

Análise de READMEs

Autores

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Motivação

"README files play an essential role in shaping a **developer's first impression** of a software repository and in **documenting the software** project that the repository hosts. Yet, **we lack a systematic understanding of the content of a typical README** file as well as tools that can process these files automatically."

Objetivos

1. Mapear o estado da arte da escrita de READMEs para bibliotecas/frameworks iOS escritos em Swift.
2. Prover um guia para desenvolvedores de boas práticas para escrita de READMEs.

Coleta de dados

- Top 100 repositórios escritos em Swift, com tag iOS (**GitHub API**)
- Filtro de bibliotecas e frameworks (**Manual**)
- 85 READMEs.md

Coleta de dados

HeroTransitions / Hero

★ 15.4k

Elegant transition library for iOS & tvOS

animation

custom-transitions

swift

ios

ios-animation

ios-transition

material-design

● Swift Updated 17 days ago

ReactiveX / RxSwift

★ 15k

Reactive Programming in Swift

swift

reactivex

reactive

ios

unidirectional

observer

functional

rxswift

● Swift Updated 7 hours ago

CosmicMind / Material

★ 10.5k

A UI/UX framework for creating beautiful applications.

material

design

material-design

animation

graphics

ios

ui

ux

● Swift Updated 10 days ago 4 issues need help

Cosmo/TinyConsole

● Swift

★ 1.8k

🚦 A *tiny log console* to display information while using your iOS app. Written in Swift 3.

console

ios

events

helper

log

tool

MIT license Updated 17 days ago

Coleta de perguntas

- 10 desenvolvedores iOS consultados
- Quais informações/perguntas seriam de interesse?
- 44 respostas

Categorização das perguntas

1. Contributing
2. Testing
3. Status (Build/CI)
4. Package manager
5. Example project
6. Licensing/Ownership
7. Purpose
8. Versioning/Compatibility
9. Installation
10. README file structure
11. Formatting
12. Usage
13. Dependency

Selecting analysis

We selected the questions that seemed most relevant/feasible for our initial analysis, they were:

README file structure

27. What are the most common section titles? 

41. Size of the README files. 

- Does the order of the sections follow a common order?


Package management


28. What are the most adopted package management tools (Cocoapods, Catharge, Swift Package Manager, direct installation?) 

Contributing:

