

Git & GitHub

◆ 팀 프로젝트를 위한 깃허브 설정 - Python

정수아

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01 팀 프로젝트를 위한 깃허브 설정



01

팀 프로젝트를 위한 깃허브 설정

[팀장] 저장소 이름 설정

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner *

HelloCoding22 ▾

Repository name *

PythonTeamProject ✓

Great repository names are short and memorable. Need inspiration? How about [psychic-spoon?](#)

Description (optional)

팀 프로젝트를 위한 깃허브 설정 수업

☒ 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.](#)

.gitignore template: None ▾

Choose a license

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

License: None ▾

ⓘ You are creating a public repository in your personal account.

Create repository

4

[팀장] 저장소 생성 완료

The screenshot shows the GitHub interface for a repository named 'PythonTeamProject' under the user 'HelloCoding22'. The repository is public. At the top, there are buttons for 'Pin', 'Unwatch' (with a count of 1), 'Fork' (with a count of 0), and 'Star' (with a count of 0). Below these are navigation tabs for 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Code' tab is selected.

The main content area has a dark blue header with the text 'Quick setup — if you've done this kind of thing before'. Below this header, there are three buttons: 'Set up in Desktop', 'or', 'HTTPS', and 'SSH'. To the right of these buttons is a text input field containing the repository URL: 'https://github.com/HelloCoding22/PythonTeamProject.git'. A copy icon is visible to the right of the input field.

Below the buttons, there is a paragraph of text: 'Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).'

The next section is titled '...or create a new repository on the command line'. It contains a code block with the following commands:

```
echo "# PythonTeamProject" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/HelloCoding22/PythonTeamProject.git
git push -u origin main
```

A copy icon is visible to the right of the code block.

The next section is titled '...or push an existing repository from the command line'. It contains a code block with the following commands:

```
git remote add origin https://github.com/HelloCoding22/PythonTeamProject.git
git branch -M main
git push -u origin main
```

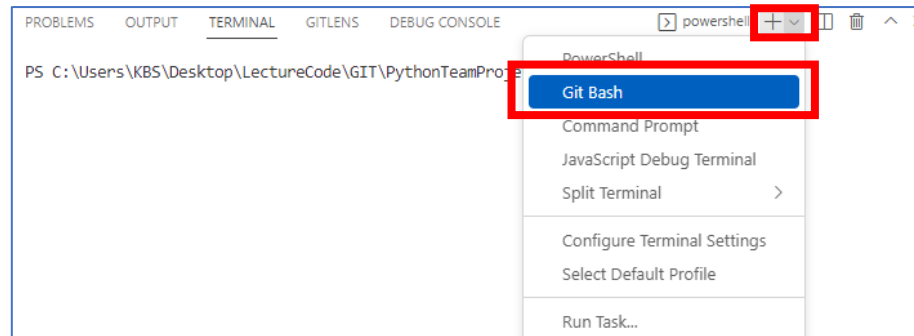
A copy icon is visible to the right of the code block.

The final section is titled '...or import code from another repository'. It contains a paragraph of text: 'You can initialize this repository with code from a Subversion, Mercurial, or TFS project.' Below this text is a button labeled 'Import code'.

[팀장] 프로젝트 초기 설정하기

❖ 프로젝트 생성 후 작업 시작

- 터미널에서 Git Bash 실행



- 프로젝트 폴더 초기화

```
$ git init
```

- 예) hello.py

```
print("Hello!")
```

[팀장] 프로젝트 초기 설정하기

❖ 스테이지에 올리기

```
$ git add .
```

❖ 커밋하기

```
$ git commit -m "first commit"
```

❖ 브랜치 변경하기

```
$ git branch -M main
```

[팀장] 프로젝트 초기 설정하기

❖ 로컬 저장소와 원격 저장소를 연결하기

```
$ git remote add origin 원격_저장소_주소
```

❖ 원격 저장소에 푸시하기

```
$ git push -u origin main
```


[팀장] 깃허브 저장소에 푸시 완료

The screenshot displays the GitHub interface for a repository named 'HelloCoding22 / PythonTeamProject', which is public. The top navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below this, there are buttons for Pin, Unwatch (1), Fork (0), and Star (0). The main content area shows the 'main' branch selected, with buttons for 'Go to file', 'Add file', and 'Code'. A commit by 'HelloCoding22' is highlighted with a red box, showing the file 'hello.py' and the message 'first commit'. To the right, the 'About' section provides statistics: 0 stars, 1 watching, and 0 forks. At the bottom, there is a prompt to 'Add a README' to help people understand the project.

HelloCoding22 / PythonTeamProject Public

Pin Unwatch 1 Fork 0 Star 0

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main Go to file Add file <> Code About

