

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

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[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: 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Code' tab is selected. The main content area has a dark theme. It starts with a 'Quick setup' section for users who have done this before, showing a 'Set up in Desktop' button, 'or', and 'HTTPS' and 'SSH' options with the repository URL 'https://github.com/HelloCoding22/PythonTeamProject.git'. Below this is a section for creating a new repository on the command line, with a code block containing 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
```

 The next section is for pushing an existing repository from the command line, with a code block containing:

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

 The final section is for importing code from another repository, with a note that you can initialize the repository with code from a Subversion, Mercurial, or TFS project, and an 'Import code' button.

HelloCoding22 / PythonTeamProject Public

Pin Unwatch 1 Fork 0 Star 0

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

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

Set up in Desktop or HTTPS SSH `https://github.com/HelloCoding22/PythonTeamProject.git`

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

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

```
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
```

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

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

...or import code from another repository

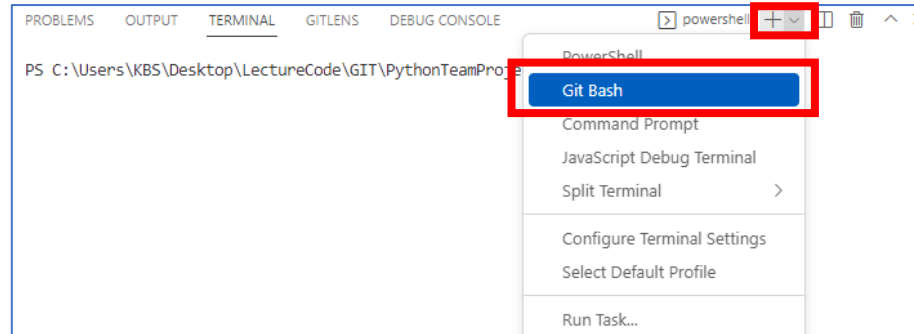
You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

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

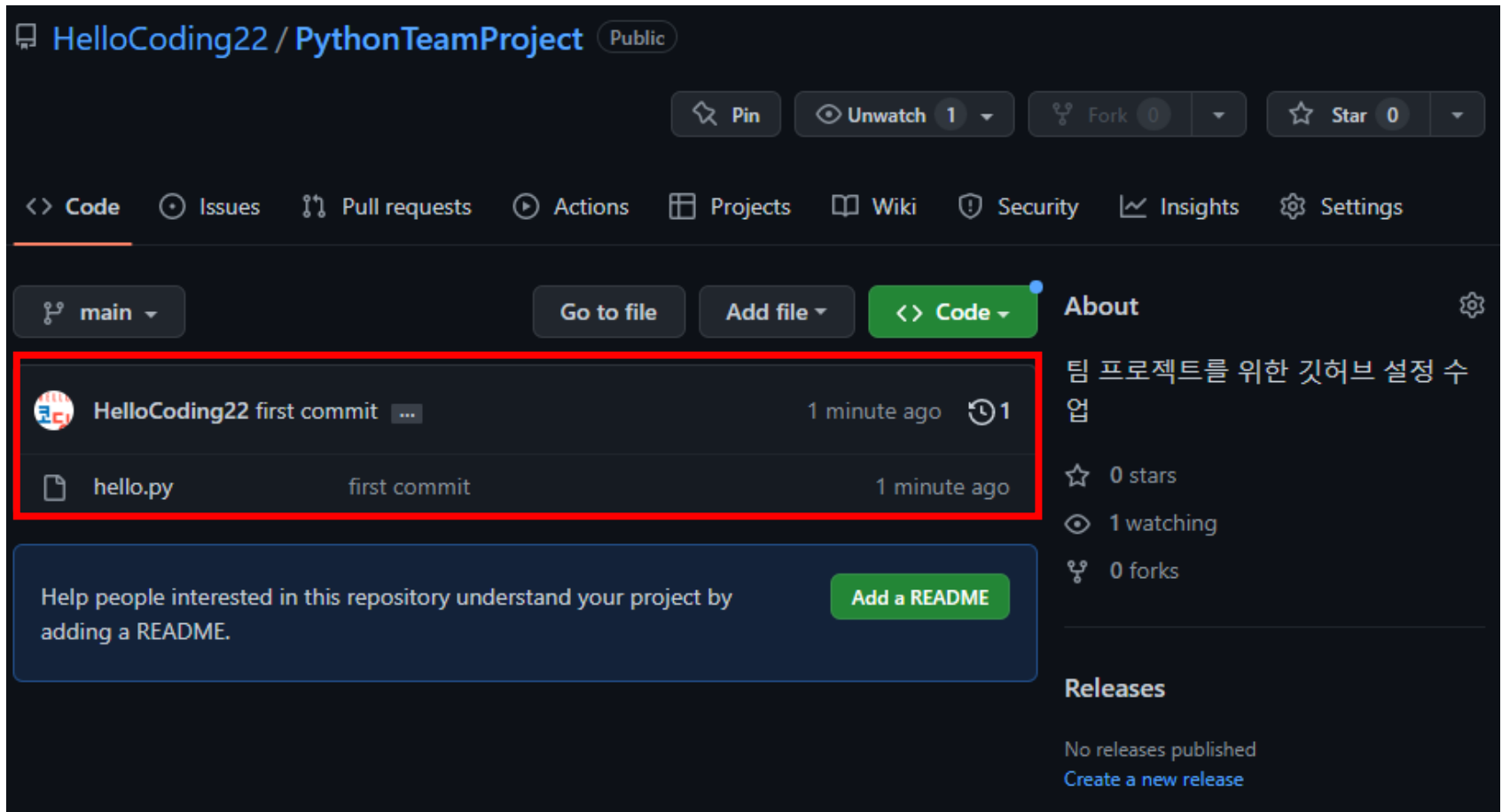
❖ 로컬 저장소와 원격 저장소를 연결하기

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

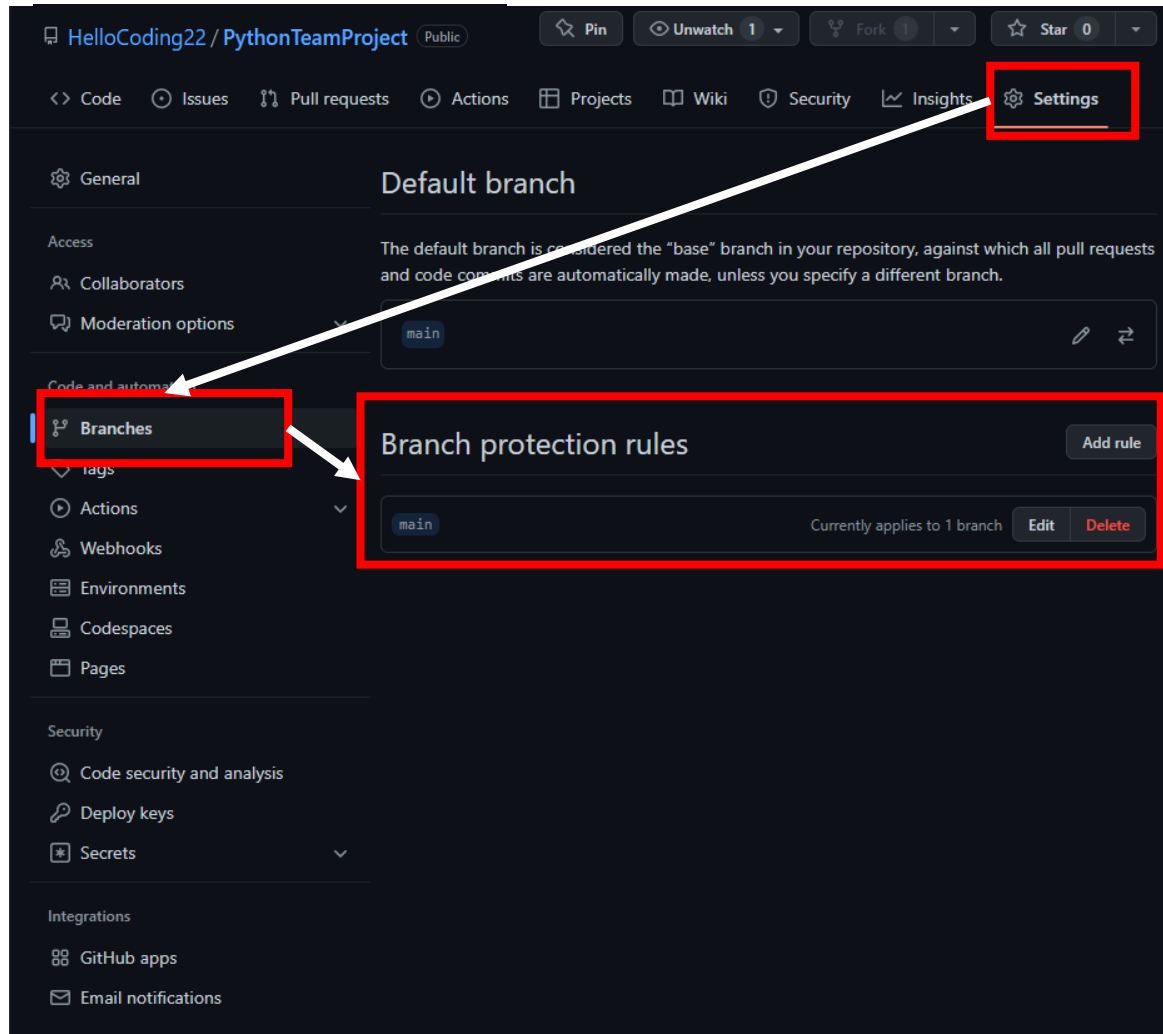
❖ 원격 저장소에 푸시하기

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


[팀장] 깃허브 저장소에 푸시 완료



[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.

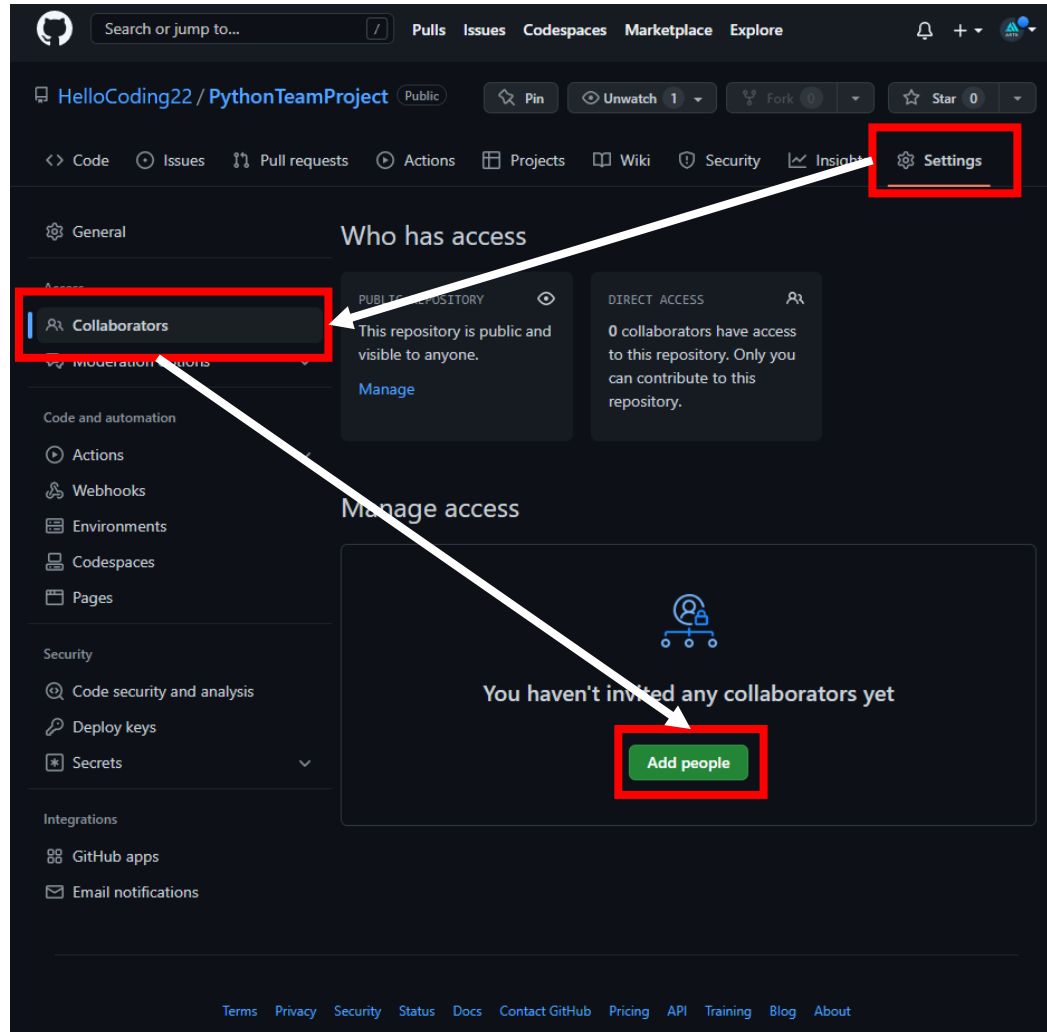
Required number of approvals before merging: 1 ▼

