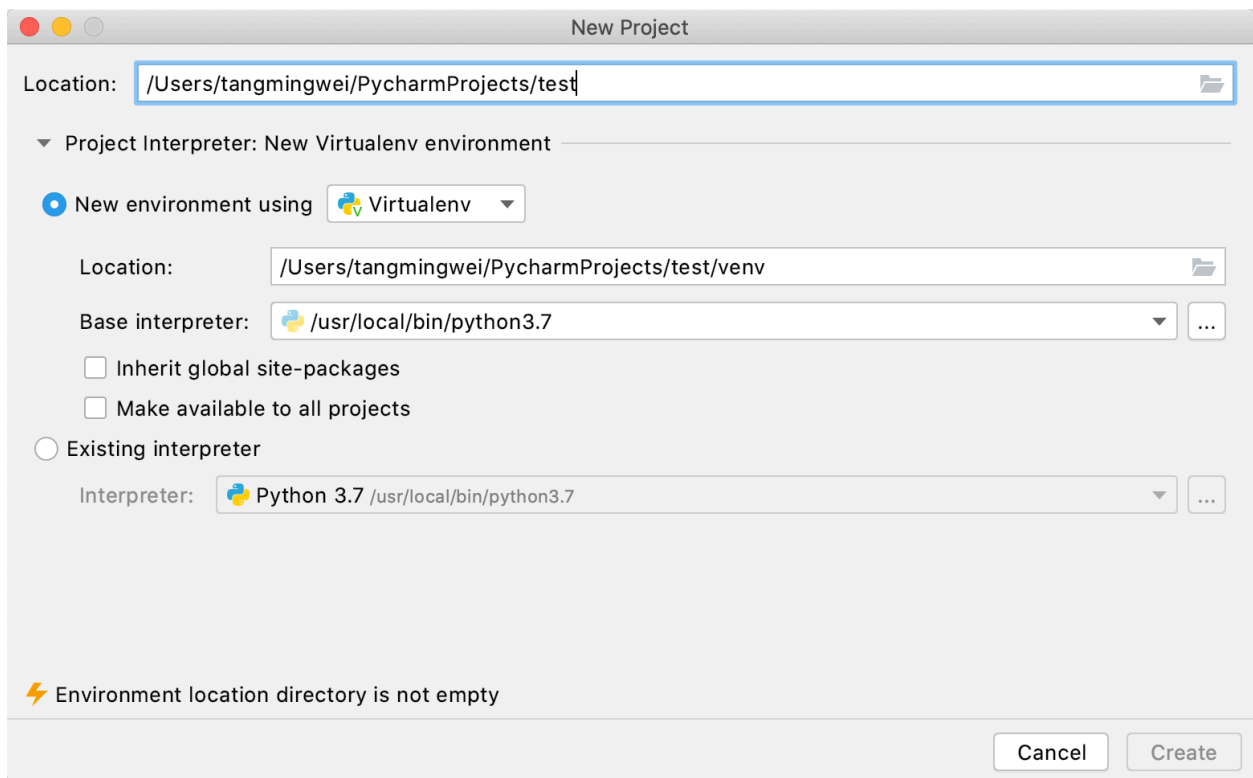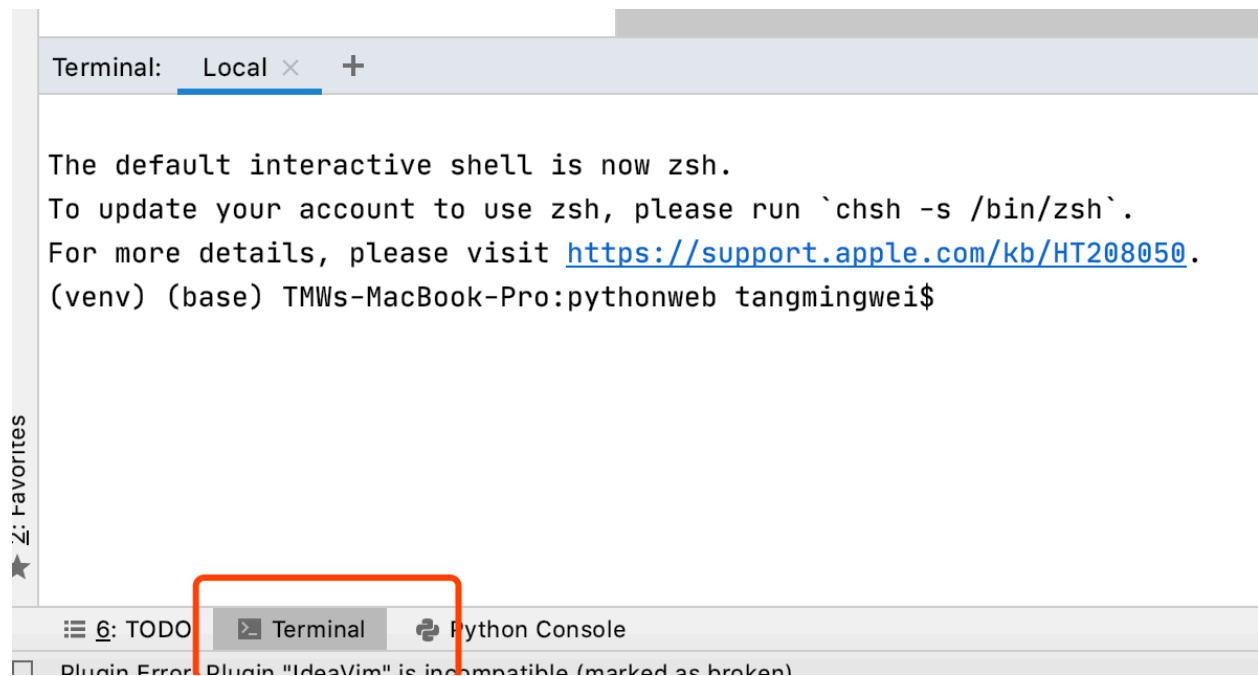# Sync your django project in GitHub

1: create django project in pycharm

We need to create Django project in terminal. You can do it via the terminal of your system. If you don't want to that, you can do it in PyCharm. When you run the PyCharm firstly, you should create a project.

