

# Git & GitHub

◆ 팀 프로젝트를 위한 깃허브 설정 - Java

정수아

# Contents

## 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 <sup>\*</sup>

Repository name <sup>\*</sup>

HelloCoding22 ▾

JavaTeamProject ✓

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

Description (optional)

자바 팀 프로젝트 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.](#)

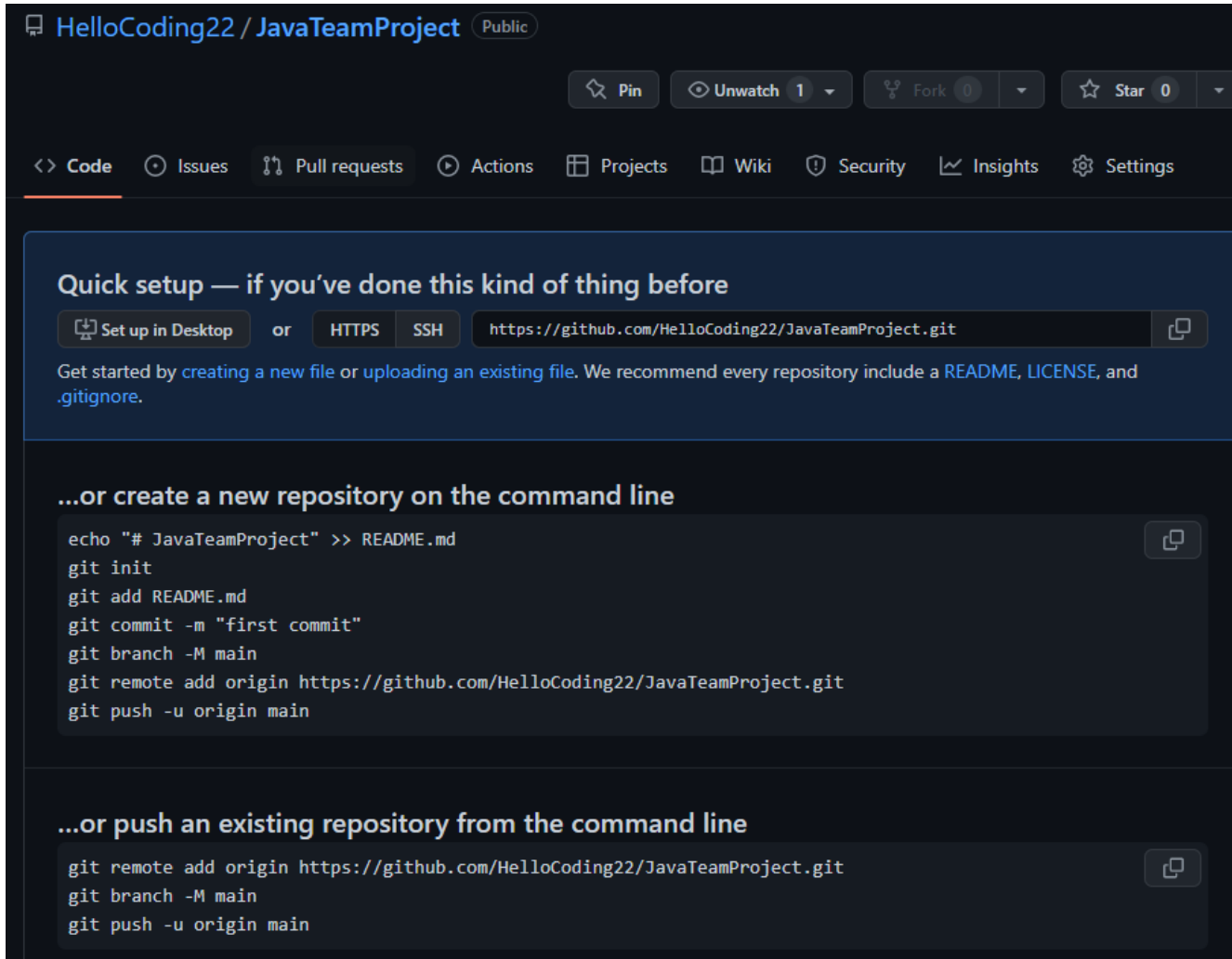
License: None ▾

ⓘ 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 'HelloCoding22 / JavaTeamProject'. The repository is public. At the top, there are buttons for 'Pin', 'Unwatch' (1), 'Fork' (0), and 'Star' (0). Below these are 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 theme. It starts with a 'Quick setup' section that says 'if you've done this kind of thing before'. It offers two options: 'Set up in Desktop' and 'HTTPS' (selected) with the URL 'https://github.com/HelloCoding22/JavaTeamProject.git'. Below this, it says '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 '...or create a new repository on the command line' and contains a code block with the following commands: 

```
echo "# JavaTeamProject" >> 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/JavaTeamProject.git
git push -u origin main
```

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

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

HelloCoding22 / JavaTeamProject 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/JavaTeamProject.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**