☐ **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.

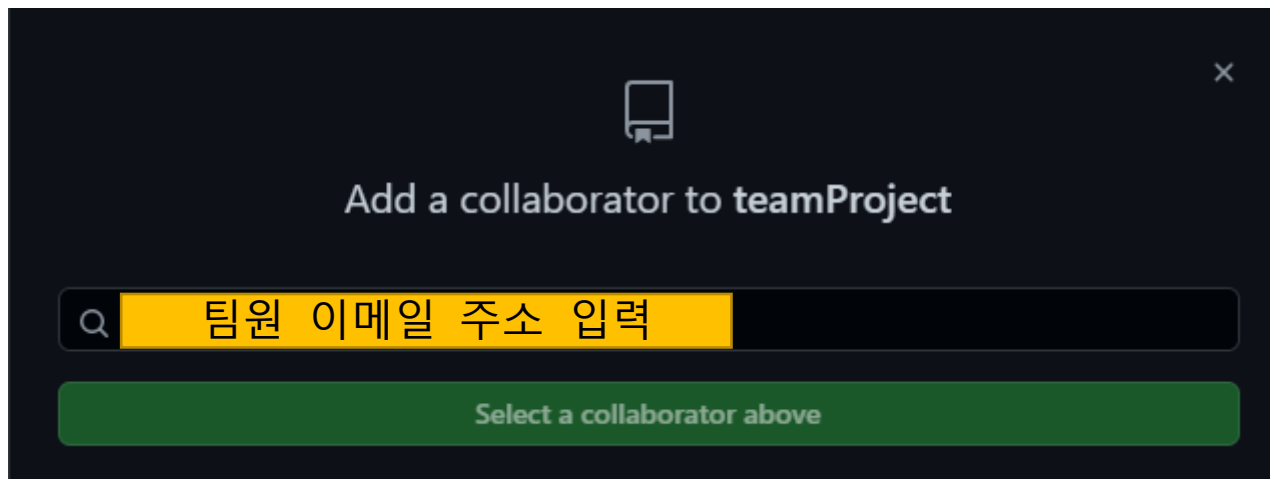
☐ **Require approval of the most recent push**
The most recent push must be approved by someone other than the last pusher.

[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 small icon of a person with a plus sign. The main text reads "Add a collaborator to teamProject". Below this 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 titled 'Who has access' and shows two access types: 'PUBLIC REPOSITORY' (This repository is public and visible to anyone. Manage) and 'DIRECT ACCESS' (1 has access to this repository. 0 collaborators. 1 invitation. Add people). Below this is the 'Manage access' section, which includes a search bar labeled 'Find a collaborator...' and a table of collaborators. The table has a red box highlighting the entry for 'Sophia-Jung', who is in a 'Pending Invite' state. The text '초대 수락 대기중' is overlaid on the search bar.

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Actions

Webhooks

Environments

Codespaces

Pages

Security

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.

