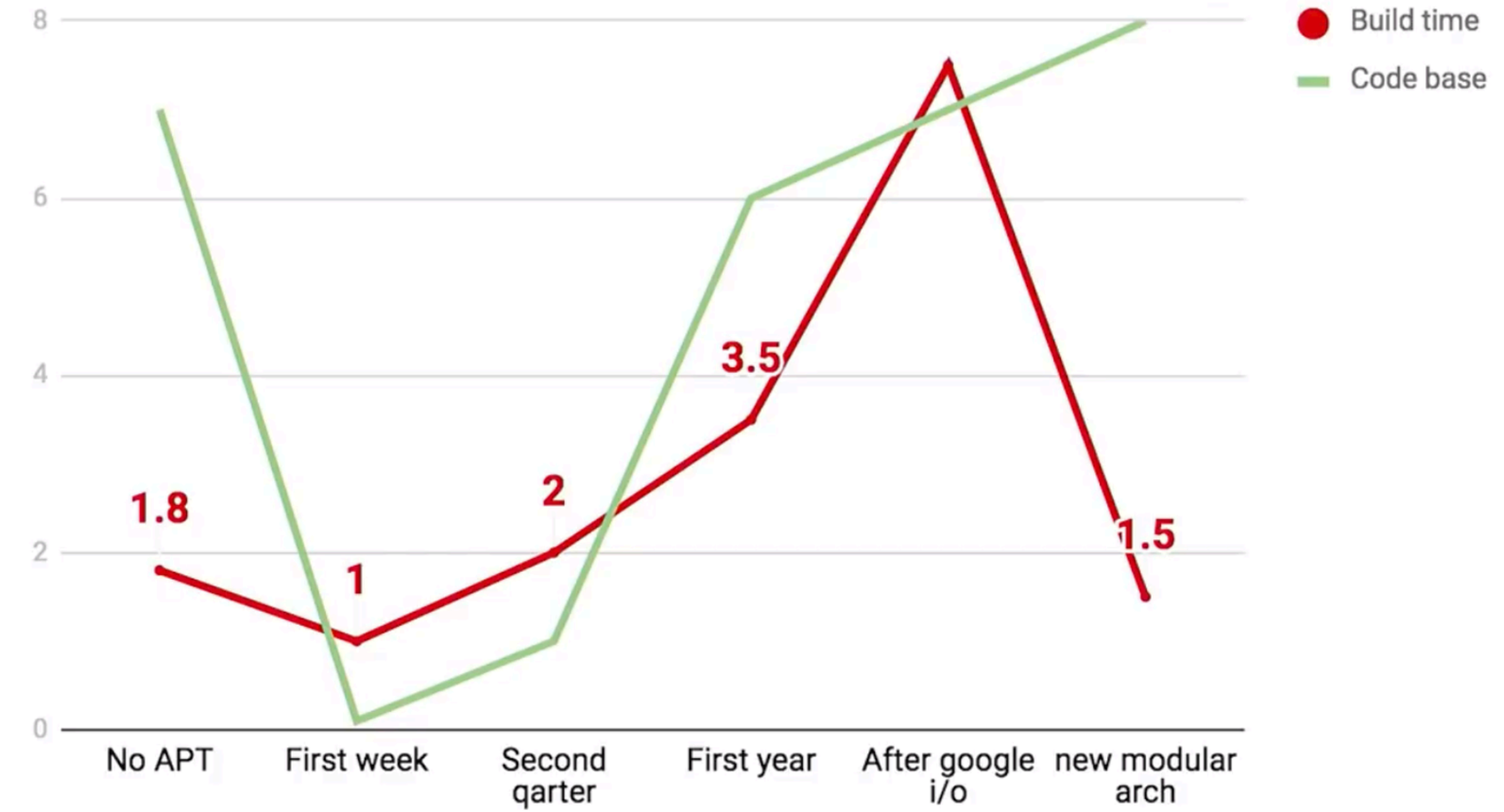
- Checkout the code
- Install the dependencies
- Compile Android
- Compile iOS
- Sign both

- Checkout the code
- Install the dependencies
- Compile Android
- Compile iOS
- Sign both
- Deploy both

