Configure Git

Associate local changes with your name + email

```
$ git config --global user.name “<first_name> <last_name>”
$ git config --global user.email “<email_address>”
```

=

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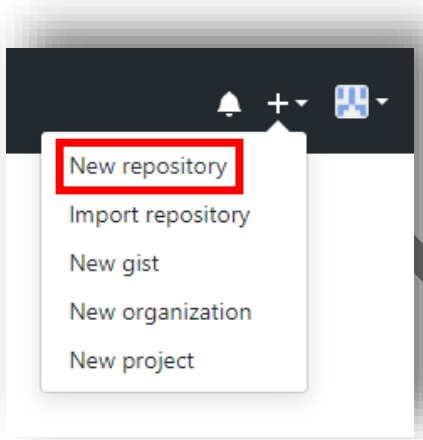
Clone a Repository

Download a Github repository to your current working directory

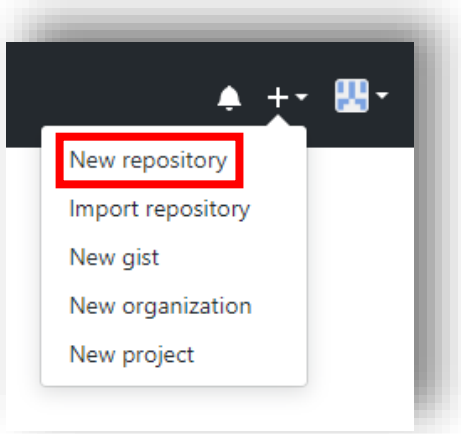



```
$ git clone https://github.com/<username>/<project_name>.git
```

```
$ cd new-repo
$ ls -a
.     ..    .git  README.md
$
```

Initialize a Repository

Create a new repository in your local directory.



You will need to create a Github repository separately if you want to push changes to it later!

```
$ mkdir new-repo
$ cd new-repo
$ git init
$ ls -a
.     ..    .git
$ git remote add origin https://github.com/<etc...>
```

Basic Git Workflow

Edit your code and save changes along the way!

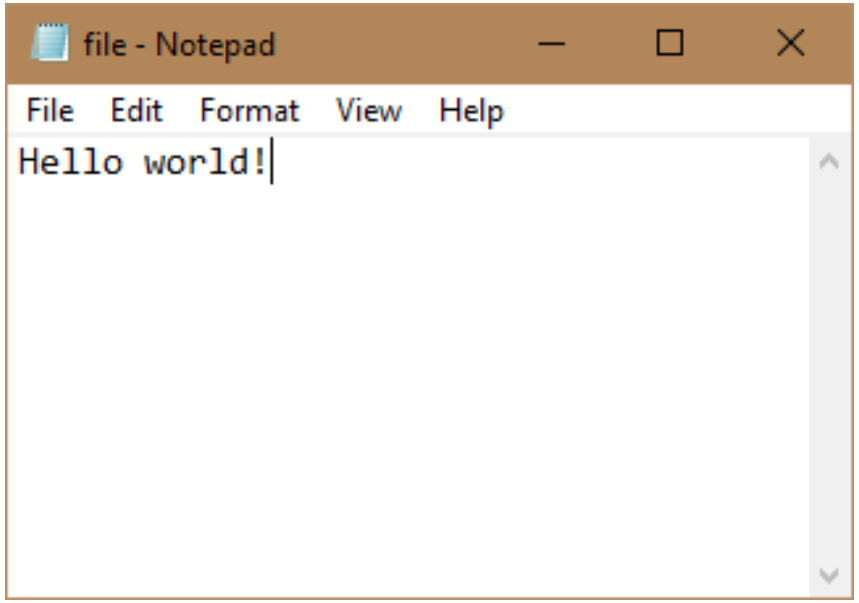
local repository

```
$ git commit –m “first commit”
```

staging area

```
$ git add file.txt
```

workspace



rinse, wash, repeat!!!