HelloCoding22 first commit 1 minute ago 1

hello.py first commit 1 minute ago

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

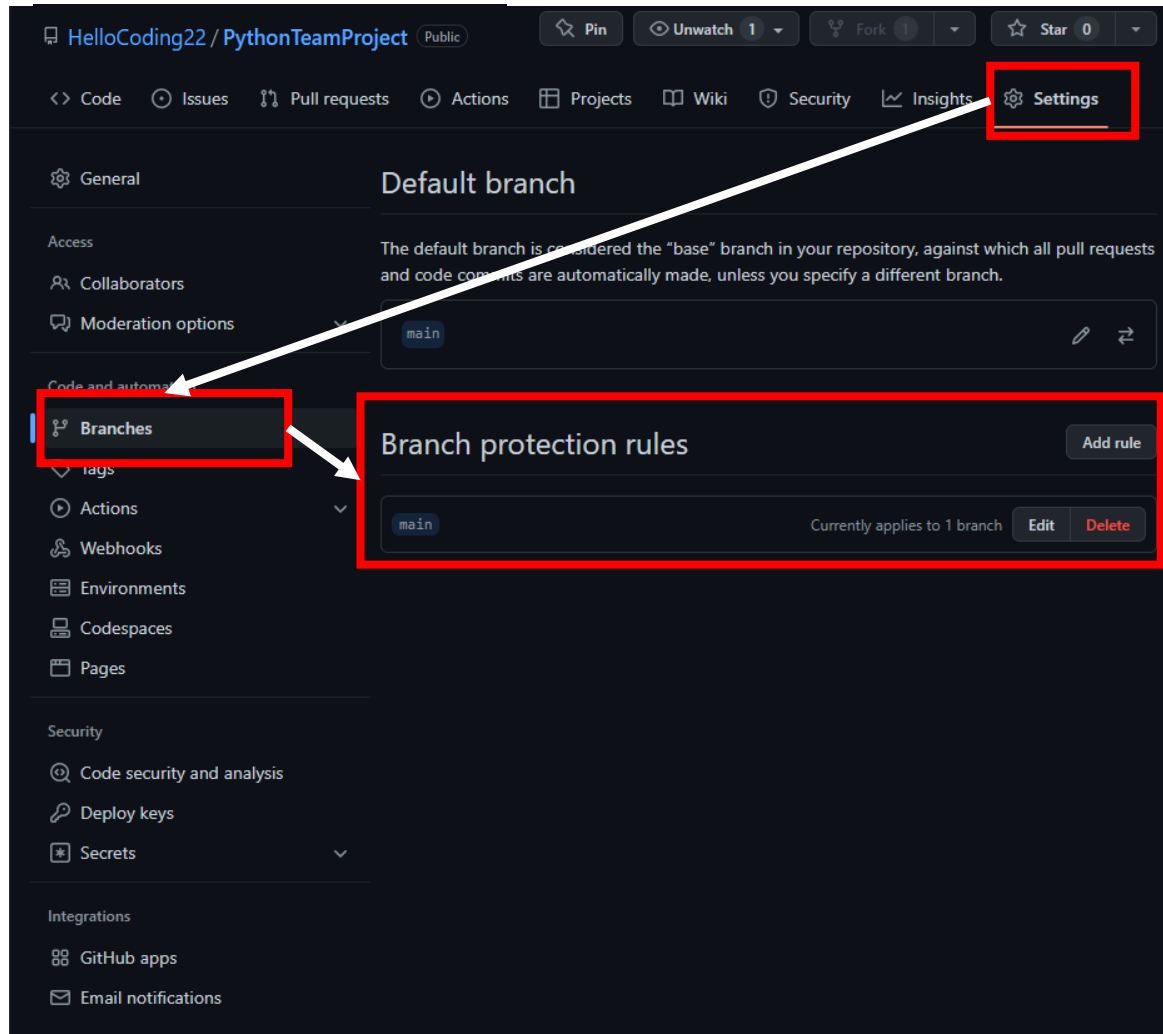
팀 프로젝트를 위한 깃허브 설정 수
업

0 stars
1 watching
0 forks

Releases

No releases published
Create a new release

[팀장] Branch 보호 규칙 설정



[팀장] Branch 보호 규칙 설정

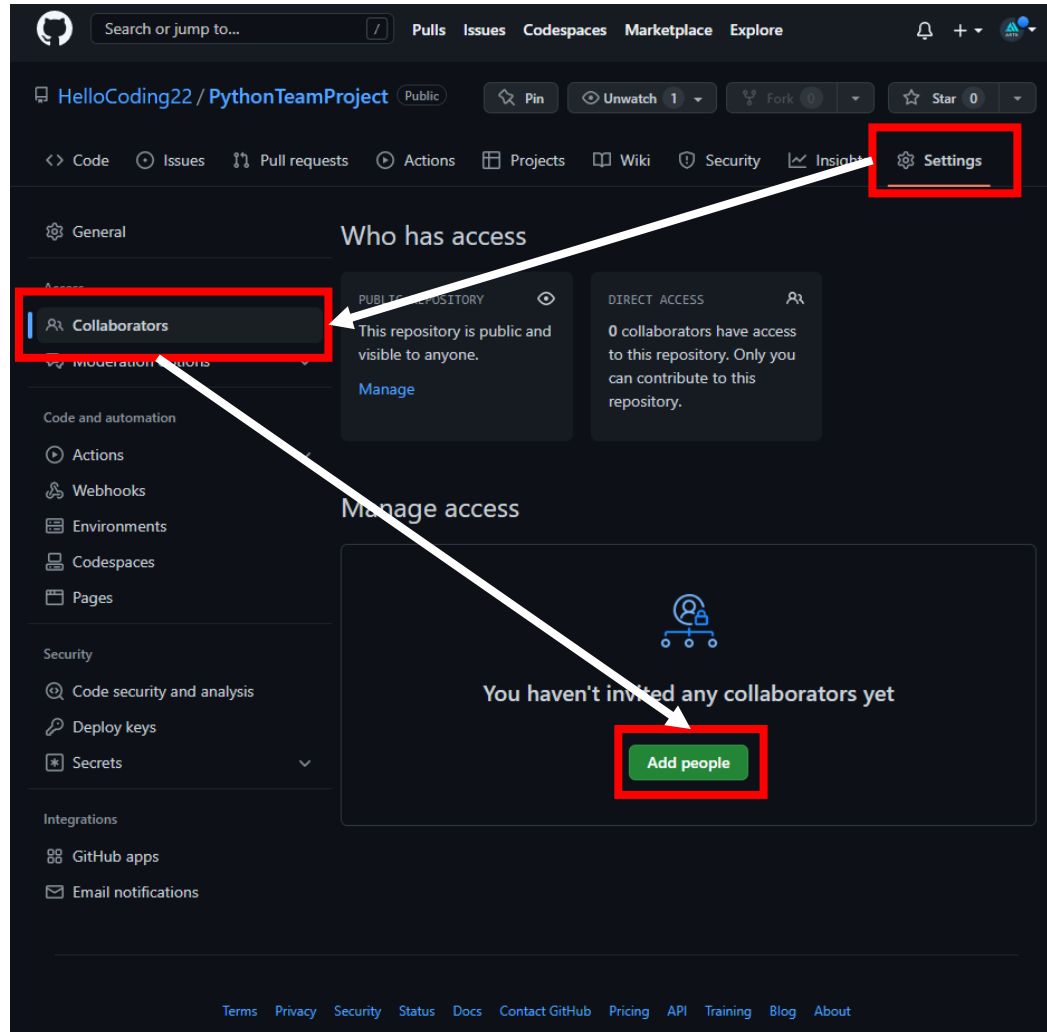
Branch name pattern *

main 브랜치 이름

Protect matching branches 규칙

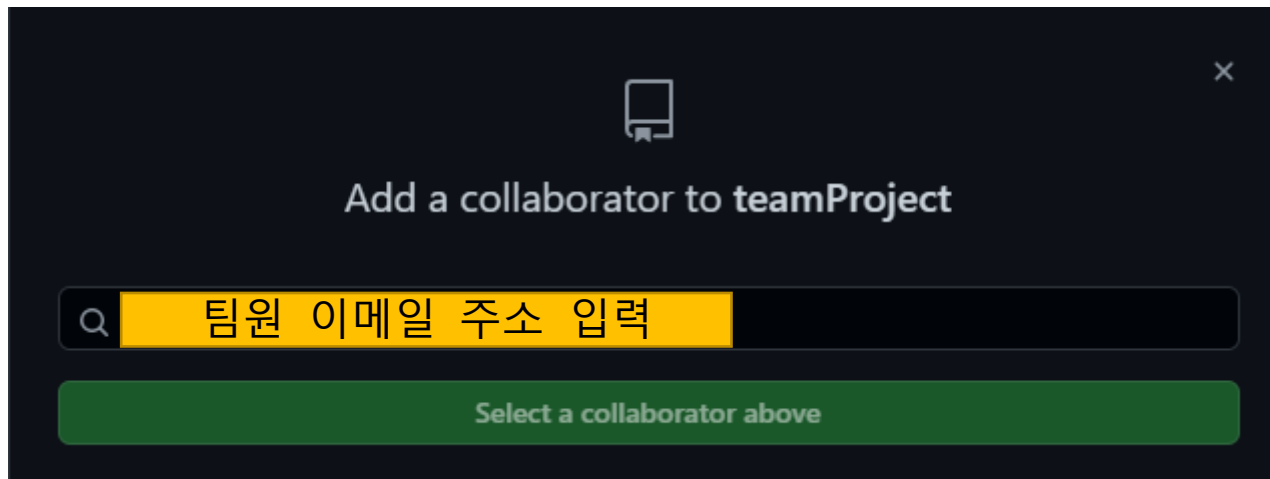
- ☒ **Require a pull request before merging**
When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.
- ☒ **Require approvals**
When enabled, pull requests targeting a matching branch require a number of approvals and no changes requested before they can be merged.
Required number of approvals before merging: 1 ▼
- ☐ **Dismiss stale pull request approvals when new commits are pushed**
New reviewable commits pushed to a matching branch will dismiss pull request review approvals.
- ☐ **Require review from Code Owners**
Require an approved review in pull requests including files with a designated code owner.
- ☐ **Require approval of the most recent push**
The most recent push must be approved by someone other than the last pusher.