- Checkout the code
- Install the dependencies
- ~~Compile Android~~
- ~~Compile iOS~~
- ~~Sign both~~
- ~~Deploy both~~

Modularization

Clean build time minutes



How to start

./gradlew clean assembleDebug --scan

Gradle

Gradle

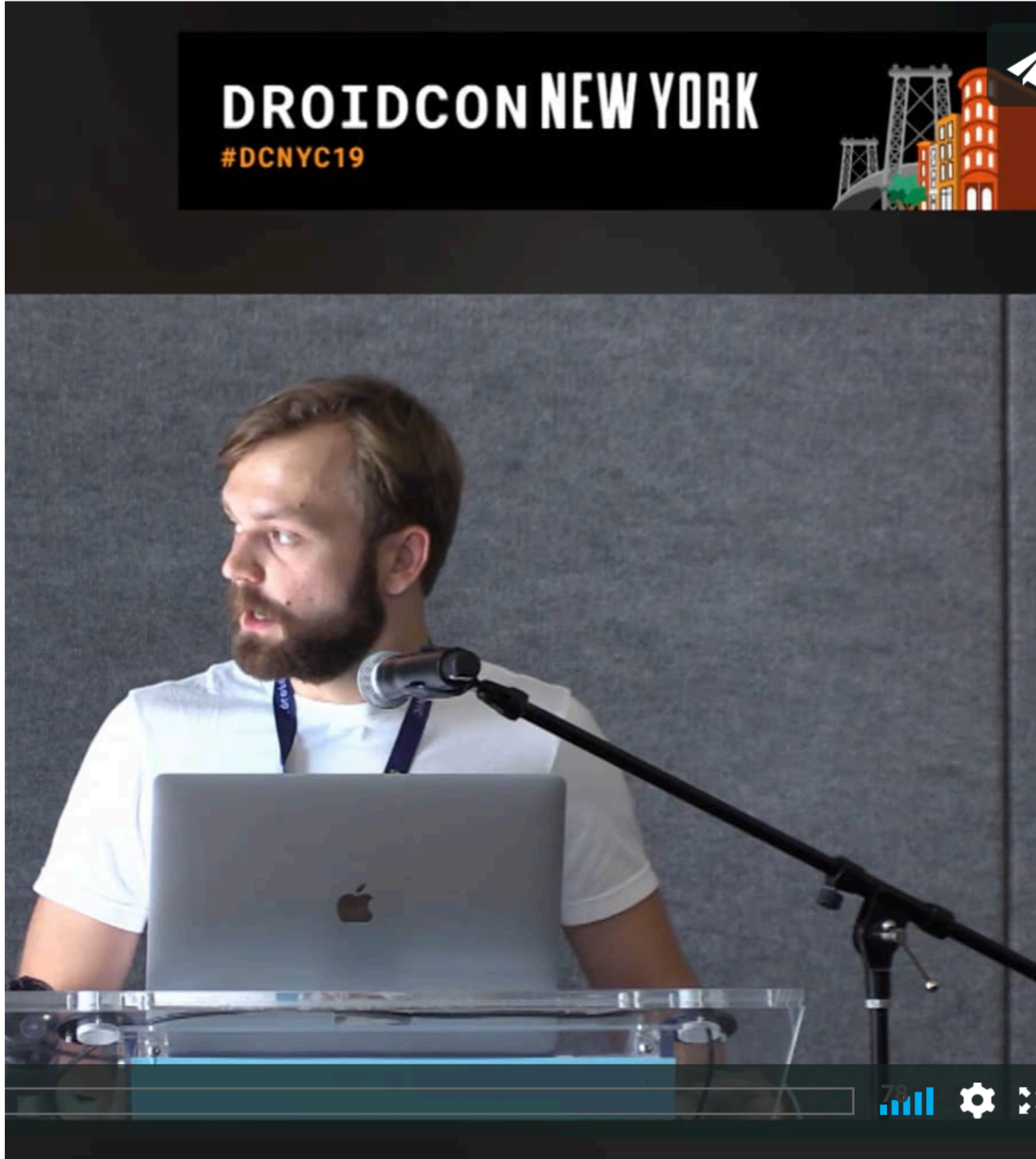
- Takes 1 minute to configure 1300 modules

Gradle

- Takes 1 minute to configure 1300 modules
- Due to IO and unlimited immutability

Bazel

See the talk of Artem Zinnatullin[1]



[1] https://www.droidcon.com/media-detail?video=362742329

Your CI/CD pipeline should support it all!

