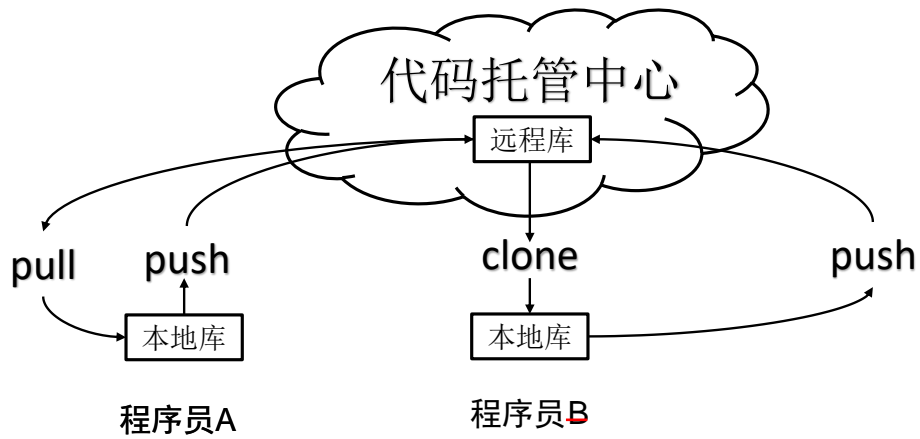
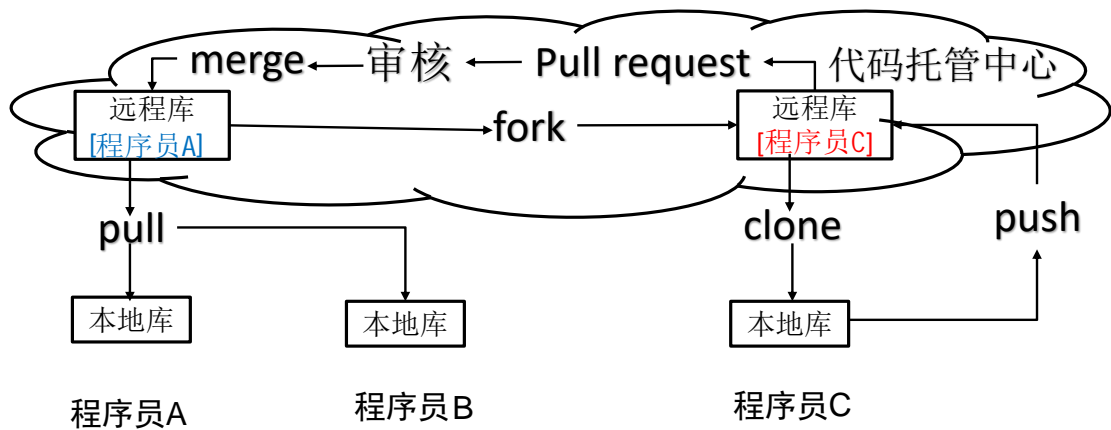


第 5 章 Git 团队协作机制

5.1 团队内协作



5.2 跨团队协作



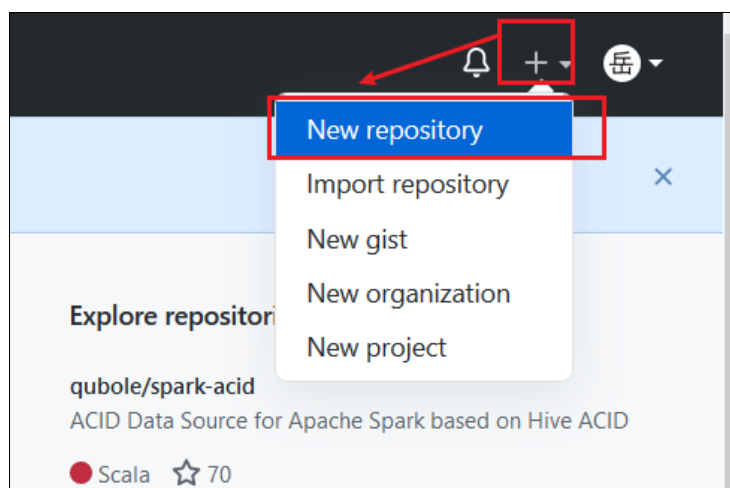
第 6 章 GitHub 操作

GitHub 网址: <https://github.com/>

Ps:全球最大同性交友网站，技术宅男的天堂，新世界的大门，你还在等什么？

注册Gi tHub账号

6.1 创建远程仓库



Owner *

congli2020

Repository name *

/ git-shTest

Great repository names are short, lowercase, and use hyphens. [git-shTest is available.](#) Need inspiration? How about [vigilant-fiesta](#)?

Description (optional)

☒ Public

Anyone on the internet can see this repository. You choose who can commit.

☐ Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

☐ Add a README file

This is where you can write a long description for your project. [Learn more.](#)

☐ Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

☐ Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

Create repository

点这里创建即可

6.2 远程仓库操作

命令名称	作用
git remote -v	查看当前所有远程地址别名
git remote add 别名 远程地址	起别名
git push 别名 分支	推送本地分支上的内容到远程仓库
git clone 远程地址	将远程仓库的内容克隆到本地
git pull 远程库地址别名 远程分支名	将远程仓库对于分支最新内容拉下来后与当前本地分支直接合并