Then you can to to the main interface of pycharm. Click the terminal like the figure.

```
Terminal:    Local ×    +

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
(venv) (base) TMWs-MacBook-Pro:pythonweb tangmingwei$
```

≡ 6: TODO   ⊵ Terminal   ⮒ Python Console

Plugin Error Plugin "IdeaVim" is incompatible (marked as broken)

The current position is in the directory where the current project is. We can't create our project here. Type "cd .." to return to the parent dir.
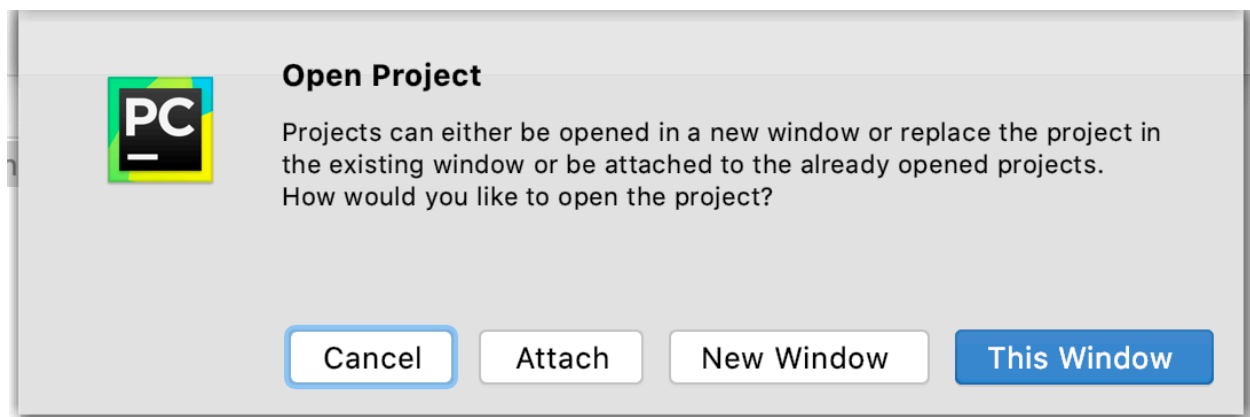
Then input the command like the figure.

```
$ django-admin startproject wtest
```

"west" is the project name, you should use your own name. Then click the menu "file→open" to open the project in pycharm.
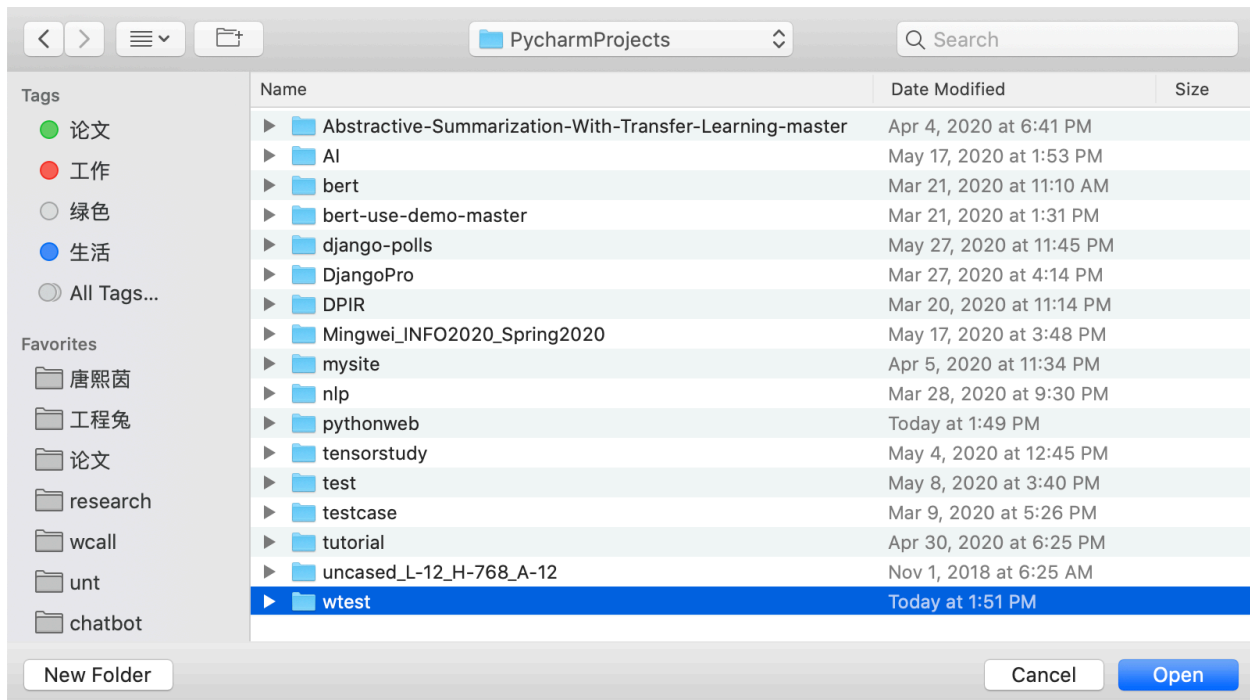
The pop up the open project dialog，you can select what you want, "this window" is recommended.

Then it is like the following figure.
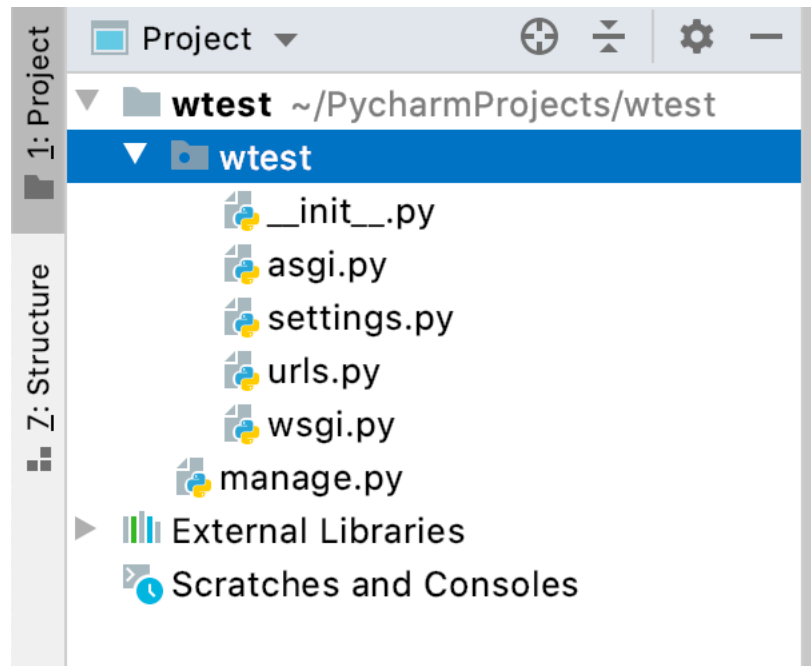
2: create an app of django project

Open the terminal again, then input like this.

```
i$ django-admin startapp newapp
:¢
```