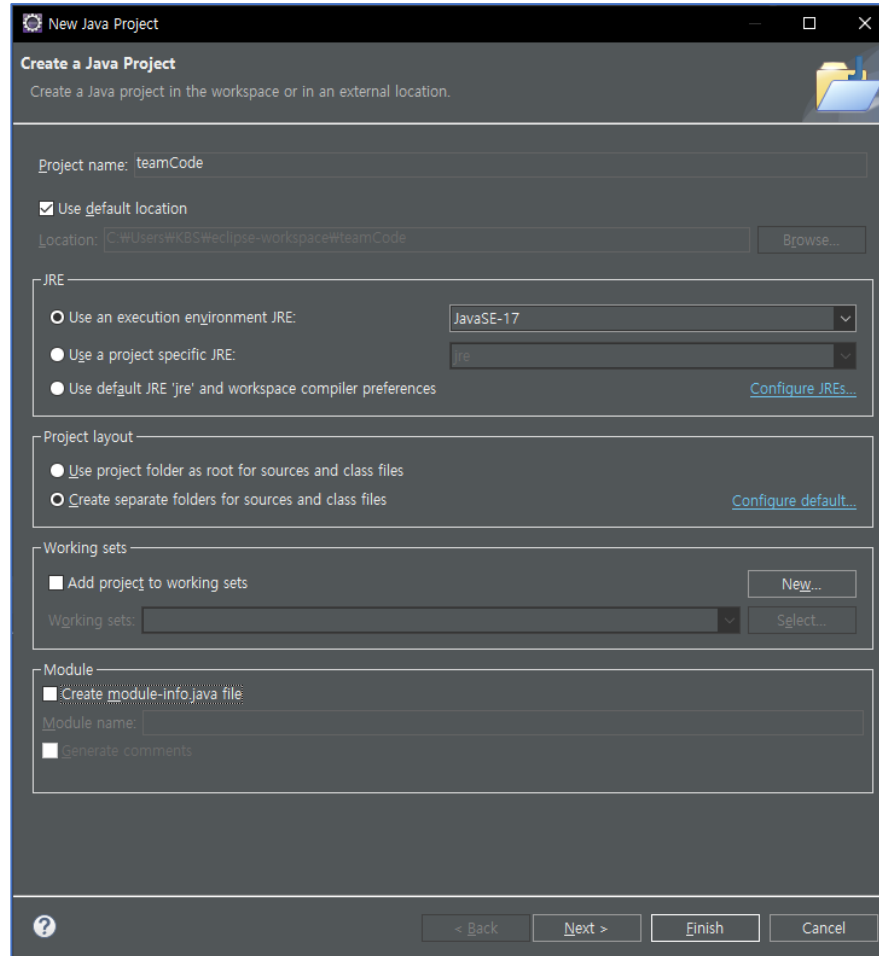
```
echo "# JavaTeamProject" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/HelloCoding22/JavaTeamProject.git
git push -u origin main
```

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

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

# [팀장] 프로젝트 초기 설정하기

## ❖ 프로젝트 생성 후 작업 시작



# [팀장] 프로젝트 초기 설정하기

## ❖ 프로젝트 생성 후 작업 시작

- 프로젝트 폴더 초기화

```
$ git init
```

- Hello.java 파일 생성

```
public class Hello {  
    public static void main(String[] args) {  
        System.out.println("안녕하세요");  
    }  
}
```

# [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 shows the GitHub interface for a repository named 'HelloCoding22 / JavaTeamProject'. The repository is public and has 1 watcher, 0 forks, and 0 stars. The 'Code' tab is selected, showing a list of files committed 3 minutes ago. The files listed are .settings, bin/teamCode, src/teamCode, .classpath, and .project, all marked as 'first commit'. A red box highlights the commit details and the list of files. Below the file list, there is a prompt to 'Add a README'. On the right side, the 'About' section shows the repository name and a brief description, followed by 'Releases' and 'Packages' sections.

Repository: HelloCoding22 / JavaTeamProject (Public)

Actions: Pin, Unwatch (1), Fork (0), Star (0)

Navigation: Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings

Branch: main

Buttons: Go to file, Add file, Code

Commit: HelloCoding22 first commit (3 minutes ago)

File	Commit	Time
.settings	first commit	3 minutes ago
bin/teamCode	first commit	3 minutes ago
src/teamCode	first commit	3 minutes ago
.classpath	first commit	3 minutes ago
.project	first commit	3 minutes ago

Help people interested in this repository understand your project by adding a README. [Add a README](#)

About: 자바 팀 프로젝트 수업

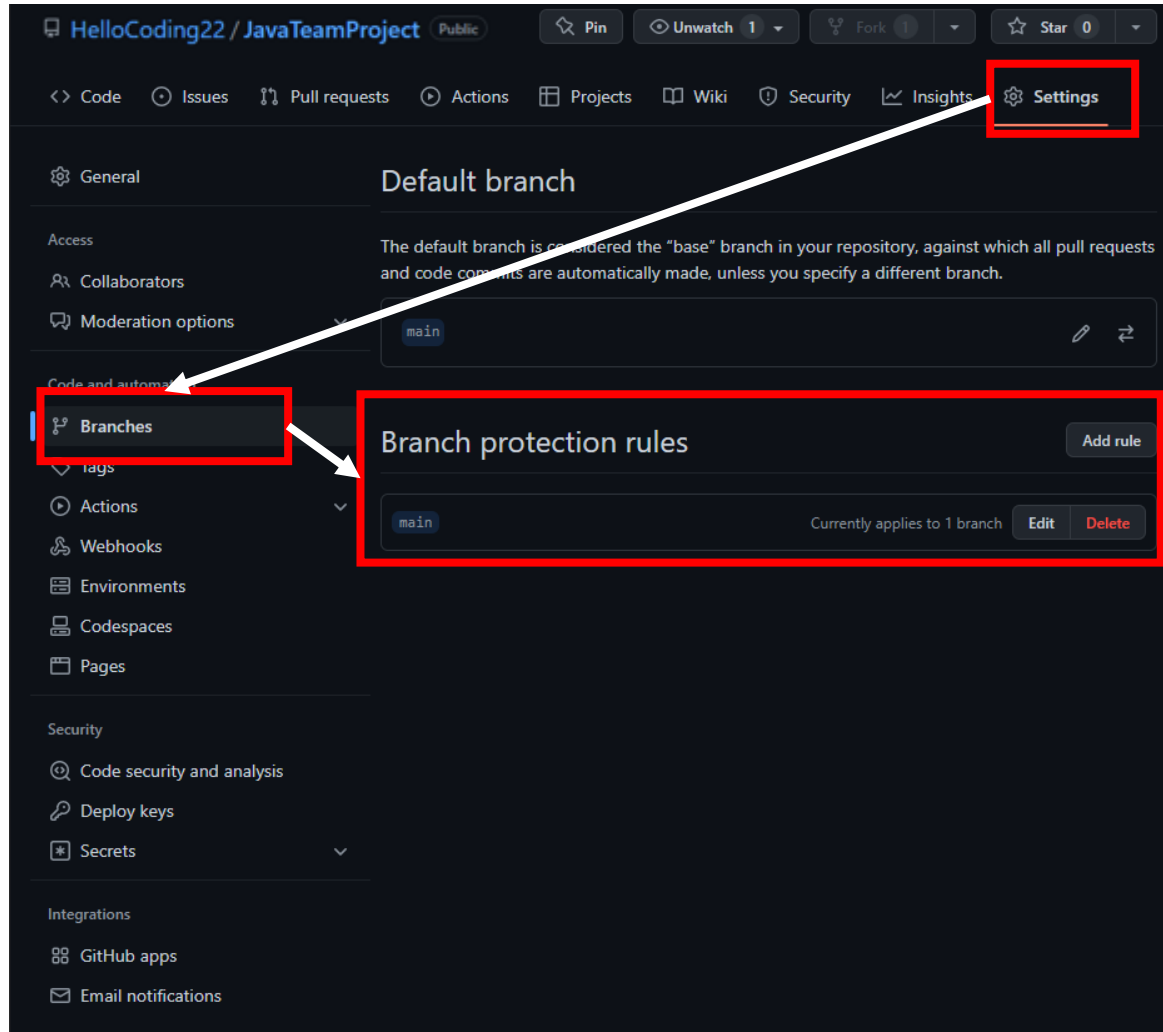
0 stars, 1 watching, 0 forks

Releases: No releases published. [Create a new release](#)