Approaches

Approaches

Approaches

- Install Jenkins/TeamCity/Whatever else

Approaches

- Install Jenkins/TeamCity/Whatever else
- Spawn a Jenkins VM/Container in a Cloud

Approaches

- Install Jenkins/TeamCity/Whatever else
- Spawn a Jenkins VM/Container in a Cloud
- Use SaaS

Local Jenkins

Local Jenkins

- Free

Local Jenkins

- Free
- Great flexibility

Local Jenkins

- Free
- Great flexibility
- Agents system

Local Jenkins

- Free
- Great flexibility
- Agents system
- Decent plugin system

Local Jenkins

- Free
- Great flexibility
- Agents system
- Decent plugin system
- For iOS: just install an agent on a Mac

Local Jenkins

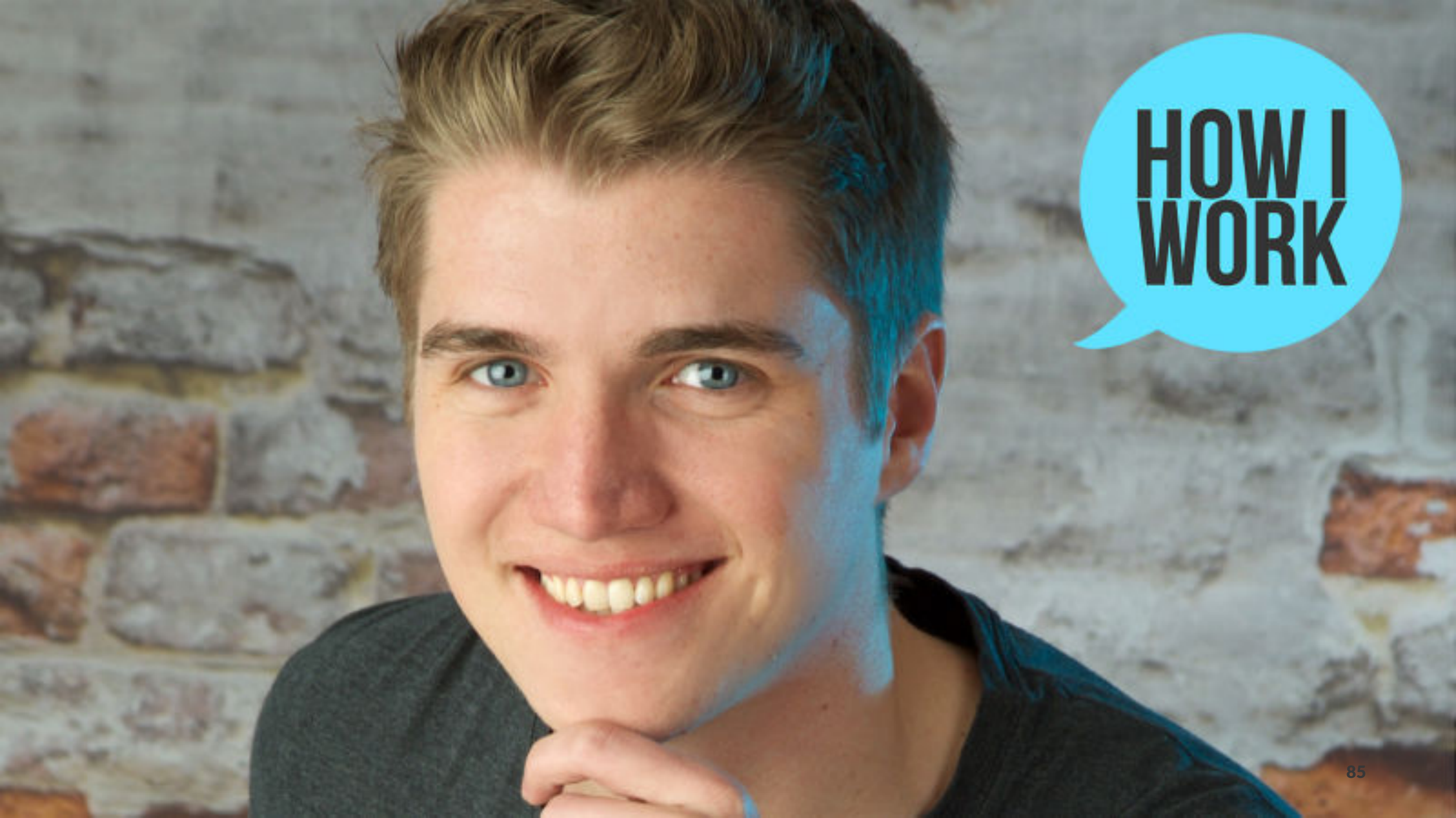
- Free
- Great flexibility
- Agents system
- Decent plugin system
- For iOS: just install an agent on a Mac
- But no containerization out-of-the-box