6.2.1 创建远程仓库别名

1) 基本语法

git remote -v 查看当前所有远程地址别名

git remote add 别名 远程地址

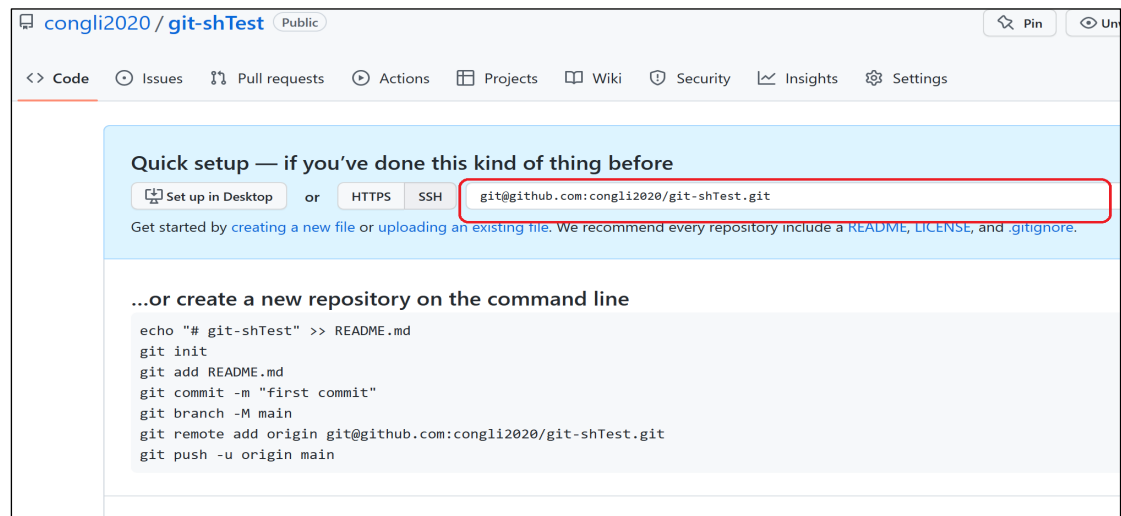
2) 案例实操

```
97944@LAPTOP-13NOVJ56 MINGW64 /d/江西应用技术职业学院/2023/git代码管理(ster)
$ git remote -v
97944@LAPTOP-13NOVJ56 MINGW64 /d/江西应用技术职业学院/2023/git代码管理/space
(master)
$ git remote add ori https://github.com/congli2020/git-shTest.git

97944@LAPTOP-13NOVJ56 MINGW64 /d/江西应用技术职业学院/2023/git代码管理/space
(master)
$ git remote -v
ori      https://github.com/congli2020/git-shTest.git (fetch)
ori      https://github.com/congli2020/git-shTest.git (push)
```

<https://github.com/congli2020/git-shTest.git>

这个地址在创建完远程仓库后生成的连接，如图所示红框中



6.2.2 推送本地分支到远程仓库

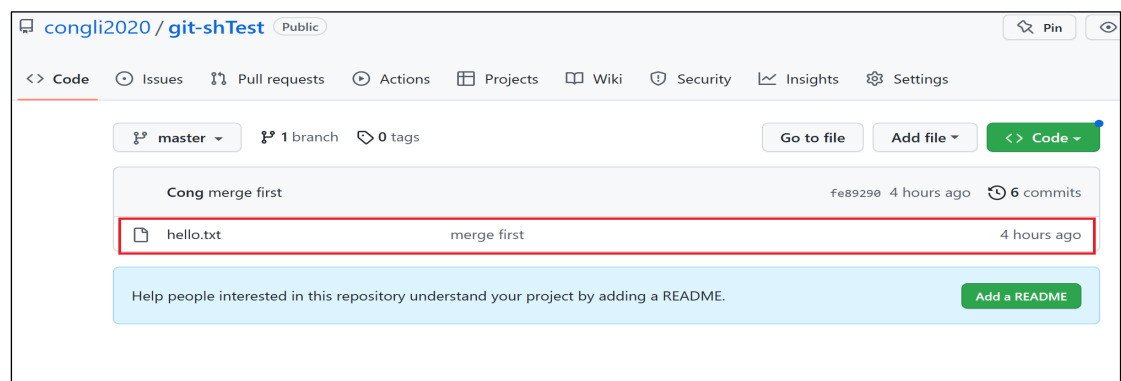
1) 基本语法

git push 别名 分支

2) 案例实操

```
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/git代码管理/space
(master)
$ git push ori master
Enumerating objects: 18, done.
Counting objects: 100% (18/18), done.
Delta compression using up to 8 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (18/18), 1.33 KiB | 273.00 KiB/s, done.
Total 18 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), done.
To https://github.com:congli2020/git-shTest.git
 * [new branch]      master -> master
```

此时发现已将我们 **master** 分支上的内容推送到 GitHub 创建的远程仓库。



6.2.3 克隆远程仓库到本地

1) 基本语法

`git clone 远程地址`

2) 案例实操

```
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/git代码管理/space (master)
$ git clone https://github.com/congli2020/git-shTest.git
Cloning into 'git-shTest'...
remote: Enumerating objects: 18, done.
remote: Counting objects: 100% (18/18), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 18 (delta 4), reused 18 (delta 4), pack-reused 0
Receiving objects: 100% (18/18), done.
Resolving deltas: 100% (4/4), done.
```

