

Git and GitHub Guides

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1 Syncing Fork to the Original Repository

1.1 Using GitHub on your Internet Browser

When you create a fork of a repository you only have the versions of the files that are in the repository at that time. So if there are any changes in the original repository you may find that your version (your fork) is out of sync. This can lead to problems when you try to create a pull request.

While GitHub has instructions for merging an upstream repository into your fork they require you to have git installed on your local machine.

If you do not want to go into git commands and only use github on the browser, here is what you do:

- Open your fork of the repository and click the “compare” button. This will open a page titled “Comparing Changes” and if you look carefully you’ll have jumped to the upstream version of the repository. If you were to do a regular pull request now, it would be bringing your changes into the upstream version. But in this case we want to flip the direction and pull changes from the original version to our fork.

This screenshot shows the GitHub repository page for 'gusamarante / FinanceHub'. The repository is a fork of 'Finance-Hub/FinanceHub'. The page includes navigation tabs for Code, Pull requests (0), Projects (0), Wiki, Security, Insights, and Settings. Below the navigation, there's a link to 'Resources for Quantitative Finance' with the URL 'https://financehub.bz' and an 'Edit' button. A progress bar shows 269 commits, 8 branches, 0 releases, 4 contributors, and MIT license. Below the progress bar, there are buttons for 'Branch: master', 'New pull request', 'Create new file', 'Upload files', 'Find File', and 'Clone or download'. A message states 'This branch is 2 commits ahead of Finance-Hub:master.' with links for 'Pull request' and 'Compare'. A table lists recent commits: 'gusamarante HRP Class' (latest commit b3571a0, 1 hour ago), 'bloomberg' (Major reorganization of the repository, 25 days ago), and 'calendars/Holidays' (Major reorganization of the repository, 25 days ago).

This screenshot shows the 'Comparing changes' page on GitHub. It compares the 'base repository: Finance-Hub/FinanceHub' (base: master) with the 'head repository: gusamarante/FinanceHub' (compare: master). A green checkmark indicates 'Able to merge. These branches can be automatically merged.' Below this, there's a green button 'Create pull request' with the text 'Discuss and review the changes in this comparison with others.' and a help icon. At the bottom, a summary bar shows '2 commits', '2 files changed', '0 commit comments', and '2 contributors'.

Comparing changes

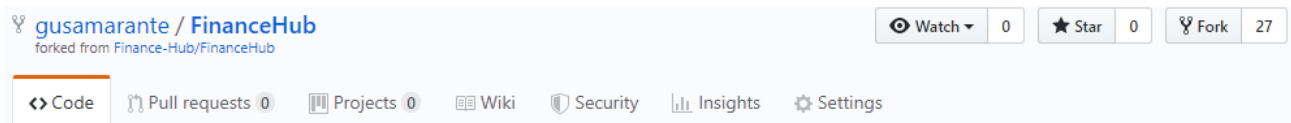
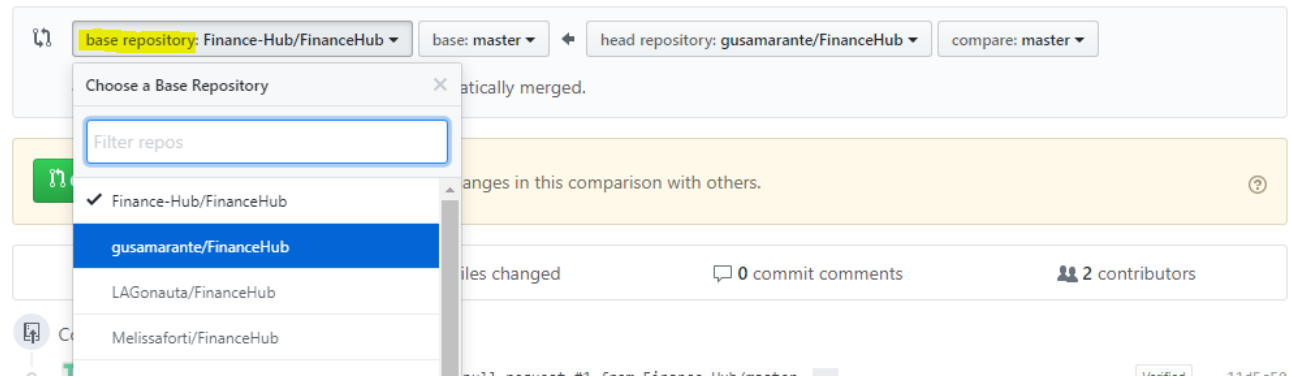
Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).

This screenshot shows the 'Comparing changes' page with a commit history view. The commit history is for 'Commits on Jun 06, 2019'. It shows two commits by 'gusamarante': 'Merge pull request #1 from Finance-Hub/master' (Verified, 11d5c50) and 'HRP Class' (b3571a0).

- Change the **base fork** to your repository. You are now back to your fork but you have also asked to compare two identical repositories so GitHub thinks you care about branches not forks. Click on **“compare across forks”** to get back your base fork option.