Packages: No packages published. [Publish your first package](#)

Languages: Java 100.0%

# [팀장] Branch 보호 규칙 설정



# [팀장] Branch 보호 규칙 설정

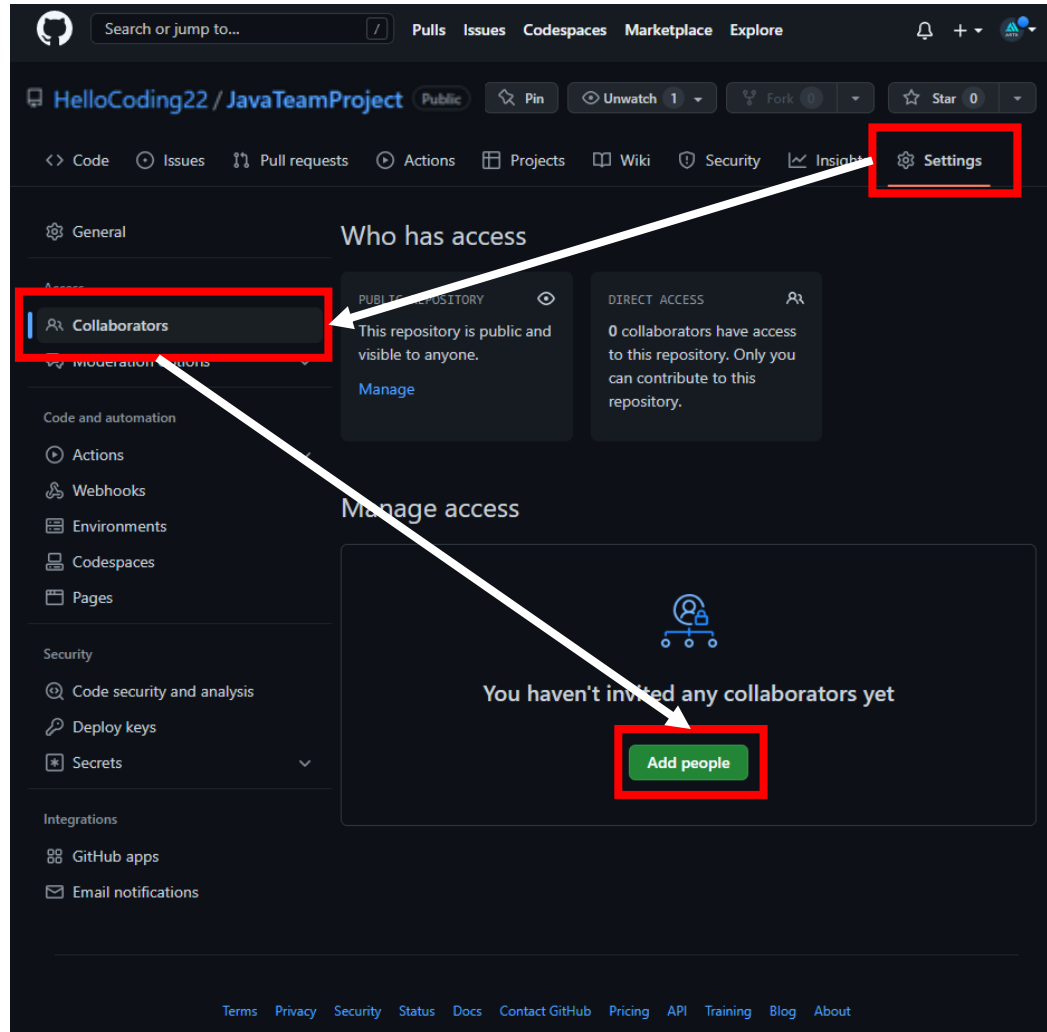
Branch name pattern \*

main 브랜치 이름

Protect matching branches 규칙

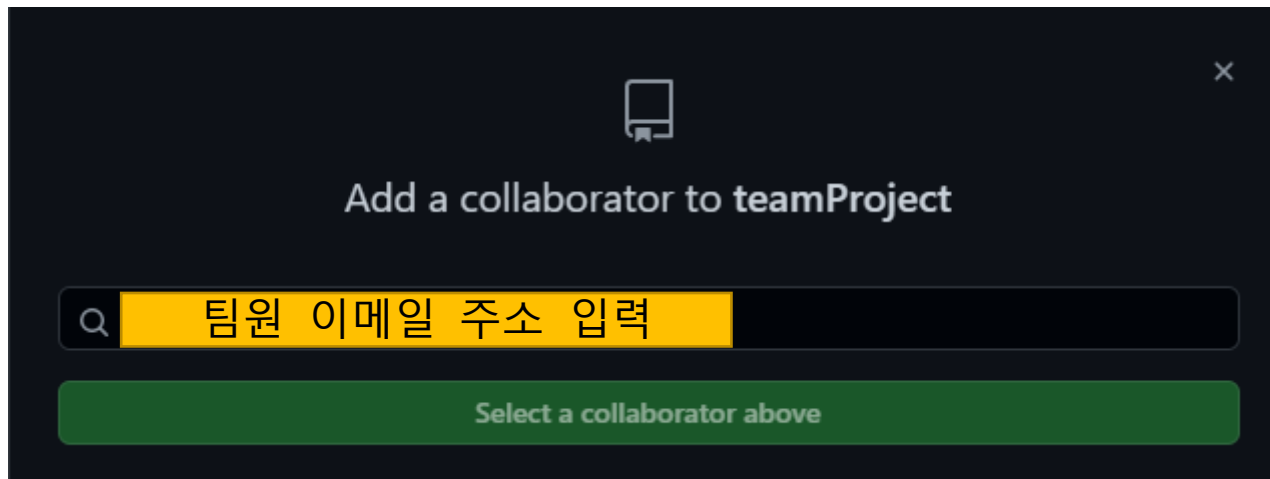
- ☒ **Require a pull request before merging**  
When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.
- ☒ **Require approvals**  
When enabled, pull requests targeting a matching branch require 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 upper right corner. Below it is a white icon of a smartphone. The main heading reads "Add a collaborator to teamProject". Below the heading 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) in the center. At the bottom of the interface 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 selected. 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**