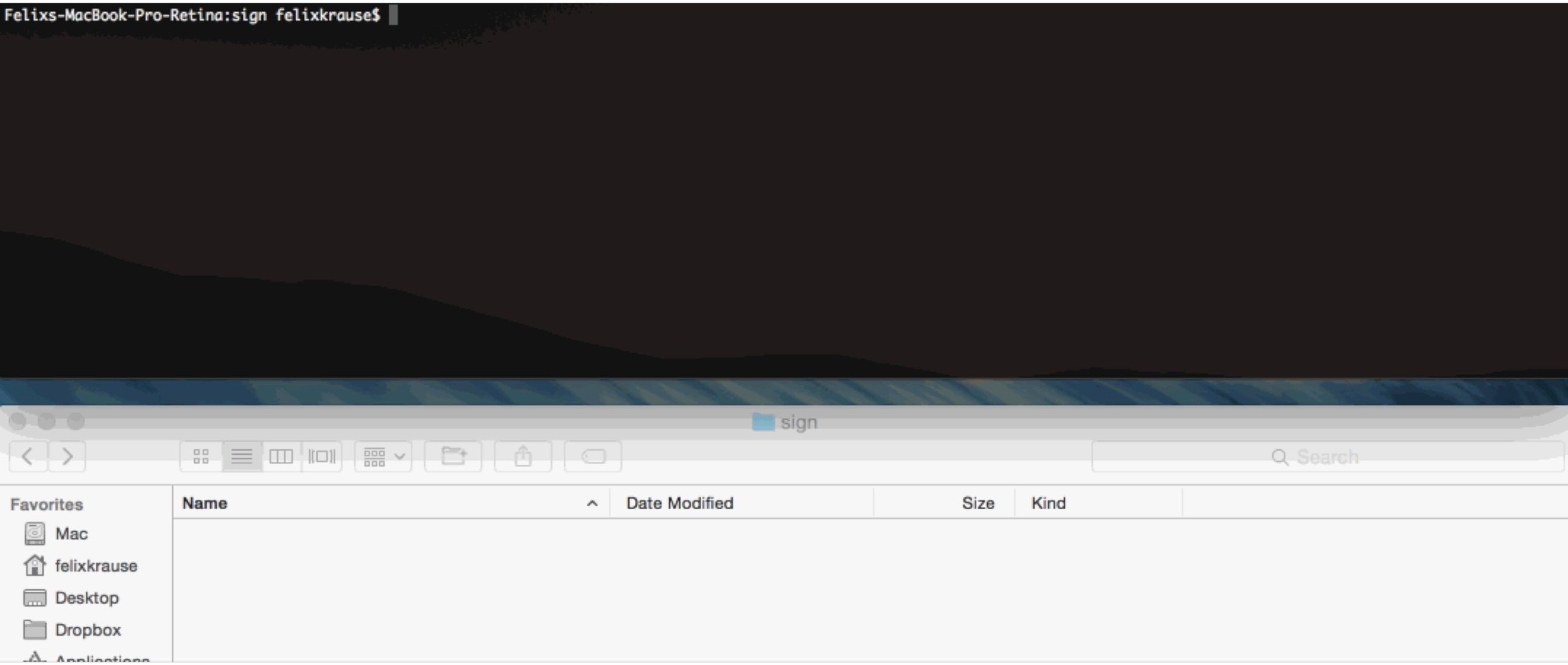
Local Jenkins

- Free
- Great flexibility
- Agents system
- Decent plugin system
- For iOS: just install an agent on a Mac
- But no containerization out-of-the-box
- All support burden is on your shoulders

