



JS Exercise Review

Introduction to Git

Creating a new repository

```
mkdir hello_world
```

```
cd hello_world
```

```
git init
```

```
Initialized empty Git repository in /Users/colinloretz/Projects/mechanism/  
hello_world/.git/
```

Checking the status

```
git status
```

On branch master

Initial commit

nothing to commit (create/copy files and use "git add" to track)

Let's add a new file

```
touch index.html
```

```
ls
```

```
index.html
```

Now check our status again

```
git status
```

On branch master

Initial commit

Untracked files:

(use "git add <file>..." to include in what will be committed)

`index.html`

nothing added to commit but untracked files present (use "git add" to track)

Adding our file to be tracked

```
git add index.html
```

```
git status
```

On branch master

Initial commit

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: index.html

To add all untracked files

```
git add .
```

```
git status
```

On branch master

Initial commit

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: index.html

Now we create a commit

```
git commit -m "added index.html to my repo"
```

```
[master (root-commit) 595fa3a] added index.html to my repo  
1 file changed, 0 insertions(+), 0 deletions(-)  
create mode 100644 index.html
```

Now let's check status again

```
git status
```

```
On branch master  
nothing to commit, working directory clean
```

View commit history

```
git log
```

```
commit 595fa3af254d563dd3bc65dbad72fa0939dbe864
```

```
Author: Colin Loretz <colin@mechani.sm>
```

```
Date: Mon Apr 18 11:41:51 2016 -0700
```

```
added index.html to my repo
```

Let's add some content

Add some html to your index.html

```
git status
```

On branch master

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

```
modified:   index.html
```

no changes added to commit (use "git add" and/or "git commit -a")

Let's commit this change

```
git commit -am "added html to index.html"
```

```
[master b4ecadf] added html to index.html  
1 file changed, 10 insertions(+)
```

Introduction to Github

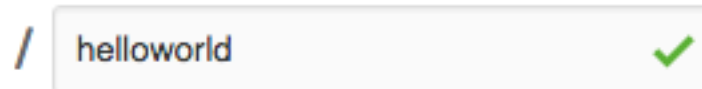
Create a new repository

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

Owner




Repository name



Great repository names are short and memorable. Need inspiration? How about **scaling-lamp**.

Description (optional)

☒  **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



This repository

Search

Pull requests

Issues

Gist



colinloretz / helloworld

Watch

0

★ Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Wiki

Pulse

Graphs

Settings

Quick setup — if you've done this kind of thing before



Set up in Desktop

or

HTTPS

SSH

git@github.com:colinloretz/helloworld.git



We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# helloworld" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@github.com:colinloretz/helloworld.git
git push -u origin master
```



...or push an existing repository from the command line

```
git remote add origin git@github.com:colinloretz/helloworld.git
git push -u origin master
```



...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

[Import code](#)

ProTip! Use the URL for this page when adding GitHub as a remote.

Adding a remote

```
git add remote <remote_name> <git_url>
```

```
git add remote origin  
git@github.com:colinloretz/helloworld.git
```

```
git remote -v
```

```
origin git@github.com:colinloretz/helloworld.git (fetch)  
origin git@github.com:colinloretz/helloworld.git (push)
```

Pushing to a remote