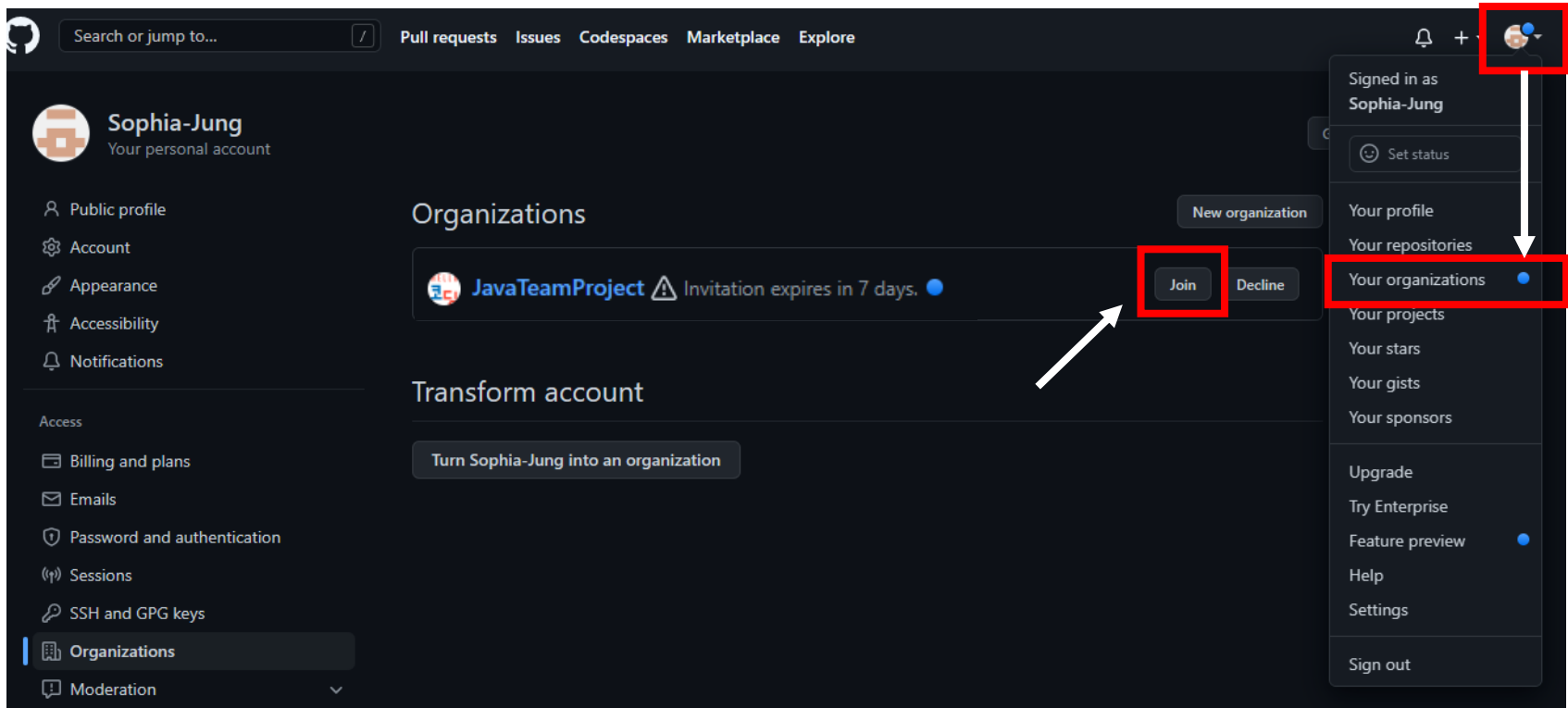
[Add people](#)

☐ Select all Type ▾

**초대 수락 대기중**

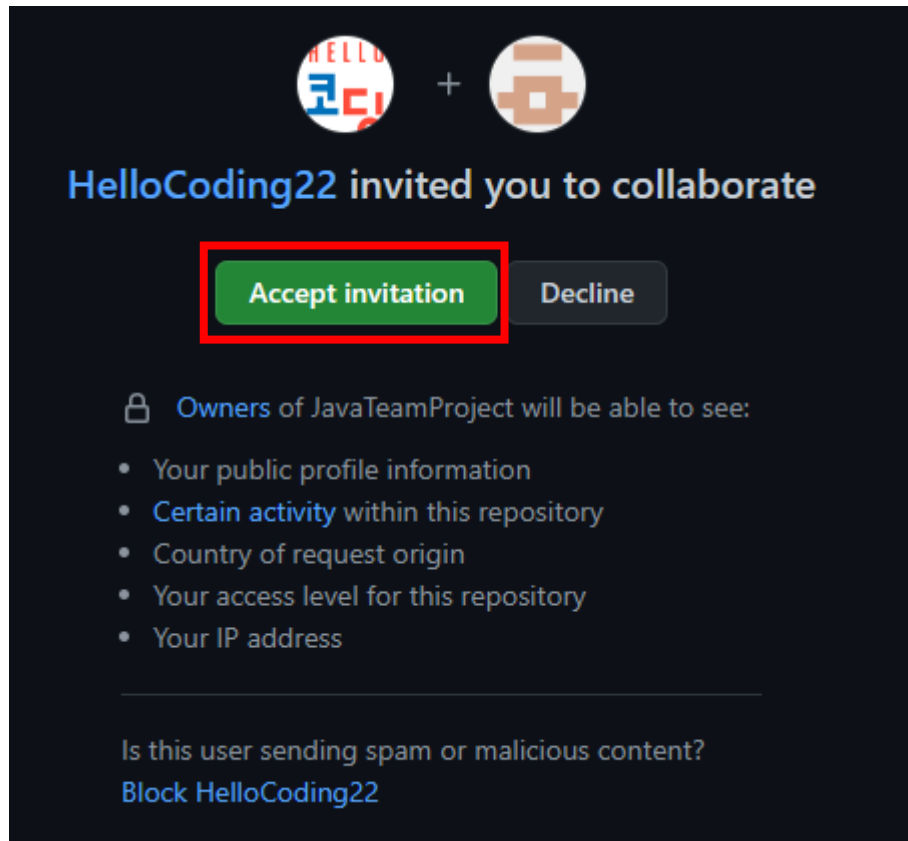
<input type="checkbox"/>	 <b>Sophia-Jung</b> Awaiting Sophia-Jung's response	Pending Invite 	<a href="#">Remove</a>
--------------------------	---	--	------------------------