[Add people](#)

Manage access

☐ Select all

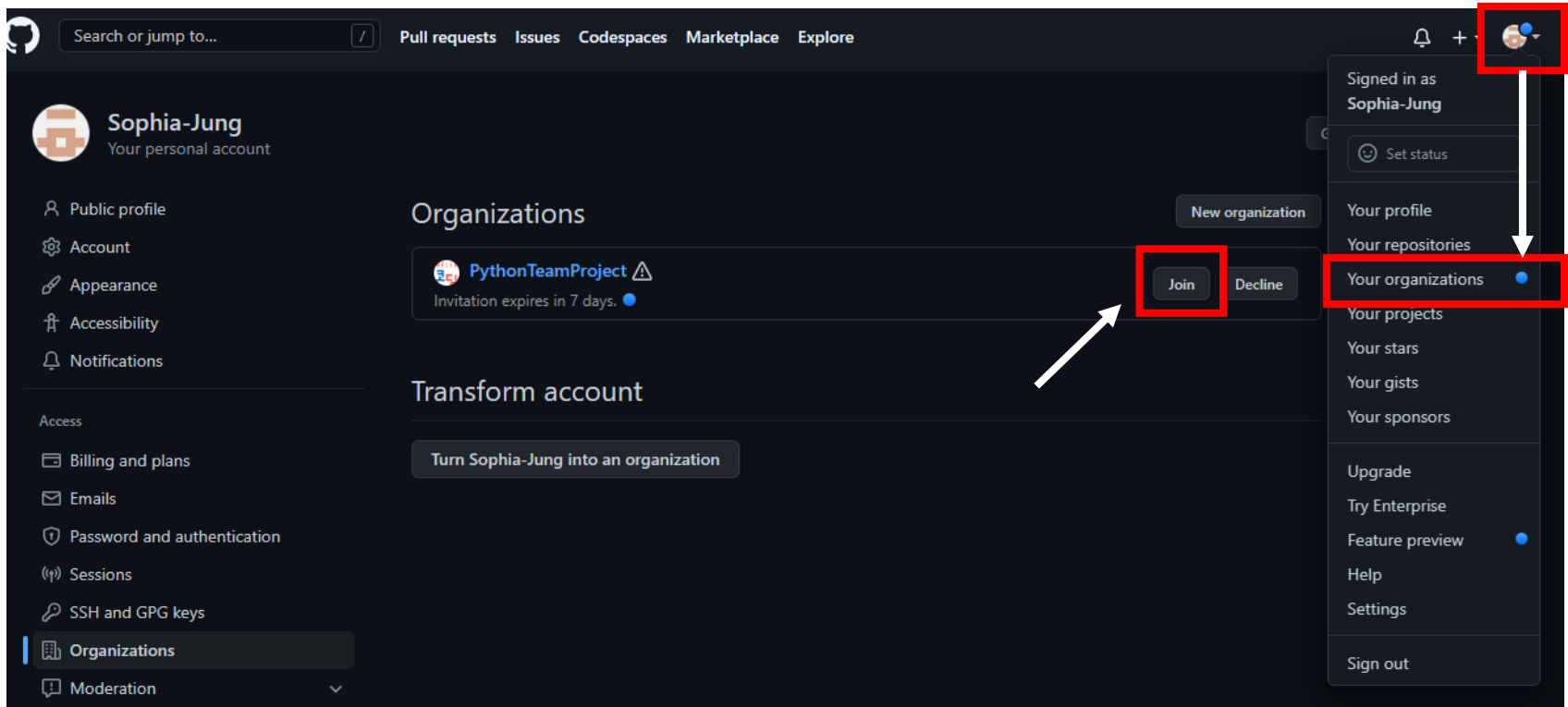
Type ▾

Find a collaborator...

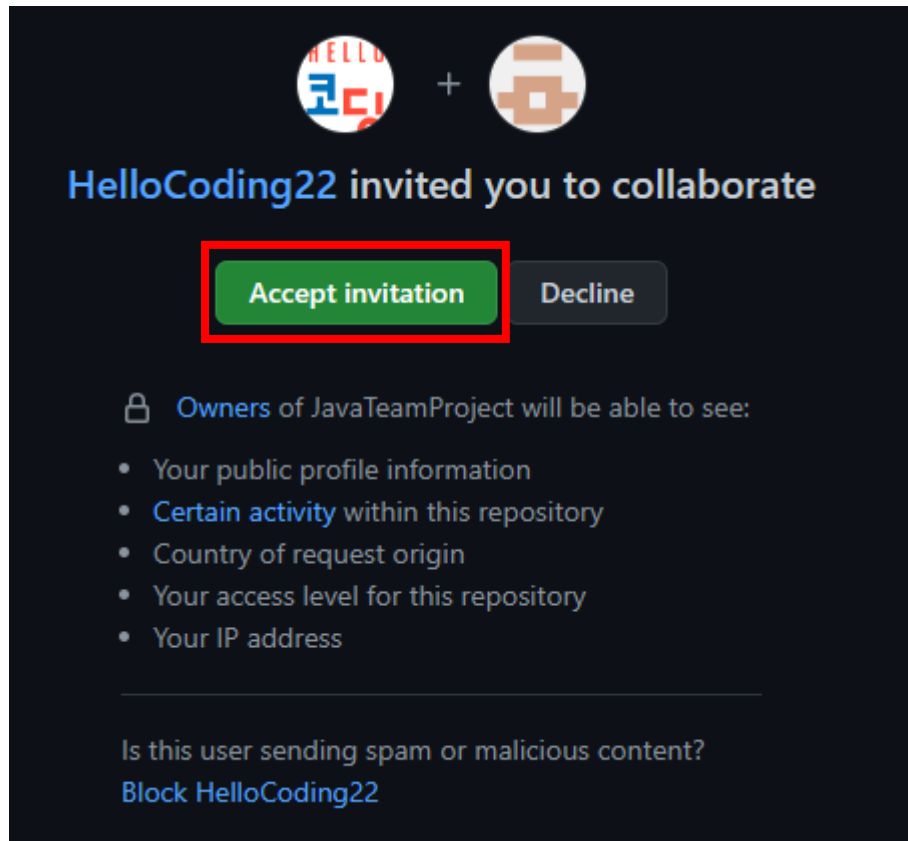
초대 수락 대기중

<input type="checkbox"/>	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 shows the 'main' branch selected, with buttons for 'Go to file', 'Add file', and 'Code'. A commit history table lists 'HelloCoding22 first commit' and 'hello.py first commit', both from 7 minutes ago. A prompt encourages adding a README. The right sidebar includes an 'About' section with statistics (0 stars, 1 watching, 0 forks) and a 'Releases' section noting 'No releases 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	File	Time
HelloCoding22 first commit		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

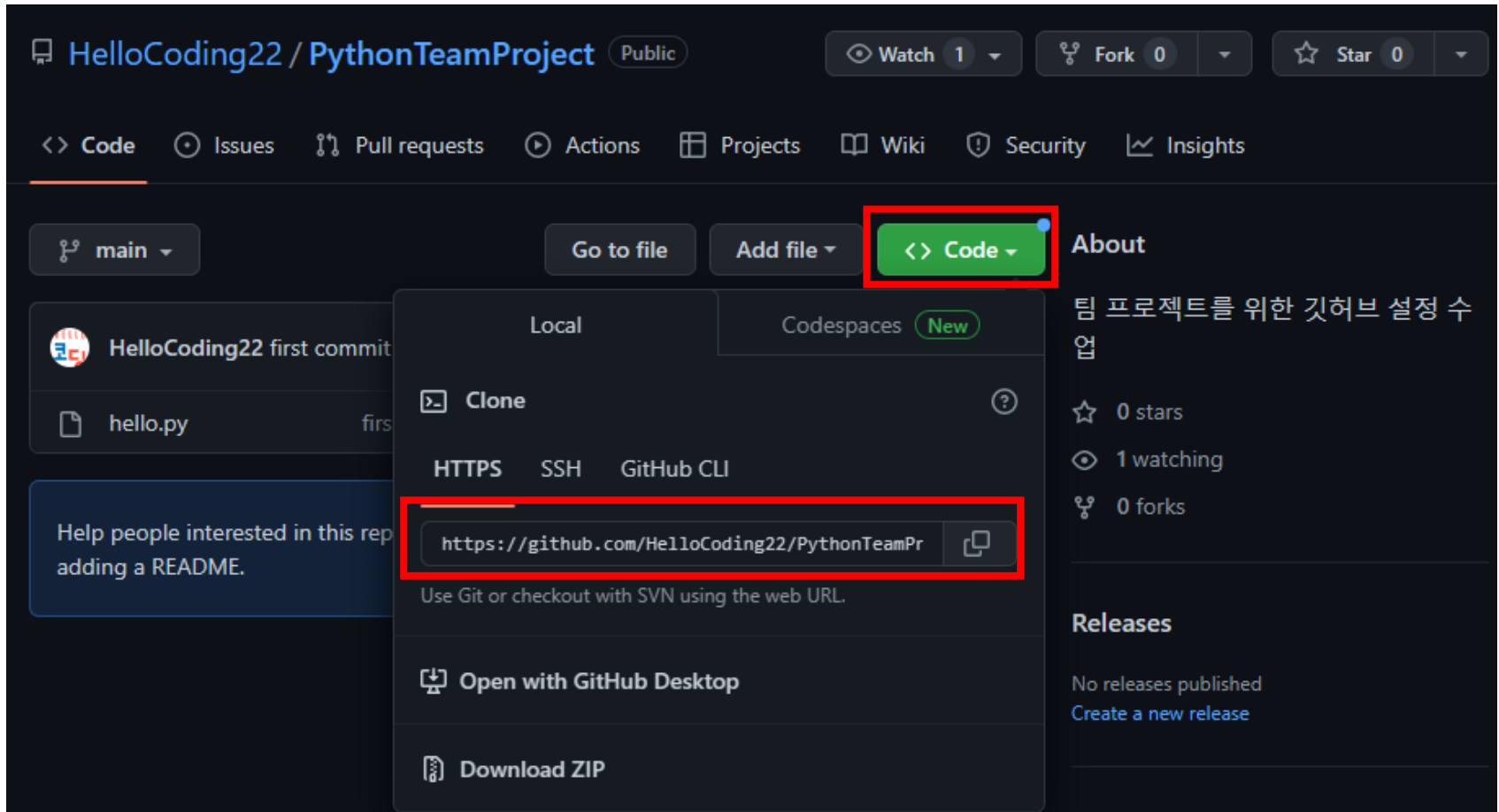
팀 프로젝트를 위한 깃허브 설정 수
업

0 stars
1 watching
0 forks

Releases

No releases published
Create a new release

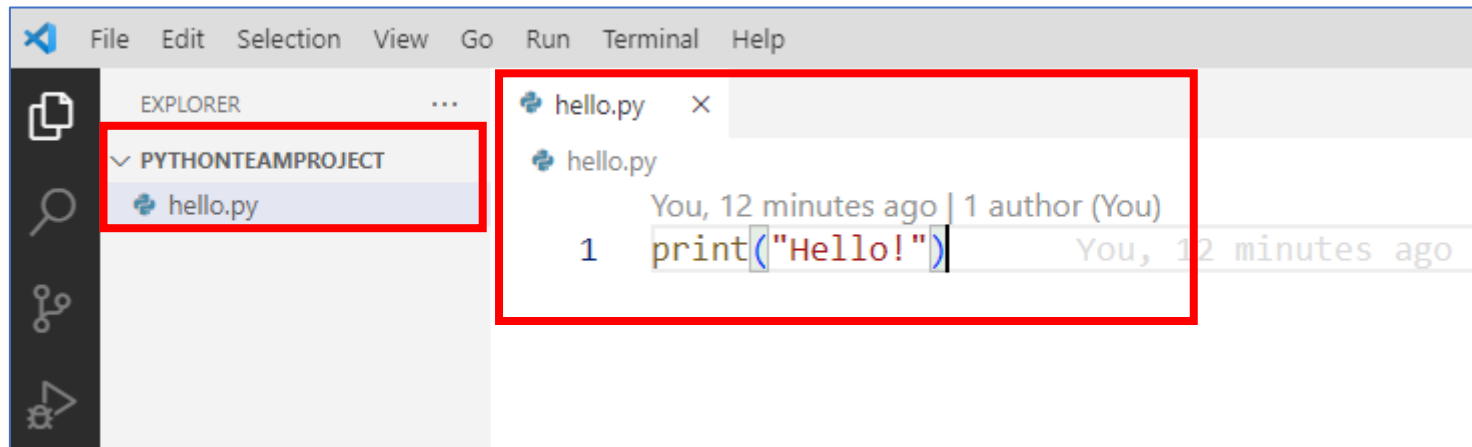
[팀원] 깃허브 저장소 복제하기



[팀원] 깃허브 저장소 복제하기

❖ 깃허브 저장소 복제하기

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



[팀원] 작업하기

❖ 팀원 본인 브랜치 생성

- 예) sooa 브랜치 생성