`https://github.com/congli2020/git-shTest.git`

这个地址为远程仓库地址，克隆结果：初始化本地仓库

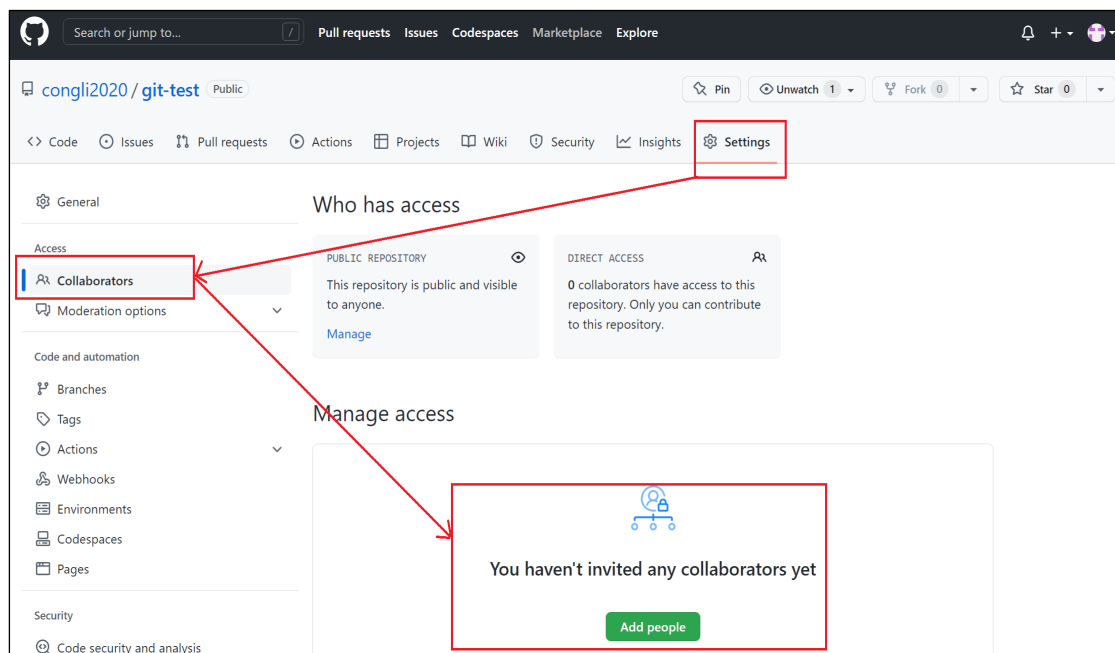


```
--创建远程仓库别名
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/git代码管理/
space/git-shTest (master)
$ git remote -v
origin https://github.com/congli2020/git-shTest.git (fetch)
origin https://github.com/congli2020/git-shTest.git (push)
```

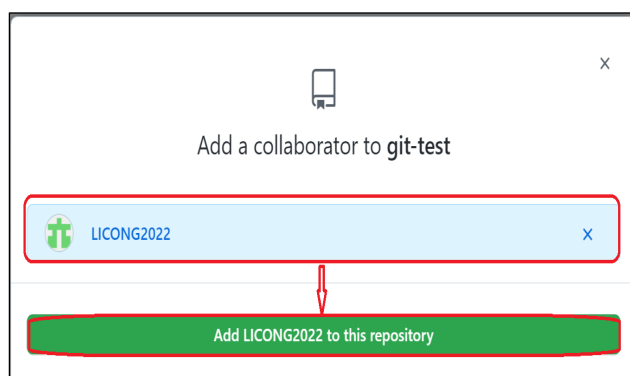
小结：clone 会做如下操作。1、拉取代码。2、初始化本地仓库。3、创建别名(自动创建别名)

6.2.4 邀请加入团队

1) 选择邀请合作者

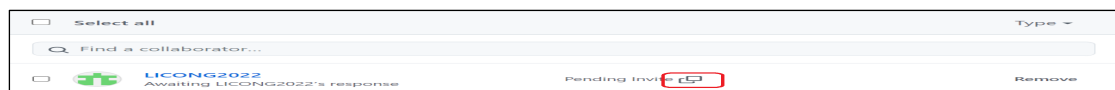


2) 填入想要合作的人

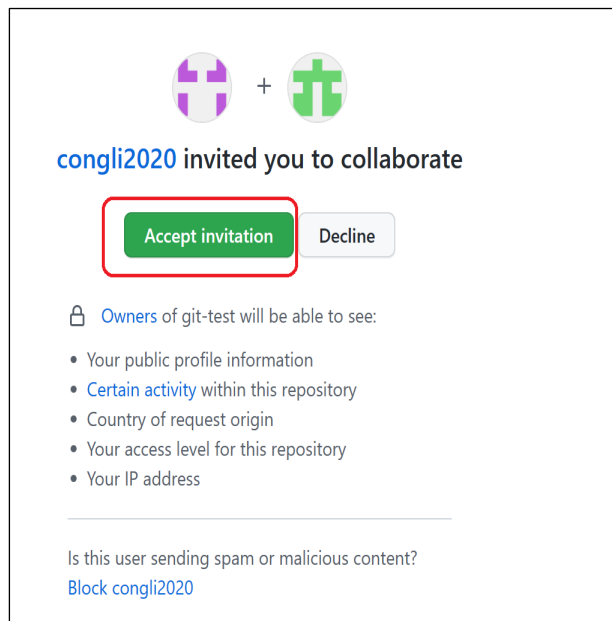


3) 复制地址并通过微信钉钉等方式发送给该用户，复制内容如下：

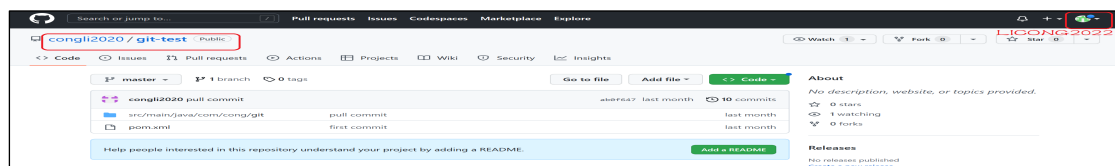
<https://github.com/congli2020/git-test/invitations>



