



How to ensure application quality on mobile devices?

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TAPOST 2016



WHO WE ARE

- One of the TOP10 social networks worldwide*
- Web (desktop & mobile)
- iOS and Android applications
- Latvia-based development

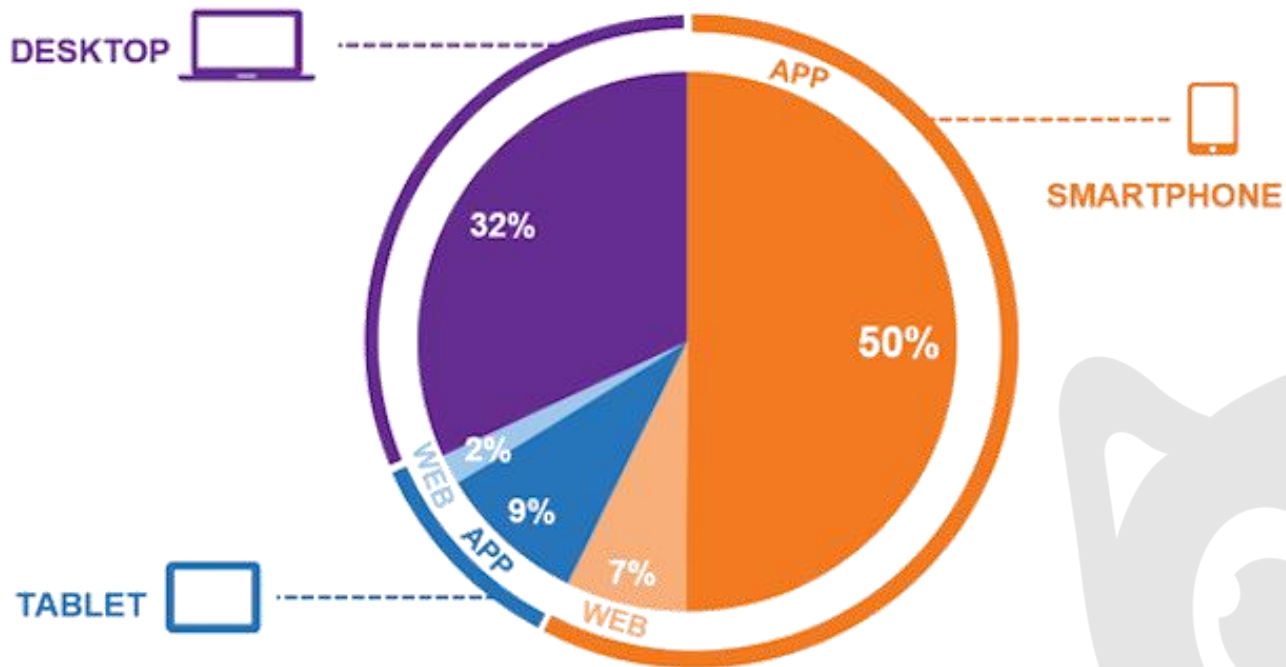
* - according to AppAnnie



WHY MOBILE APPS

Share of Total Digital Time Spent: July 2016

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



WHAT IS THE PROBLEM

Same quality with different
devices



HOW WE TEST

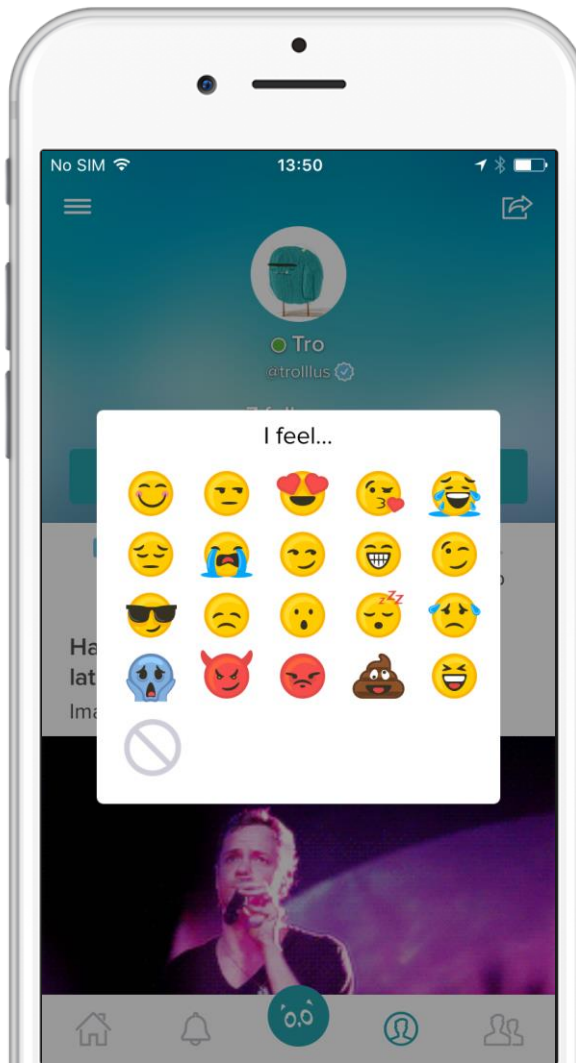
Automated and manual tests, that cover all functionality on all platforms



```
SettingsPage.openAccountTab()  
SettingsAccountTab.viewBlockedList()  
assert BlacklistPage.usersAreInBlacklist()  
}  
  
When(~/^(.*) toggles (.) notification  
WebPage.switchTo(userAlias)  
InternalWebPage.openSettings()  
SettingsPage.openNotificationsTab()  
  