```
$ git branch sooa
```

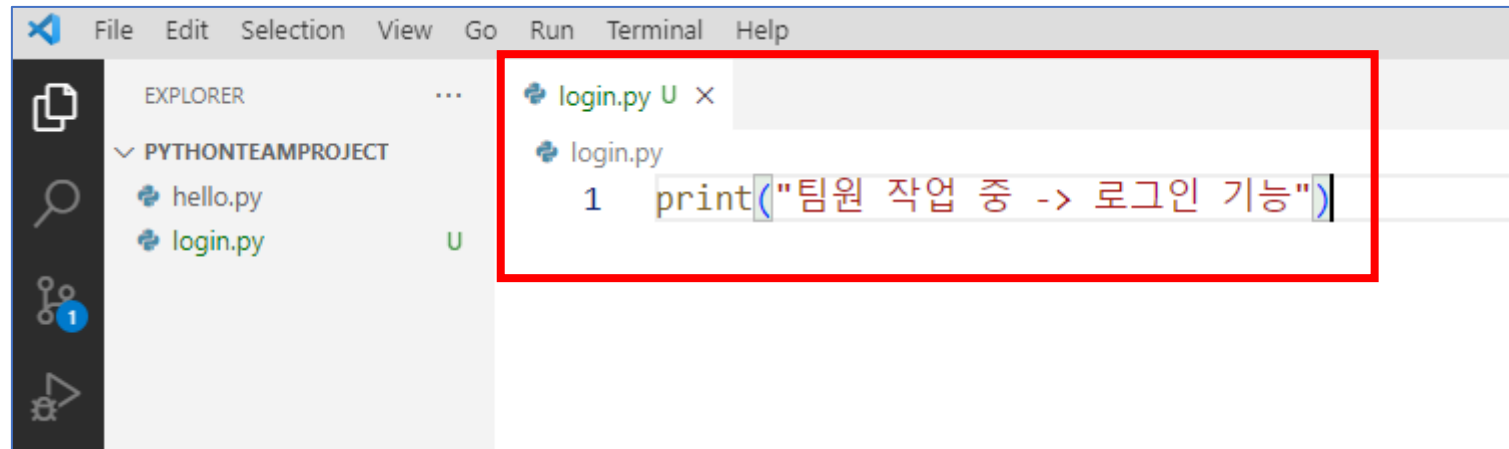
❖ 브랜치 변경(main → sooa)