newapp is the app name, each member could create one's own app according to your own module. Then the structure of the project is as follows.
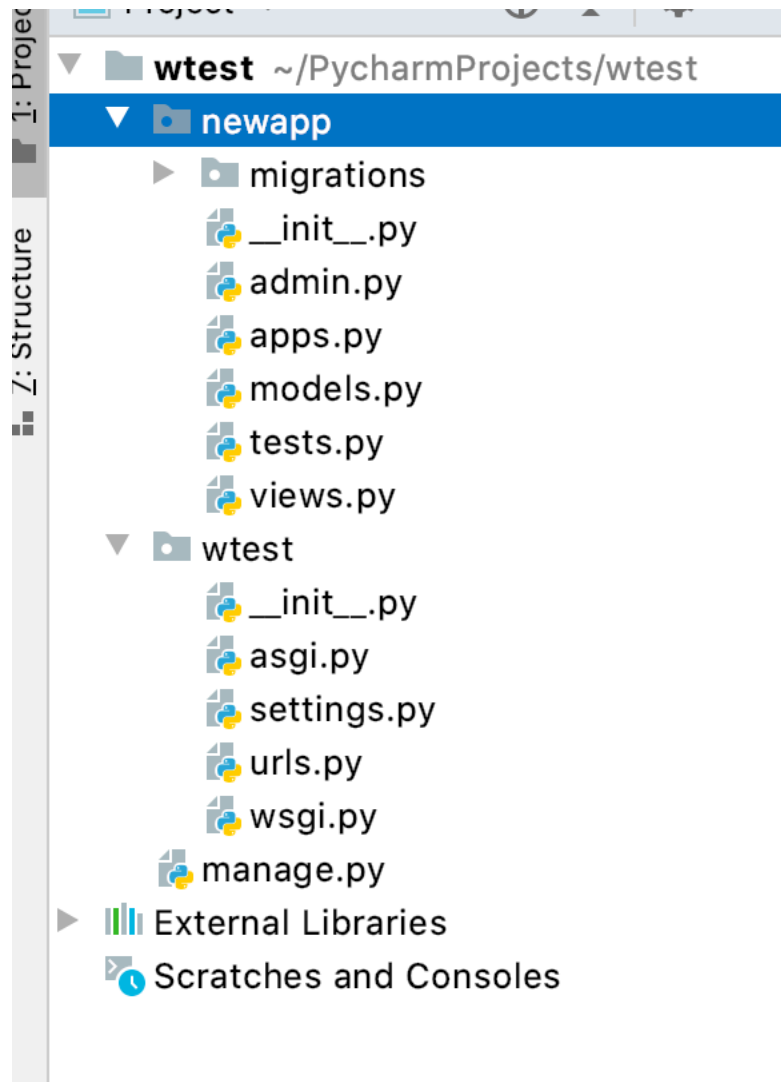
3: share your project in GitHub

Sign up an account in GitHub ahead of time. Then click the menu like the figure.
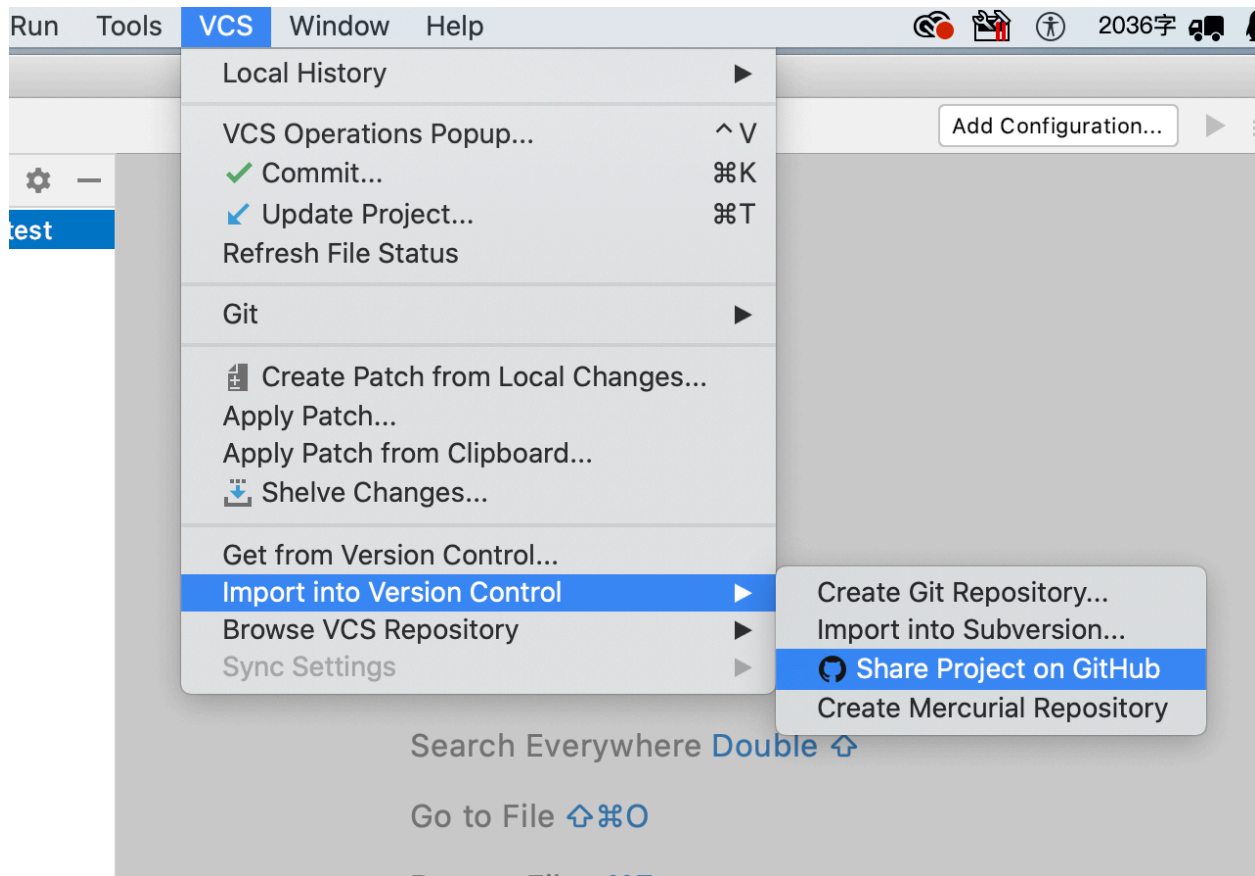
Then input the account into the login interface.
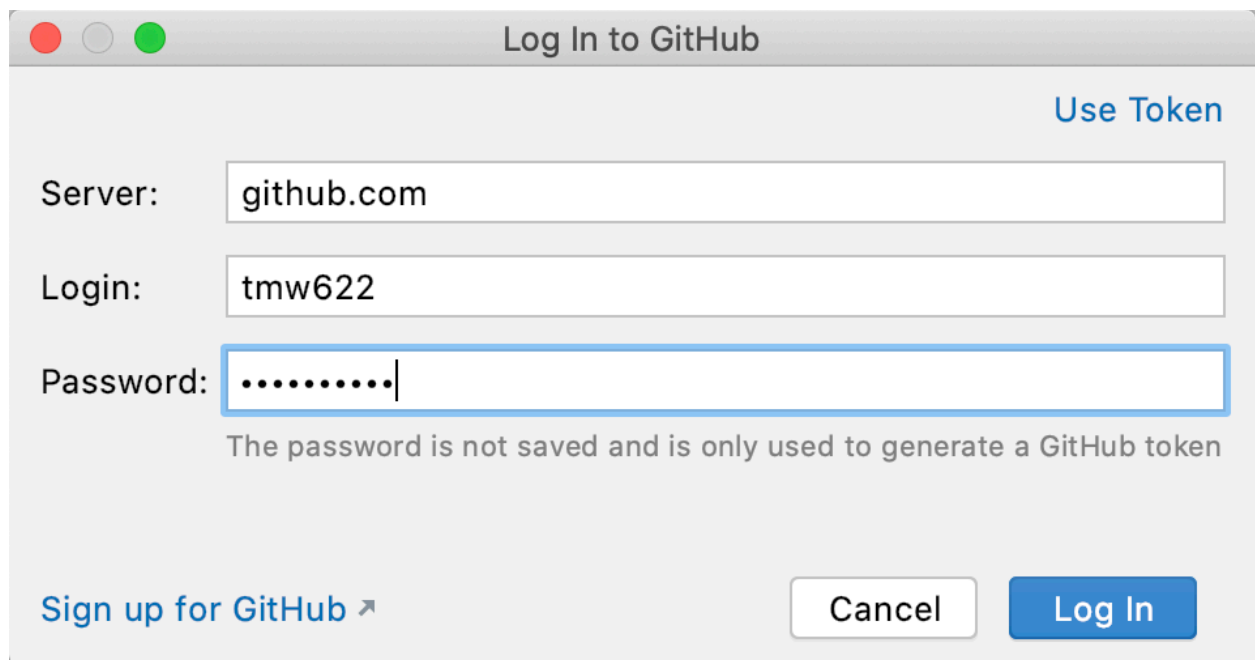
Click share in the following dialog.