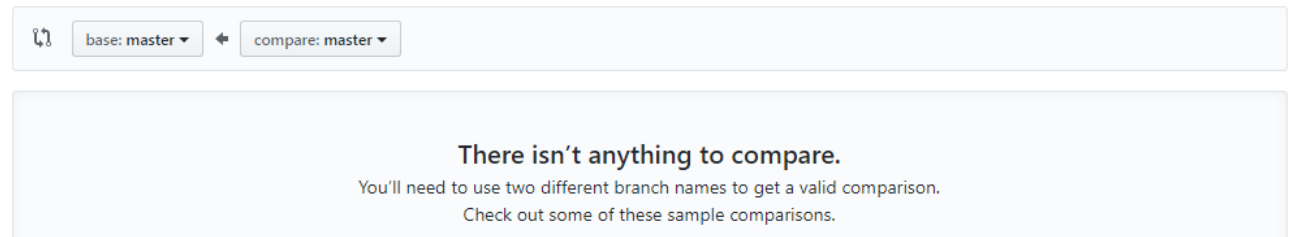
Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).

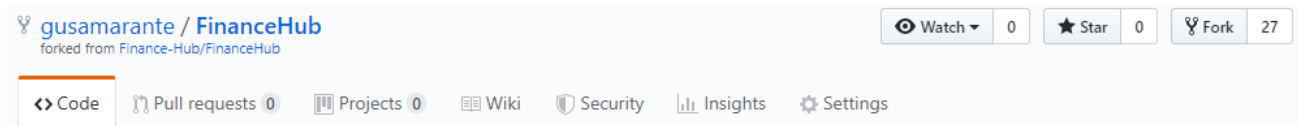


Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).

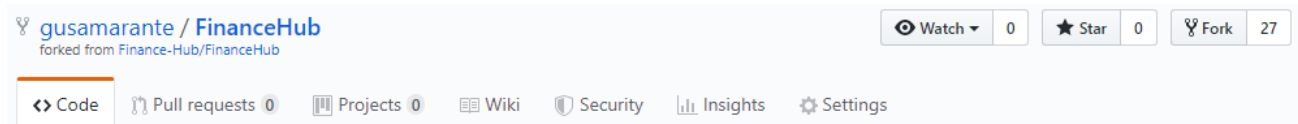
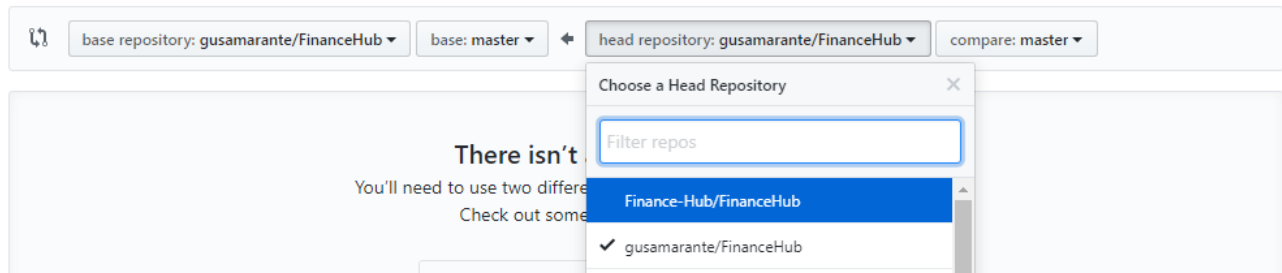


- Change the **head fork** to the upstream (original) repository. You'll see one of two options: (i) "There isn't anything to compare". This means you are up to date and you do not have to do anything. (ii) A list of commits. These are the changes that have happened in the repository since you forked your version.



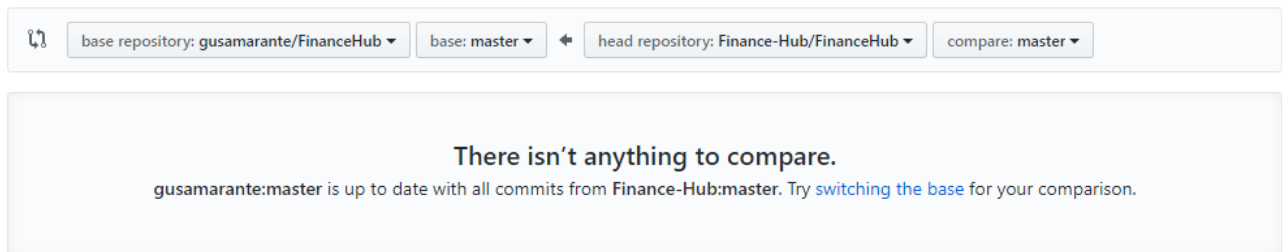
Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



- Create a pull request. Note that this pull request is to you! So you can confirm that it is ok and merge it when necessary. And if there are any merge conflicts then it is up to you to figure out what has gone wrong and sort them out.

And now you're ready to continue working on your fork. Well done!