# [팀원] 프로젝트 참여하기





# [팀원] 프로젝트 참여하기



# [팀원] 프로젝트 참여 완료

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

HelloCoding22 / JavaTeamProject Public Watch 1 Fork 0 Star 0

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

[main](#) [Go to file](#) [Add file](#) [Code](#)

**HelloCoding22 first commit** 33 minutes ago 1

folder	.settings	first commit	33 minutes ago
folder	bin/teamCode	first commit	33 minutes ago
folder	src/teamCode	first commit	33 minutes ago
file	.classpath	first commit	33 minutes ago
file	.project	first commit	33 minutes ago

Help people interested in this repository understand your project by adding a README. [Add a README](#)

**About**  
자바 팀 프로젝트 수업  
0 stars  
1 watching  
0 forks

**Releases**  
No releases published  
[Create a new release](#)

**Packages**  
No packages published  
[Publish your first package](#)

**Languages**  
Java 100.0%

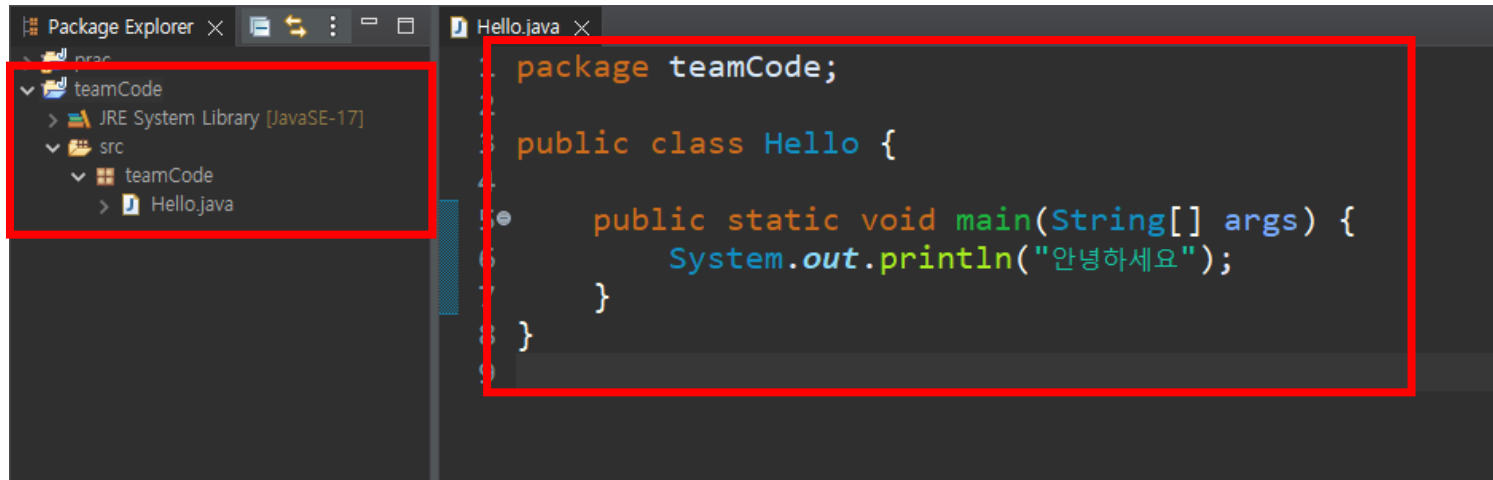
# [팀원] 깃허브 저장소 복제하기

The screenshot shows the GitHub interface for the repository **HelloCoding22 / JavaTeamProject**. The repository is public and has 1 watch, 0 forks, and 0 stars. The **Code** button is highlighted with a red box. The dropdown menu is open, showing options for cloning the repository. The **Clone** button is highlighted with a red box, and the **HTTPS** URL is also highlighted with a red box. The URL is `https://github.com/HelloCoding22/JavaTeamProj`. Other options in the dropdown include **SSH**, **GitHub CLI**, **Open with GitHub Desktop**, and **Download ZIP**. The repository's file structure is visible on the left, including `.settings`, `bin/teamCode`, `src/teamCode`, `.classpath`, and `.project`. The right sidebar shows the **About** section with project details and **Releases** and **Packages** sections.

# [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.java

```
package teamCode;

public class Login {
    public void login(String id, String pw) {
        System.out.println("로그인 기능");
    }
}
```

