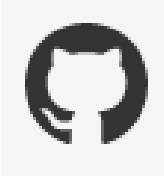


Code hosting with GitHub Cheat Sheet



Basics

GitHub is a code hosting platform for version control and collaboration.

Pros of using GitHub:

- you and your coworker can each upload your revisions to the same page, and Git will save **both** copies,
- you can **merge** your changes together without losing any work along the way,
- you can **revert** to an earlier version at any time, Git keeps a “snapshot” of every change ever made,
- **free of charge** account.

Step 1 – Create a Repository

A **repository** is usually used to organize a single project.

Repositories can contain folders and files, images, videos, spreadsheets, and data sets – anything your project needs.

1. In the upper right corner, next to your avatar or identicon, click and then select **New repository**.
2. Write **name** and short description, click **create repository**.

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner: gradzielr / Repository name: Hello ✓

Great repository names are short and memorable. Need inspiration? How about **animated-adventure**.

Description (optional)

My new repository

☒ **Public**
Anyone can see this repository. You choose who can commit.

☐ **Private**
You choose who can see and commit to this repository.

☒ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None Add a license: None

Create repository

Step 1' – Fork a Repository

A **fork** is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project. Especially useful during classes.

Find a repository in which you are interested. In the upper right corner click **Fork**.



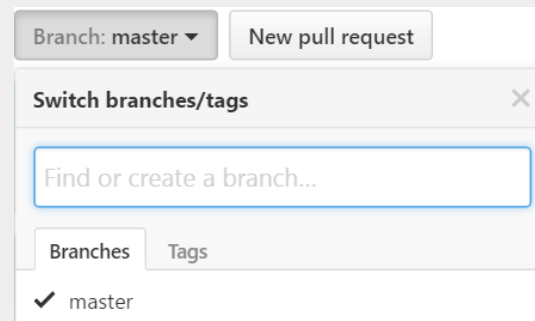
Now, this repository is available in your list of repositories.

Step 2 – Create a Branch

Branching is the way to work on **different** versions of a repository at one time.

By default your repository has one branch named **master**. We use branches to experiment and make edits before committing them to master.

1. Go to your repository.
2. Click the drop down at the top of the file list that says **branch: master**.



Switch branches/tags

Copy

Branches Tags

Create branch: Copy from 'master'

3. Type a branch name.
4. Select the blue **Create branch** box or hit “Enter” on your keyboard.

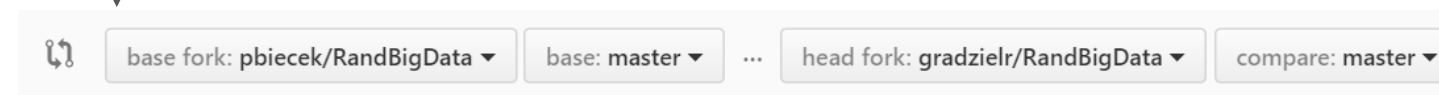
Step 3 – Open a Pull Request

When you have made changes in a branch or a forked repository, you can open a **pull request**.

After opening a **pull request**, you are proposing your changes and requesting that someone review and pull in your contribution. **Pull requests** show differences of the content from both branches. The changes, additions, and subtractions are shown in green and red.



1. At the top of the file list click **New pull request**.



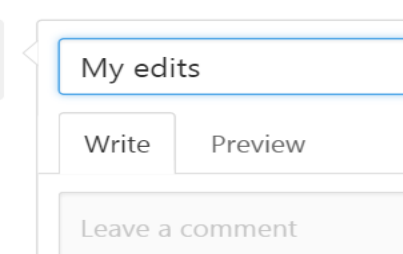
2. Select the branch to compare with. Look over your changes in the diffs on the **Compare page**.



Create pull request

Discuss and review the changes in this comparison with others.

3. Give your pull request a **title** and write short comment of your changes.



4. Click **Create pull request**.

Create pull request