Share Project On GitHub

Repository name: wtes ☐ Private

Remote: origin

Description:

? Cancel Share
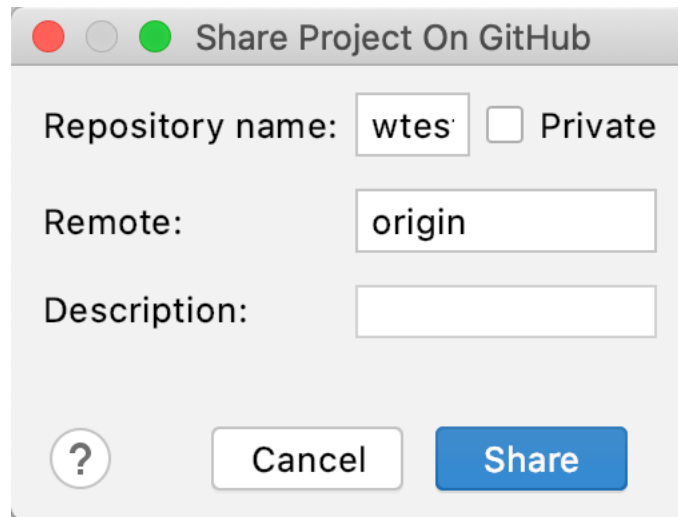
Maybe it will ask you to install the git module, just follow it. Then pop up such a dialog.

Add Files For Initial Commit

☑ 📁 F:\wtest 13 files
  ☑ 📁 newapp 7 files
    ☑ 📁 migrations 1 file
      ☑ 🐍 __init__.py
    ☑ 🐍 __init__.py
    ☑ 🐍 admin.py
    ☑ 🐍 apps.py
    ☑ 🐍 models.py
    ☑ 🐍 tests.py
    ☑ 🐍 views.py
  ☑ 📁 wtest 5 files
    ☑ 🐍 __init__.py
    ☑ 🐍 asgi.py
    ☑ 🐍 settings.py
    ☑ 🐍 urls.py
    ☑ 🐍 wsgi.py