```
$ 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 the file 'hello.py' and a 'first commit' message. A sidebar on the right provides details about the repository, including 'About', 'Releases', and 'Packages' sections.

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 interface for a repository named 'PythonTeamProject' under the user 'HelloCoding22'. The repository is public. 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 with a red box. 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

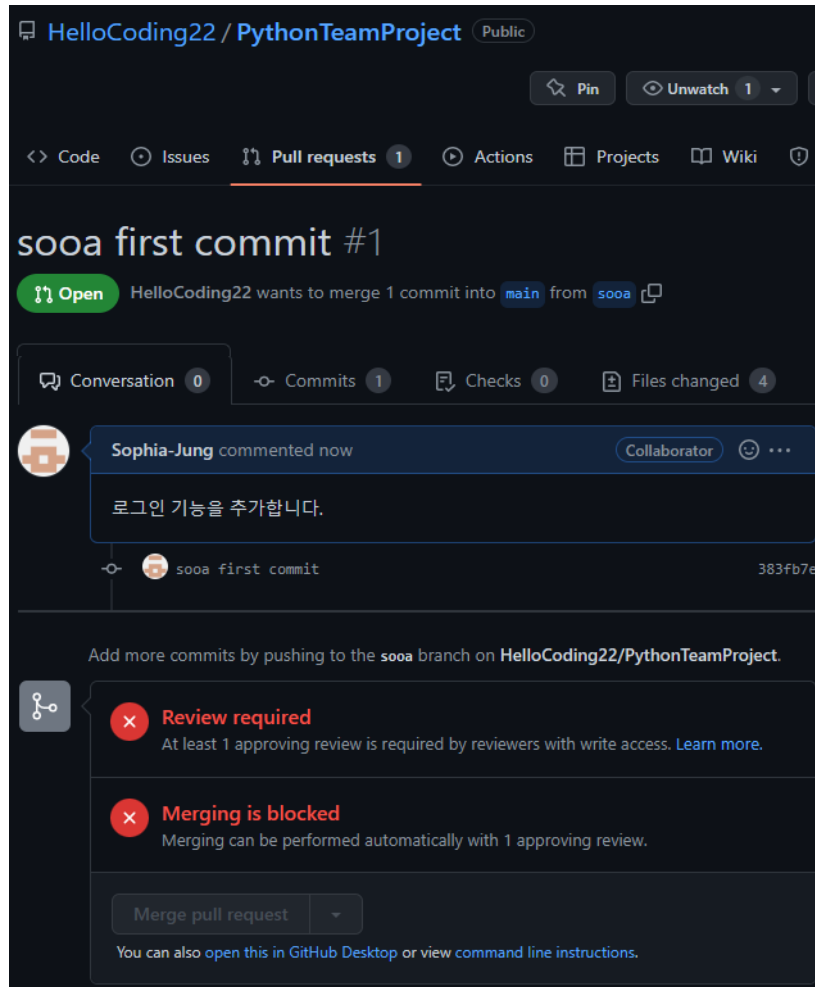
Labels
None yet

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 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' (Check code) button. The right sidebar shows the 'Reviewers' section with a message: 'No reviews—at least 1 approving review is required.' Below this, there are sections for 'Assignees', 'Labels', 'Projects', 'Milestone', and 'Development', all of which are currently empty. At the bottom, there are buttons for 'Merge pull request' and 'Merge without waiting for requirements to be met (bypass branch protections)'.

sooa first commit #1

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

Conversation 0 Commits 1 Checks 0 Files changed 4 +10 -0

Sophia-Jung commented 1 minute ago Collaborator

로그인 기능을 추가합니다.

sooa first commit 코드 확인

Add more commits by pushing to the `sooa` branch on `HelloCoding22/JavaTeamProject`.

Review required At least 1 approving review is required by reviewers with write access. [Learn more.](#) Add your review

Merging is blocked Merging can be performed automatically with 1 approving review.