It should be managed


fastlane


HOW I
WORK


Felixs-MacBook-Pro-Retina:sign felixkrause$
sign
Search
Favorites
Mac
felixkrause
Desktop
Dropbox
Name
Date Modified
Size
Kind

Pros

✨ More than 400 integrations

📖 100% open source under the MIT license

⚒️ Runs on your machine, it's your app and your data

🖥️ Supports iOS, Mac, and Android apps

🔧 Extendable

When

When

- For education purposes and student projects

When

- For education purposes and student projects
- For companies which already use Jenkins

When

- For education purposes and student projects
- For companies which already use Jenkins
- For security paranoids(debatable)

Jenkins in Cloud

Jenkins in Cloud

- Solves the containerization issue

Jenkins in Cloud

- Solves the containerization issue
- Support burden is partially decreased

Jenkins in Cloud

- Solves the containerization issue
- Support burden is partially decreased
- Unclear how to solve Mac issue

3rd party services

3rd party services

3rd party services

- GitLab CI

3rd party services

- GitLab CI
- Circle CI

3rd party services

- GitLab CI
- Circle CI
- Nevercode

3rd party services

- GitLab CI
- Circle CI
- Nevercode
- App Center

3rd party services

- GitLab CI
- Circle CI
- Nevercode
- App Center
- Bitrise

GitLab CI/Circle CI

GitLab CI/Circle CI

- Very basic support(mac machines, xcode, gradle)

GitLab CI/Circle CI

- Very basic support(mac machines, xcode, gradle)
- Integration with the parent tool

GitLab CI/Circle CI

- Very basic support(mac machines, xcode, gradle)
- Integration with the parent tool
- Yaml editor as an interface

GitLab CI/Circle CI

- Very basic support(mac machines, xcode, gradle)
- Integration with the parent tool
- Yaml editor as an interface
- Almost no mobile specific involved

App Center

App Center - Azure DevOps

App Center - Azure DevOps

- Part of the integrated environment(former TFS)

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)
- Configuration as Code ✅

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅
- Cloud based ✅

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅
- Cloud based ✅
- Allows for Machine Pools(which solves Mac issue)

App Center - Azure DevOps

- Part of the integrated environment(former TFS)
- Distribution destinations - GP, TestFlight, Internal
- Bitbucket, Github, VSTS, GitLab(!)
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅
- Cloud based ✅
- Allows for Machine Pools(which solves Mac issue)
- Webhooks

App Center - Azure DevOps

App Center - Azure DevOps

- Support for ad-hoc git servers ❌

App Center - Azure DevOps

- Support for ad-hoc git servers ❌
- SonarQube Support - ❌

App Center - Azure DevOps

- Support for ad-hoc git servers ❌
- SonarQube Support - ❌
- Local debug - ❌

App Center - When

App Center - When

- You already have Azure DevOps/Azure subscription

App Center - When

- You already have Azure DevOps/Azure subscription
- You're hosted in Bitbucket/Github

App Center - When

- You already have Azure DevOps/Azure subscription
- You're hosted in Bitbucket/Github
- You only want apps distribution solution


NEVERCODE

Nevercode

Nevercode

- Mobile Centric CI/CD

Nevercode

- Mobile Centric CI/CD
- Distribution destinations - App Store Connect, Google Play, HockeyApp, Crashlytics, TestFairy

Nevercode

- Mobile Centric CI/CD
- Distribution destinations - App Store Connect, Google Play, HockeyApp, Crashlytics, TestFairy
- Bitbucket, GitHub or GitLab

Nevercode

- Mobile Centric CI/CD
- Distribution destinations - App Store Connect, Google Play, HockeyApp, Crashlytics, TestFairy
- Bitbucket, GitHub or GitLab
- Cloud based ✅

Nevercode

- Mobile Centric CI/CD
- Distribution destinations - App Store Connect, Google Play, HockeyApp, Crashlytics, TestFairy
- Bitbucket, GitHub or GitLab
- Cloud based ✅
- Mobile Apps as first class citizens ✅