After adding a file for the first time, you can combine these two steps using

```
$ git commit –am “all other commits”
```

Useful Local Commands

If you're interested

```
$ git status
```

See which files have been changed, staged, removed, etc…

```
$ git diff --staged
```

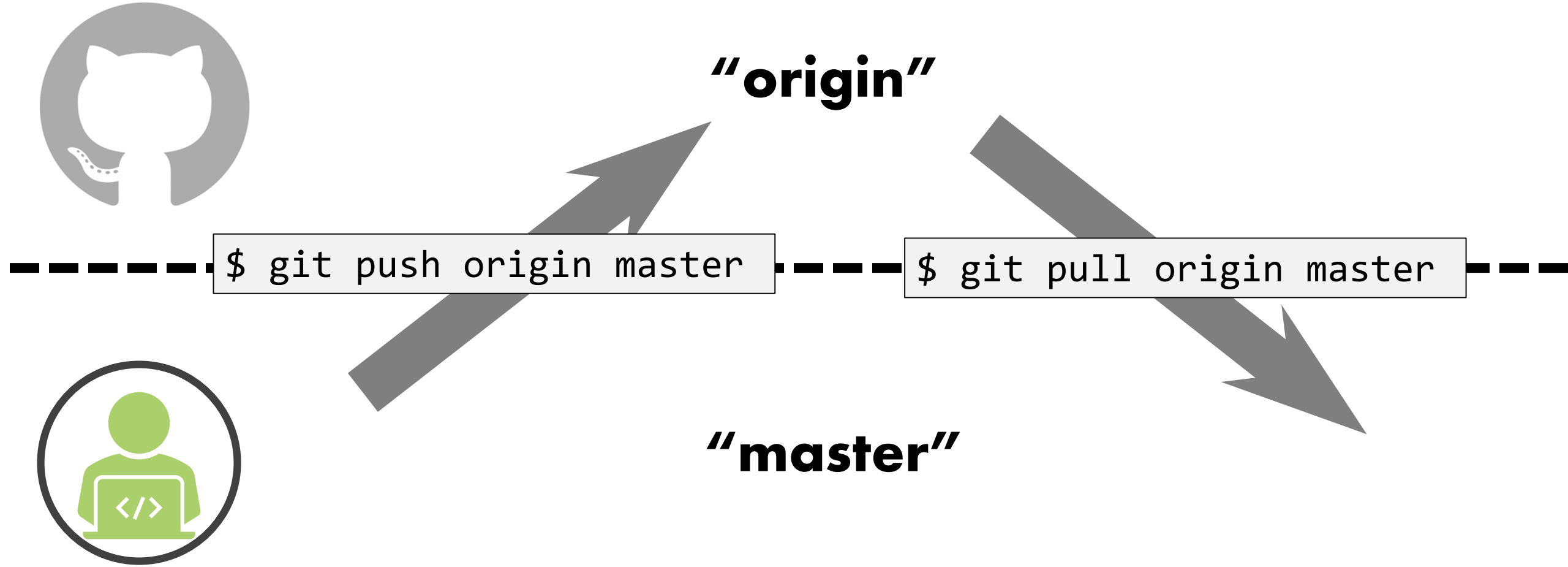
Check how staged files have been modified compared to previous commit

```
$ git log
```