10. Is there a contribution guide? 

Licensing/Ownership

11. What license does it use? 

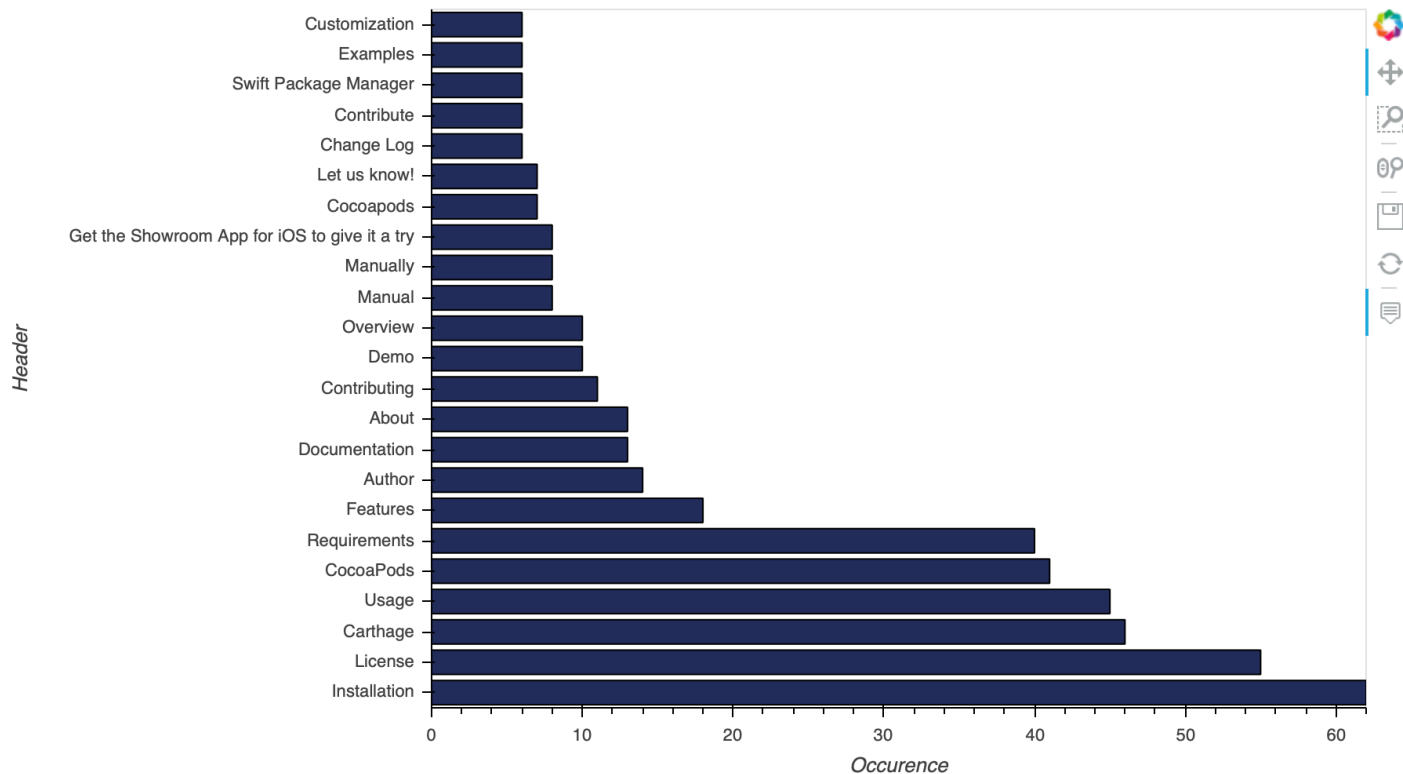
- Do maintainers have more then one popular repository? 