[팀장] 팀원 초대하기



[팀장] 팀원 초대하기

❖ 팀원 초대하기



The screenshot shows a dark-themed mobile app interface. At the top, there is a close button (X) in the top right corner. Below it is a white icon of a smartphone. The text "Add a collaborator to teamProject" is centered. Below the text is a search bar with a magnifying glass icon on the left and the placeholder text "팀원 이메일 주소 입력" (Enter team member email address). Below the search bar is a green button with the text "Select a collaborator above".

[팀장] 팀원 초대하기

The screenshot shows the GitHub repository settings page for a team. The left sidebar contains navigation links: General, Access, Collaborators, Moderation options, Code and automation, Branches, Tags, Actions, Webhooks, Environments, Codespaces, Pages, and Security. The 'Collaborators' section is active. The main content area is divided into 'Who has access' and 'Manage access'.

Who has access

- PUBLIC REPOSITORY**: This repository is public and visible to anyone. [Manage](#)
- DIRECT ACCESS**: 1 has access to this repository. 0 collaborators. 1 invitation.

Manage access

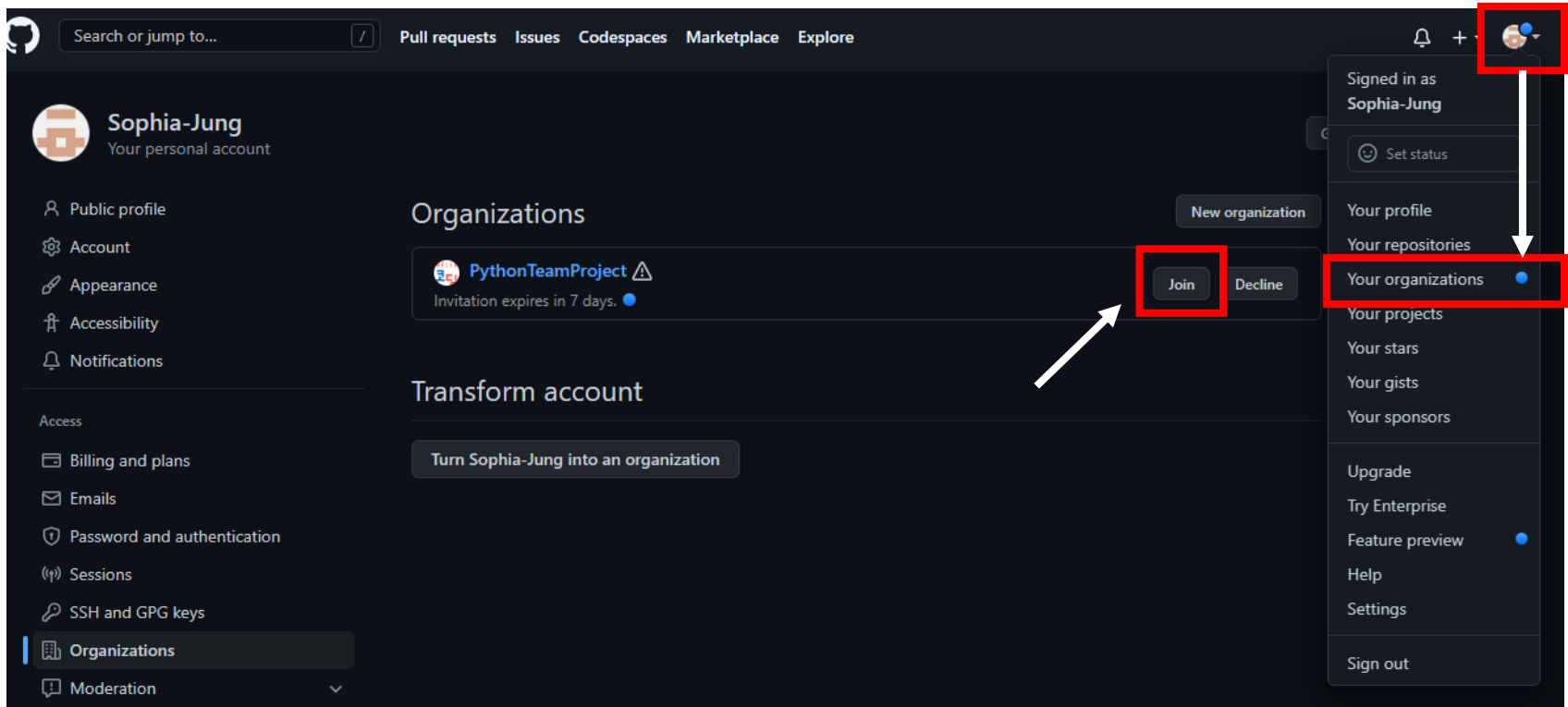
[Add people](#)

☐ Select all Type ▾

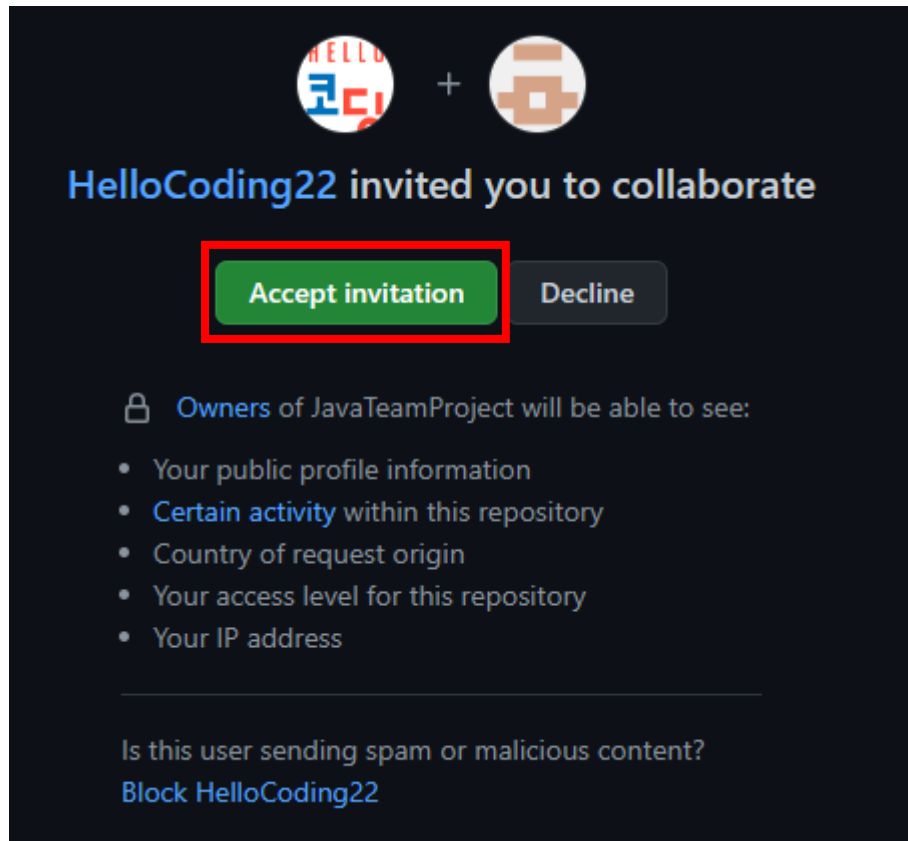
초대 수락 대기중

	Sophia-Jung Awaiting Sophia-Jung's response	Pending Invite	Remove
--	---	----------------	------------------------

[팀원] 프로젝트 참여하기



[팀원] 프로젝트 참여하기



[팀원] 프로젝트 참여 완료

The screenshot shows the GitHub interface for the repository 'HelloCoding22 / PythonTeamProject'. At the top, a notification bar states: 'You now have push access to the HelloCoding22/PythonTeamProject repository.' Below this, the repository name is displayed with a 'Public' badge. Interaction buttons include 'Watch' (1), 'Fork' (0), and 'Star' (0). A navigation bar contains links for 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', and 'Insights'. The 'Code' section is active, showing a 'main' branch and buttons for 'Go to file', 'Add file', and 'Code'. A commit history table lists a 'first commit' by 'HelloCoding22' from 7 minutes ago, which includes a file named 'hello.py'. A prompt at the bottom encourages adding a README. On the right, the 'About' section shows 0 stars, 1 watcher, and 0 forks. The 'Releases' section indicates no releases are published.