Commit Message

```
Initial commit
```

Add   Cancel
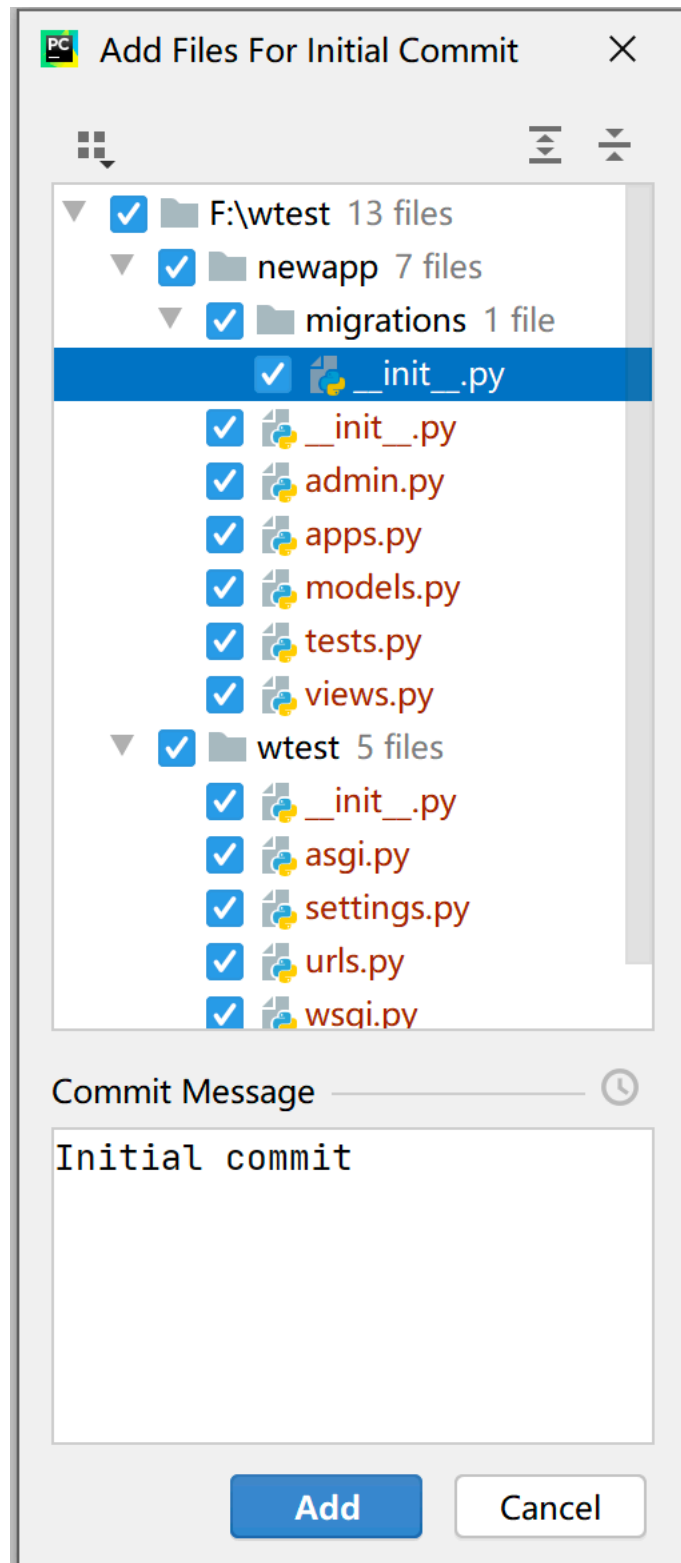
Click "Add", your project will be submitted to the github. But that is only for the meta information of the project. For the codes, you should push your code to github. Right click your project, follow the action.
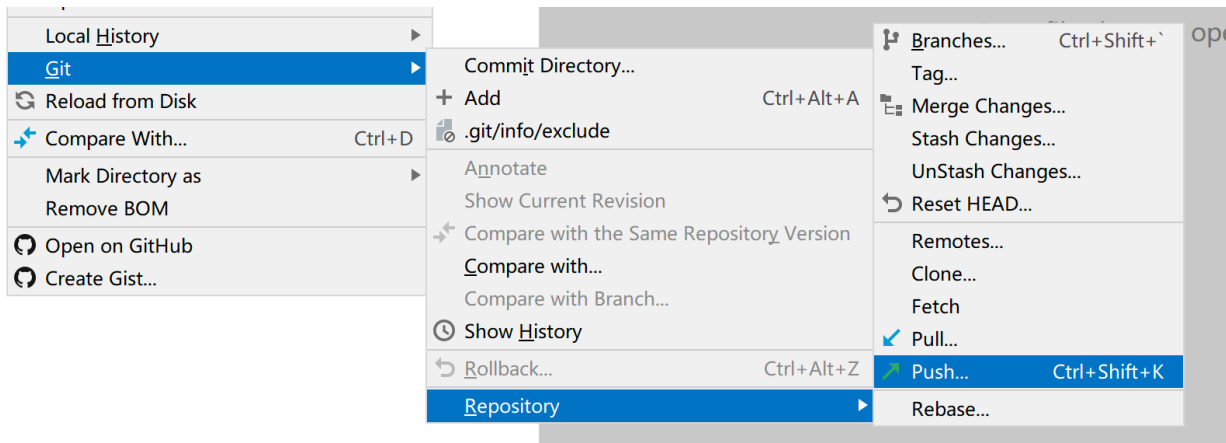
Then push the codes to GitHub. Log into GitHub.com, you can see like this.
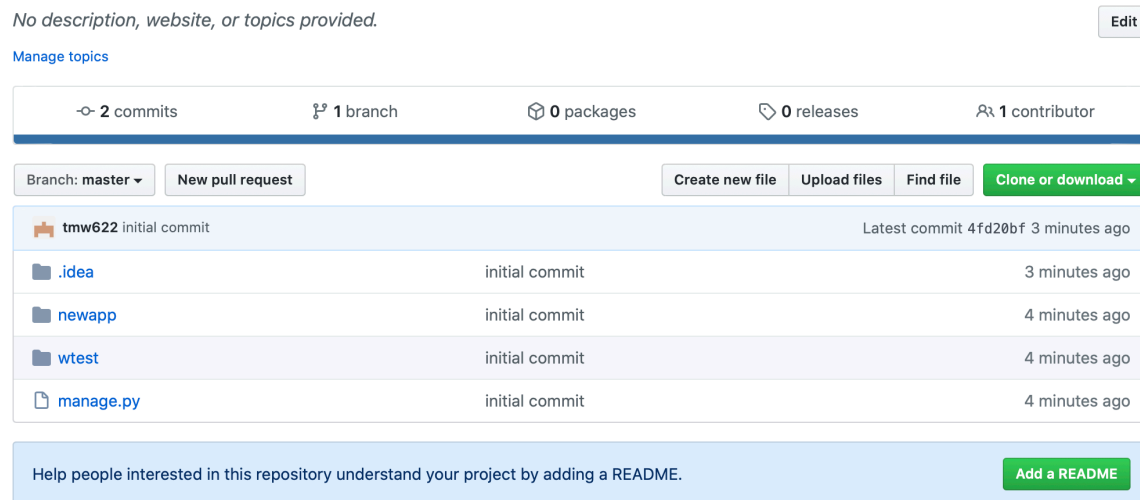
Then click the setting link here.
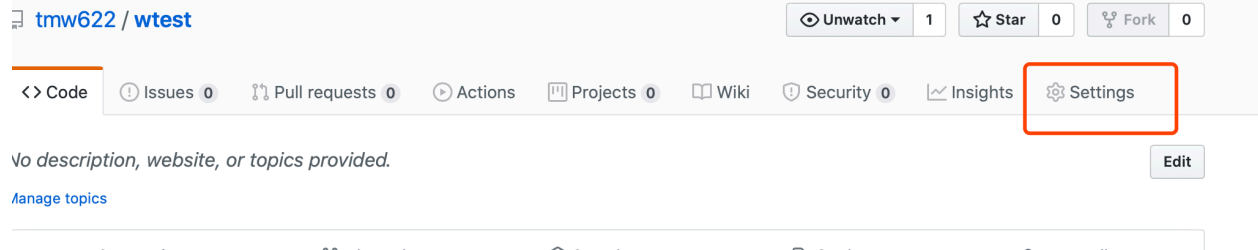
Click the menu "Manage access→ Invite a collaborator", to add your member into your project. My email in GitHub is kyo622@gmail.com. Each team leader should add me as a collaborator into your project.
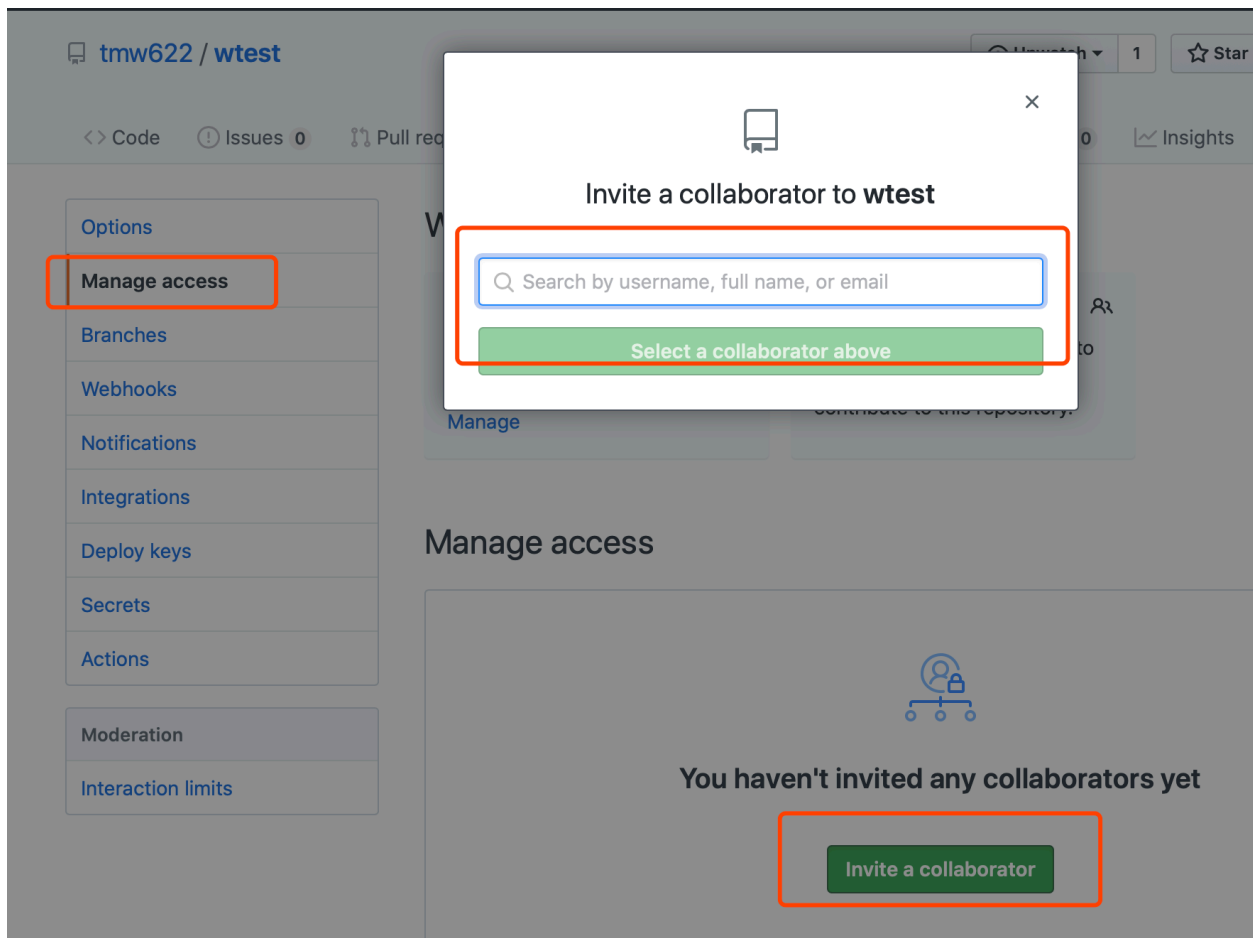
4: import project from GitHub

