

Request Builder Help

Below is some frequently asked questions, as well as a tutorial on how to use the request builder of the application.

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FAQs

What is the username field for?

The username field (above) is used to specify the GitHub username of the owner of the repository that you wish to analyse. The username must be valid otherwise you will receive an error message such as:



Username is invalid

Your request has the following errors:


Username can't be empty or only a space



OK

What is the select repository for?

The select repository select box is to allow you to specify one of the public repositories owned by the user, specified by the input field, to analyse. The select box has three possible states:

Icon	Name	Description	Analysis Possible
	Repositories not fetched	The repositories for a given user have not been fetched. This is the default state when the page	No

		is loaded	
	Repositories fetching	The repositories for the given, valid, username are currently being fetched	No
	Repositories fetched	The repositories for the given, valid, username have been fetched and have been added to the repository select box	Yes

What is the addition threshold field for?

Addition Threshold

The addition threshold allows you to specify the number of additions per commit that you want to flag up when performing analysis. For example, specifying an addition threshold of 5000 would notify you of all commits with over 5000 additions logged against them.

The addition threshold can help you identify potential mass addition commits that may cause bias to the score of collaborators. These commits can be removed from the contribution analysis.

What is the deletion threshold field for?

Deletion Threshold

Similar to the addition threshold, the deletion threshold allows you to specify the number of additions per commit that you want to flag up when performing analysis. For example, specifying a deletion threshold of 5000 would notify you of all commits with over 5000 deletions logged against them.

The deletion threshold can help you identify potential mass deletion commits that may cause bias to the score of collaborators. These commits can be removed from the contribution analysis.

What is the commit threshold field for?

Commit Threshold

Similar to both the addition and deletion threshold, the commit threshold allows you to specify the minimum number of commits you expect a collaborator to have done over the analysis period. For example, specifying a commit threshold of 5 would highlight any collaborator who has committed less than this.

The commit threshold can help you identify collaborators who may be under-contributing or being marginalised by a group.

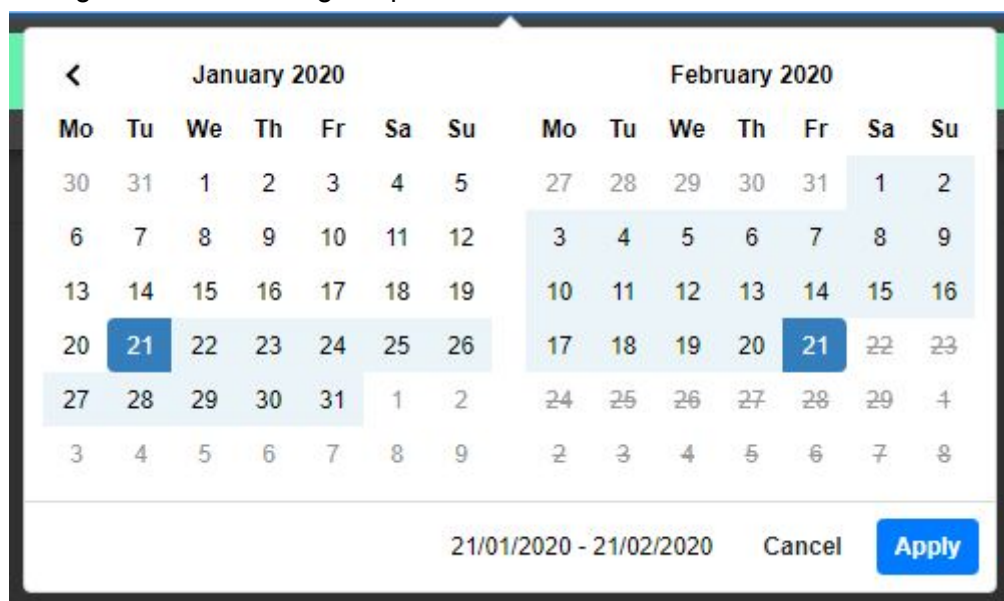
What is the date range for?

21/01/2020 - 21/02/2020

The date range allows you to analyse a select repository over a given period. The range defaults to the last month, which may result in no results, but can be changed for any range.

The date range can be used to ensure that only contributors during the range of a project are analysed or to analyse a smaller period of a large project.

The date range is selected using the picker:



What are the Github, Mass addition and Mass deletion commit tables for?

The Github, Mass addition and mass deletion commit tables are tables that contain commits that are performed by Github or exceed the addition and deletion thresholds.