```
git push <remote_name> <branch_name>
```

```
git push origin master
```

```
Counting objects: 6, done.
```

```
Delta compression using up to 4 threads.
```

```
Compressing objects: 100% (3/3), done.
```

```
Writing objects: 100% (6/6), 559 bytes | 0 bytes/s, done.
```

```
Total 6 (delta 0), reused 0 (delta 0)
```

```
To git@github.com:colinloretz/helloworld.git
```

```
* [new branch]      master -> master
```



This repository

Search

Pull requests

Issues


Gist




 **colinloretz / helloworld**


 Watch ▾ 0


 Star 0

 Fork 0

<> Code

 Issues 0

 Pull requests 0

 Wiki

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 Graphs

 Settings

No description or website provided. — Edit

 2 commits

 1 branch

 0 releases

 1 contributor

Branch: **master** ▾

New pull request

New file

Upload files

Find file

SSH ▾

git@github.com:colinloret



Download ZIP



colinloretz added html to index.html

Latest commit b4ecadf 8 minutes ago

 [index.html](#)

added html to index.html

8 minutes ago

Help people interested in this repository understand your project by adding a README.

Add a README





This repository

Search

Pull requests

Issues

Gist



colinloretz / helloworld

Watch 0

Star 0

Fork 0

Code

Issues 0

Pull requests 0

Wiki

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Graphs

Settings

Branch: master

Commits on Apr 18, 2016



added html to index.html

colinloretz committed 9 minutes ago



b4ecadf



added index.html to my repo

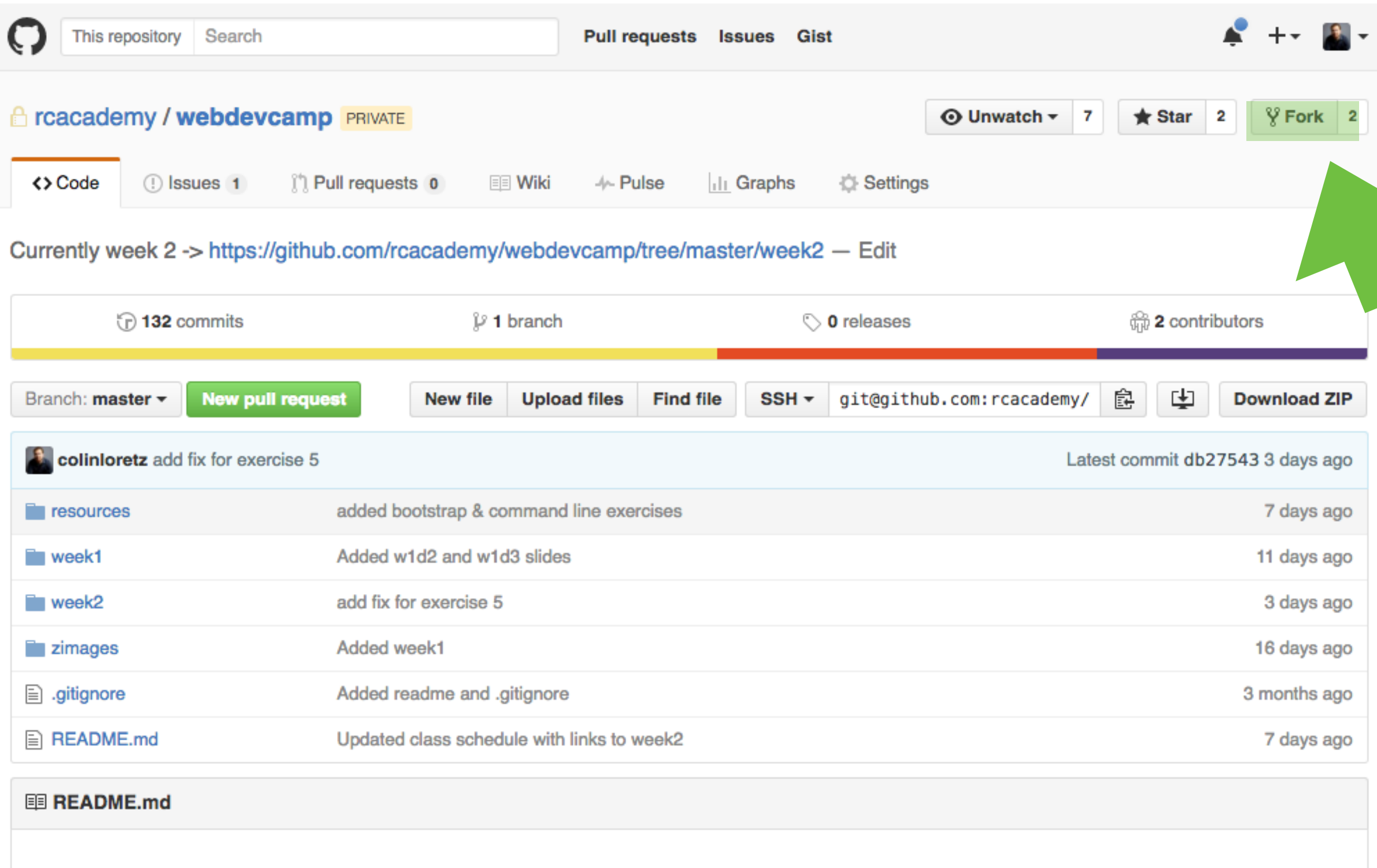
colinloretz committed 13 minutes ago



595fa3a



Forking a repository



The screenshot shows the GitHub interface for the repository `rcacademy / webdevcamp`, which is marked as `PRIVATE`. The repository has 7 watchers, 2 stars, and 2 forks. The `Fork` button is highlighted with a green arrow. The repository is currently on the `master` branch. The commit history shows the latest commit by `colinloretz` with the message "add fix for exercise 5" 3 days ago. The file list includes `resources`, `week1`, `week2`, `zimages`, `.gitignore`, and `README.md`.

rcacademy / webdevcamp PRIVATE

Unwatch 7 Star 2 Fork 2

Code Issues 1 Pull requests 0 Wiki Pulse Graphs Settings

Currently week 2 -> <https://github.com/rcacademy/webdevcamp/tree/master/week2> — Edit

132 commits 1 branch 0 releases 2 contributors

Branch: master New pull request New file Upload files Find file SSH git@github.com:rcacademy/ Download ZIP

colinloretz add fix for exercise 5 Latest commit db27543 3 days ago

resources	added bootstrap & command line exercises	7 days ago
week1	Added w1d2 and w1d3 slides	11 days ago
week2	add fix for exercise 5	3 days ago
zimages	Added week1	16 days ago
.gitignore	Added readme and .gitignore	3 months ago
README.md	Updated class schedule with links to week2	7 days ago

README.md

Cloning from a remote (your fork)