Status

- Is the building status present? ✓
 - Is it passing? ✓

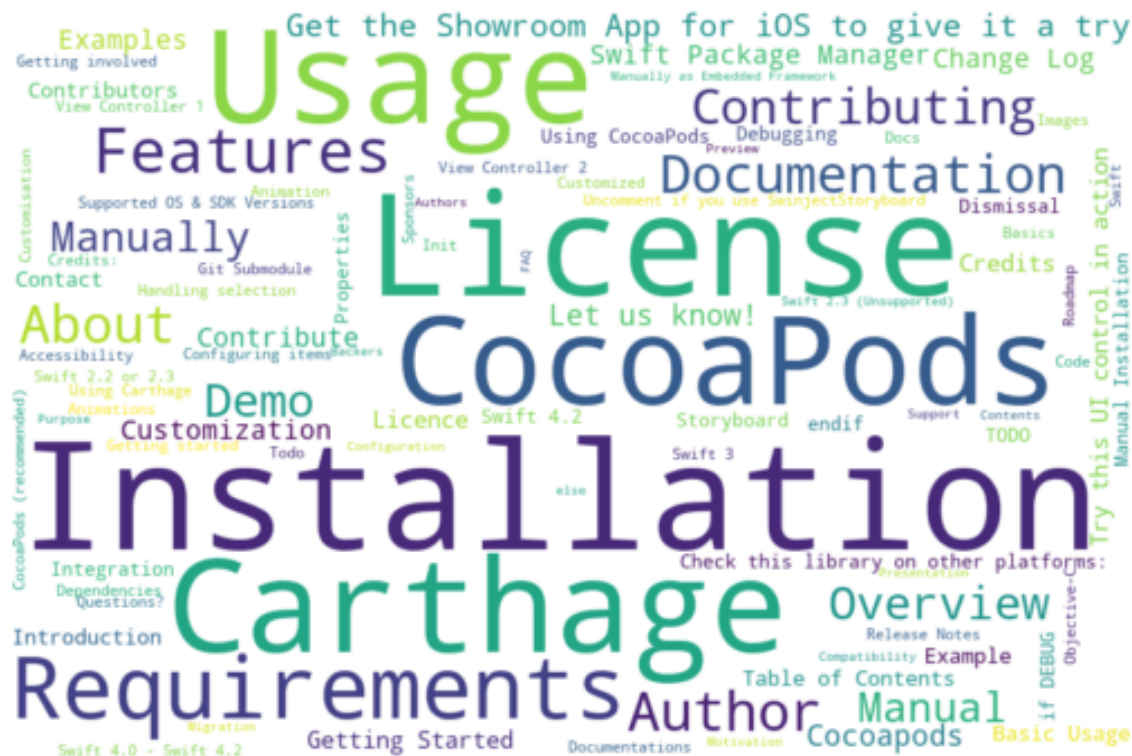
README file structure

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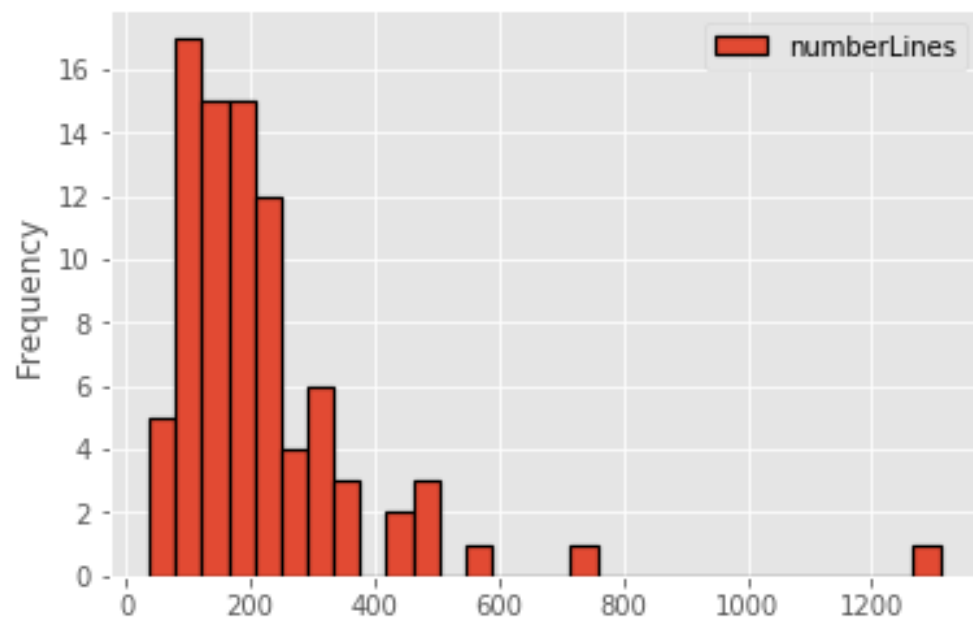
README file structure

27. What are the most common section titles? 



41. Size of the README files. ✓

Number of lines



numberLines	
count	85.000000
mean	219.741176
std	171.922404
min	38.000000
25%	122.000000
50%	178.000000
75%	249.000000
max	1309.000000