Name	Contains	Example
Github commit table	Commits that have been	Manipulating .readme files,

	performed by Github	adding .gitignore files or merging between branches
Mass addition commit table	Commits that exceed the user-specified addition threshold	Creating a new project, adding libraries or commenting large sections
Mass deletion commit table	Commits that exceed the user-specified deletion threshold	Refactoring code

All of the above-mentioned tables can be used to identify and exclude commits that you think may cause bias to the contribution score of collaborators.

How do I remove commits from my contribution analysis?

To remove commits from contribution analysis, select the checkbox on the left-hand side of the commits that you want to exclude. Once they are checked, these commits will not be included in analysis. Examples:

Repository Bias ×

Below is a list of the commits that may cause bias to collaborator's contribution score. You can choose to remove these commits from the calculation.

GitHub Commits

<input checked="" type="checkbox"/>	Author	Message	Additions	Deletions
<input checked="" type="checkbox"/>	rtaggart16	Add .gitignore and .gitattributes.	324	0

Showing 1 to 1 of 1 rows

Mass Addition Commits

<input checked="" type="checkbox"/>	Author	Message	Additions	Deletions
<input checked="" type="checkbox"/>	rtaggart16	Add project files.	26386	0

Calculate Contribution
Close

I don't want to exclude commits. How can I do this?

Commits don't have to be disregarded before performing analysis. In order to ensure all commits are included in statistics, do not select any commits from the bias or initial commit tables and click proceed.

What is the initial commit analysis for?

Often projects built using frameworks such as ASP.NET or Maven have large amounts of boilerplate code that is included in the first few commits to a repository. As this code is not explicitly created by a collaborator, including this commit in analysis, may cause their score to be biased.

Furthermore, Github often adds commits to repositories when they are created, such as adding .gitignore files, which can also make contribution scores biased.

The application allows you analyse the first few commits of a repository to help you identify these commits and remove them from analysis if you wish. Some example framework initial commits are:

Framework	Commit
ASP.NET Core	Add project files.

An example of how to view and exclude initial commits is:

Potential Initial Commit Bias ×

Below is a table that displays the initial commits of the target repository. These commits may contribute to bias for a user's contribution score

<input type="checkbox"/>	Author	Message	Additions	Deletions
<input type="checkbox"/>	rtaggart16	Add .gitignore and .gitattributes.	324	0
<input type="checkbox"/>	rtaggart16	Add project files.	26386	0
<input type="checkbox"/>	rtaggart16	Added TestController with basic CRUD	93	0
<input type="checkbox"/>	rtaggart16	Created a ProductController with basic CRUD	93	0

Proceed Close

Tutorial

This tutorial will walk you through each step involved in submitting an analysis request. Each step will include detailed instructions as well as visual examples.

Step 1 - Enter the Github username of the owner of the repository you want to analyse

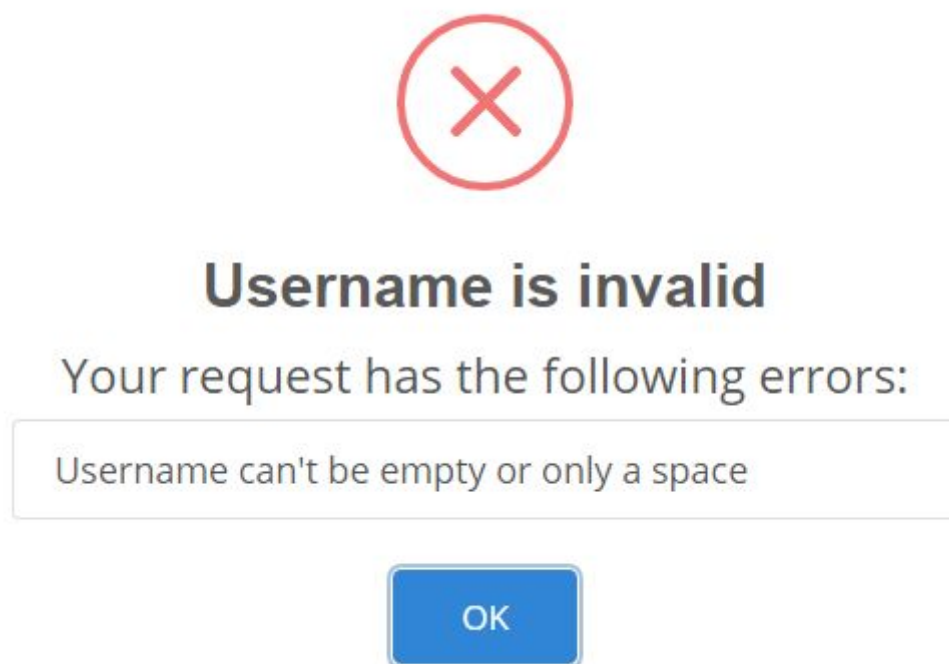
Part 1 - Enter the username

The only process for this step is to enter the desired username into the username field. The case of the username is not important i.e. RTAGGART16 has the same effect as using rtaggart16.