When finishing that, copy the github link to your member. In my project, it is "https://github.com/tmw622/wtest". Members could click the menu like that.
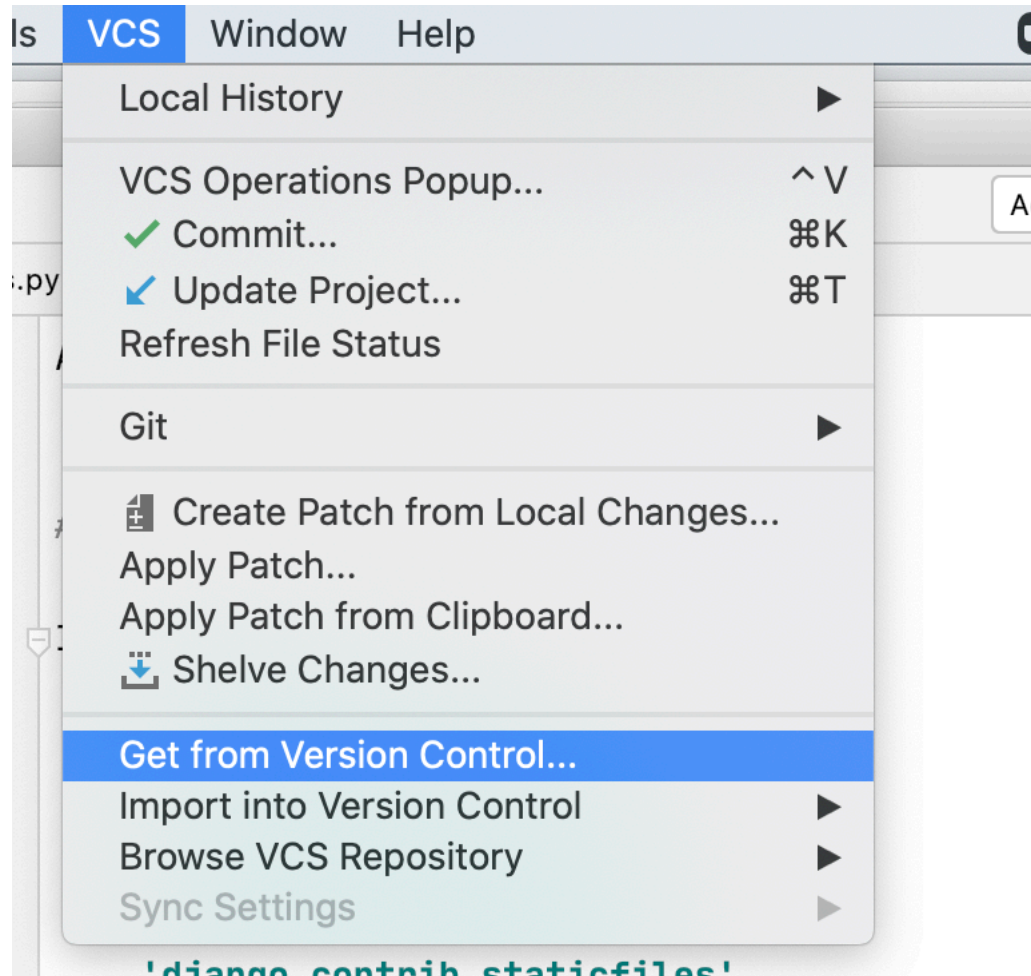
Paste the link at here.
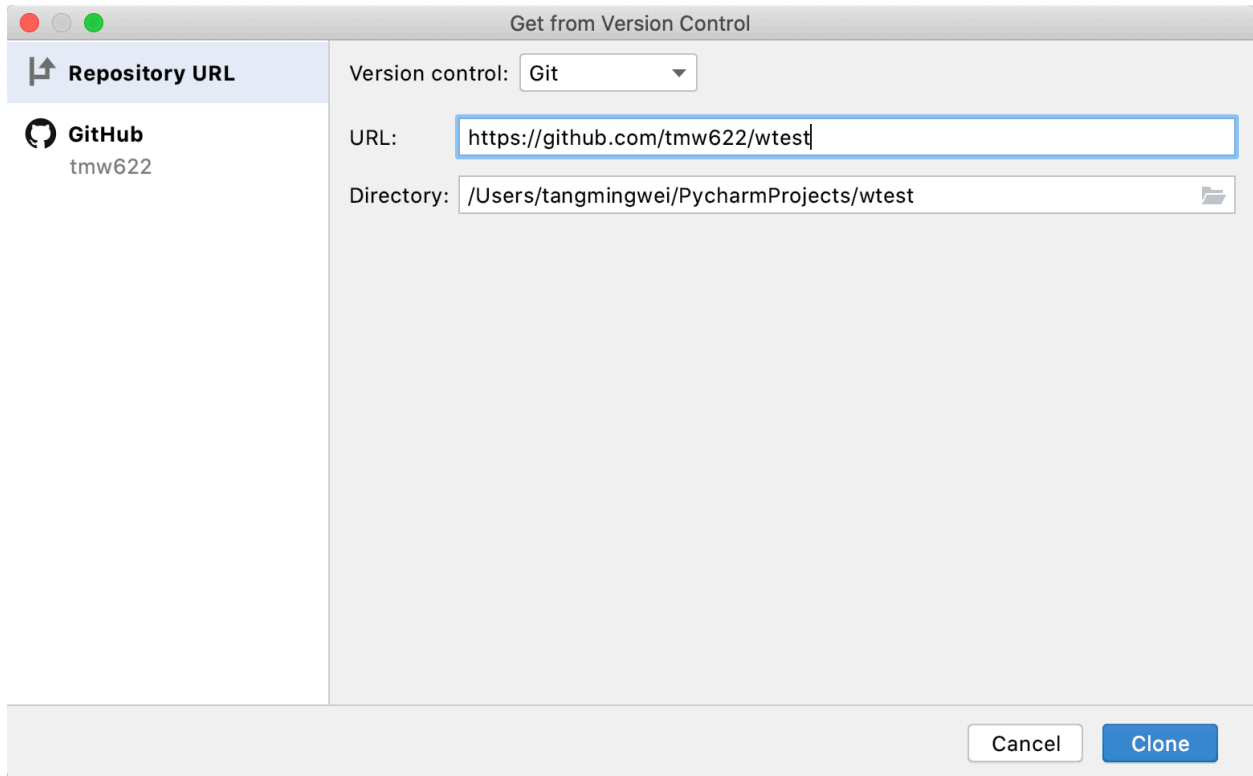
Click clone, then you can download the project into your local computer.