☐ Merge without waiting for requirements to be met (bypass branch protections)

Merge pull request

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

Reviewers No reviews—at least 1 approving review is required. Still in progress? Convert to draft

Assignees No one—assign yourself

Labels None yet

Projects None yet

Milestone No milestone

Development

[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

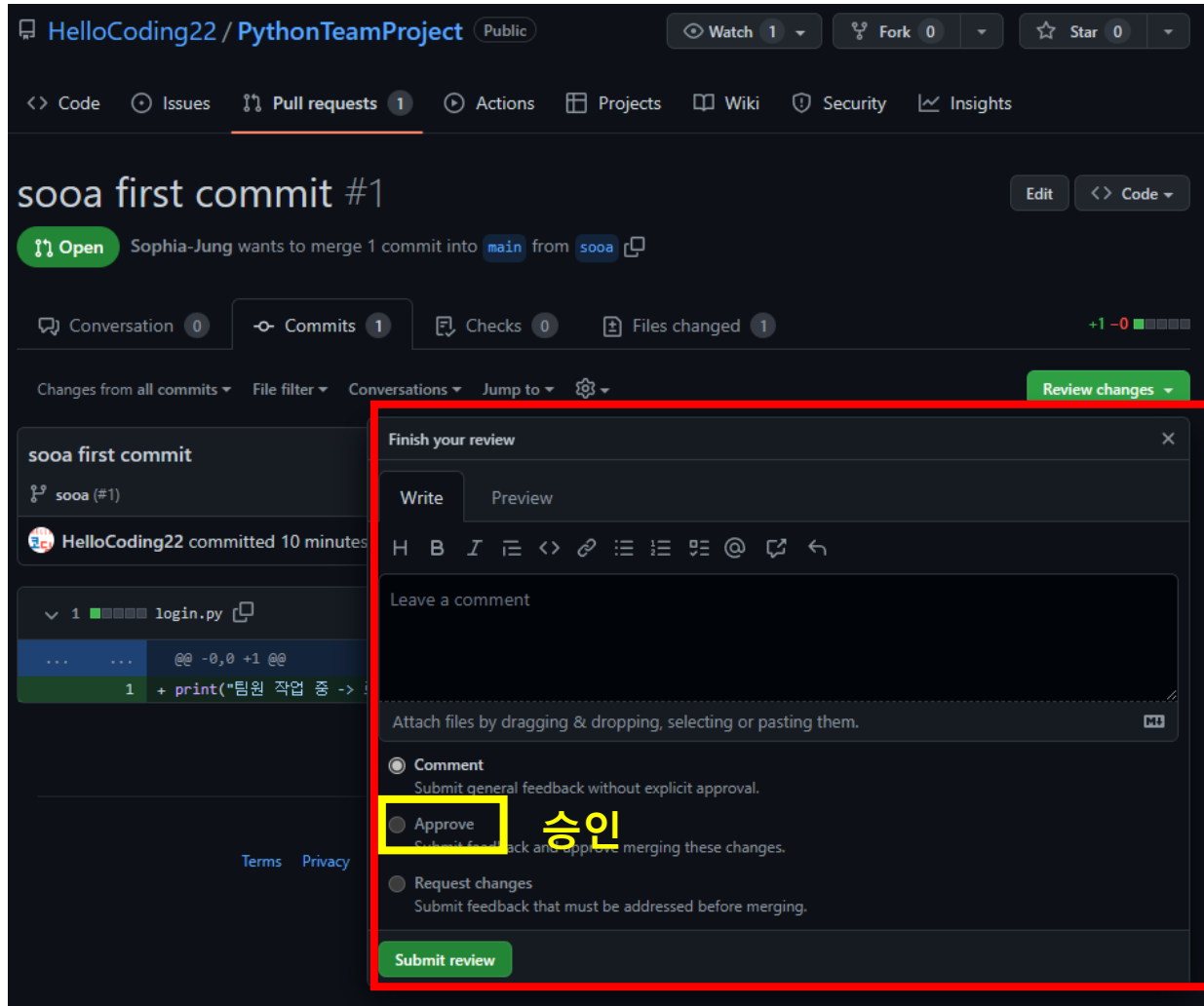
sooa (#1)

Sophia-Jung committed 12 minutes ago commit 896ca87bbb9c0e0b52fbf048b1bfd285aaf0b4fc

1 login.py

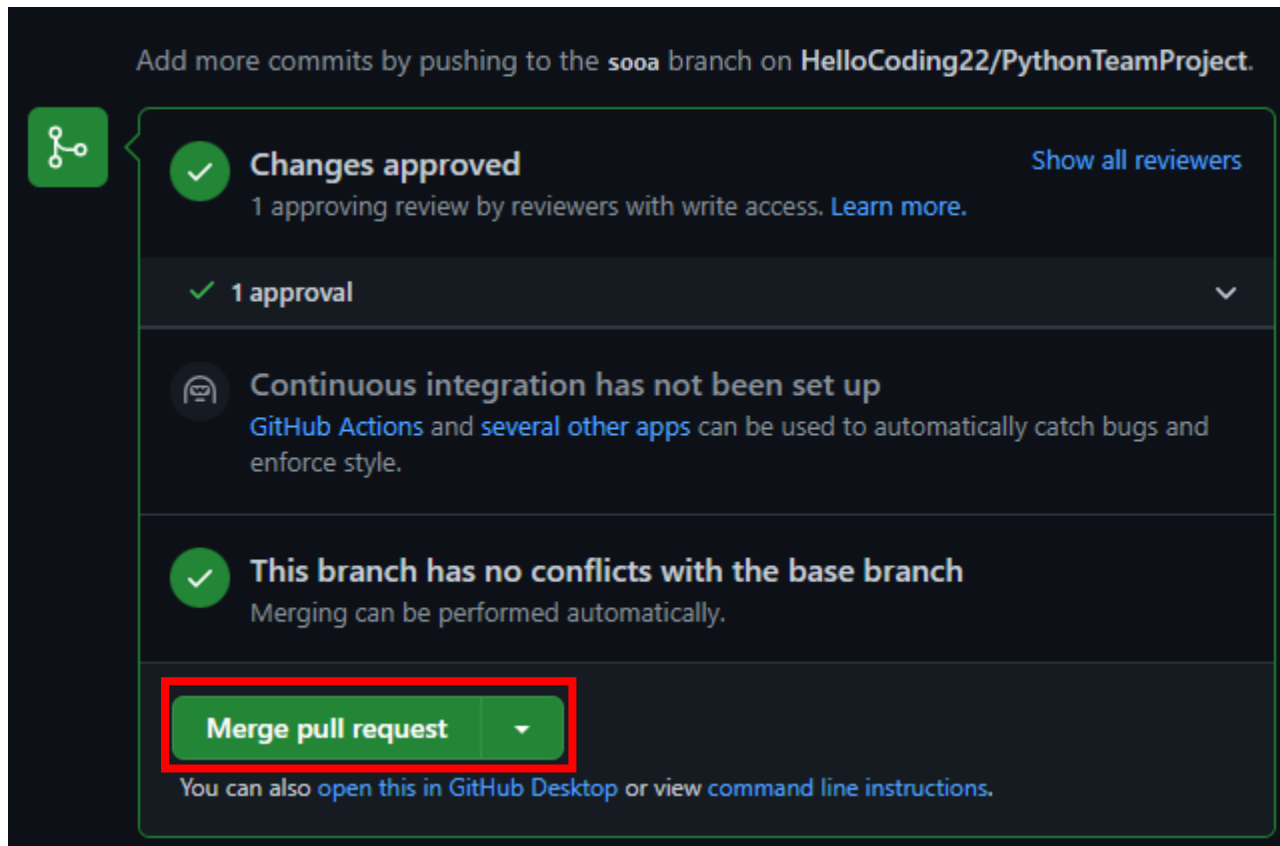
```
@@ -0,0 +1 @@
1 + print("팀원 작업 중 -> 로그인 기능")
```