4) 在 LICONG2022 这个账号中的地址栏复制收到邀请的链接，点击接受邀请。



5) 成功之后可以在 LICONG2022 这个账号上看到 git-Test 的远程仓库。



6) LICONG2022这个账号可以修改内容并 push 到远程仓库。

```
--编辑 clone 下来的文件
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/gi t代码管理/
space/gi t-shTest (master)
$ vim hello.txt

97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/gi t代码管理/
space/gi t-shTest (master)
$ cat hello.txt
hello git! 2222
hello git!
hello git!
hello git! 你好!
hello git!
hello git!
hello git!
hello git!master test
hello git!hotfix test

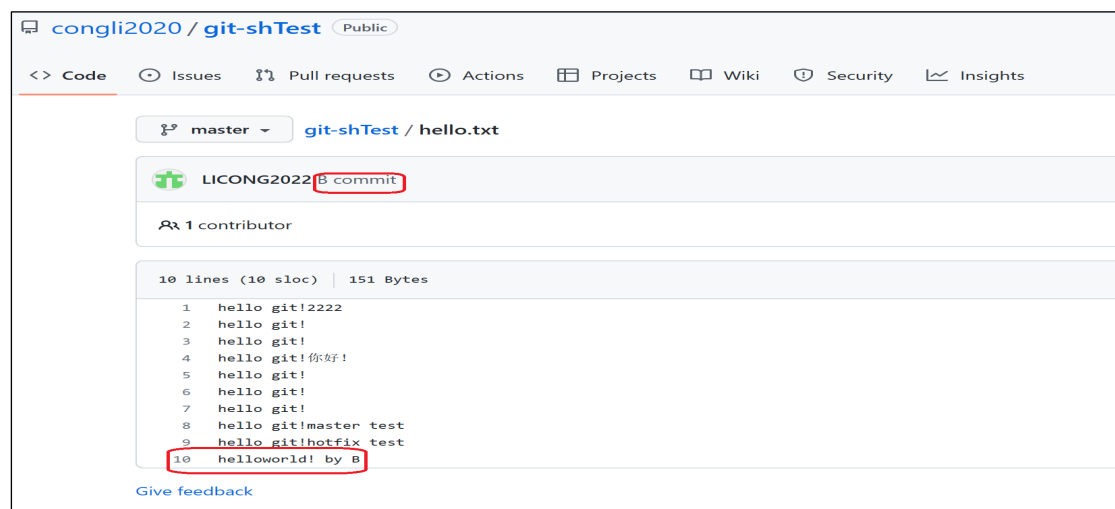
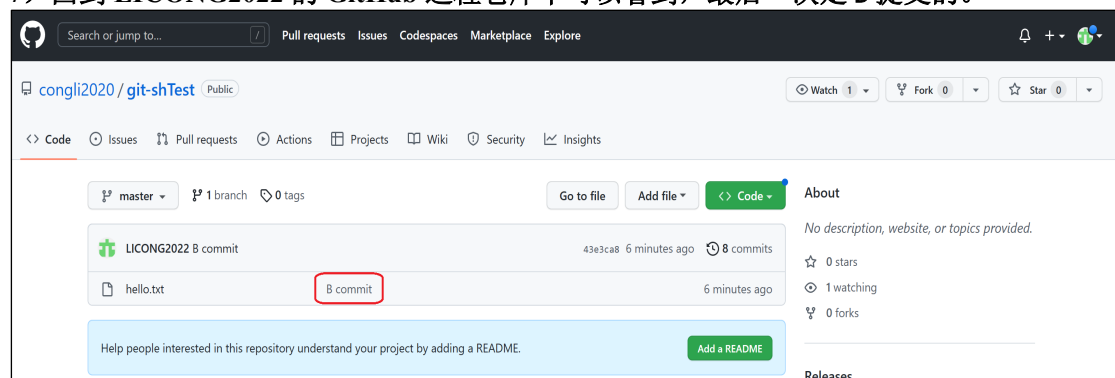
--将编辑好的文件添加到暂存区
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/gi t代码管理/space/gi t-
shTest (master)
```

```

$ git add hello.txt
--将暂存区的文件上传到本地库
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/git代码管理/
space/git-shTest (master)
$ git commit -m "B commit" hello.txt
[master 4764413] LICONG2022 commit
1 file changed, 1 insertion(+), 1 deletion(-)
--将本地库的内容 push 到远程仓库
97944@LAPTOP-13NOVJ56 MI NGW64 /d/江西应用技术职业学院/2023/git代码管理/
space/git-shTest (master)
$ git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 283 bytes | 283.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/congli2020/git-shTest.git
fe89290..4764413 master -> master

```

7) 回到 LICONG2022 的 GitHub 远程仓库中可以看到，最后一次是 B 提交的。



6.2.5 拉取远程库内容

1) 基本语法

`git pull` 远程库地址别名 远程分支名

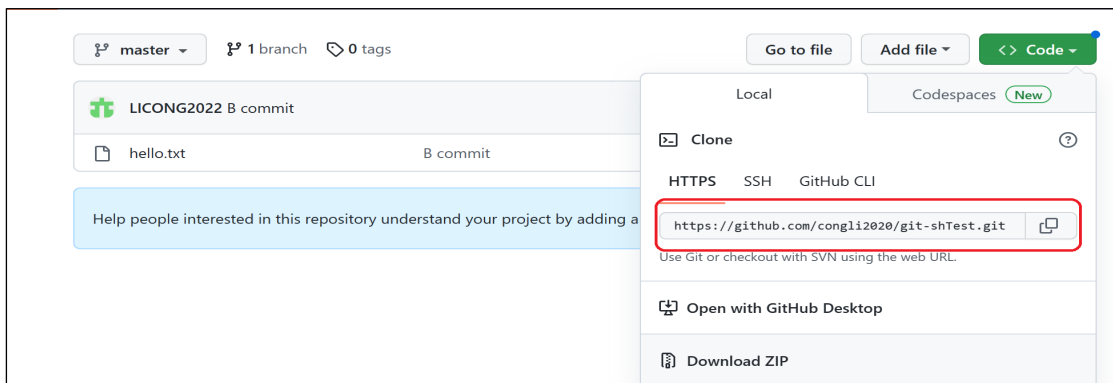
2) 案例实操

```
--将远程仓库对于分支最新内容拉下来后与当前本地分支直接合并
97944@LAPTOP-13NOVJ56 MINGW64 /d/江西应用技术职业学院/
2023/git代码管理/班级/21物联网0102/git-shTest (master)
$ git pull origin master
From https://github.com/congli2020/git-shTest
* branch      master    -> FETCH_HEAD
 4764413..43e3ca8 master -> origin/master
Already up to date.

97944@LAPTOP-13NOVJ56 MINGW64 /d/江西应用技术职业学院/
2023/git代码管理/班级/21物联网0102/git-shTest (master)
$ cat hello.txt
hello git!2222
hello git!
hello git!
hello git!你好!
hello git!
hello git!
hello git!
hello git!master test
hello git!hotfix test
helloworld! by B
```

