



Enough to Git Started

2019 MedRec Hackathon at UConn Health

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Center for Quantitative Medicine, UConn Health

2019 April 13

the MedRec Hackathon GitHub repo

aims-cdas / uche-hackathon-march-2019

Unwatch 3

Star 2

Fork 0

Code

Issues 0

Pull requests 0

Projects 0

Wiki

Insights

Settings

Hub for the March 2019 hackathon hosted by UCHC

Edit

Manage topics

11 commits

3 branches

0 releases

1 environment

3 contributors

GPL-3.0

Branch: master

New pull request

Create new file

Upload files

Find File

Clone or download



emeria Merge pull request #1 from aims-cdas/readme

Latest commit 4d25b8a 11 days ago



img

draft README from CQM site

17 days ago



LICENSE

Initial commit

3 months ago



README.md

contact needn't 'us'

13 days ago



_config.yml

Set theme jekyll-theme-hacker

2 months ago



README.md



Hackathon 2019

Website at the Center for Quantitative Medicine

Contact: [Kate Hayden](#)

[Registration](#)

<https://github.com/aims-cdas/medrec-hackathon-2019>

Introduction to Git

The screenshot shows a GitHub repository page for 'aims-cdas / uhc-hackathon-march-2019'. At the top, there are navigation links for Code, Issues (0), Pull requests (0), Projects (0), Wiki, Insights, and Settings. On the right, there are buttons for Unwatch (3), Star (2), and Fork (0). Below the navigation bar, the current branch is 'git-github'. The repository path is 'uhc-hackathon-march-2019 / git-github /'. There are buttons for 'Create new file', 'Upload files', 'Find file', and 'History'. A status message indicates 'This branch is 2 commits ahead, 4 commits behind master.' with links for 'Pull request' and 'Compare'. A commit by 'corybrunson' is highlighted with the message 'don't expect pull requests back into origin' and a link to the latest commit 'f382eba' from 10 days ago. Below this, a list of files is shown: 'README.html', 'README.md', and 'screenshot-fork.png', each with a commit message and a timestamp. The 'README.md' file is selected, showing its content. The content starts with the title 'Using Git and GitHub' followed by a paragraph about Git and GitHub, mentioning the '2019 MedRec Hackathon' and providing instructions on how to fork the repository.

aims-cdas / uhc-hackathon-march-2019

Unwatch 3 Star 2 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

Branch: git-github

uhc-hackathon-march-2019 / git-github /

Create new file Upload files Find file History

This branch is 2 commits ahead, 4 commits behind master. Pull request Compare

corybrunson don't expect pull requests back into origin Latest commit f382eba 10 days ago

..

README.html	don't expect pull requests back into origin	10 days ago
README.md	don't expect pull requests back into origin	10 days ago
screenshot-fork.png	draft-git-intro	10 days ago

README.md

Using Git and GitHub

Git is version tracking and control software widely used both by individual developers and by collaborative development teams. **GitHub** is the most popular public code and documentation repository built on Git. Participants in the [2019 MedRec Hackathon](#) can fork this repository ("repo") to build upon the instruction and resources it contains, as explained below.

Installation

Git introduction:

<https://git-scm.com/book/en/v2/Getting-Started-About-Version-Control>

Git installation (Mac, Windows, source):

<https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>

Documentation (and help)

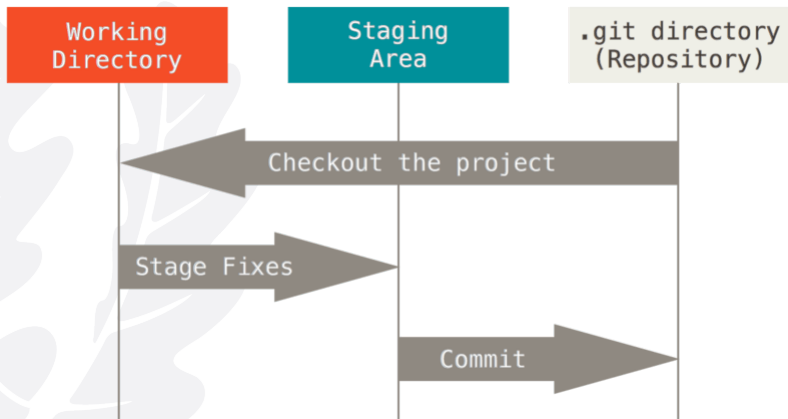
- 1 Git documentation:
git –help
- 2 Git Book:

<https://git-scm.com/book/en/v2/>

- 3 StackOverflow:


<https://stackoverflow.com/>


Version control with Git



Create a GitHub account

<https://github.com/join>

 Why GitHub? ▾ Enterprise Explore ▾ Marketplace Pricing ▾

Search GitHub 

Sign in

Sign up

 **Step 1:**
Set up your account

 **Step 2:**
Choose your plan

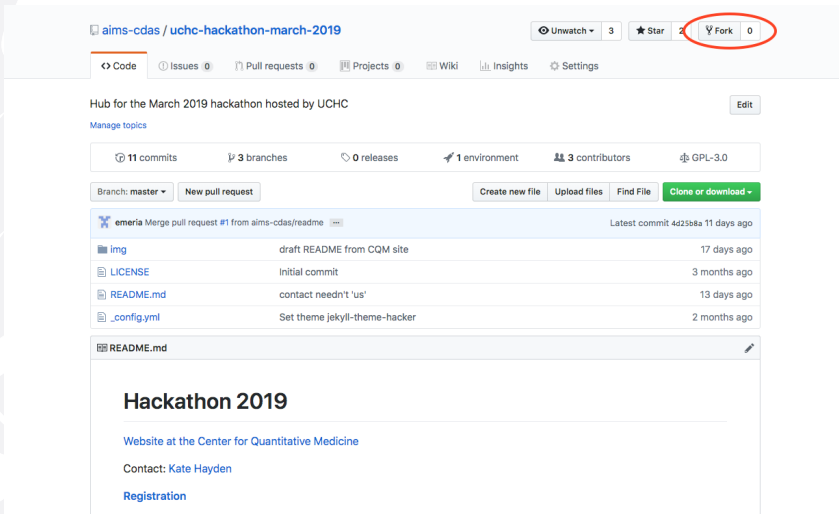
 **Step 3:**
Tailor your experience

You'll love GitHub

Unlimited public repositories
Unlimited private repositories

 Limitless collaboration
 Frictionless development
 Open source community

Fork the MedRec repo



aims-cdas / uche-hackathon-march-2019

Unwatch 3 Star 2 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

Hub for the March 2019 hackathon hosted by UCHC

Manage topics

11 commits 3 branches 0 releases 1 environment 3 contributors GPL-3.0

Branch: master New pull request Create new file Upload files Find File Clone or download

emeria Merge pull request #1 from aims-cdas/readme Latest commit 4d25b8a 11 days ago

img	draft README from CQM site	17 days ago
LICENSE	Initial commit	3 months ago
README.md	contact needn't 'us'	13 days ago
_config.yml	Set theme jekyll-theme-hacker	2 months ago

README.md

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Duplicate the MedRec repo

aims-cdas / uhc-hackathon-march-2019

Unwatch 3 Star 2 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

Hub for the March 2019 hackathon hosted by UCHC

Edit

Manage topics

11 commits 3 branches 0 releases 1 environment 3 contributors GPL-3.0

Branch: master New pull request

Create new file Upload files Find file Clone or download

emeria Merge pull request #1 from aims-cdas/readme	Latest commit 4d25b8a 11 days ago
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README.md

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<https://help.github.com/en/articles/duplicating-a-repository>

Clone your forked copy or private repo

```
# clone repo from URL
git clone \
  https://github.com/<username>/medrec-hackathon-2019

# <navigate into local directory>

# list remotes linked to local directory
git remote
git remote --verbose
```