```
git clone <git_url>
```

```
git clone git@github.com:colinloretz/webdevcamp.git
```

```
cd webdevcamp
```

```
Cloning into 'webdevcamp'...
remote: Counting objects: 851, done.
remote: Compressing objects: 100% (174/174), done.
remote: Total 851 (delta 75), reused 0 (delta 0), pack-reused 673
Receiving objects: 100% (851/851), 22.75 MiB | 1.58 MiB/s, done.
Resolving deltas: 100% (292/292), done.
Checking connectivity... done.
```

Why?

Allow you to work inside your fork and push your work up to Github.

Other Commands

Creating a branch

```
git branch <new_branch_name>
```

```
git branch
```

```
add-feature-10
```

```
* master
```

Switch to that branch

```
git checkout <branch_name>
```

```
git branch
```

```
* add-feature-10  
master
```

Merging

Merging

```
git checkout master
```

```
git merge <other_branch_name>
```

```
Updating bc4388d..d583441
```

```
Fast-forward
```

```
moon.html | 10 ++++++++
```

```
1 file changed, 10 insertions(+)
```

```
create mode 100644 moon.html
```

Merge Conflicts!

SSH / Github Setup

Check to see if you have existing SSH keys

```
ls -al ~/.ssh
```

```
id_rsa.pub  id_rsa
```


Create new SSH key

```
ssh-keygen -t rsa -b 4096 -C "your_email@example.com"
```

Generating public/private rsa key pair.

Enter a file in which to save the key (/Users/you/.ssh/id_rsa): [Press enter]

Enter passphrase (empty for no passphrase): [Type a passphrase]

Enter same passphrase again: [Type passphrase again]

Ensure ssh-agent is running

```
eval "$ (ssh-agent -s) "
```

Agent pid 59566

Add new key to ssh-agent

```
ssh-add ~/.ssh/id_rsa
```

Add your public key to Github

```
pbcopy < ~/.ssh/id_rsa.pub
```

This will copy your public key into your clipboard.

In Github, go to **Settings > SSH & GPG Keys**

Click **New SSH Key**. Give it a name like "Personal Macbook Air" or "PC"

Paste your public key into the "Key" field.

Enter your Github password to confirm.

Git-It Exercise