

Metrics Report #1




Frontend Complexity

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Cyclomatic Complexity






/

Cyclomatic Complexity 302 

 build	2
 public	1
 src	299

3 of 3 shown




/src

 js	267
 App.js	1
 App.test.js	1
 index.js	0
 serviceWorker.js	30

/src/js

 components/header	32
 popups	43
 toolbox	101
 views	68
 index.js	22
 rootReducer.js	1

/src/js/toolbox

 components	101
 constants	0
 index.js	0

/src/js/toolbox/components

📁 api	11
📁 button	15
📁 explorer	45
📁 file_input	10
📁 icon	5
📁 options_button	8
📁 spinner	7

Cognitive Complexity

/src

📁 js	88
📄 App.js	0
📄 App.test.js	0
📄 index.js	0
📄 serviceWorker.js	25

/src/js

📁 components/header	12
📁 popups	12
📁 toolbox	40
📁 views	17
📄 index.js	6
📄 rootReducer.js	1

/src/js/toolbox/components

📁 api	1
📁 button	8
📁 explorer	18
📁 file_input	5
📁 icon	0
📁 options_button	4
📁 spinner	4

Analysis & Observations

I read a StackOverflow article that said that cognitive complexity for any single method shouldn't be over 15. After analyzing our frontend code base, I'd say that our project is in pretty good shape. The highest levels of complexity reside within our "Toolbox" directory where we keep all of the reusable components. The highest number of cognitive complexity for a single class in our code base is 18, which is within explorer.js. This file is responsible for displaying the entire visualizer, so the fact that it has such a low cognitive complexity is pretty good in my books.

Our cyclomatic complexity is also within a reasonable number. The whole codebase has a total complexity score of 299 according to SonarQube. After scouring the web, there aren't any solid metrics for what defines a "good" cyclomatic score, but I think ours is entirely reasonable given the scope of our project and how large our codebase is. Overall, I'm happy with the results. I do, however, think that given a few more weeks of development, we'll probably see the numbers go up a bit.