6.3 跨团队协作

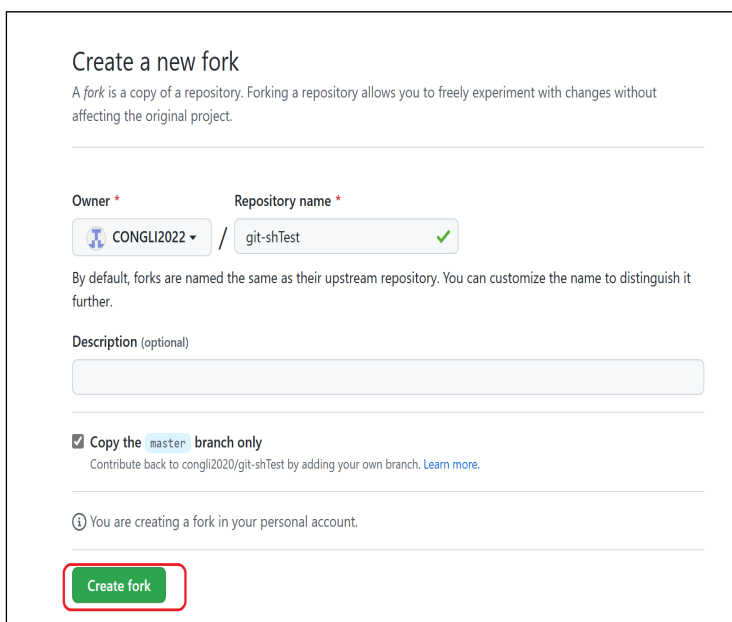
1) 将远程仓库的地址复制发给邀请跨团队协作的人，比如程序员C。



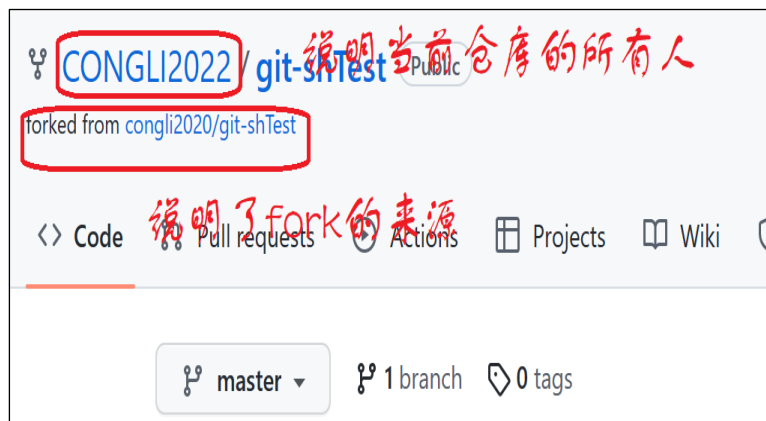
2) 在 C 程序员的 CONGLI2022 账号里的地址栏复制收到的链接，然后点击 Fork 将项目叉到自己的本地仓库。



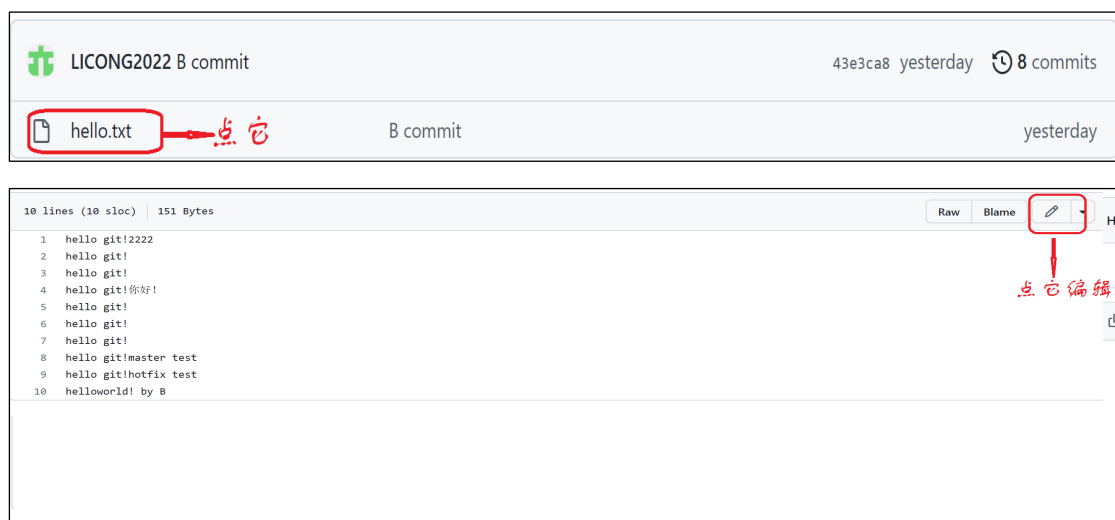
叉入中...