See a history of all recent commits

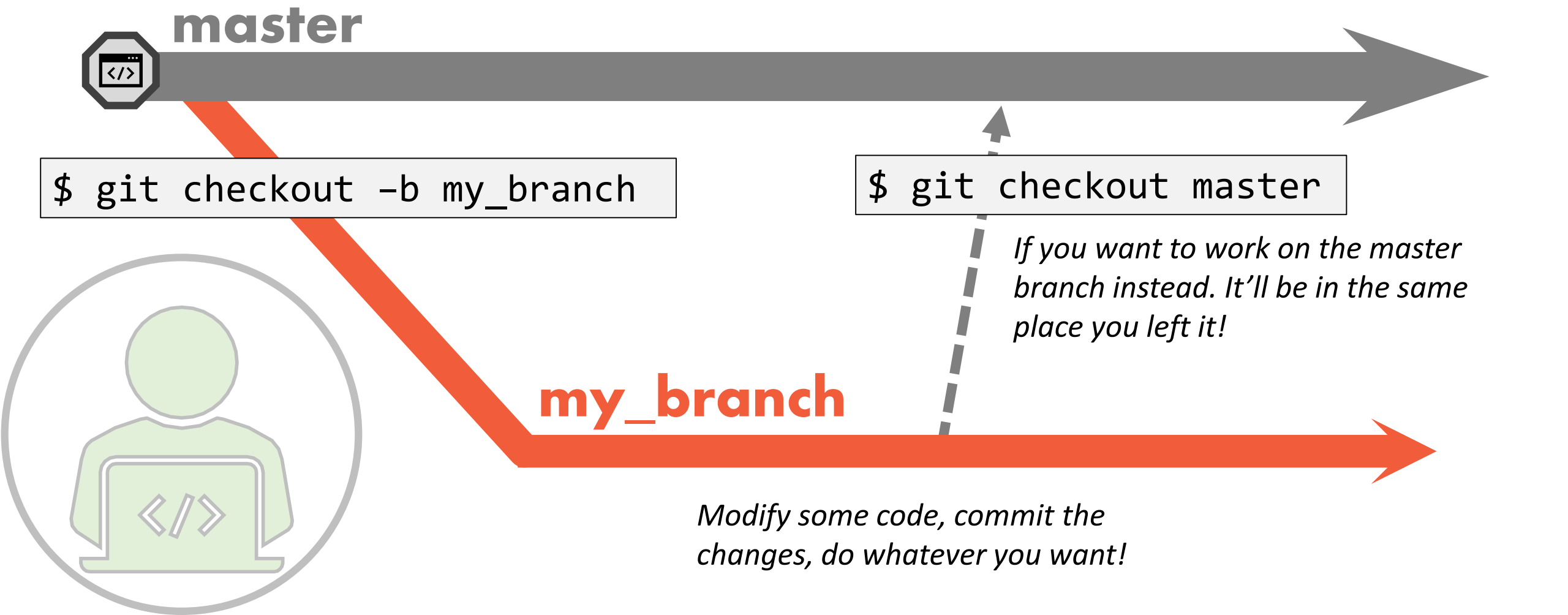
Interfacing with Github

Push changes from your local repository to Github and pull changes from Github locally



Branching

Change and test your code without modifying a working version (or collaborate with others!)



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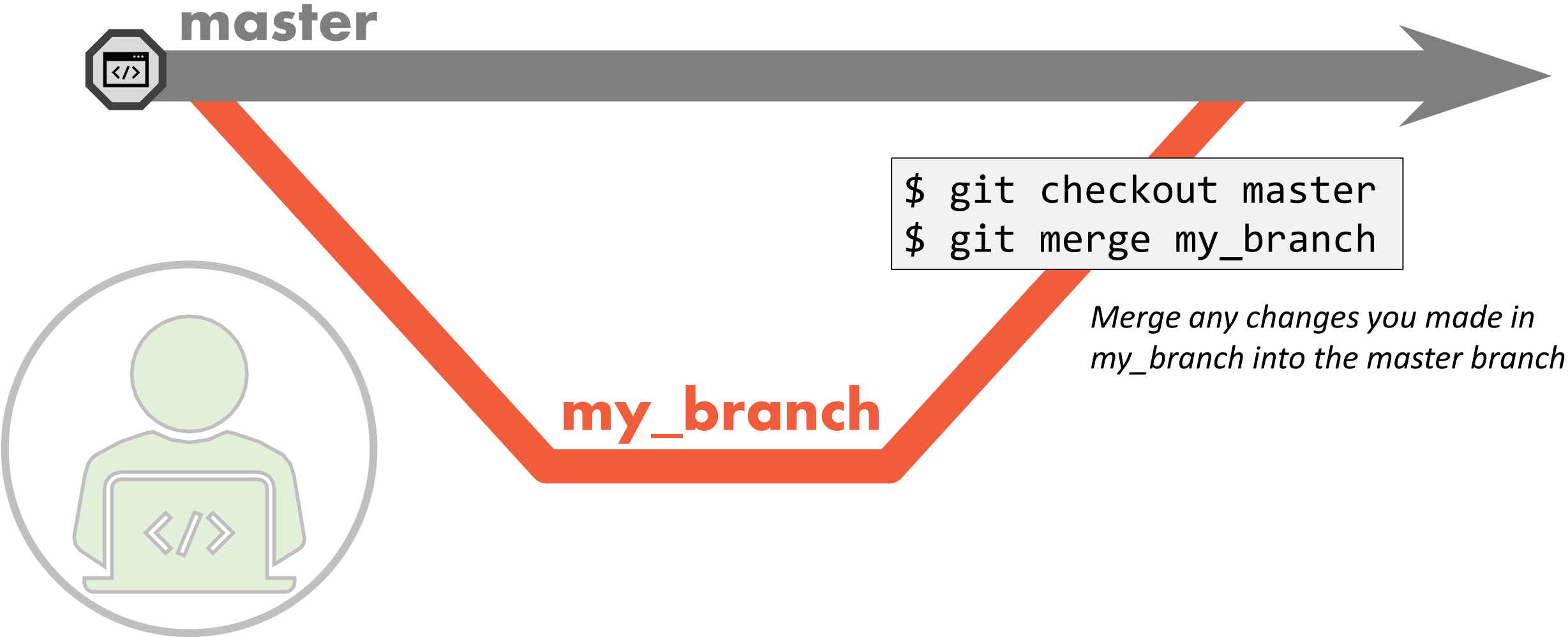