	file	numLines
Largest	Eureka.md	1309
Smallest	ClassicKit.md	38

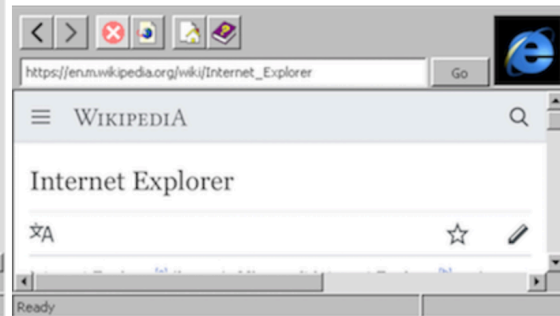
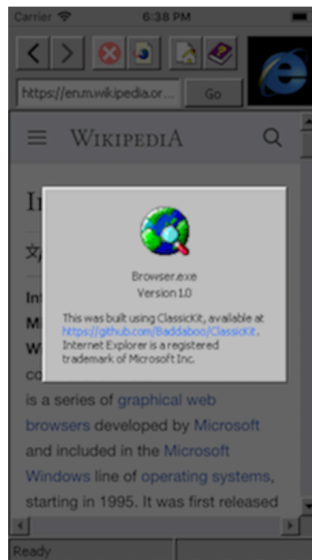
41. Size of the README files. ✓