4: submit your change

When you write something in your code, such as add 'newapp' in "settings.py".

```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'newapp'
]
```

The file turns to blue, that means you have made a change to the code, and haven't submitted and pushed to the server.

▼ 📁 wtest
    🐍 __init__.py
    🐍 asgi.py
    🐍 settings.py
    🐍 urls.py
    🐍 wsgi.py

Right click the file like that.

```
 asgi.py                          39        'django.contrib.staticfiles',
 sett                                       'newapp'
     New                          ▶
 urls                                    ]
     Cut                    ⌘X
 wsg  Copy                         ▶
      Paste                  ⌘V      MIDDLEWARE = [
 manag                                      'django.middleware.security.SecurityMiddlev
External I  Find Usages        ⌥F7          'django.contrib.sessions.middleware.Session
Scratche  Inspect Code...                   'django.middleware.common.CommonMiddleware'
                                            'django.middleware.csrf.CsrfViewMiddleware'
      Refactor                   ▶          'django.contrib.auth.middleware.Authenticat
      Clean Python Compiled Files           'django.contrib.messages.middleware.Message
                                            'django.middleware.clickjacking.XFrameOptic
      Add to Favorites           ▶
                                      Commit File...
      Reformat Code         ⌥⌘L
      Optimize Imports      ^⌥O   + Add                        ⌥⌘A
      Delete...              ⌫      Annotate
   ▨ Mark as Plain Text             Show Current Revision
                                  ✦ Compare with the Same Repository Version
    ▶ Run 'settings'        ^⇧R     Compare with...
   ▤ Debug 'settings'       ^⇧D     Compare with Branch...           nds.dj
   🐍 Create 'settings'...           🕐 Show History
      Reveal in Finder              ↺ Rollback...                ⌥⌘Z
   ▨ Open in Terminal
                                      Repository                      ▶
      Local History              ▶
      Git                        ▶           'context_processors': [
   ↻ Reload from Disk                             'django.template.context_proces
   ✦ Compare With...       ⌘D                     'django.template.context_proces
      Mark Directory as          ▶              'django.contrib.auth.context_pr
    Open on GitHub
    Create Gist...

Git      6: TODO     Terminal    Python Console
```

14

The commit message is required, input that and commit.

Remember that push it to the server.

```
setting          New                    ▶         'newapp'
urls.py    ✂ Cut              ⌘X
wsgi.p      Copy              ▶       DDLEWARE = [
nage.p    📋 Paste            ⌘V          'django.middleware.security.SecurityMiddleware',
nal Libr     Find Usages       ⌥F7          'django.contrib.sessions.middleware.SessionMiddleware',
ches ar     Inspect Code...                'django.middleware.common.CommonMiddleware',
                                            'django.middleware.csrf.CsrfViewMiddleware',
            Refactor           ▶          'django.contrib.auth.middleware.AuthenticationMiddleware',
            Clean Python Compiled Files    'django.contrib.messages.middleware.Mess ⑂ Branches...
            Add to Favorites   ▶          'django.middleware.clickjacking.XFrameOp    Tag...
            Reformat Code      ⌥⌘L                                                 ⊨ Merge Changes...
            Optimize Imports   ^⌥O      Commit File                                  Stash Changes...
            Delete...          ⌫        + Add                            ⌥⌘A        UnStash Changes...
         ▦ Mark as Plain Text                                                      ↺ Reset HEAD...
         ▶ Run 'settings'       ^⇧R        Annotate                                 Remotes...
         🐞 Debug 'settings'    ^⇧D        Show Current Revision                    Clone...
         🐍 Create 'settings'...         ↙ Compare with the Same Repository Version   Fetch
            Reveal in Finder              Compare with...                         s',
         ✉ Open in Terminal               Compare with Branch...                 ↙ Pull...
            Local History     ▶          ⏱ Show History                         ↗ Push...      ⇧⌘K
            Git               ▶        ↺ Rollback...                    ⌥⌘Z        Rebase...
         ⟳ Reload from Disk             Repository                       ▶
         ↙ Compare With...   ⌘D                      'context_processors': [
            Mark Directory as ▶                          'django.template.context_processors.debug',
         ◯ Open on GitHub                                'django.template.context_processors.request',
                                                         'django.contrib.auth.context_processors.auth',
```