Search or jump to... / Pulls Issues Codespaces Marketplace Explore

You now have push access to the HelloCoding22/PythonTeamProject repository.

HelloCoding22 / PythonTeamProject Public

Watch 1 Fork 0 Star 0

Code Issues Pull requests Actions Projects Wiki Security Insights

main Go to file Add file Code

Commit	Author	Time
first commit	HelloCoding22	7 minutes ago

hello.py first commit 7 minutes ago

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

About

팀 프로젝트를 위한 깃허브 설정 수업

0 stars

1 watching

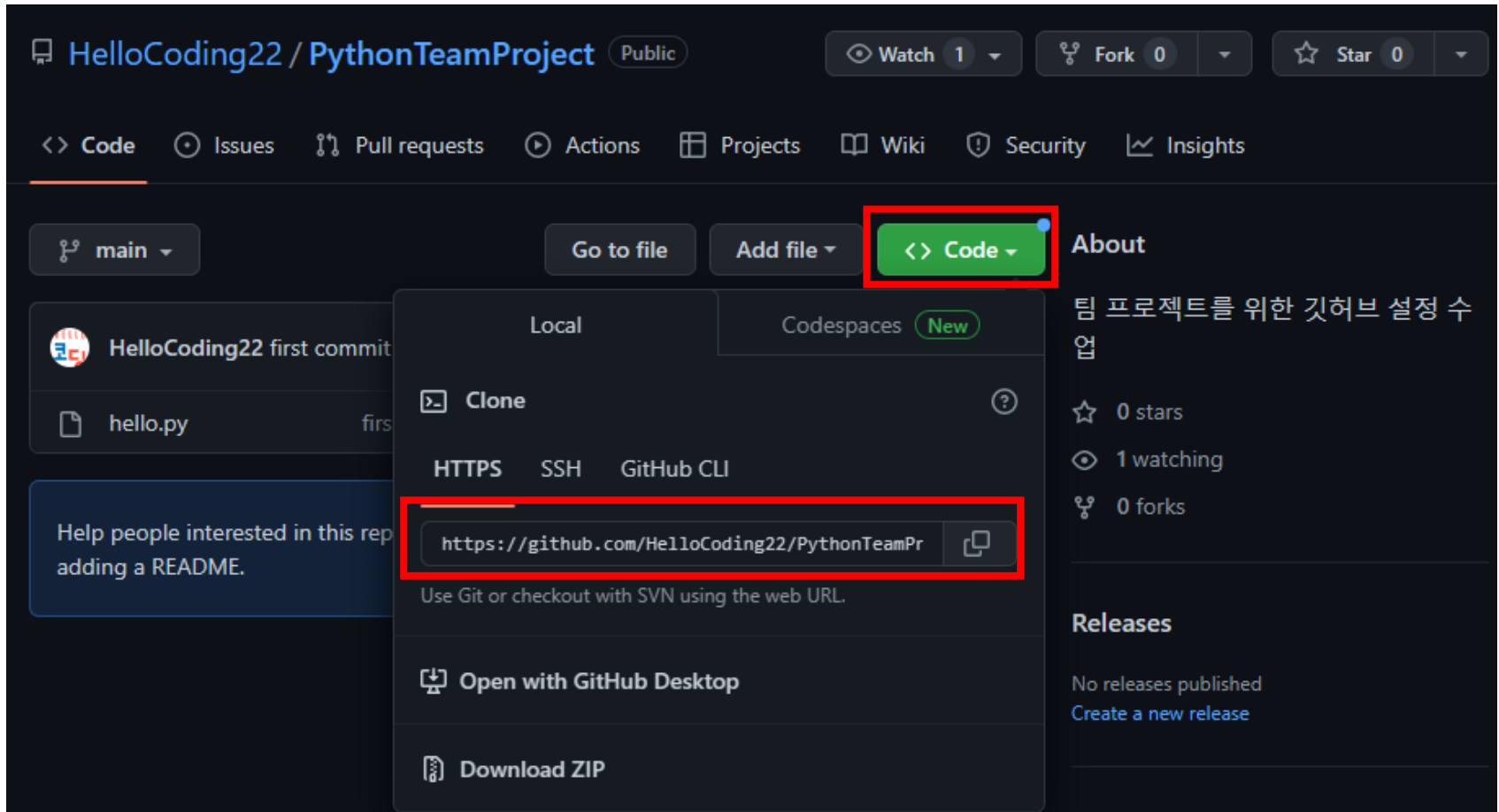
0 forks

Releases

No releases published

Create a new release

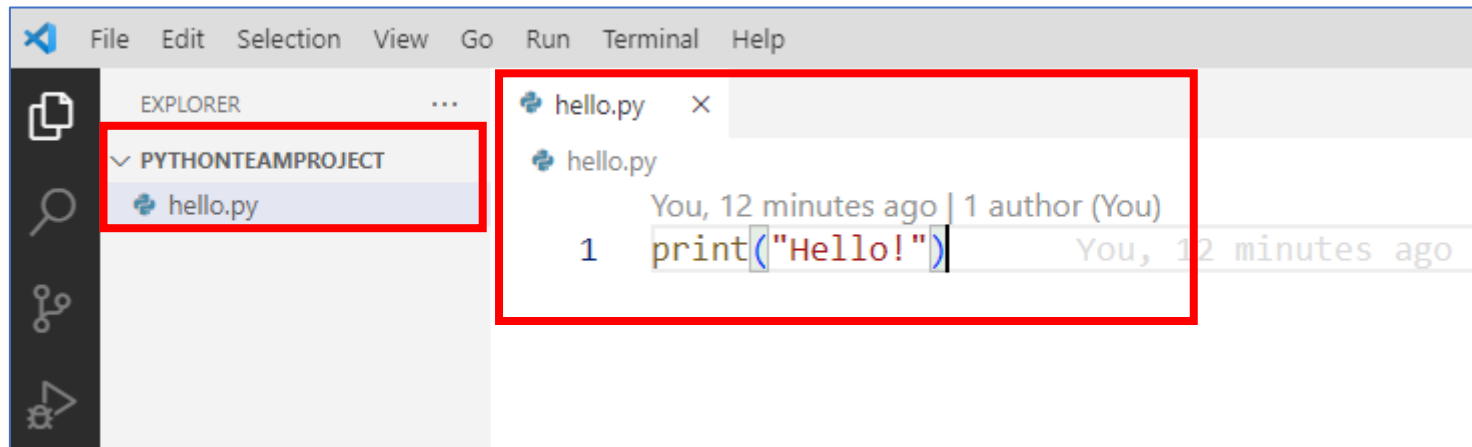
[팀원] 깃허브 저장소 복제하기



[팀원] 깃허브 저장소 복제하기

❖ 깃허브 저장소 복제하기

```
$ git clone https://github.com/팀장계정/프로젝트이름.git
```



[팀원] 작업하기

❖ 팀원 본인 브랜치 생성

- 예) soo 브랜치 생성

```
$ git branch sooa
```

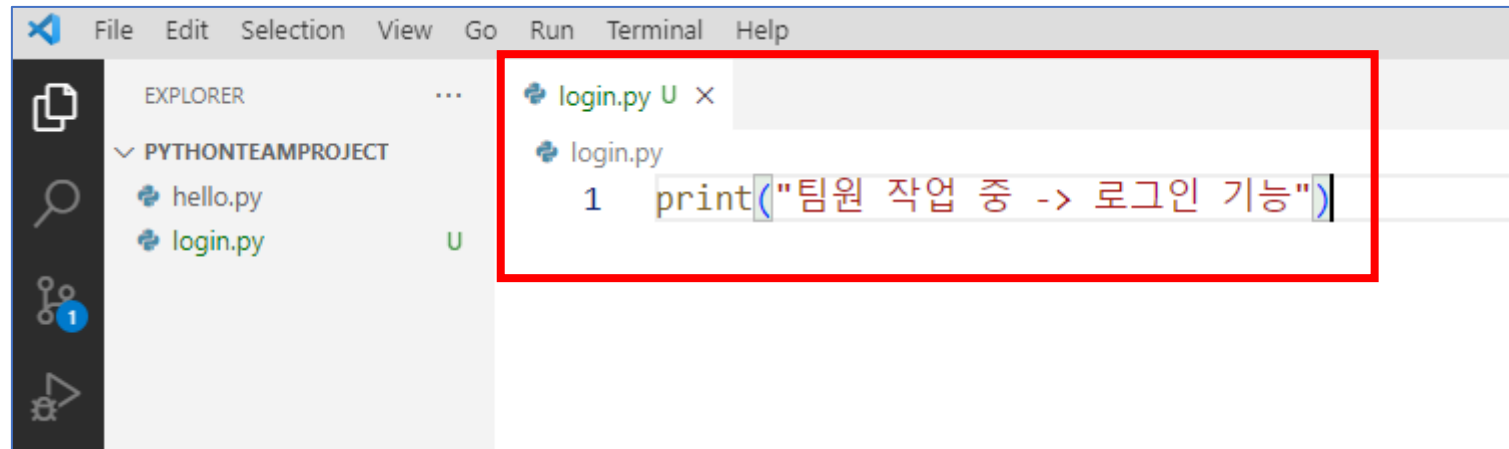
❖ 브랜치 변경(main → sooa)

```
$ git switch sooa
```

[팀원] 작업하기

❖ 코드 작성하기

- 예) login.py



[팀원] 작업하기

❖ 스테이지에 올리기

```
$ git add .
```

❖ 커밋하기

```
$ git commit -m "sooa first commit"
```

[팀원] 작업 완료 파일 업로드

❖ 깃허브 저장소에 파일 push

```
$ git push origin 브랜치이름
```

- 예) sooa 브랜치에 파일 업로드

```
$ git push origin sooa
```

❖ 깃허브 사이트 → Pull request

[팀원] pull request

The screenshot shows the GitHub interface for the repository 'HelloCoding22 / PythonTeamProject'. At the top, there's a navigation bar with links to Pulls, Issues, Codespaces, Marketplace, and Explore. Below this, the repository name and 'Public' status are displayed. A notification bar highlights a pull request from 'sooa' with a 'Compare & pull request' button. The repository's main content area shows a commit by 'HelloCoding22' with a file 'hello.py'. On the right, the 'About' section provides project details, and the 'Releases' and 'Packages' sections indicate no published content.

Search or jump to... Pulls Issues Codespaces Marketplace Explore

HelloCoding22 / PythonTeamProject Public

Pin Unwatch 1 Fork 0 Star 0

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

sooa had recent pushes less than a minute ago Compare & pull request

sooa Go to file Add file <> Code

HelloCoding22 first commit 20 minutes ago 1

hello.py first commit 20 minutes ago

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