# [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
```

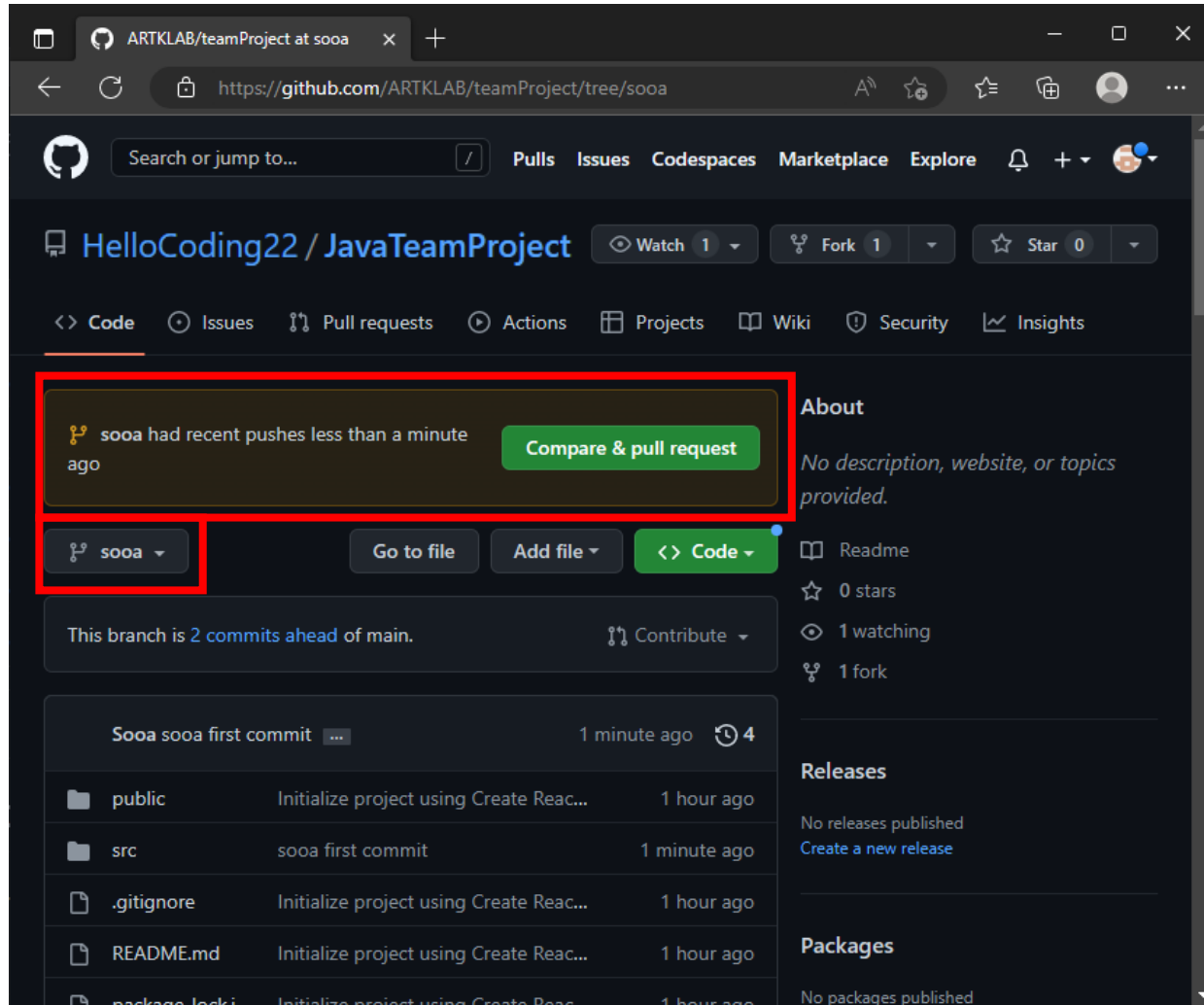
- 예) sooa 브랜치에 파일 업로드