SettingsNotificationTab.toggleNotifications()  
SettingsNotificationTab.saveSettings()  
}  
  
Then(~/^(.*) should have notification  
💡 WebPage.switchTo(userAlias)  
InternalWebPage.openSettings()  
SettingsPage.openNotificationsTab()  
def notificationSettingIsOn = SettingsPage.notificationSettingIsOn()  
assert notificationSettingIsOn() == true  
}  
  
When(~/^(.*) toggles (.) options$/)  
WebPage.switchTo(userAlias)  
InternalWebPage.openSettings()  
SettingsPage.toggleProfileOptions()  
SettingsPage.saveSettings()  
}  
  
Then(~/^(.*) status on Profile is (.)  
WebPage.switchTo(userAlias)  
def userWebStatus = ProfilePage.userWebStatus()  
assert UserWebStatus.valueOf(status) == userWebStatus()  
}
```

iOS APPLICATION

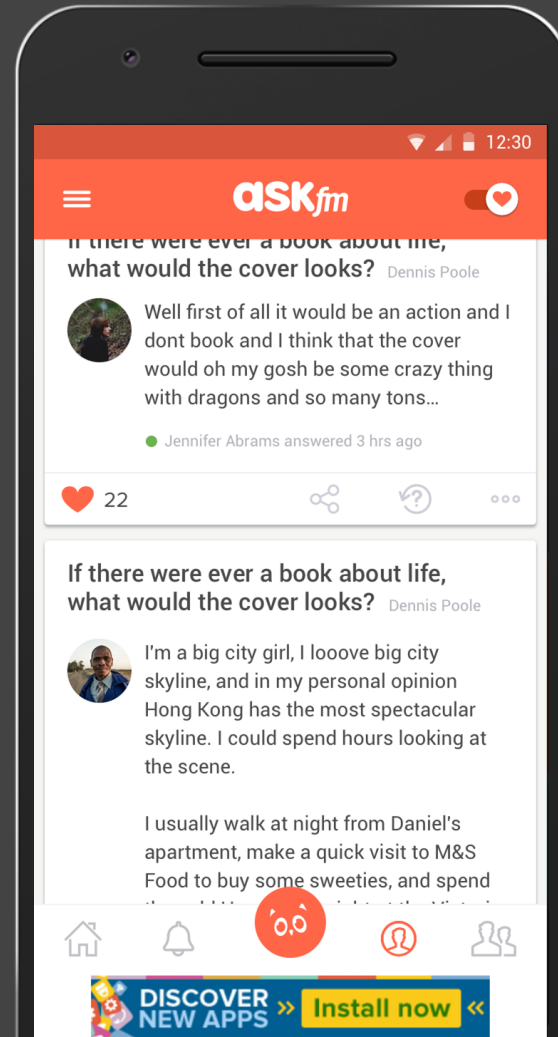
- Limited amount of devices – 13 options (iPhones and iPods)
- Two major iOS versions – 9.x and 10.x
- Mostly, bugs don't depend on device

