Article version: GitHub.com

GitHub / Search on GitHub / Searching on GitHub / Searching code

# Searching code

You can search for code on GitHub and narrow the results using these code search qualifiers in any combination.

In this article

Considerations for code search

Search by the file contents or file path

Search within a user's or organization's repositories

Search by file location

Search by language

Search by file size

Search by filename

Search by file extension

Further reading

You can search globally across all of GitHub, or scope your search to a particular repository or organization. For more information, see "About searching on GitHub."

You can only search code using these code search qualifiers. Search qualifiers specifically for repositories, users, or commits, will not work when searching for code.

#### Tips:

- For a list of search syntaxes that you can add to any search qualifier to further improve your results, see "Understanding the search syntax".
- Use quotations around multi-word search terms. For example, if you want to search for issues with the label "In progress," you'd search for label: "in progress". Search is not case sensitive.

#### Considerations for code search

Due to the complexity of searching code, there are some restrictions on how searches are performed:

- You must be signed into a user account on GitHub to search for code across all public repositories.
- Code in forks is only searchable if the fork has more stars than the parent repository. Forks
  with fewer stars than the parent repository are not indexed for code search. To include forks
  with more stars than their parent in the search results, you will need to add fork:true or
  fork:only to your query. For more information, see "Searching in forks."
- Only the *default branch* is indexed for code search.
- Only files smaller than 384 KB are searchable.
- Only repositories with fewer than 500,000 files are searchable.
- Only repositories that have had activity or have been returned in search results in the last year are searchable.
- Except with filename searches, you must always include at least one search term when searching source code. For example, searching for language:javascript is not valid, while amazing language:javascript is.
- At most, search results can show two fragments from the same file, but there may be more results within the file.
- You can't use the following wildcard characters as part of your search query: . , : ; / \ ' " = \* ! ? # \$ & + ^ | ~ < > ( ) { } [ ] @ . The search will simply ignore these symbols.

#### Search by the file contents or file path

With the in qualifier you can restrict your search to the contents of the source code file, the file path, or both. When you omit this qualifier, only the file contents are searched.

Qualifier	Example	
in:file	octocat in:file matches code where "octocat" appears in the file contents.	
in:path	octocat in:path matches code where "octocat" appears in the file path.	
	octocat in:file,path matches code where "octocat" appears in the file contents or the file path.	

### Search within a user's or organization's repositories

To search the code in all repositories owned by a certain user or organization, you can use the user or org qualifier. To search the code in a specific repository, you can use the repoqualifier.

Qualifier	Example
user: <i>USERNAME</i>	user:defunkt extension:rb matches code from @defunkt that ends in .rb.
org: <i>ORGNAME</i>	org:github extension:js matches code from GitHub that ends in .js.
repo: <i>USERNAME/REPOSITORY</i>	repo:mozilla/shumway extension:as matches code from @mozilla's shumway project that ends in .as.

#### Search by file location

You can use the path qualifier to search for source code that appears at a specific location in a repository. Use path:/ to search for files that are located at the root level of a repository. Or specify a directory name or the path to a directory to search for files that are located within that directory or any of its subdirectories.

Qualifier	Example
path:/	octocat filename:readme path:/ matches readme files with the word "octocat" that are located at the root level of a repository.
path:DIRECTORY	<b>form path:cgi-bin language:perl</b> matches Perl files with the word "form" in a <i>cgi-bin</i> directory, or in any of its subdirectories.
path: <i>PATH/TO/DIRECTORY</i>	console path:app/public language:javascript matches JavaScript files with the word "console" in an app/public directory, or in any of its subdirectories (even if they reside in app/public/js/form-validators).

#### Search by language

You can search for code based on what language it's written in. The language qualifier can be the language name or alias. For a full list of supported languages with their names and aliases, see the github/linguist repository.

Qualifier	Example
language: <i>LANGUAGE</i>	element language:xml size:100 matches code with the word "element" that's marked as being XML and has exactly 100 bytes.
	display language:scss matches code with the word "display," that's marked as being SCSS.

Qualifier Example

**org:mozilla language:markdown** matches code from all @mozilla's repositories that's marked as Markdown.

#### Search by file size

You can use the size qualifier to search for source code based on the size of the file where the code exists. The size qualifier uses greater than, less than, and range qualifiers to filter results based on the byte size of the file in which the code is found.

Qualifier Example

function size:>10000 language:python matches code with the word "function," written in Python, in files that are larger than 10 KB.

#### Search by filename

The filename qualifier matches code files with a certain filename. You can also find a file in a repository using the file finder. For more information, see "Finding files on GitHub."

Qualifier	Example
filename:FILENAME	filename:linguist matches files named "linguist."
	filename:.vimrc commands matches .vimrc files with the word "commands."
	<b>filename:test_helper path:test language:ruby</b> matches Ruby files named test helper within the test directory.

### Search by file extension

The extension qualifier matches code files with a certain file extension.

Qualifier	Example
extension: EXTENSION	<b>form path:cgi-bin extension:pm</b> matches code with the word "form," under <i>cgi-bin</i> , with the <i>.pm</i> file extension.

icon size:>200000 extension:css matches files larger than 200 KB that end in .css and have the word "icon."

## **Further reading**

- "Sorting search results"
- "Searching in forks"
- "Navigating code on GitHub"
  - © 2021 GitHub, Inc. Terms Privacy Security Status Help Contact GitHub Pricing Developer API

    Training About