Have Git ignore certain files

Example .gitignore file:

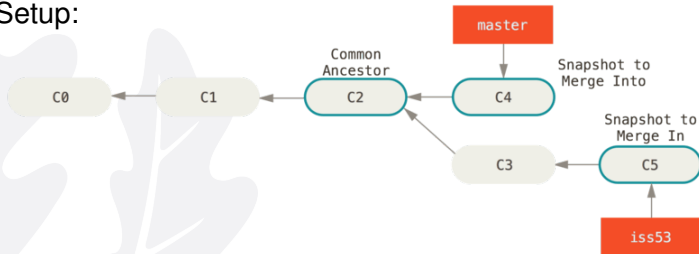
```
# Mac OS X metadata
.DS_Store

# R & RStudio metadata
.Rhistory
.Rapp.history
.RData
.Rproj.user

# experimentation folder
sandbox
```

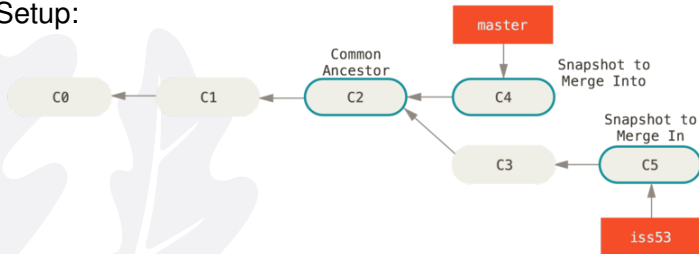
Basic merging

Setup:

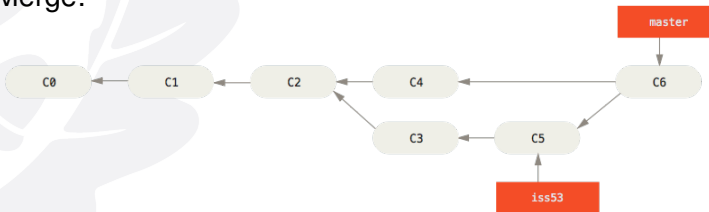


Basic merging

Setup:



Merge:



Work in a new branch

```
# view all branches  
git branch
```

```
# create a new branch  
git branch experimental
```

```
# switch to new branch  
git checkout experimental
```

Work in project folders

corybrunson / uche-hackathon-march-2019

forked from aims-cdas/uche-hackathon-march-2019

Unwatch

1

Star

0

Fork

1

Code

Pull requests

0

Projects

0

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10 commits

2 branches

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GPL-3.0

Your recently pushed branches:

git-github (less than a minute ago)

Compare & pull request

Branch: git-github

New pull request

Create new file

Upload files

Find File

Clone or download

This branch is 1 commit ahead of aims-cdas:git-github.

Pull request

Compare



corybrunson my team work

Latest commit e74fa57 17 seconds ago



git-github

don't expect pull requests back into origin

10 days ago



my-team-work

my team work

15 seconds ago



LICENSE

Initial commit

3 months ago



README.md

Updated readme

2 months ago



_config.yml

Set theme jekyll-theme-hacker

2 months ago



README.md



Stage changes

list all tracked changes (committed or not)

```
git status
```

add changes to a file to the staging area

```
git add <filename>
```

stage any changes to all tracked files

```
git add .
```

stop tracking a file (without deleting it)

```
git rm --cached <filename>
```


Commit staged changes

```
# retrieve the last committed version of a file  
# (erase uncommitted changes)  
git checkout <filename>
```

```
# commit staged changes  
git commit --message="this is what i did"
```

```
# message option shortcut  
git commit -m "this is what i did"
```

In general, **don't** change branches with uncommitted changes.

Merge into the master branch

```
# switch (back) to the master branch  
git checkout master
```

```
# merge commits from the experimental branch  
git merge experimental
```

```
# open a merge tool to resolve merge conflicts  
git mergetool
```

Fin