Number of lines



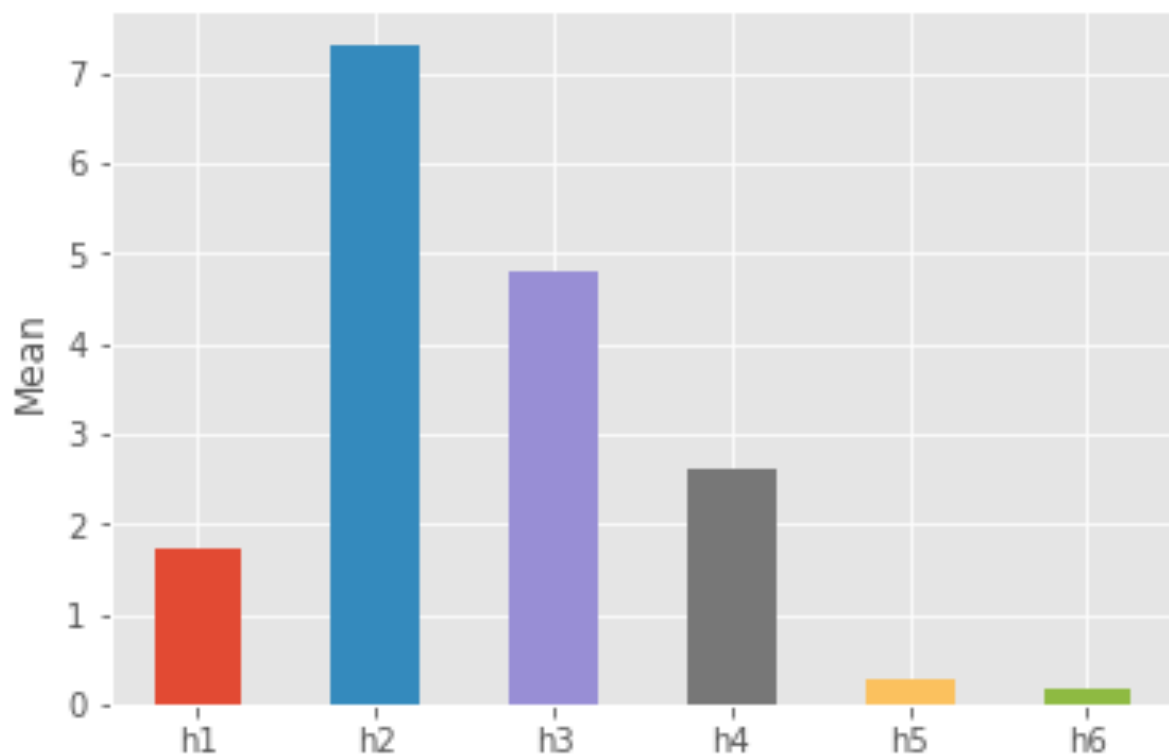
Classickit

A collection of classic-style UI components for UIKit, influenced by Windows 95



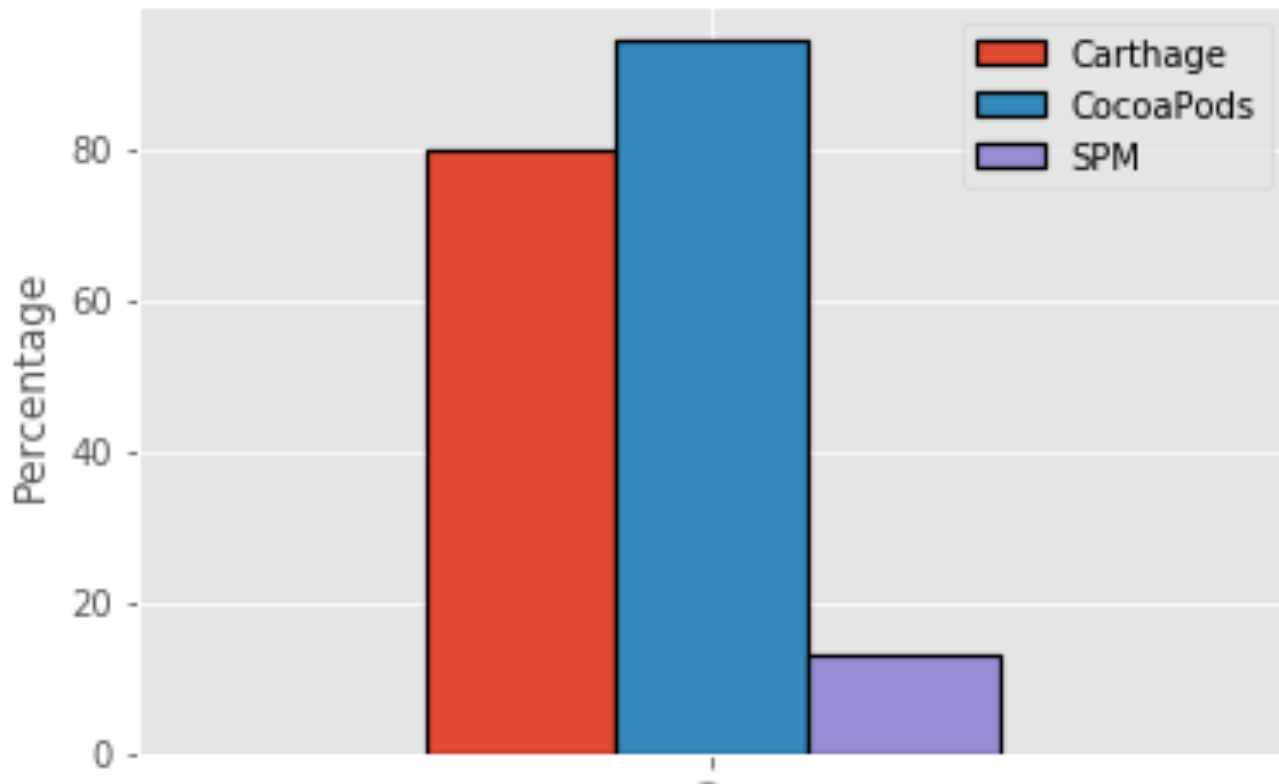
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Number of sections