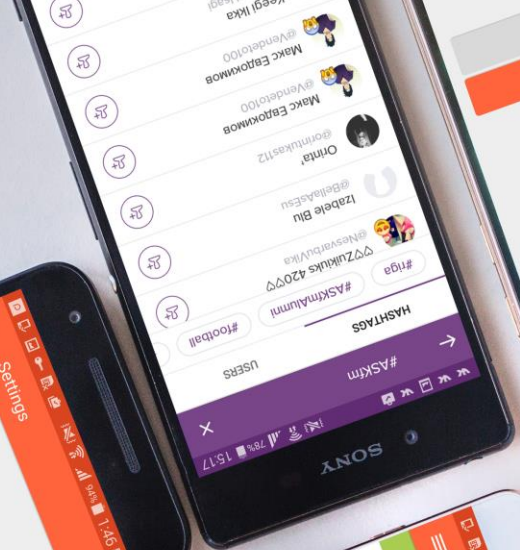
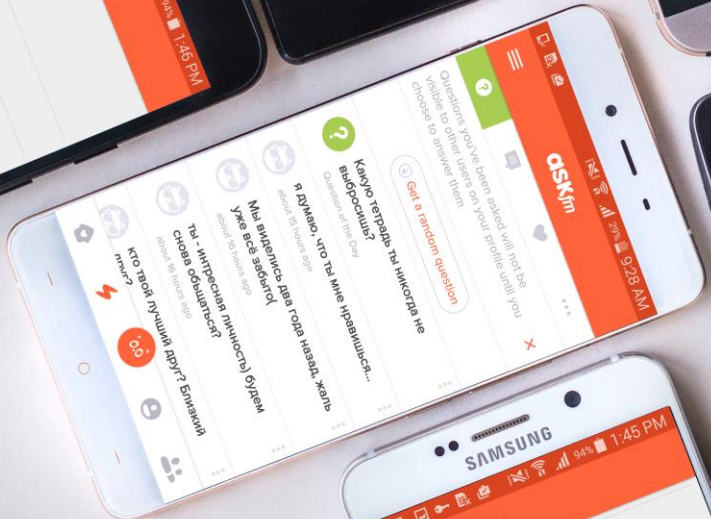
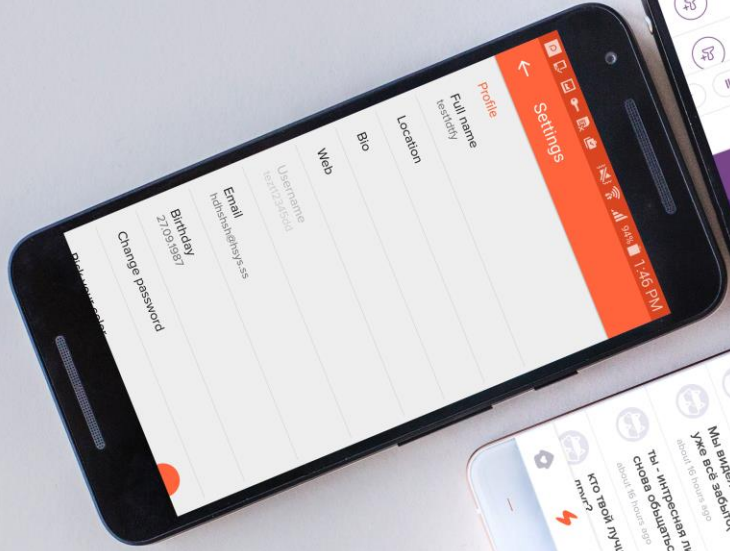