叉成功后可以看到当前仓库信息。

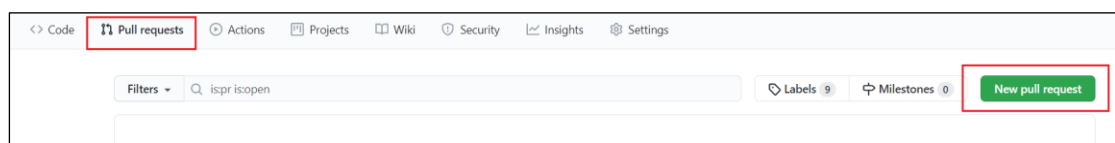


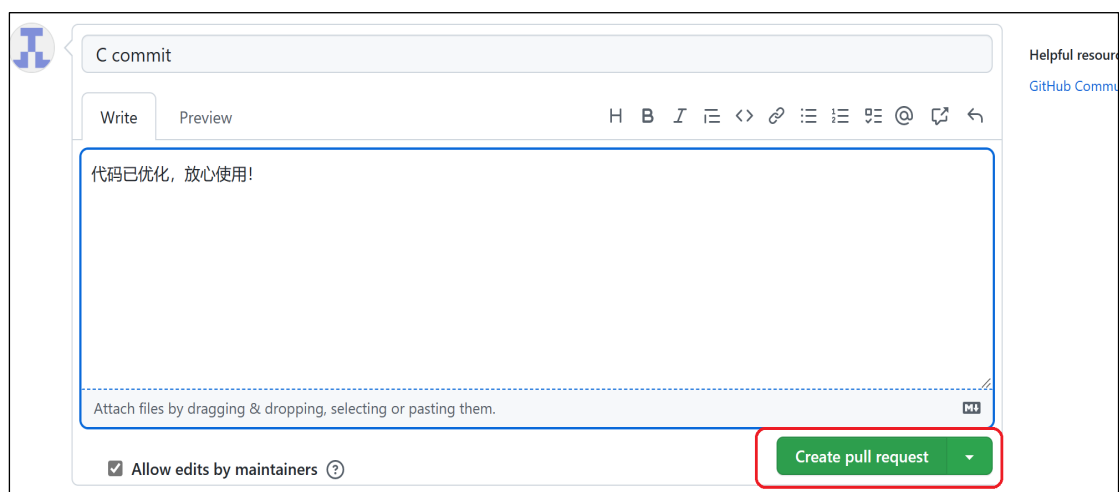
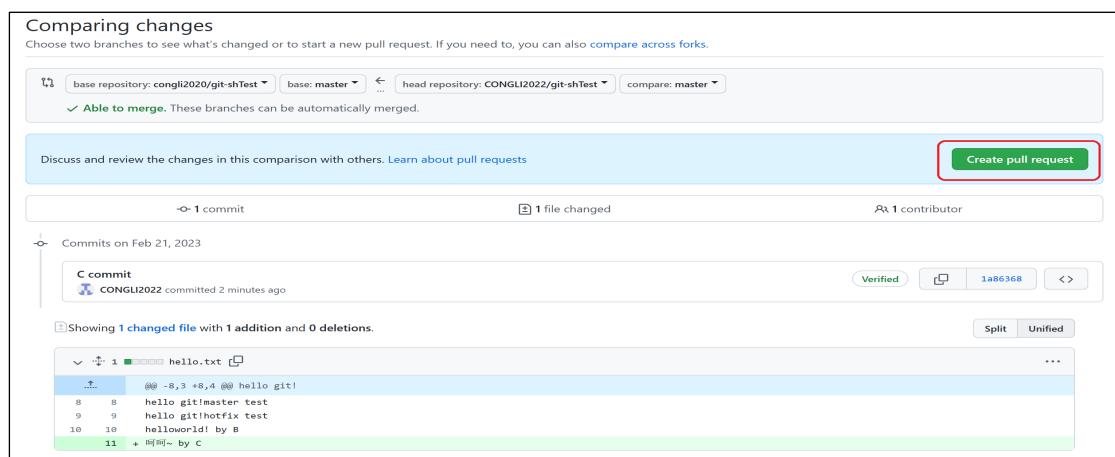
3) 程序员C就可以在线编辑叉取过来的文件。



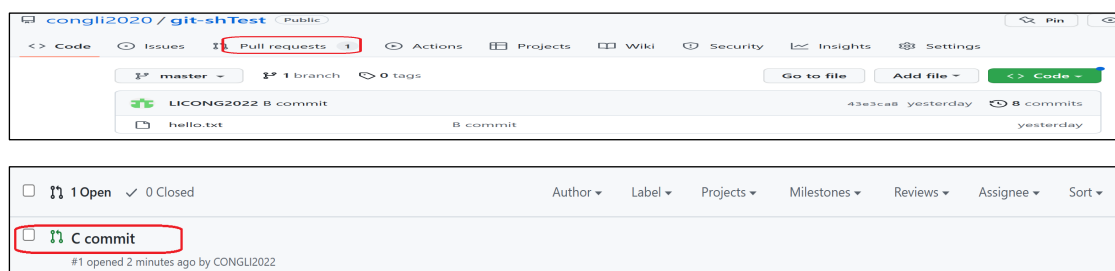
4) 编辑完毕后，填写描述信息并点击左下角绿色按钮提交。

5) 接下来点击上方的 Pull 请求，并创建一个新的请求。





6) 回到程序员A的 GitHub 账号 (congli2020) 可以看到有一个 Pull request 请求。




进入到聊天室，可以讨论代码相关内容。

Conversation 0

Commits 1

Checks 0

Files changed 1




CONGLI2022 commented 3 minutes ago

First-time contributor

...

代码已优化，放心使用！





C commit

Verified

1a86368

Add more commits by pushing to the **master** branch on CONGLI2022/git-shTest.




 Require approval from specific reviewers before merging

Branch protection rules ensure specific people approve pull requests before they're merged.


Add rule

×



Continuous integration has not been set up

GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.




This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request

You can also [open this in GitHub Desktop](#) or view [command line instructions](#).