```
$ git push origin sooa
```

## ❖ 깃허브 사이트 → Pull request



# [팀원] pull request



# [팀원] pull request

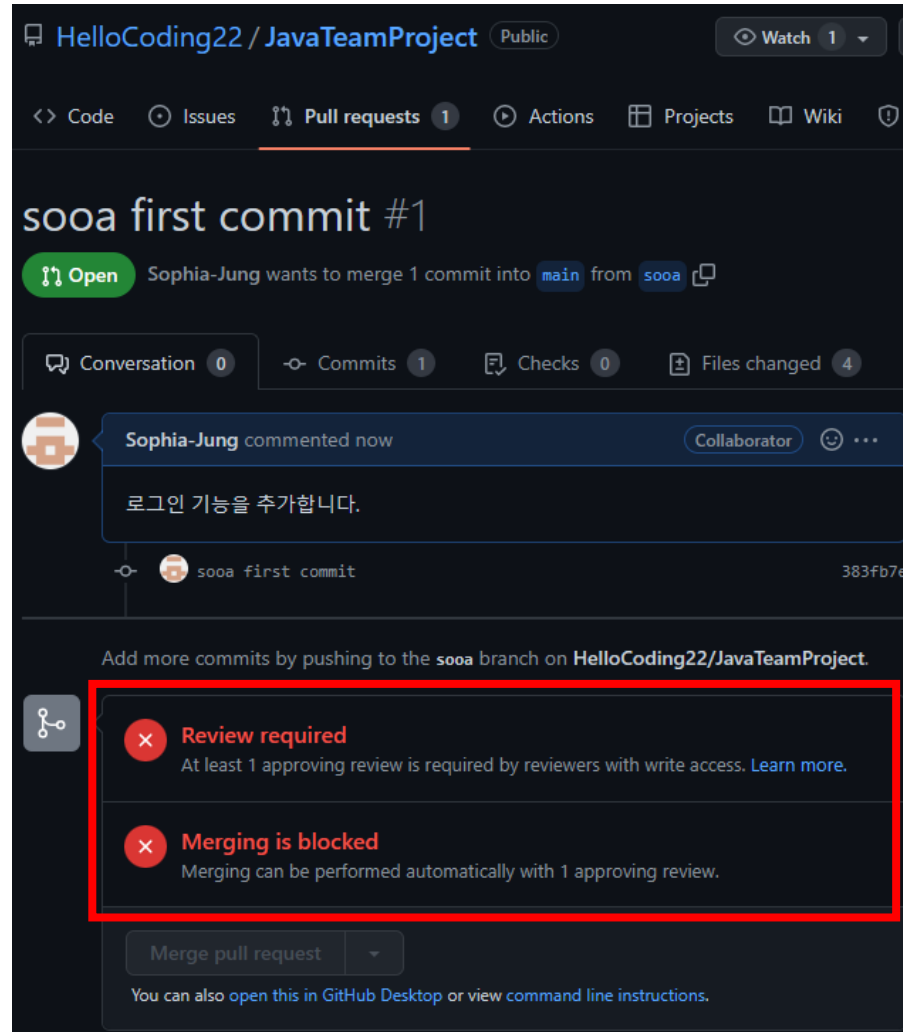
The screenshot shows the GitHub interface for a repository named 'HelloCoding22 / JavaTeamProject'. The page is titled 'Open a pull request' and includes a description: 'Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).' Below this, there are dropdowns for 'base: main' and 'compare: sooa', with a green checkmark indicating 'Able to merge. These branches can be automatically merged.'

The main content area shows a pull request from the user 'sooa' with the title 'first commit'. The description of the pull request is '로그인 기능을 추가합니다.' (Adding login functionality). The interface includes a 'Write' tab and a 'Preview' tab. Below the description, there is a text area for attaching files, with the instruction 'Attach files by dragging & dropping, selecting or pasting them.'

On the right side, there are sections for 'Reviewers', 'Assignees', 'Labels', 'Projects', and 'Milestone', each with a settings gear icon. The 'Reviewers' section shows 'No reviews—at least 1 approving review is required.' The 'Assignees' section shows 'No one—assign yourself'. The 'Labels' section shows 'None yet'. The 'Projects' section shows 'None yet'. The 'Milestone' section shows 'No milestone'.

At the bottom right, there is a green button labeled 'Create pull request' with a dropdown arrow.

# [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 / JavaTeamProject'. The 'Pull requests' tab is selected and highlighted with a red box. Below the repository header, there is a notification banner about labeling issues and pull requests for new contributors. The search bar shows 'is:pr is:open'. The 'Pull requests' section shows 1 Open and 0 Closed requests. A red box highlights the first pull request, 'sooa first commit', which was opened by Sophia-Jung and requires review.

Repository: HelloCoding22 / JavaTeamProject (Public)

Navigation: Code, Issues, **Pull requests 1**, Actions, Projects, Wiki, Security, Insights

Notification: Label issues and pull requests for new contributors. Now, GitHub will help potential first-time contributors discover issues labeled with **good first issue**. [Dismiss]

Filters: is:pr is:open | Labels 9 | Milestones 0 | [New pull request](#)

1 Open ✓ 0 Closed

Author	Label	Projects	Milestones	Reviews	Assignee	Sort
sooa	first commit					

#1 opened now by Sophia-Jung • Review required

# [전체] pull request 확인

The screenshot shows a GitHub pull request interface for the repository 'HelloCoding22 / JavaTeamProject'. The pull request is titled 'sooa first commit #1' and is created by 'Sophia-Jung'. It shows 1 commit and 4 files changed. A comment from Sophia-Jung says '로그인 기능을 추가합니다.' (Adding login functionality). The pull request is currently in a 'Review required' state, with a message indicating that at least 1 approving review is required. Below this, there is a 'Merging is blocked' message stating that merging can be performed automatically with 1 approving review. At the bottom, there is a checkbox for 'Merge without waiting for requirements to be met (bypass branch protections)' and 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'. The 'Labels' section shows 'None yet', and the 'Projects' section also shows 'None yet'. The 'Milestone' section shows 'No milestone', and the 'Development' section is visible at the bottom.