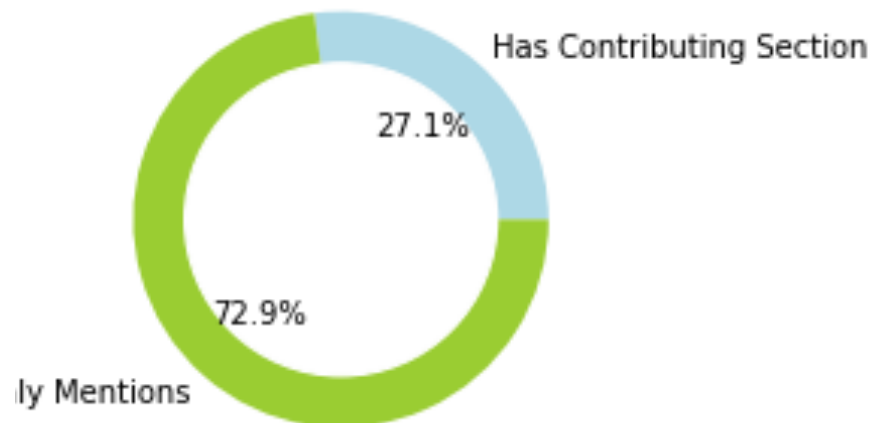
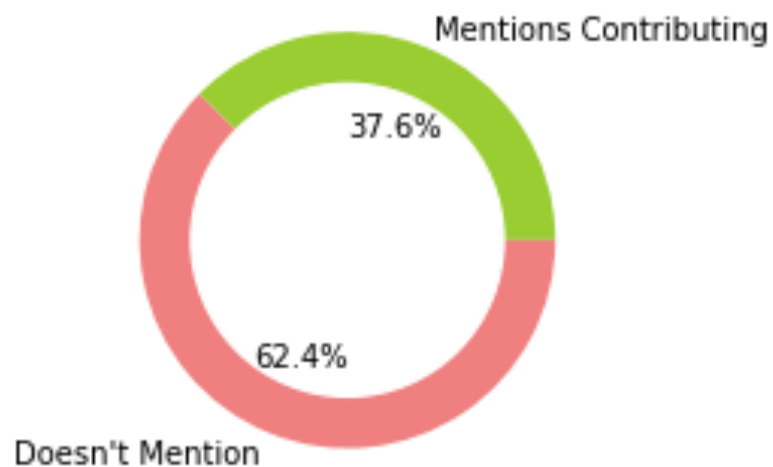
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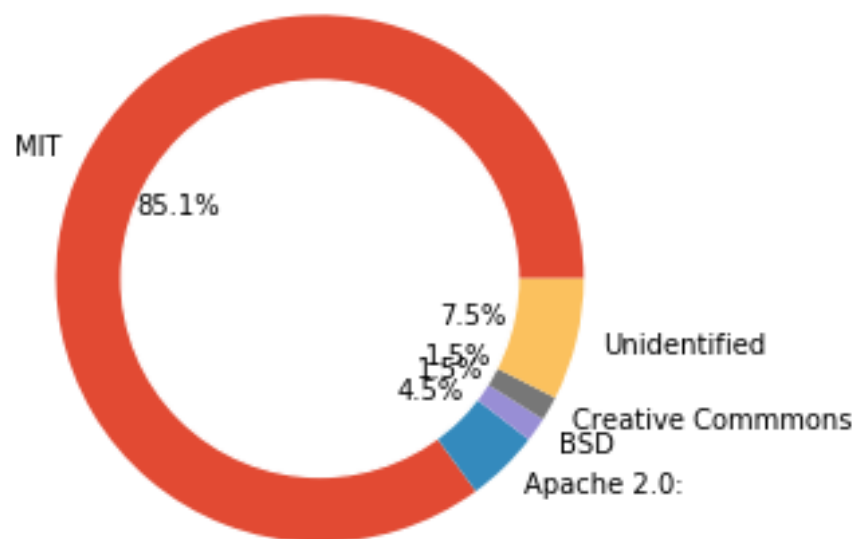