Write

Preview


H B I ≡ <> 🔗 ≡ ≡ ≡ @ ↗ ↶

Leave a comment

在这里面可以输入聊天信息，另外一方可以实时的接收到

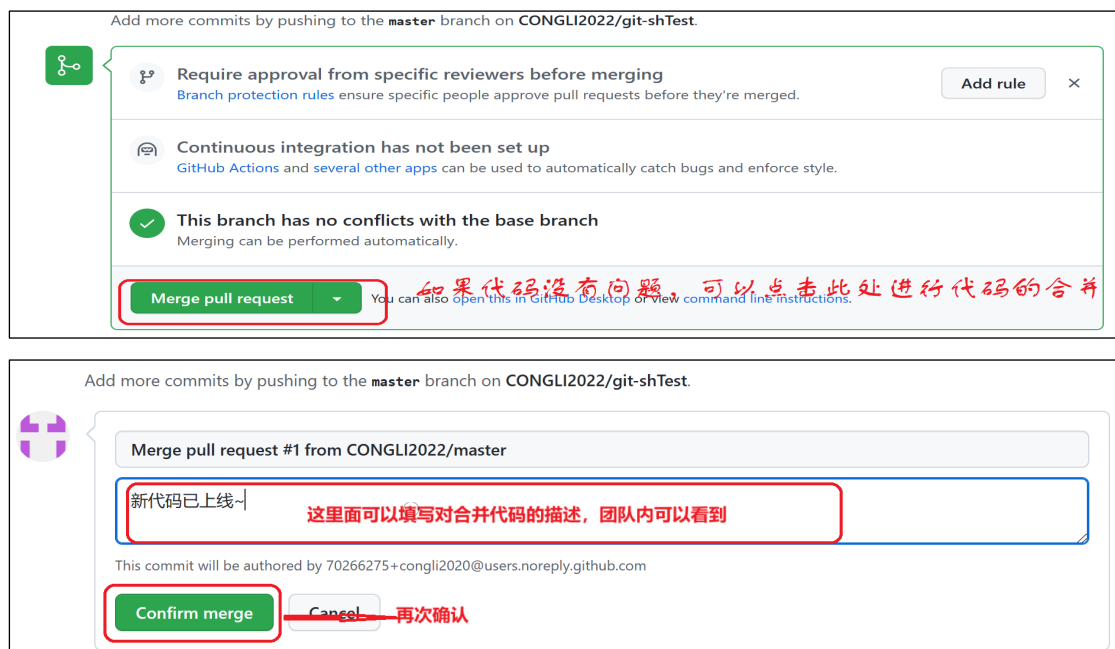
Attach files by dragging & dropping, selecting or pasting them.