About 팀 프로젝트를 위한 깃허브 설정 수업 0 stars 1 watching 0 forks

Releases No releases published Create a new release

Packages No packages published Publish your first package

[팀원] pull request

The screenshot shows the GitHub web interface for a repository named 'HelloCoding22 / PythonTeamProject'. The repository is public and has 1 watch, 0 forks, and 0 stars. The navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, and Insights. The main heading is 'Open a pull request', with a subtext explaining that a new pull request is created by comparing changes across two branches. Below this, a comparison bar shows 'base: main' and 'compare: sooa', with a green checkmark indicating 'Able to merge'. The pull request title is 'sooa first commit'. The description field contains the Korean text '로그인 기능을 추가합니다.' (Adding login functionality). The 'Create pull request' button is highlighted. The right sidebar shows various settings for the pull request, including Reviewers, Assignees, Labels, Projects, Milestone, and Development.

HelloCoding22 / PythonTeamProject Public

Watch 1 Fork 0 Star 0

<> Code Issues Pull requests Actions Projects Wiki Security Insights

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base: main compare: sooa ✓ Able to merge. These branches can be automatically merged.

sooa first commit

Write Preview

H B I @

로그인 기능을 추가합니다.

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

Create pull request

Reviewers
No reviews

Assignees
No one—assign yourself

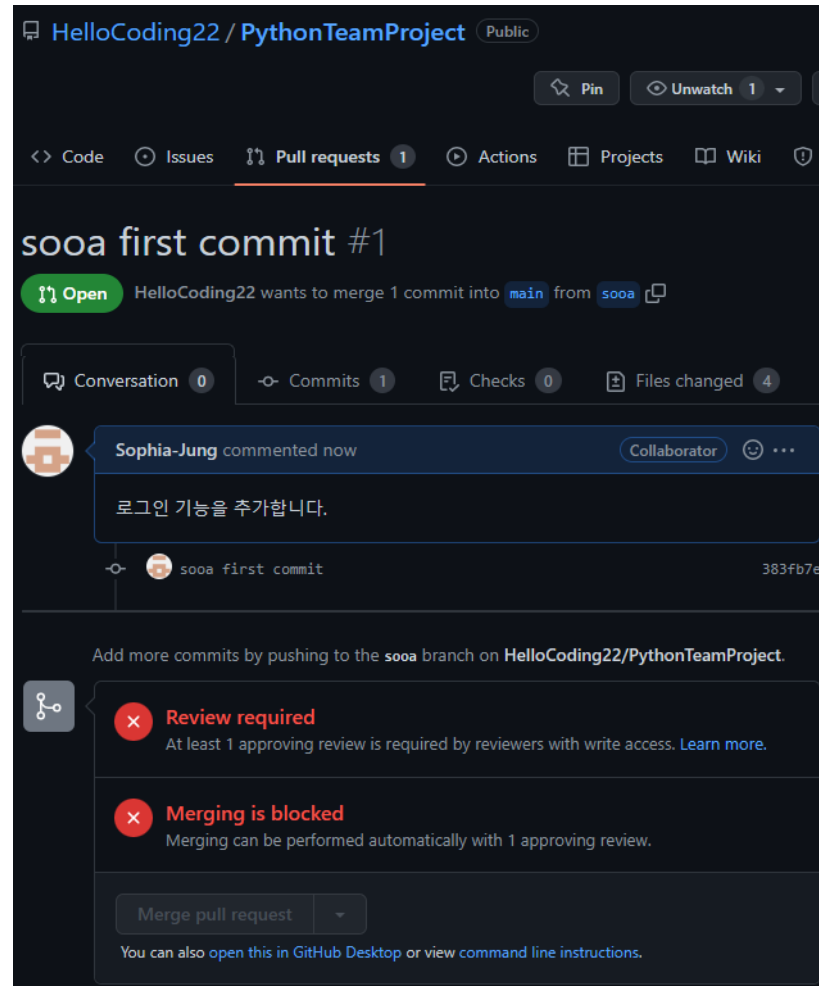
Labels
None yet

Projects
None yet

Milestone
No milestone

Development

[팀원] pull request



1명 이상의 팀원이
코드 승인을 해줘야
merge 가능

[전체] pull request 확인

The screenshot shows the GitHub interface for the repository 'HelloCoding22 / PythonTeamProject'. The 'Pull requests' tab is selected and highlighted with a red box. Below the navigation bar, a message states: 'Label issues and pull requests for new contributors. Now, GitHub will help potential first-time contributors discover issues labeled with good first issue'. The search bar contains 'is:pr is:open'. The pull request list shows one open request titled 'sooa first commit' by Sophia-Jung, which is also highlighted with a red box. The repository has 1 pull request, 9 labels, and 0 milestones.