Then you will find the change in GitHub server.
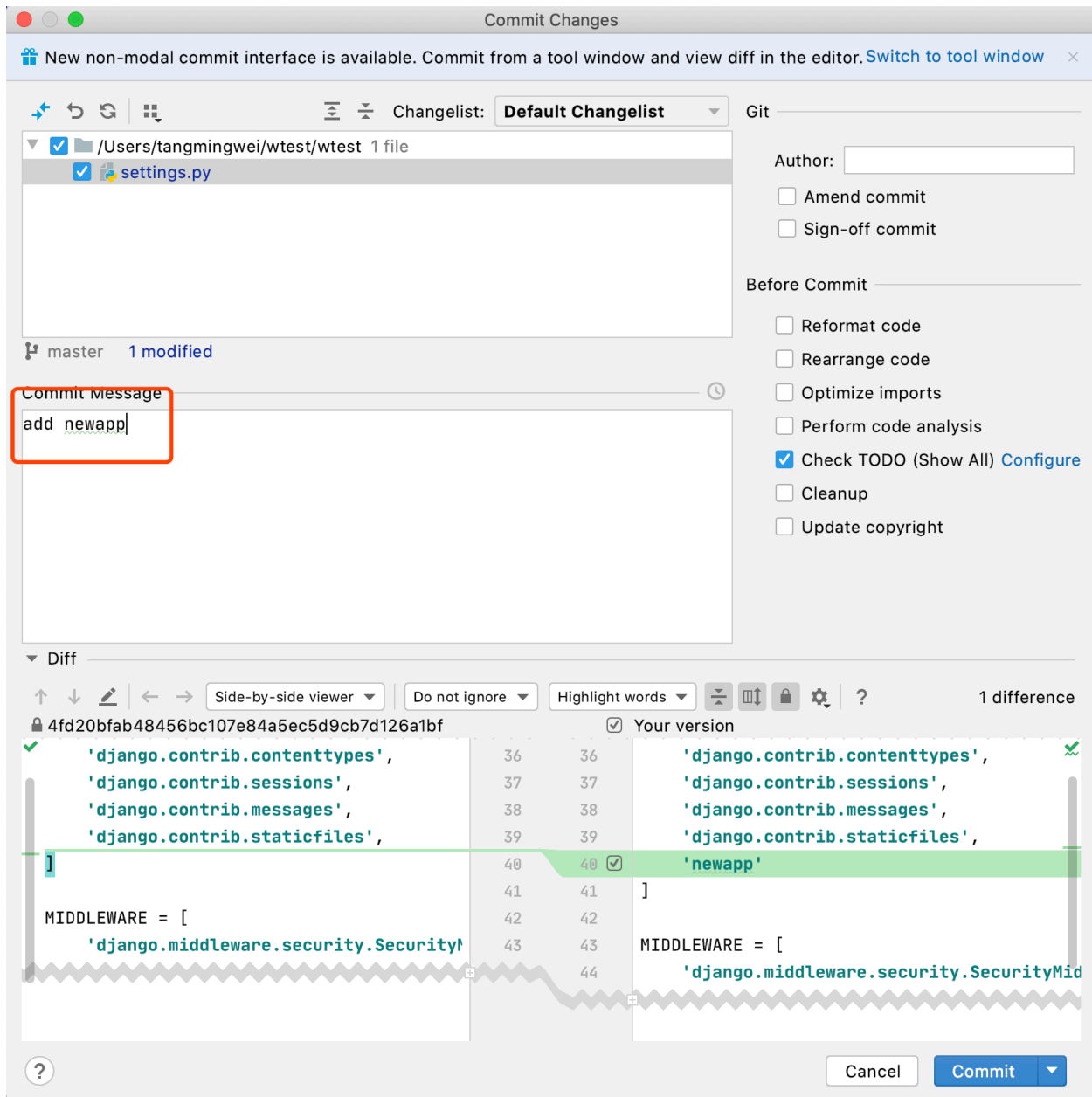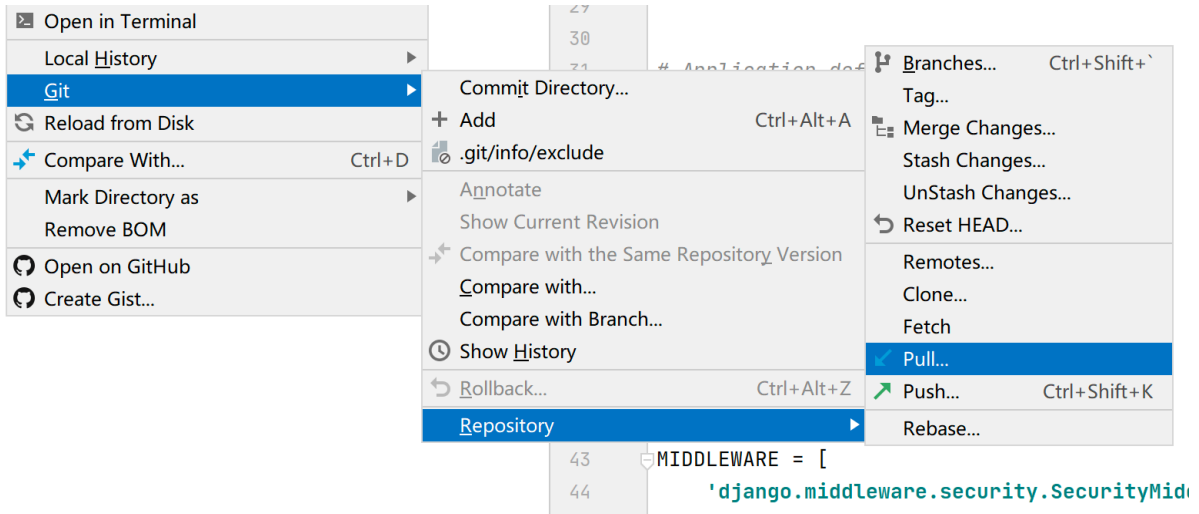


```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'newapp'
]

MIDDLEWARE = [
```
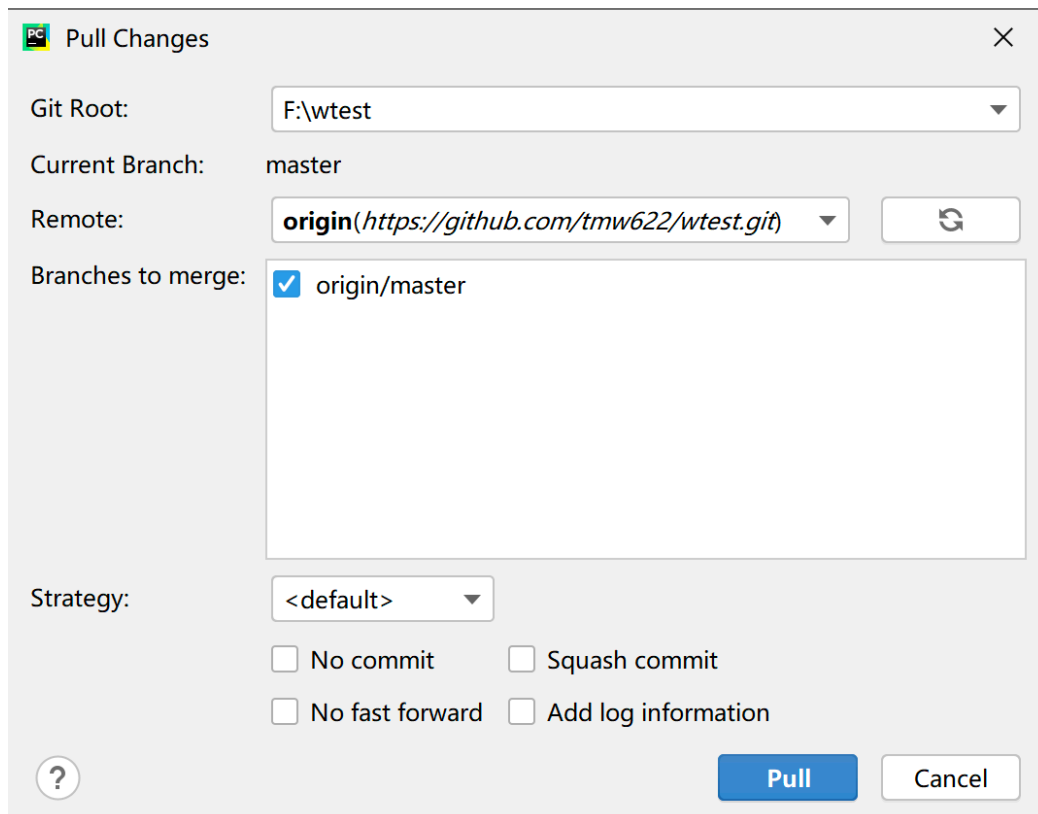
5: get the new version

If you want to get the latest version from GitHub, right click the project like that.

Pull the project from remote.

Click "Pull" button, you can get the latest version.

6: conclusion

This is the support for team work. It can make sure that all the codes in your team are the same. When you begin to work, pull the project, and after you finish the work, submit and push it to GitHub.

Writer: Mingwei Tang

June 2rd 2020