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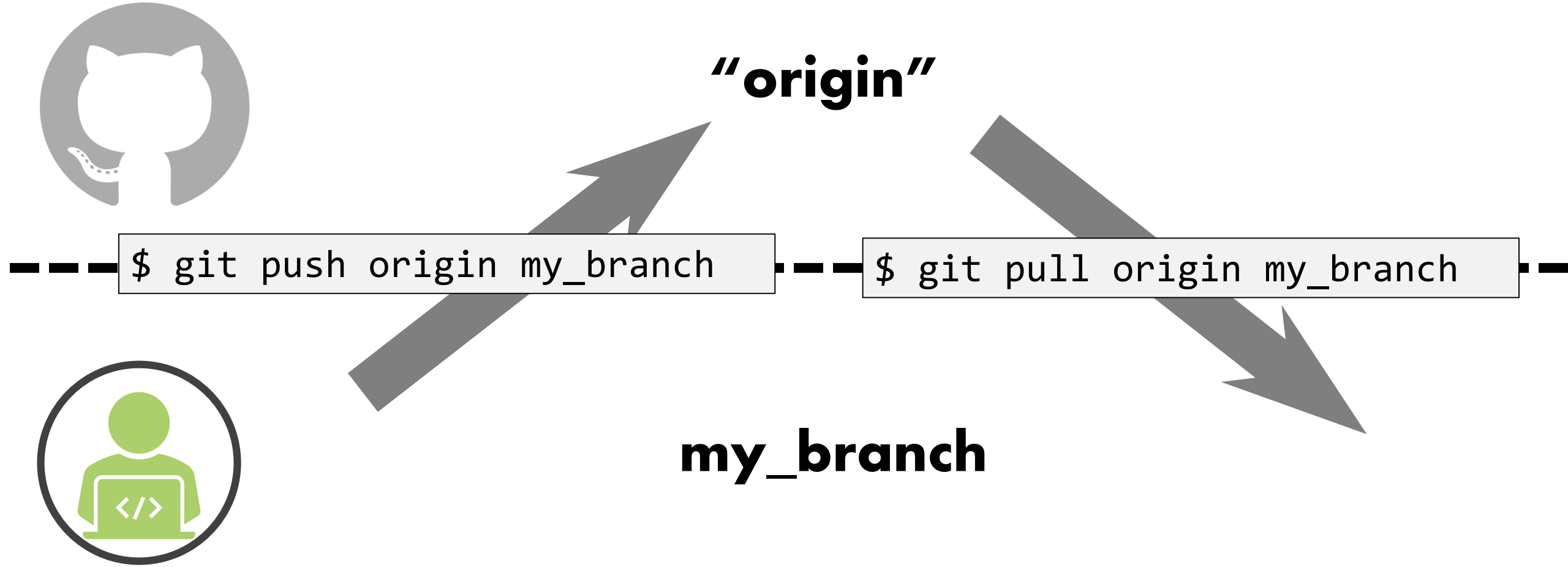
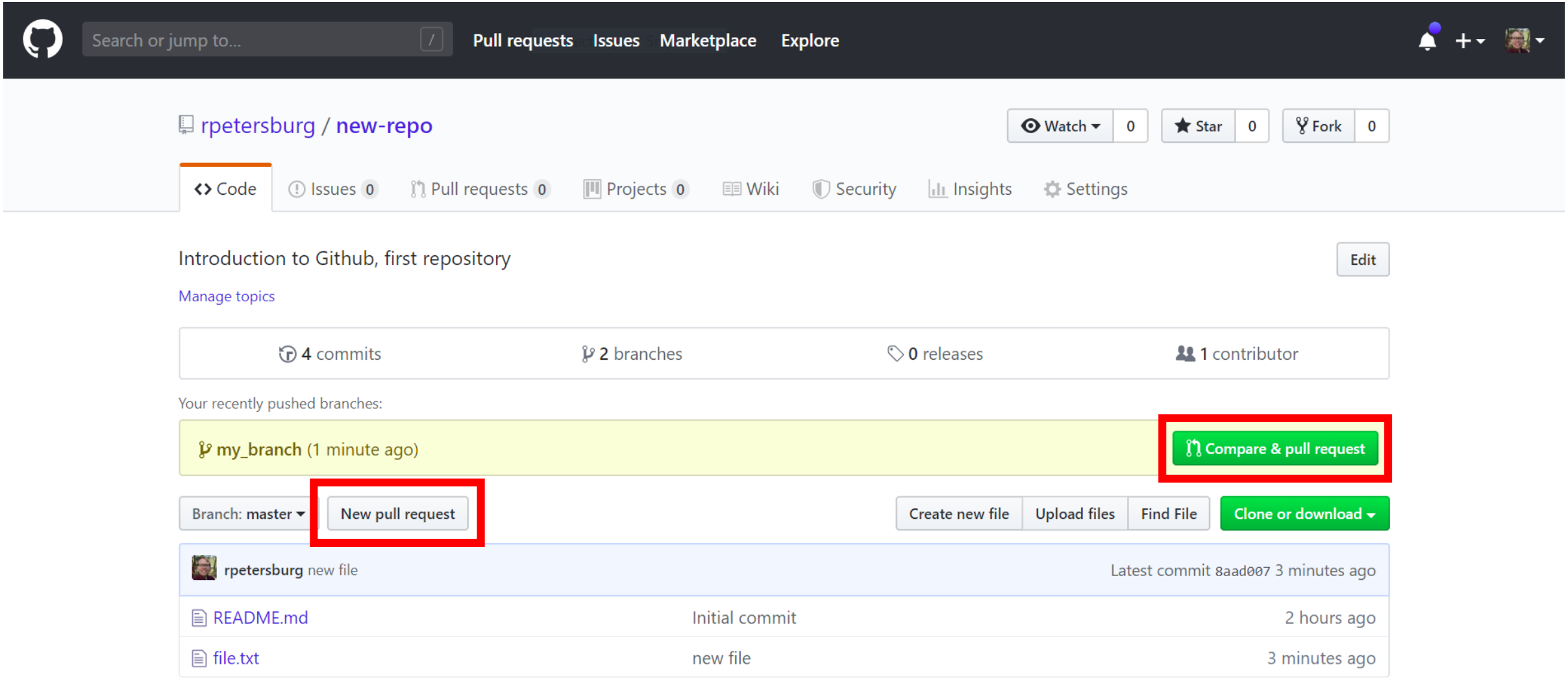


Pull Requests



Summary

Download the Github repository to you local directory

```
$ git clone https://github.com/<username>/<project_name>.git
```

Edit files, stage them, and then commit (save) the changes

```
$ git add <file_name>
$ git commit –m “<commit_description>”
```

Create a new branch, edit some files, then merge the changes back into the master branch

```
$ git checkout –b <branch_name>
$ git checkout master
$ git merge <branch_name>
```

Push/pull changes to/from the Github repository

```
$ git push origin <branch_name>
$ git pull origin <branch_name>
```

Github Desktop