HelloCoding22 / PythonTeamProject Public

Pin Unwatch 1 Fork 0 Star 0

Code Issues **Pull requests 1** Actions Projects Wiki Security Insights Settings

Label issues and pull requests for new contributors Dismiss

Now, GitHub will help potential first-time contributors discover issues labeled with **good first issue**

Filters is:pr is:open Labels 9 Milestones 0 New pull request

1 Open 0 Closed

<input type="checkbox"/>	Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	sooa	first commit					
	#1 opened 2 minutes ago by Sophia-Jung						

[전체] pull request 확인

The screenshot shows a GitHub pull request interface for the repository 'HelloCoding22 / PythonTeamProject'. The pull request is titled 'sooa first commit #1' and is in the 'Open' state. It shows a commit from the 'sooa' branch being merged into the 'main' branch. The commit message is '로그인 기능을 추가합니다.' (Add login feature). The pull request is created by 'Sophia-Jung' (a collaborator) 1 minute ago. The interface highlights the 'sooa first commit' link and the '코드 확인' (Code review) section, which contains the following messages:

- Review required**: At least 1 approving review is required by reviewers with write access. [Add your review](#). [Learn more.](#)
- Merging is blocked**: Merging can be performed automatically with 1 approving review.
- ☐ **Merge without waiting for requirements to be met (bypass branch protections)**

At the bottom of the review section, there is a 'Merge pull request' button. The right sidebar shows the 'Reviewers' section with the message 'No reviews—at least 1 approving review is required.' and the 'Assignees' section with the message 'No one—assign yourself'.

[전체] pull request 확인

The screenshot shows a GitHub pull request interface for the repository 'HelloCoding22 / PythonTeamProject'. The pull request is titled 'sooa first commit #1' and is created by 'Sophia-Jung'. It shows 1 commit and 1 file changed (login.py). The 'Review changes' button is highlighted with a red box. The commit message is 'sooa first commit' and the commit hash is '896ca87bbb9c0e0b52fbf048b1bfd285aaf0b4fc'. The diff shows a change in login.py, adding a print statement: 'print("팀원 작업 중 -> 로그인 기능")'.

HelloCoding22 / PythonTeamProject Public

Watch 1 Fork 0 Star 0

Code Issues Pull requests 1 Actions Projects Wiki Security Insights

sooa first commit #1 Edit Code

Open Sophia-Jung wants to merge 1 commit into main from sooa

Conversation 0 Commits 1 Checks 0 Files changed 1 +1 -0

Changes from all commits File filter Conversations Jump to Review changes

sooa first commit

sooa (#1)

Sophia-Jung committed 12 minutes ago commit 896ca87bbb9c0e0b52fbf048b1bfd285aaf0b4fc

1 login.py

```
@@ -0,0 +1 @@
1 + print("팀원 작업 중 -> 로그인 기능")
```

[전체] pull request 확인

The screenshot shows a GitHub pull request page for the repository 'HelloCoding22 / PythonTeamProject'. The pull request is titled 'sooa first commit #1' and is created by 'Sophia-Jung'. It shows a merge of 1 commit into the 'main' branch from the 'sooa' branch. The interface includes tabs for Code, Issues, Pull requests (1), Actions, Projects, Wiki, Security, and Insights. A 'Review changes' button is visible in the top right. On the left, there is a file diff for 'login.py' showing a change from '@@ -0,0 +1 @@' to '+ print("팀원 작업 중 ->)'.

A modal window titled 'Finish your review' is open, showing options to 'Write' or 'Preview' a comment. Below the comment field, there are three radio button options: 'Comment' (selected), 'Approve', and 'Request changes'. The 'Approve' option is highlighted with a yellow box, and the Korean word '승인' (Approval) is written next to it. A 'Submit review' button is at the bottom of the modal.

sooa first commit #1

Open Sophia-Jung wants to merge 1 commit into main from sooa

Conversation 0 Commits 1 Checks 0 Files changed 1 +1 -0

Changes from all commits File filter Conversations Jump to Review changes

sooa first commit

sooa (#1)

HelloCoding22 committed 10 minutes ago

1 login.py

@@ -0,0 +1 @@

1 + print("팀원 작업 중 ->)

Terms Privacy

Finish your review

Write Preview

Leave a comment

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

☒ Comment
Submit general feedback without explicit approval.

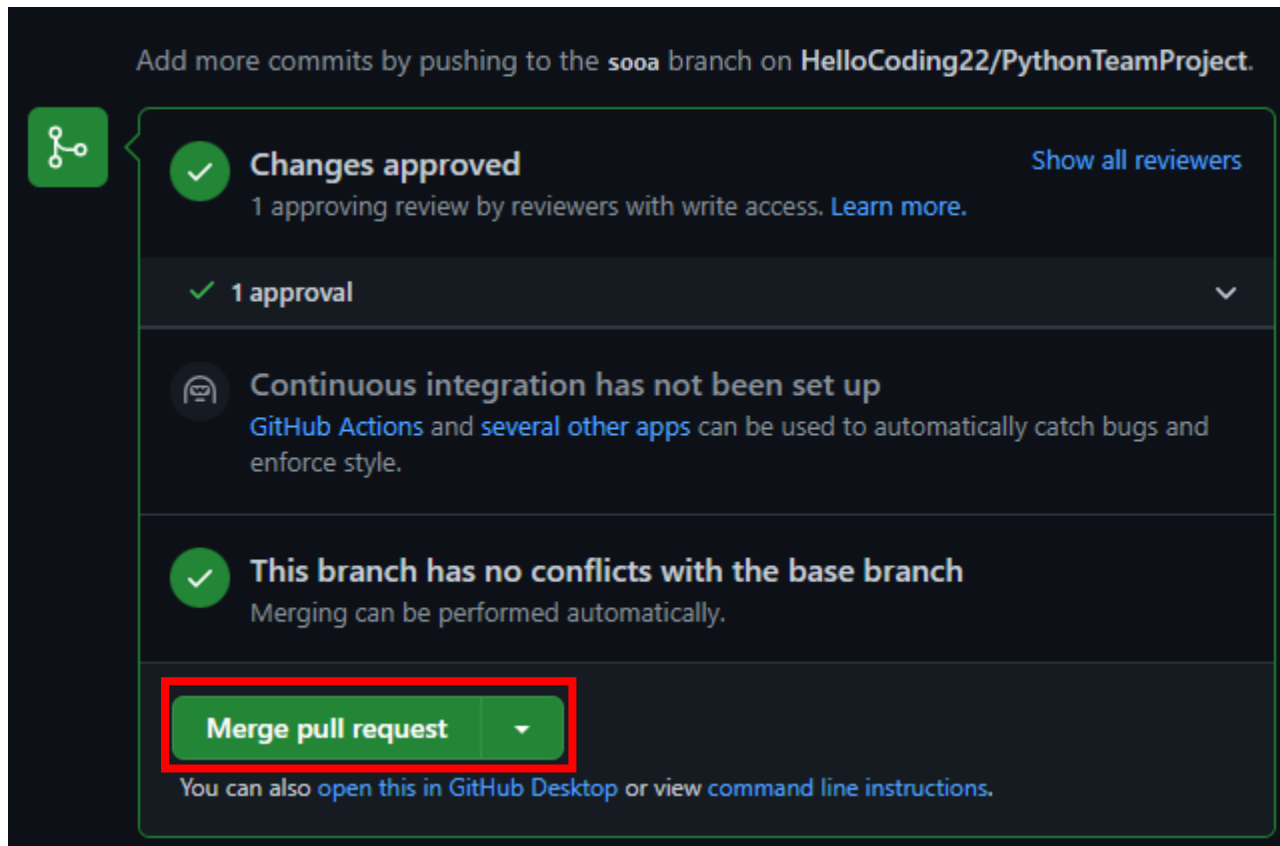
☐ Approve 승인
Submit feedback and approve merging these changes.