License/Ownership

11. What license does it use?

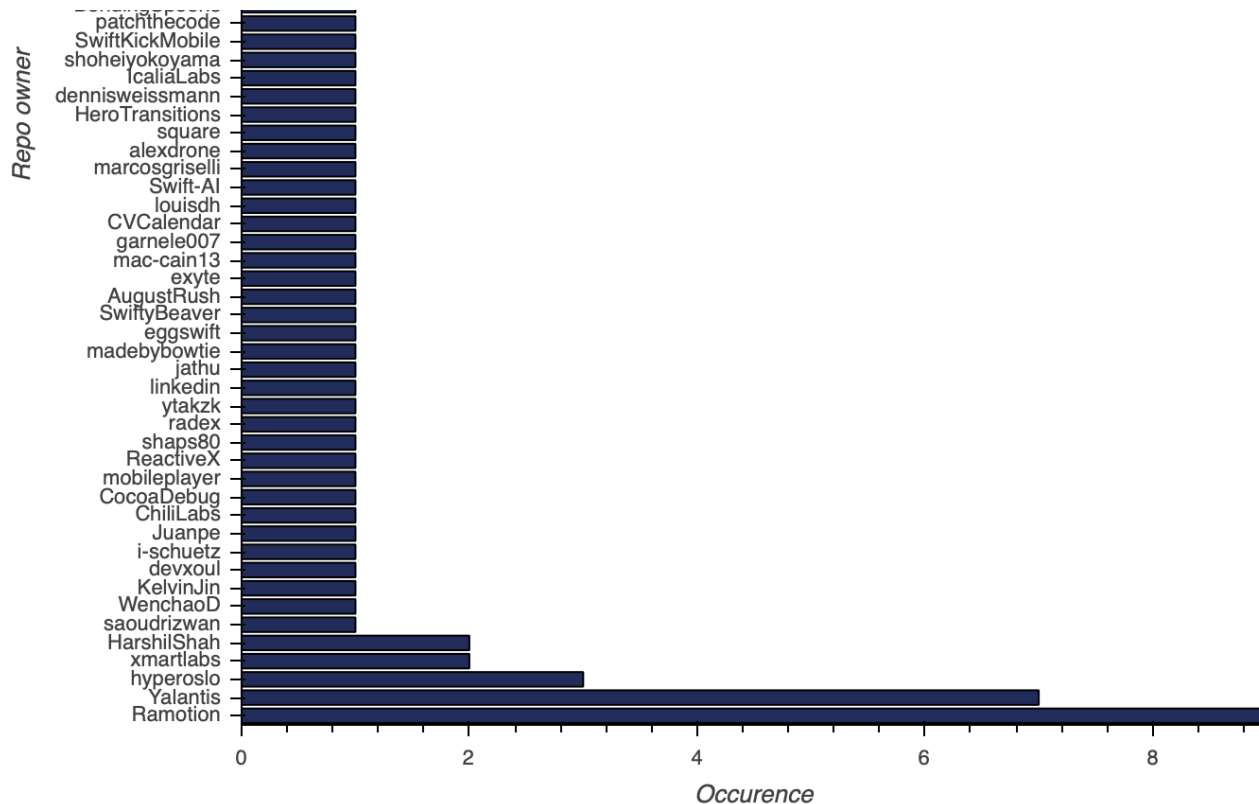
[Popular open-source licenses list](#)

MIT: 57
Apache 2.0: 3
BSD: 1
Creative Commons: 1
Total Mentions: 67



License/Ownership

- Do maintainers have more then one popular repository? 



Status

- Is the building status present? ✓

- Is it passing?

build passing	build passing	build passing	build error	
build passing	build passing	build passing	build passing	
build failing	build passing	build passing	build passing	
build failing	build passing	build passing	build passing	
build passing	build passing	build passing	build passing	
build passing	build passing	build passing	build failing	
build unknown	build passing	build passing	build passing	
build passing	build failing	build passing	build passing	
build passing	build failing	build passing	build passing	build failing
build passing	build passing	build passing	build failing	build failing

49.41% of the repositories present a travis build status

Trabalhos futuros

1. Desenvolver mais análises, e de forma mais profunda.
2. Entrevistar mais desenvolvedores.
3. Utilizar ferramentas de análise de texto para categorização do conteúdo.
4. Desenvolver ferramenta e disponibilizar para desenvolvedores
5. Continuar pesquisa **(TG)**

Obrigado

Repo

- <https://github.com/if1015-datascience-ufpe/2018-2-projeto-bubads>

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