ANDROID APPLICATION

Situation differs

askfm












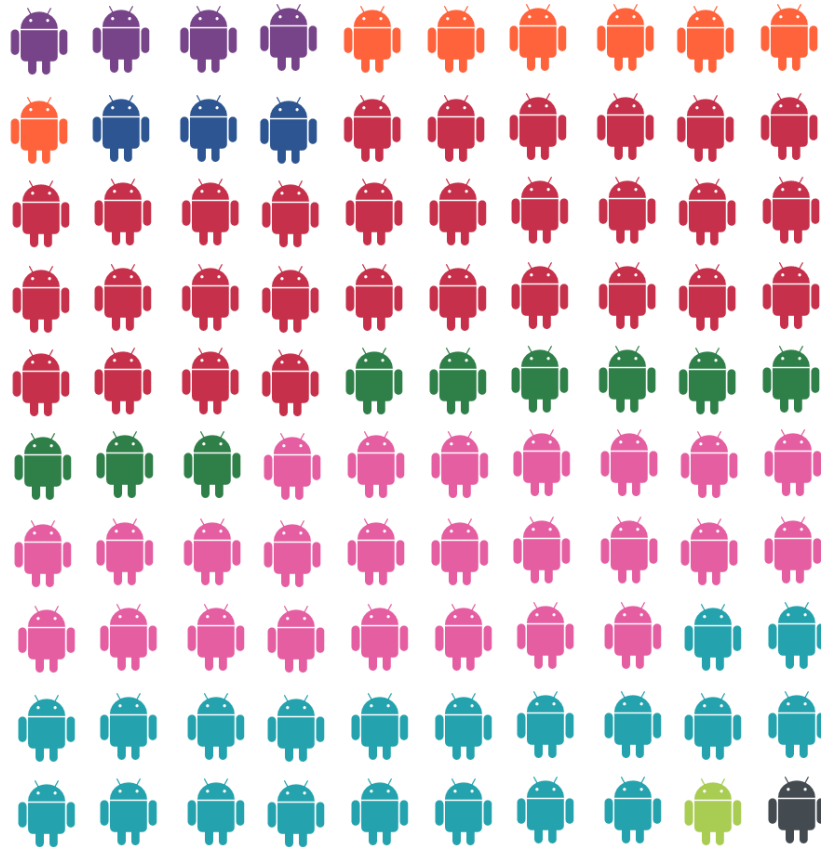













ANDROID VERSIONS AMONG USERS

More than 8 actively used versions.

-  - other versions
-  - 7.x.x
-  - 6.x.x
-  - 5.1.x
-  - 5.0.x
-  - 4.4.x
-  - 4.3.x
-  - 4.2.x
-  - 4.1.x



ANDROID vs iOS VERSIONS

-  - others
-  - 7.x.x
-  - 6.x.x
-  - 5.1.x
-  - 5.0.x
-  - 4.4.x
-  - 4.3.x
-  - 4.2.x
-  - 4.1.x