[전체] pull request 확인



[전체] pull request 승인 완료

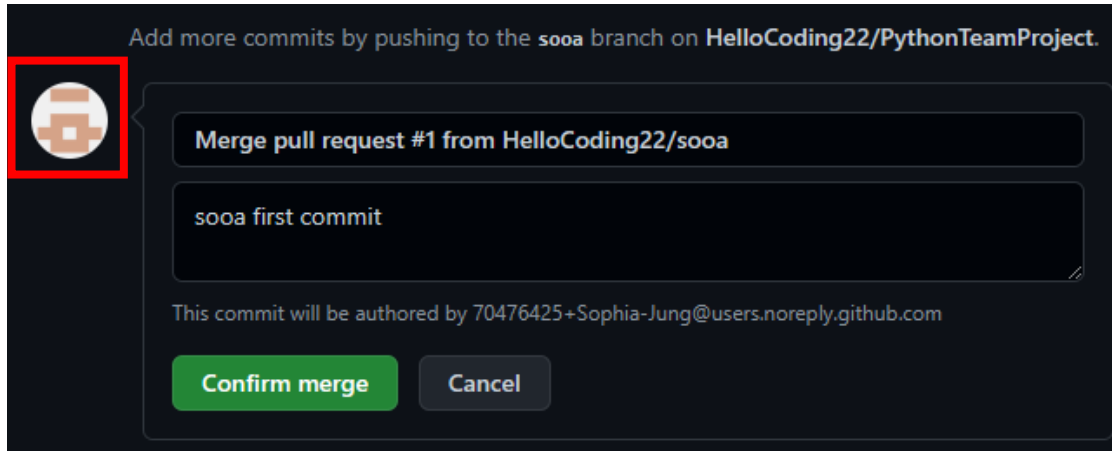
❖ Merge pull request 버튼 활성화



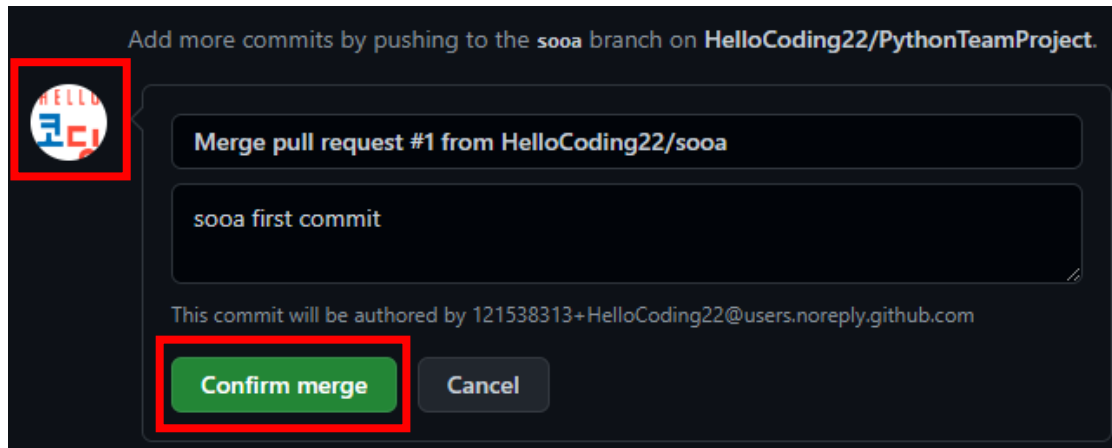
[팀장] merge 버튼 클릭

❖ 팀원은 merge 하지 않는 것이 좋음

팀원

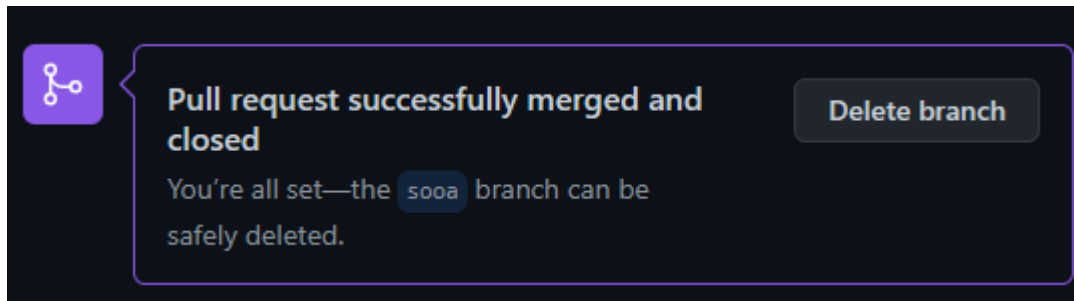


팀장



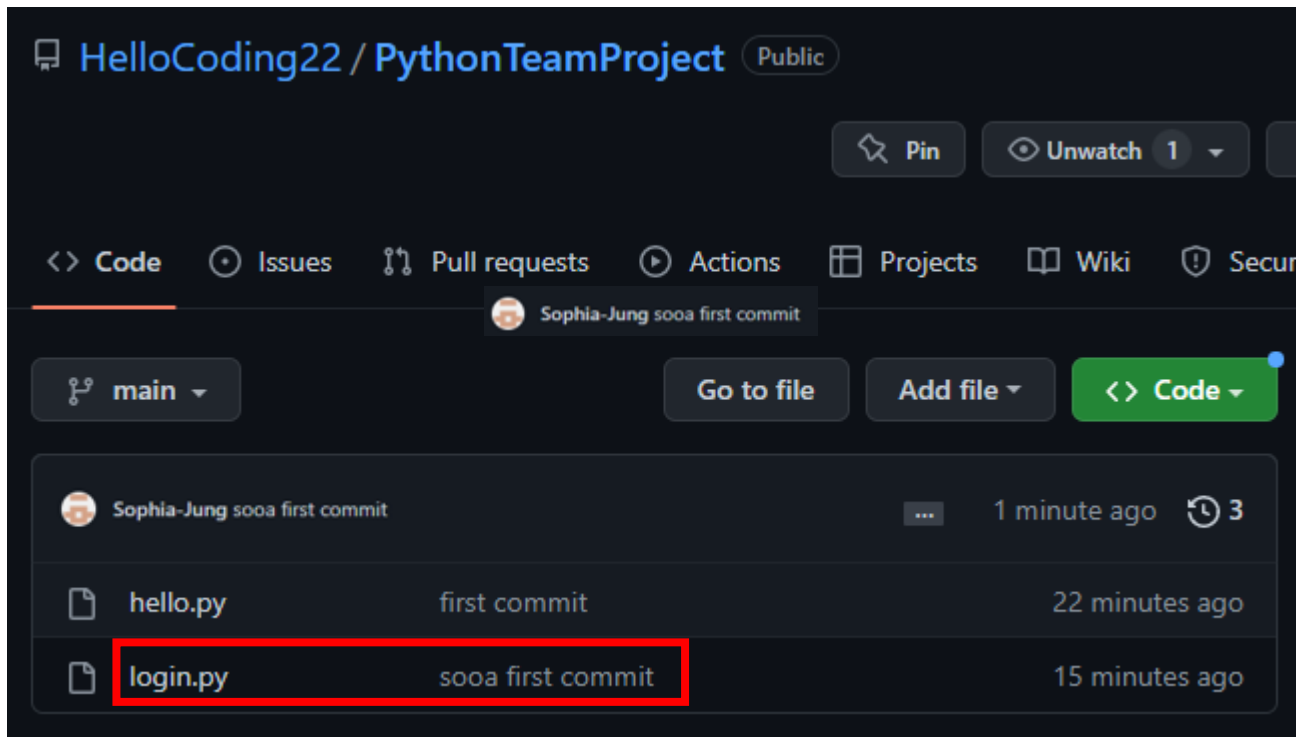
[팀장] merge 버튼 클릭

❖ 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 .
```

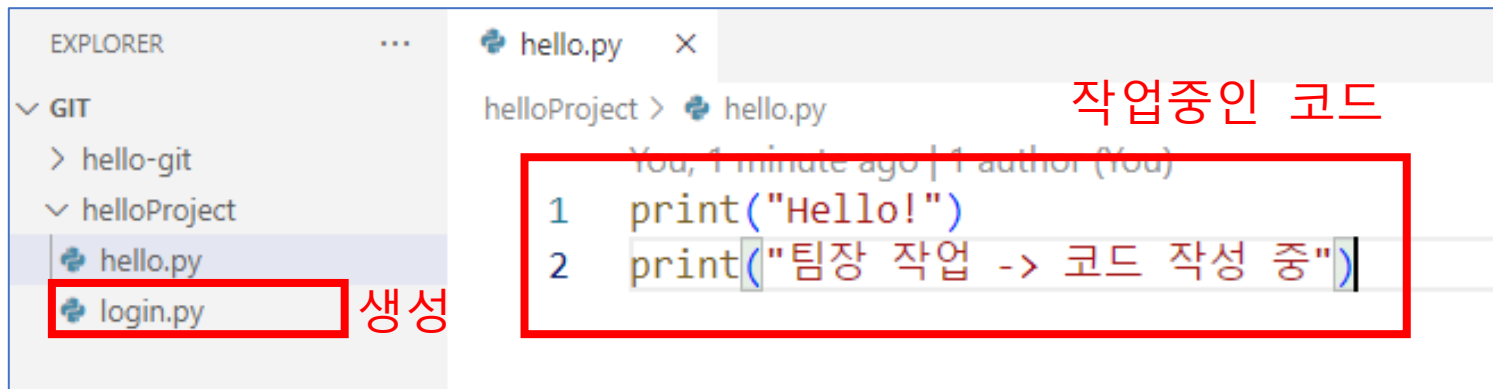
❖ [전체] 커밋하기

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

[전체] 최신 프로젝트 pull

❖ main 브랜치로부터 최신 파일 다운로드(동기화)

```
$ git pull origin main
```



[전체] 작업 완료 파일 업로드

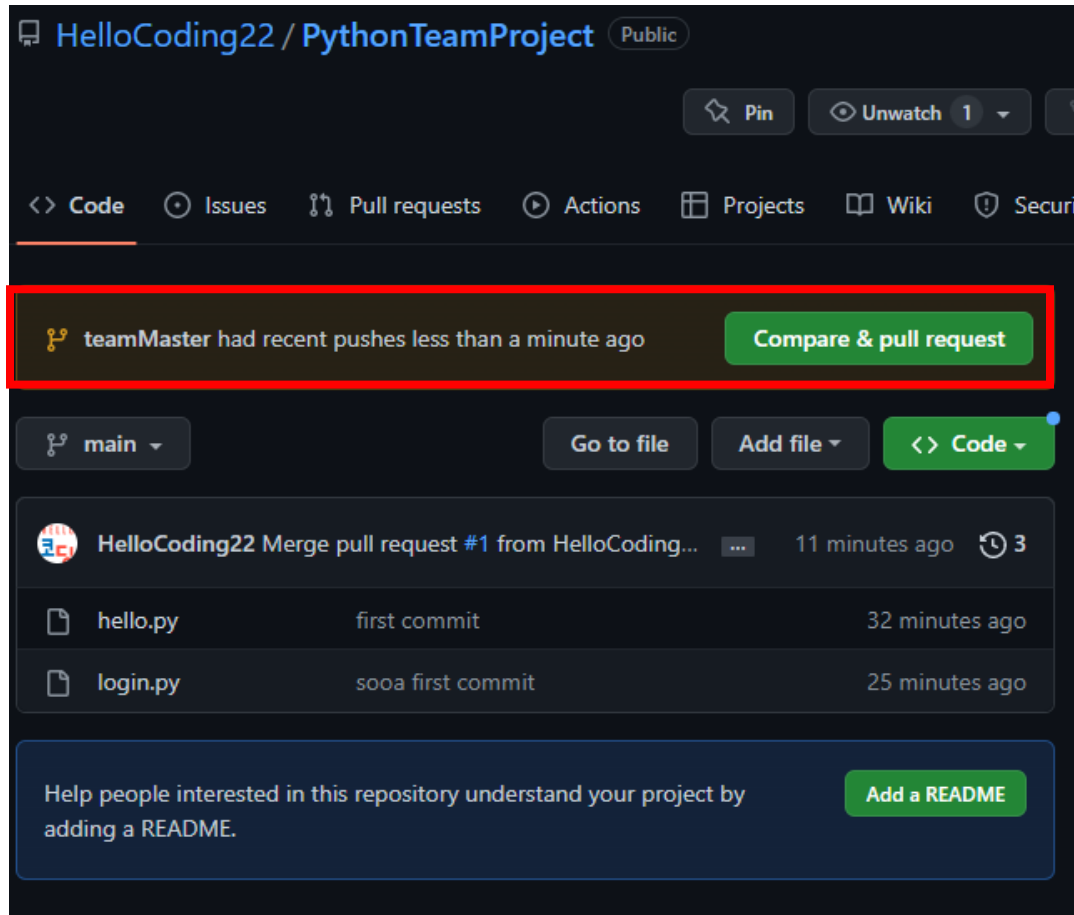
❖ 깃허브 저장소에 파일 push

- 예) teamMaster(팀장) 브랜치에 파일 업로드

```
$ git push origin teamMaster
```

[전체] 작업 완료 파일 업로드

❖ Pull request 요청하기



THANK 😊 YOU