Nevercode

- Mobile Centric CI/CD
- Distribution destinations - App Store Connect, Google Play, HockeyApp, Crashlytics, TestFairy
- Bitbucket, GitHub or GitLab
- Cloud based ✅
- Mobile Apps as first class citizens ✅
- Webhooks ✅

Nevercode

Nevercode

- Configuration as Code ❌

Nevercode

- Configuration as Code ❌
- Pricy ❌

Nevercode - When

Nevercode - When

- Flutter apps

Bitrise

Bitrise

- Mobile Centric CI/CD

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever
- Bitbucket, Github, Custom

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever
- Bitbucket, Github, Custom
- Configuration as Code ✅

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever
- Bitbucket, Github, Custom
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever
- Bitbucket, Github, Custom
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅
- Cloud based ✅

Bitrise

- Mobile Centric CI/CD
- Distribution destinations - GP, TestFlight, TestFairy, App Center, Whatever
- Bitbucket, Github, Custom
- Configuration as Code ✅
- Mobile Apps as first class citizens ✅
- Cloud based ✅
- Webhooks

Bitrise

Bitrise

- Support for ad-hoc git servers ✅

Bitrise

- Support for ad-hoc git servers ✅
- Support CI job triggers on push to Any branch ✅

Bitrise

- Support for ad-hoc git servers ✅
- Support CI job triggers on push to Any branch ✅
- SonarQube Support with a community extension ✅

Bitrise

- Support for ad-hoc git servers ✅
- Support CI job triggers on push to Any branch ✅
- SonarQube Support with a community extension ✅
- Local debug - ✅

Bitrise

- Support for ad-hoc git servers ✅
- Support CI job triggers on push to Any branch ✅
- SonarQube Support with a community extension ✅
- Local debug - ✅
- Open source

Bitrise

Continuous Integration and Continuous Delivery for mobile apps

Hungary https://www.bitrise.io letsconnect@bitrise.io

Report abu

Repositories 124 People 4

Pinned repositories

bitrise

Bitrise runner CLI - run your automations on your Mac or Linux machine -

Go ★ 421 79

bitrise.io

Bitrise.io public issues

★ 56 19

bitrise-steplib

New Bitrise StepLib

Go ★ 66 131

devcenter

CSS ★ 118 148

build.issues

Issue / bug tracker for build related issues

★ 3 3

bitrise-blog

HTML ★ 2 3

Bitrise

Bitrise

- Rather slow ❌

Bitrise

- Rather slow ❌
- No Flutter support(yet) ❌

Bitrise

- Rather slow ❌
- No Flutter support(yet) ❌
- Flutter support(already) ✅

Services Comparison

App Center	Nevercode	Bitrise
Simplicity ✅	Flutter ✅	Flexible ✅
Device Cloud ✅	Build cache ✅	Build cache ✅
Crash Reporting ✅	No Xamarin ❌	Different inf. stacks ✅
Difficult customization ❌	No conf as service ❌	Open Source ✅
	Funny jokes	Slow ❌

DevOps Practices

- Secured process ✅
- Continuous integration ✅
- Continuous delivery ✅
- Frequent releases(Canary/BG deployments) ✅
- Automated testing ✅
- Monitoring ✅
- Automated rollback ❌

Summary

Summary

- Mobile is a serious business requiring automation

Summary

- Mobile is a serious business requiring automation
- There are some caveats and issues which are overcomeable

Summary

- Mobile is a serious business requiring automation
- There are some caveats and issues which are overcomeable
- Except rollbacks


epam
epam
epam

Links

Links

- Twitter, telegram: @vvsevolodovich

Links

- Twitter, telegram: @vvsevolodovich
- Talks: http://speakerdeck.com/vlivanov

Links

- Twitter, telegram: @vvsevolodovich
- Talks: http://speakerdeck.com/vlivanov
- Email: Vladimir_Ivanov4@epam.com

Links

- Twitter, telegram: @vvsevolodovich
- Talks: http://speakerdeck.com/vlivanov
- Email: Vladimir_Ivanov4@epam.com
- https://mobiusconf.com/