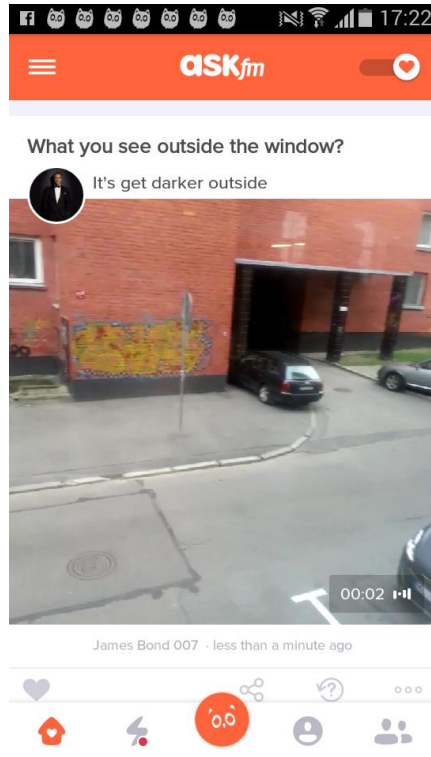
VS



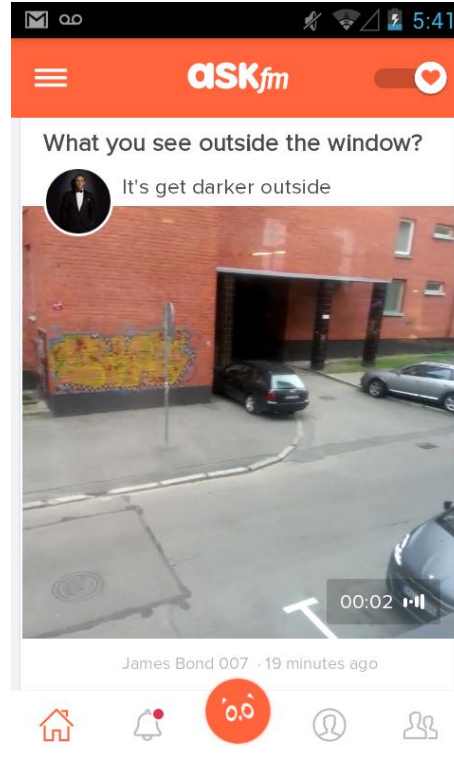
-  - 10.x
-  - 9.x

BUGS ARE UNEXPECTED

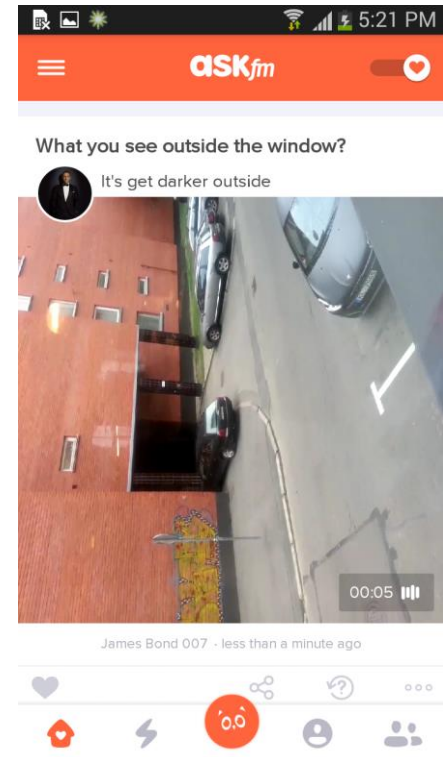
Samsung S4, Android 4.4.1



Nexus S, Android 4.1.2

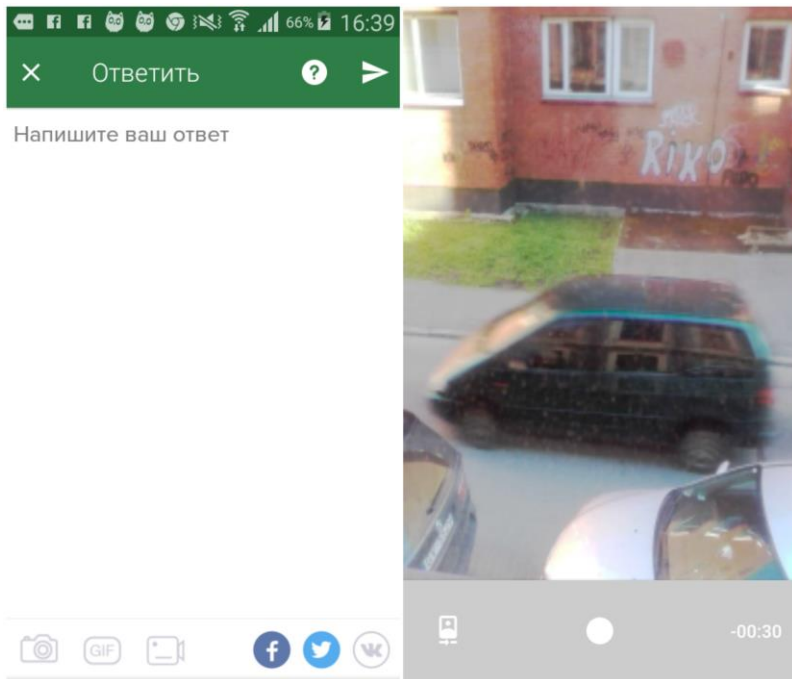


Samsung S3, Android 4.3

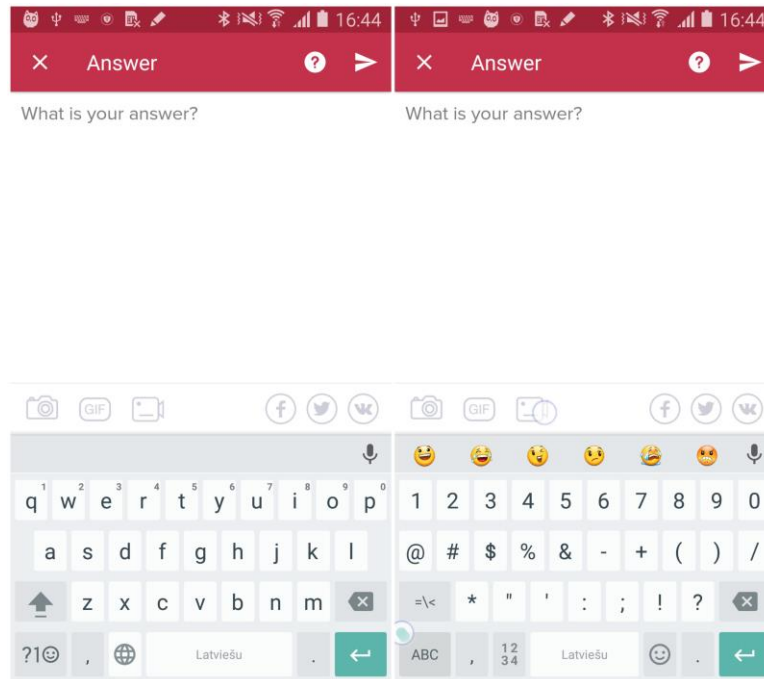


BUGS ARE UNEXPECTED

Samsung S5, Android 5.0.0



Samsung Note 3, Android 5.0.0

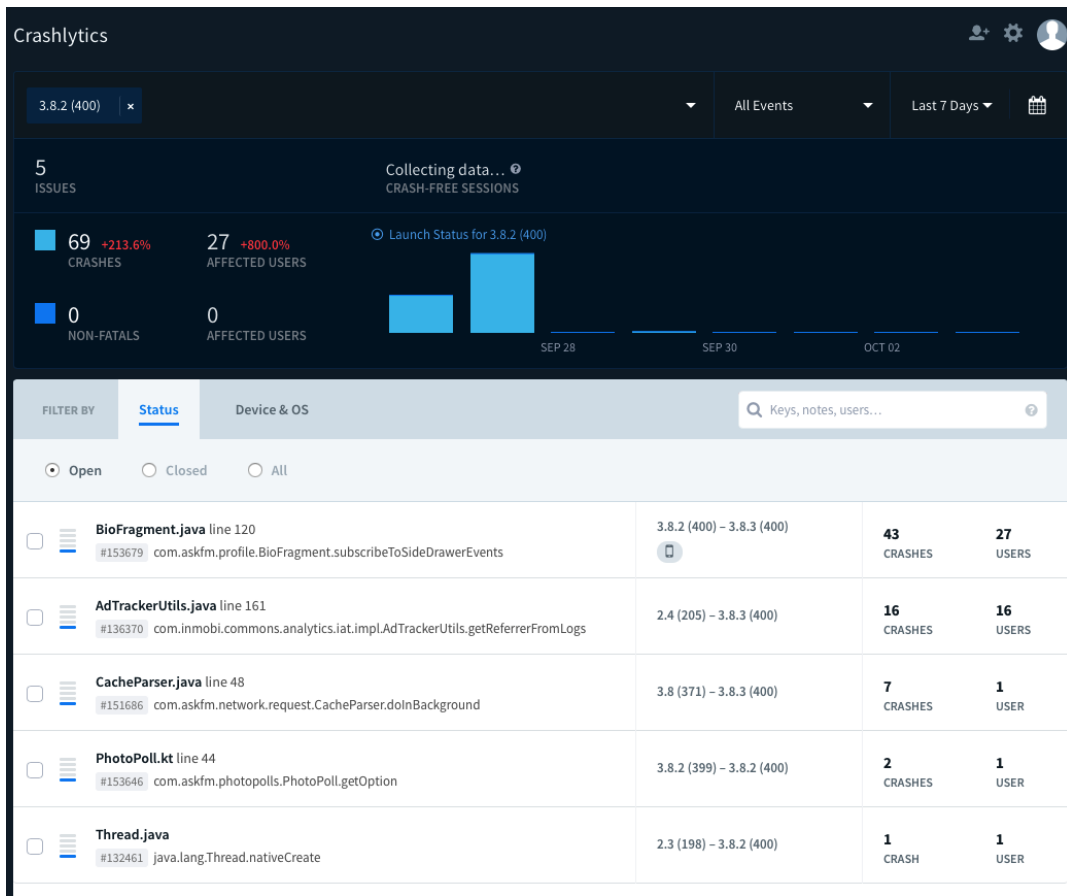


Let users test Your software



NEW VERSION RELEASE

- 5%, 20%, 100%
- Random users and devices
- Follow up crashes



FOLLOW USERS COMMENTS

- User comments in Google play or AppStore
- User mails to Support



Cannot enter

Whenever i open the app,it just freezes and does not load.Please fix this.Thank you

by [redacted] 14.09.2016 **EN** via the Google Play



Keeps refusing to open

It just shows up with a white screen whenever I press the app

by [redacted] 13.09.2016 **EN** via the Google Play



Its not opening up

When I tap on the app it opens and the screen stays white. It'd be great if you guys could fix that

by [redacted] 13.09.2016 **EN** via the Google Play

CONCLUSION

FRAGMENTATION

Situation differs for iOS and Android /
Devices count / OS versions

RELEASE GRADUALLY

5%, 20%, 100%

COMMENTS

Follow user comments in Google Play
or AppStore / Emails to Support

Questions?
Comments?

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