☐ Request changes
Submit feedback that must be addressed before merging.

Submit review

[전체] pull request 승인 완료

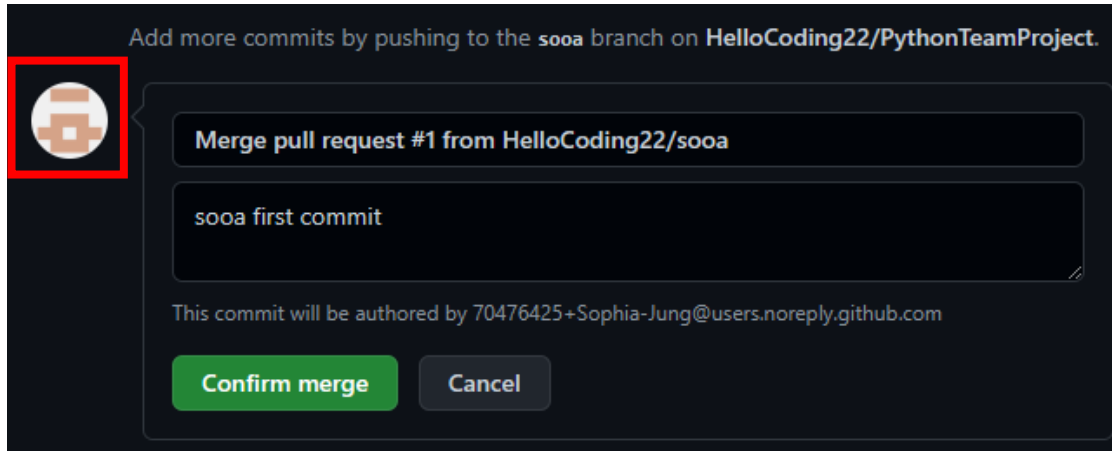
❖ Merge pull request 버튼 활성화



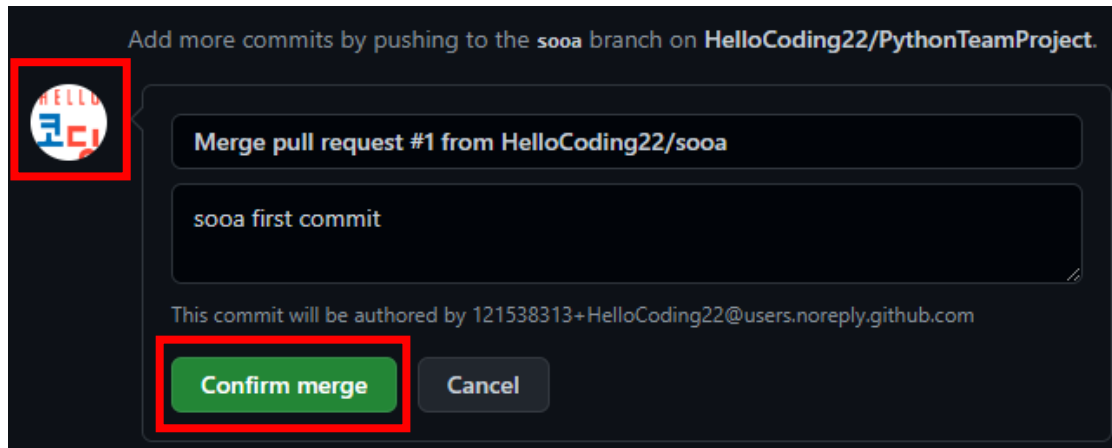
[팀장] merge 버튼 클릭

❖ 팀원은 merge 하지 않는 것이 좋음

팀원

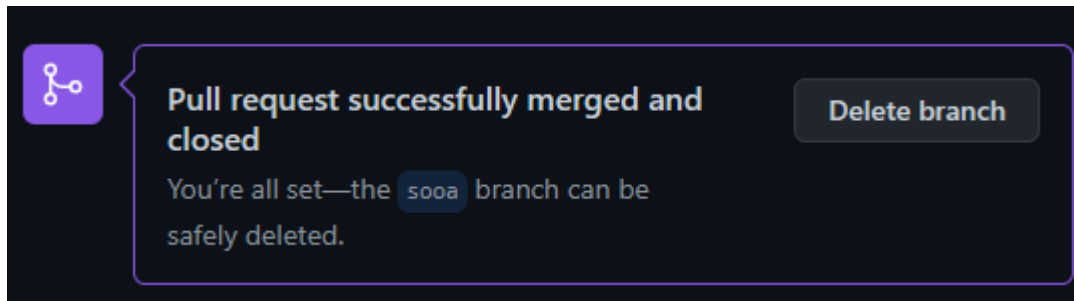


팀장



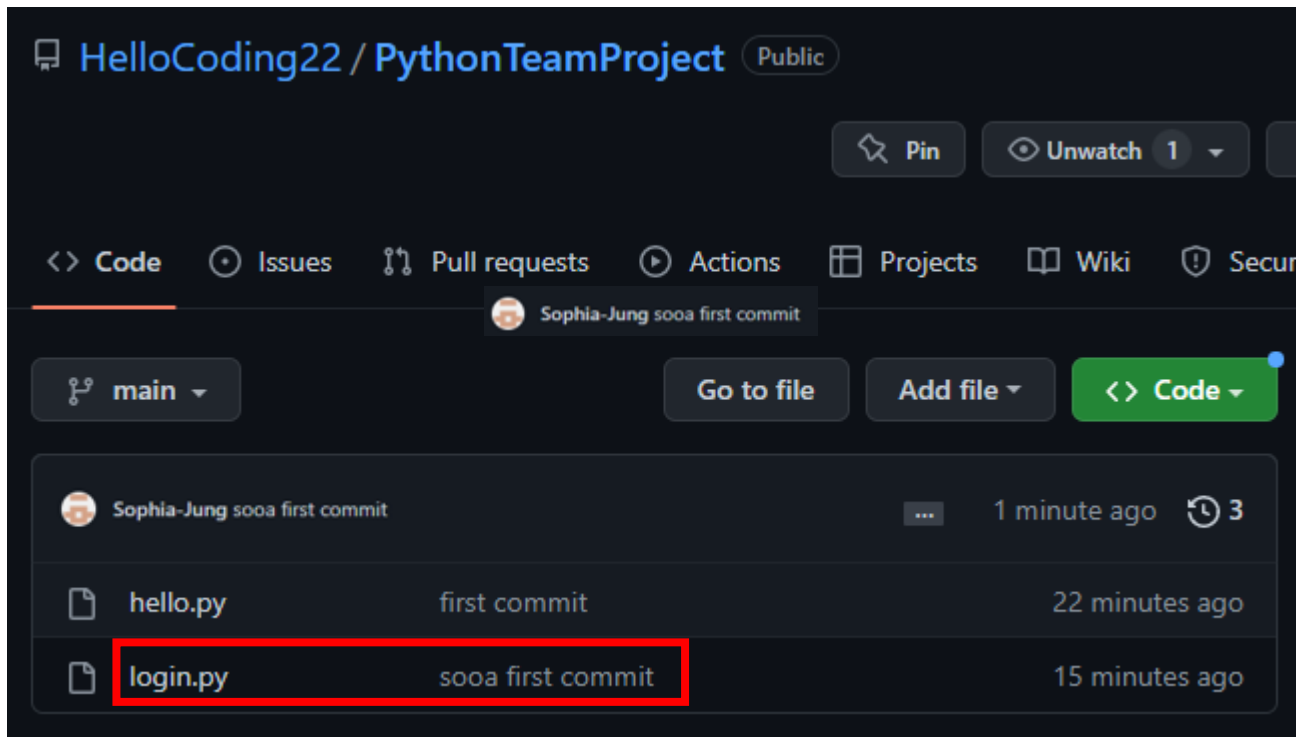
[팀장] merge 버튼 클릭

❖ merge 완료



merge 완료

❖ merge 완료



코드 작성 중 main 브랜치 변경 발생

❖ [전체] 기존에 작성하던 코드 저장

- hello.py

```
print("Hello!")  