14

 Close pull request

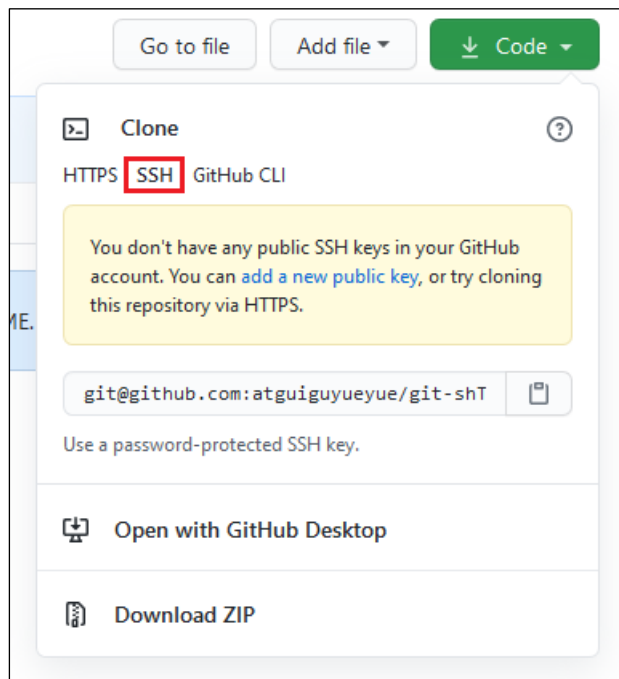
Comment

7) 如果代码没有问题，可以点击 **Merge pull requ** 合并代码。



6.4 SSH 免密登录

我们可以看到远程仓库中还有一个 SSH 的地址，因此我们也可以使用 SSH 进行访问。



具体操作如下：

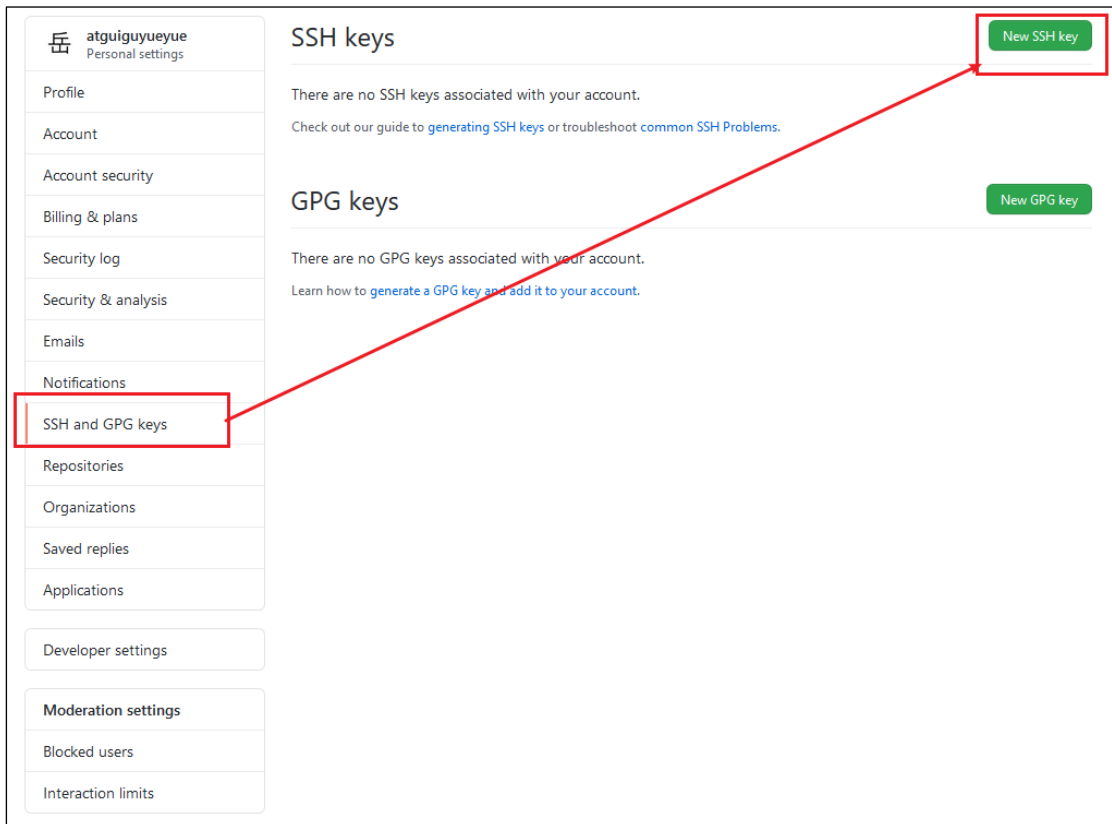
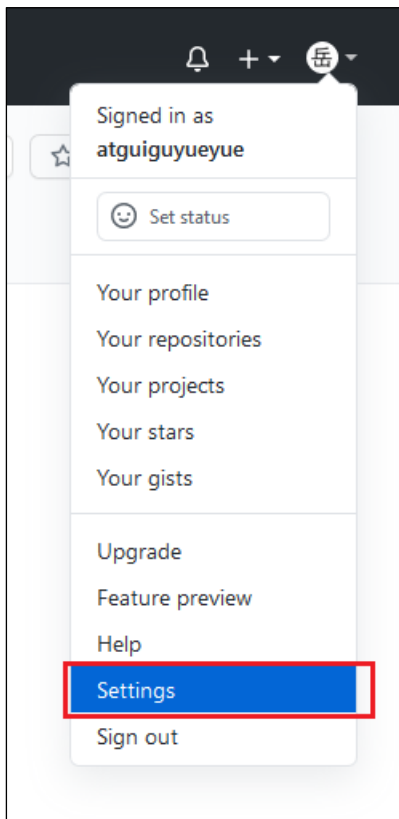
```
--进入当前用户的家目录
Layne@LAPTOP-Layne MINGW64 /d/Git-Space/SH0720 (master)
$ cd
--删除.ssh 目录
Layne@LAPTOP-Layne MINGW64 ~
$ rm -rvf .ssh
removed '.ssh/known_hosts'
```

```

removed directory '.ssh'
--运行命令生成.ssh 密钥目录[注意：这里-c 这个参数是大写的 C]
Layne@LAPTOP-Layne MINGW64 ~
$ ssh-keygen -t rsa -C atguiguyueyue@aliyun.com
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Layne/.ssh/id_rsa):
Created directory '/c/Users/Layne/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Layne/.ssh/id_rsa.
Your public key has been saved in /c/Users/Layne/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:7CPfRLITKcYDhaqpEDeok7Atvwh2reRmpxxOC6dkY44
atguiguyueyue@aliyun.com
The key's randomart image is:
+---[RSA 2048]-----+
|      ..          |
|      ..          |
|      . . .       |
|+ + o . . .       |
|oO . = S .        |
|X . . . + =       |
|+@ * . . = .      |
|X.&o+. o =         |
|Eo+Oo . .         |
+----[SHA256]-----+
--进入.ssh 目录查看文件列表
Layne@LAPTOP-Layne MINGW64 ~
$ cd .ssh
Layne@LAPTOP-Layne MINGW64 ~/.ssh
$ ll -a
total 21
drwxr-xr-x 1 Layne 197609  0 11月 25 19:27 ./
drwxr-xr-x 1 Layne 197609  0 11月 25 19:27 ../
-rw-r--r-- 1 Layne 197609 1679 11月 25 19:27 id_rsa
-rw-r--r-- 1 Layne 197609 406 11月 25 19:27 id_rsa.pub
--查看 id_rsa.pub 文件内容
Layne@LAPTOP-Layne MINGW64 ~/.ssh
$ cat id_rsa.pub
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQDRXRsk9Ohtg1AXLltsuNRAGBsx3ypE101Rkdzpm
1lwoa6y6G62lZri3XtCH0F7GQvnMvQtPISJFXXWo+jFHZmqYQa/6kOIMv2sszcoj2Qtwl
lGXTpN/4T2h/cHjSHfc+ks8OYP7OWOOefpOCbYY/7DWYr189k7nQlfd+A1FV/vQmcsa1L
P5ihqjpjms2CoUUen8kZHbjwHBAHQHWRE+Vc371MG/dwINvCi8n7ibI86o2k0dW0+8SL+
svPV/Y0G9m+RAqgec8b9U6DcSSAMH5uq4UWfnAcUNagb/aJQLytrH0pLa8nMv3XdSGNNo
AGBFeW2+K81XrmkP27FrLI6lDef atguiguyueyue@aliyun.com

```

复制 id_rsa.pub 文件内容，登录 GitHub，点击用户头像→Settings→SSH and GPG keys



SSH keys / Add new

Title

SH200720

这里面可以随意取个名字

Key

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQDRXRsk9Ohtg1AXLtsuNRAGBsx3ypE1O1Rkdzpm11woa6y6G62lZri3XtCH
0F7GQvnMvQtPISJFXXWo+jFHZmqYQa/6kOIMv2sszcoj2QtwllGXTpn/4T2h/cHjSHfc+ks8OYP7OWOOefpOCbYY
/7DWYri89k7nQlfd+A1FV/vQmcsa1LP5ihqjpjms2CoUUen8kZHbjwHBAHQHWRE+Vc371MG
/dwINvCi8n7ib186o2k0dW0+8SL+svPV/Y0G9m+RAqgec8b9U6DcSSAMH5uq4UWfnAcUNagb
/aJQLytrH0pLa8nMv3XdSGNNoAGBFeW2+K81XrmkP27FrLi6lDef atguiguyueyue@aliyun.com
```

将生成的id_rsa.pub文件内容复制到这里

Add SSH key