Once the username is entered, click or tab off of the input to start the repository fetch. Move onto stage 2.

Possible errors

If you do not fill in the username field correctly i.e. leave it blank you will receive the following error:



To fix this, reenter the username correctly.

Step 2 - Select the target repository

Part 1 - Select the repository from the select box

If the username you entered in Step 1 was valid, and the user had public repositories, a list of the user's repositories will be displayed. From this list, select the repository you wish to validate so that the value of the select box is updated such as:

A screenshot of a web interface showing a dropdown menu with the text 'Test-Repository' and a green checkmark to its right, indicating a successful selection.

Once the repository is selected, you are ready to move on to the next step.

Possible errors

Invalid username

The repository select box may not display any values if the username you inputted in step 1 was not a valid username. To check if the user is valid, navigate to [Github](#) and search for the username. If the user's account displayed, check the next possible issue. If the user's account is not displayed, the username you are entering is not valid. Ensure that you use the "All of Github" and "Users" option.

No public repositories

The application is only able to fetch public repositories for a user. If no repositories are available, it may be that the target repository is a private repository which means it can't currently be analysed. In order to still analyse the repository, the owner would have to make it public.

Recap

At this point in the tutorial, you should have entered a valid Github username and selected one of the user's public repositories from the list which may look something like the following:

A screenshot of the application interface showing a text input field with the username 'rtaggart16' and a dropdown menu with 'Test-Repository' selected, accompanied by a green checkmark.

Step 3 - Enter thresholds for additions, deletions and commits

Part 1 - Enter the addition threshold

The addition threshold allows you to flag up commits with additions over a certain value. In the addition threshold field, enter a valid integer value such as 5000. The threshold should be relative to the size of the target repository.

Possible errors

The addition threshold has to be a positive whole number. Any deviation from this will result in an error similar to the following:



Request data is invalid

Your request has the following errors:

Addition Threshold can't be less than 0

OK

Part 2 - Enter the deletion threshold

The deletion threshold allows you to flag up commits with deletions over a certain value. In the deletion threshold field, enter a valid integer value such as 5000. The threshold should be relative to the size of the target repository.

Possible errors

The deletion threshold has to be a positive whole number. Any deviation from this will result in an error similar to the following:



Request data is invalid

Your request has the following errors:

Deletion Threshold can't be less than 0

OK

Part 3 - Enter the commit threshold

The commit threshold allows you to flag up users with commits under a certain value. In the commit threshold field, enter a valid integer value such as 15. The threshold should be relative to the size of the target repository and the date range you are using.

Possible errors

The commit threshold has to be a positive whole number. Any deviation from this will result in an error similar to the following:



Request data is invalid

Your request has the following errors:

Commit Threshold can't be less than 0

OK

Recap

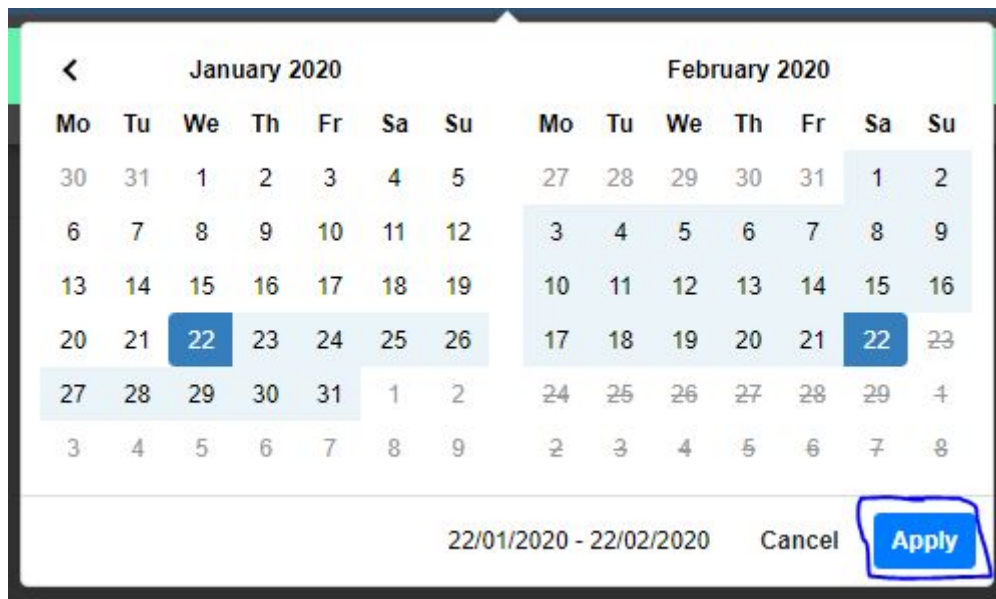
At this point in the tutorial, you should have entered a valid Github username and selected one of the user's public repositories from the list and entered thresholds for additions, deletions and commits. This may look something like the following:

rtaggart16	Test-Repository	✓
5000	5000	5

Step 4 - Select date range

Part 1 - Select date range for analysis

The date range allows you to select the range of data that you want to analyse. This range can be as little as a day or a year (or more). In order to select your range, click the input and click the start and end date you want to use and click apply, such as:



Possible errors

None

Recap

At this point in the tutorial, you should have entered a valid Github username and selected one of the user's public repositories from the list, entered thresholds for additions, deletions and commits and selected an analysis range. This may look something like the following:

Step 5 - Submit options

Now that you have inputted your options, you can now submit and begin analysis.

Step 6 - Handle initial commit bias

Part 1 - Decide the commits you want to exclude

The initial commits of the selected repository will be displayed in a popup dialog. If you want to exclude commits, select the ones you want to exclude using the checkboxes such as:

Potential Initial Commit Bias



Below is a table that displays the initial commits of the target repository. These commits may contribute to bias for a user's contribution score

<input type="checkbox"/>	Author	Message	Additions	Deletions
<input checked="" type="checkbox"/>	rtaggart16	Add .gitignore and .gitattributes.	324	0
<input checked="" type="checkbox"/>	rtaggart16	Add project files.	26386	0
<input type="checkbox"/>	rtaggart16	Added TestController with basic CRUD	93	0
<input type="checkbox"/>	rtaggart16	Created a ProductController with basic CRUD	93	0

Proceed

Close

Once you have selected the commits you want to exclude, click proceed.'

Alternatively, if you don't want to exclude any commits, click proceed without selecting any commits and they will still be included.

Potential Errors

It is possible that the target repository does not have any commits and so initial commit analysis, and all further analysis, is not possible. If this is the case, you will receive an error such as:



No commits found

No commits could be found for the target repository.
Statistics are unavailable

OK

Step 7 - Handle threshold bias

Part 1 - Decide the commits you want to exclude

Similar to the initial commit bias handler, the threshold bias popup highlights all commits made by Github, over the addition and finally over the deletion threshold. As with the initial commit handler, you can select commits you don't want to include in the analysis such as:

Repository Bias ×

Below is a list of the commits that may cause bias to collaborator's contribution score. You can choose to remove these commits from the calculation.

GitHub Commits

<input checked="" type="checkbox"/>	Author	Message	Additions	Deletions
<input checked="" type="checkbox"/>	rtaggart16	Add .gitignore and .gitattributes.	324	0

Showing 1 to 1 of 1 rows

Mass Addition Commits

<input checked="" type="checkbox"/>	Author	Message	Additions	Deletions
<input checked="" type="checkbox"/>	rtaggart16	Add project files.	26386	0

Calculate Contribution

Close

As with the initial commit bias, you can include all commits by not selecting any and clicking calculate contribution.

Possible errors

No commits in range

It is possible that the target repository does not contain any commits within the target date range. If this is the case, you will receive an error such as:



No commits found in range

No commits found in the specified date range. Analysis can't be performed



In order to counter this error, select a new range to check if there are commits.

No repository bias

This is not necessarily an error as it is possible that no commits in the repository breach your specific thresholds. If this is the case you will see the following:



No Bias Found

The selected repository does not appear to have any bias commits



Your request for stats will still be processed if you see this message

Step 8 - Complete

At this point after submitting your bias selections, the popups should disappear and a loader will be displayed displaying that your stats are being loaded. Shortly the statistics related to your options will be loaded.

In order to understand how these results are calculated and you can analyse them, read the "Request Results Help".