print("팀장 작업 -> 코드 작성 중")
```

코드 작성 중 main 브랜치 변경 발생

❖ [전체] 기존에 작성하던 코드 저장 및 스테이징

```
$ git add .
```

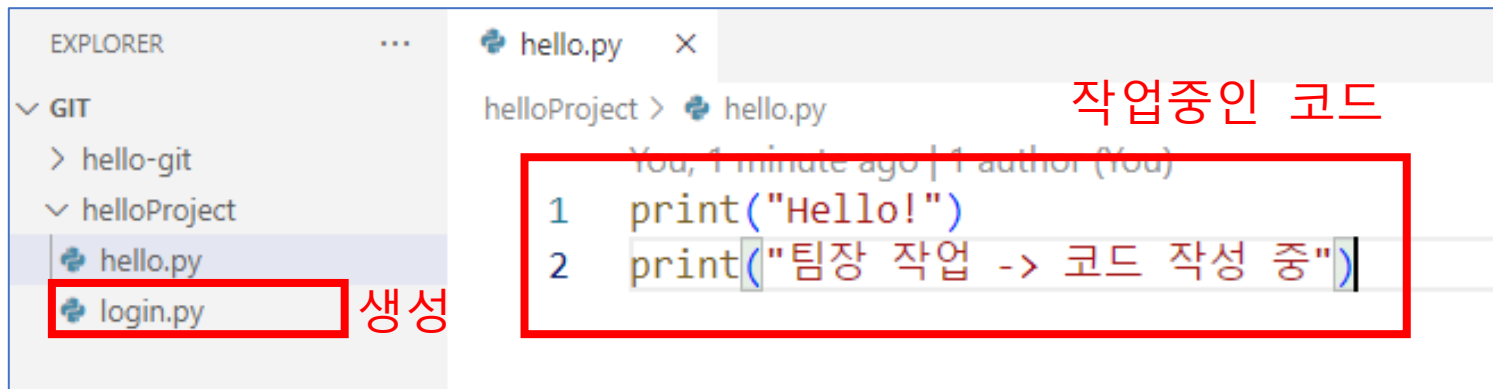
❖ [전체] 커밋하기

```
$ git commit -m "second commit"
```

[전체] 최신 프로젝트 pull

❖ main 브랜치로부터 최신 파일 다운로드(동기화)

```
$ git pull origin main
```



[전체] 작업 완료 파일 업로드

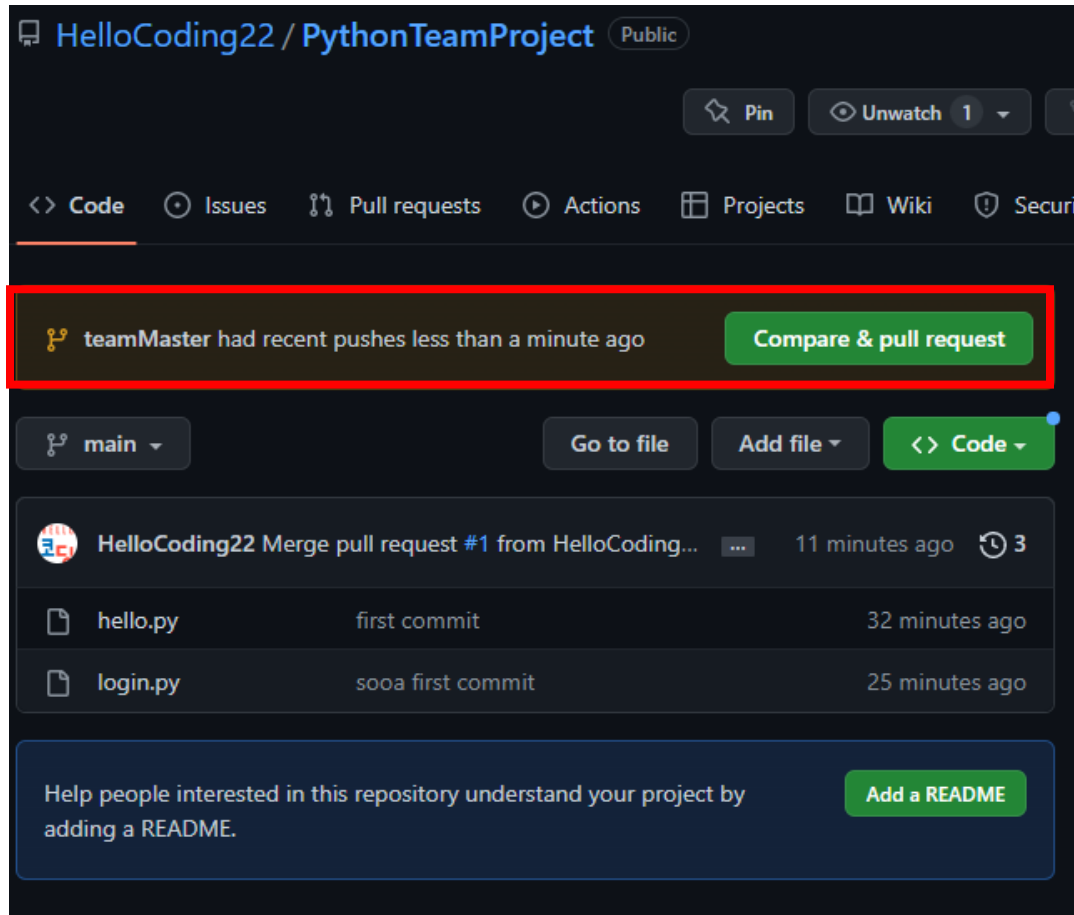
❖ 깃허브 저장소에 파일 push

- 예) teamMaster(팀장) 브랜치에 파일 업로드

```
$ git push origin teamMaster
```

[전체] 작업 완료 파일 업로드

❖ Pull request 요청하기



THANK 😊 YOU