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

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** Add your review  
At least 1 approving review is required by reviewers with write access. [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)

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. At the top, the title is "sooa first commit #1". Below the title, it says "Sophia-Jung wants to merge 1 commit into main from sooa". There are buttons for "Open", "Edit", and "Code". Below this, there are tabs for "Conversation" (0), "Commits" (1), "Checks" (0), and "Files changed" (4). A green bar indicates "+10 -0" changes. On the right side, a red box highlights a green button labeled "Review changes". Below this, the commit details are shown: "sooa first commit" by "sooa (#1)". It states "Sophia-Jung committed 12 minutes ago" with the commit hash "383fb7eef75def4da6490613ce268d3f12d0172b". The file changes section shows a diff for "bin/.gitignore" and a new file "bin/teamCode/Hello.class" (+74 Bytes, 110%). The file "bin/teamCode/Hello.class" is marked as a binary file and is not shown.

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

Changes from all commits File filter Conversations

Filter changed files

bin

- .gitignore
- teamCode
  - Hello.class
- src/teamCode
  - Hello.java
  - Login.java

sooa first commit

sooa (#1)

Sophia-Jung committed 12 minutes ago commit 383fb7eef75def4da6490613ce268d3f12d0172b

1 bin/.gitignore

@@ -0,0 +1 @@

1 + /teamCode/

BIN +74 Bytes (110%) bin/teamCode/Hello.class

Binary file not shown.

버튼 클릭

# [전체] pull request 확인

The screenshot displays a GitHub pull request titled "sooa first commit #1". At the top, it indicates that "Sophia-Jung wants to merge 1 commit into main from sooa". Below this, there are tabs for "Conversation" (0), "Commits" (1), "Checks" (0), and "Files changed" (4). A "Review changes" button is visible on the right.

On the left side, a file tree shows the structure of the repository, including files like `.gitignore`, `Hello.class`, `Hello.java`, and `Login.java`.

The central focus is the "Finish your review" modal. It has two tabs: "Write" and "Preview". Under the "Write" tab, there are three options for submitting feedback:

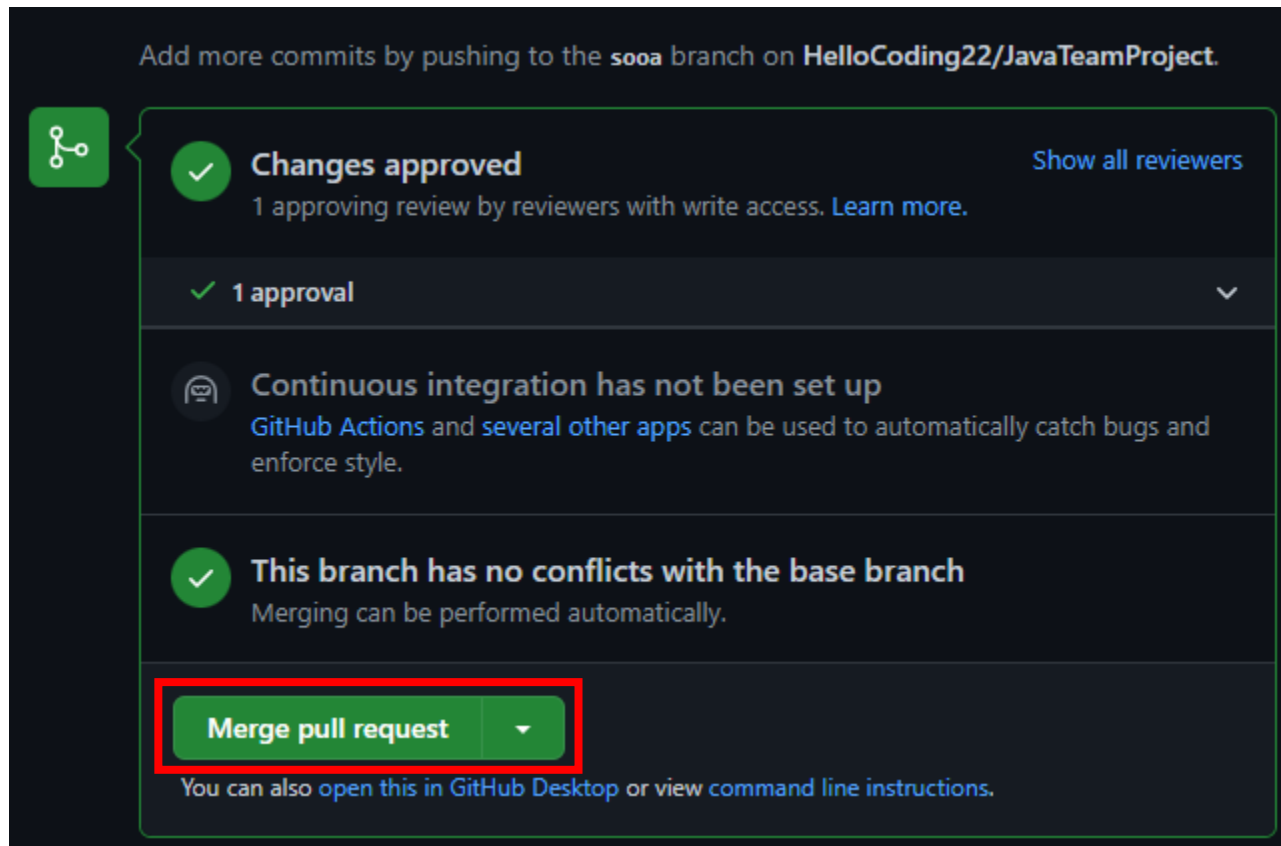
- ☐ **Comment**: Submit general feedback without explicit approval.
- ☒ **Approve**: Submit feedback and approve merging these changes. This option is highlighted with a yellow box, and the Korean word "승인" (Approval) is written next to it.
- ☐ **Request changes**: Submit feedback that must be addressed before merging.

At the bottom of the modal is a green "Submit review" button.

Below the modal, a portion of the code diff is visible, showing changes to a `main` method in `src/teamCode/Login.java`.

# [전체] pull request 승인 완료

## ❖ Merge pull request 버튼 활성화

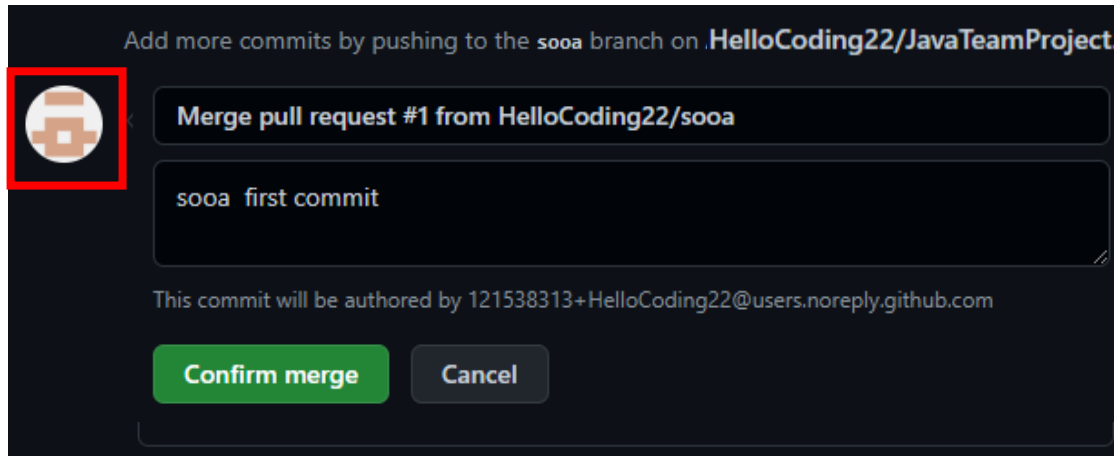




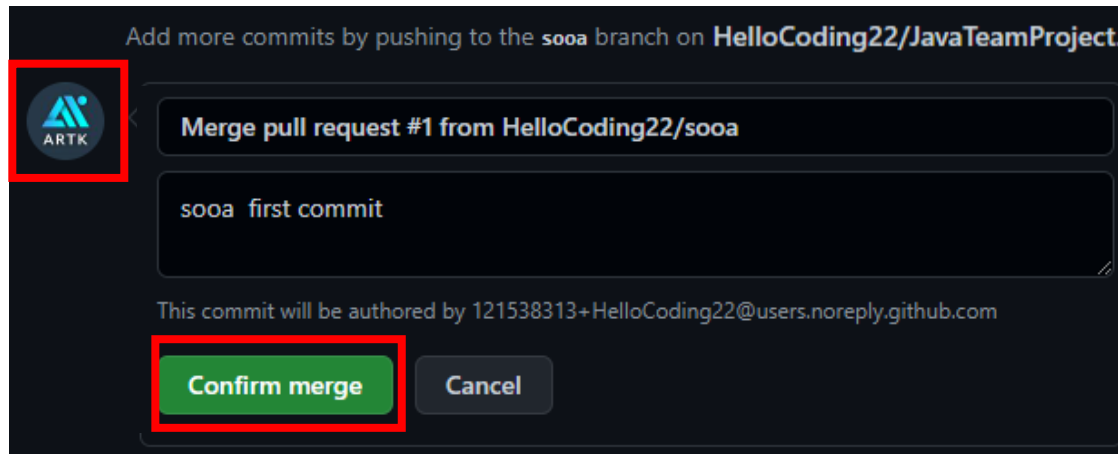
# [팀장] merge 버튼 클릭

❖ 팀원은 merge 하지 않는 것이 좋음

팀원

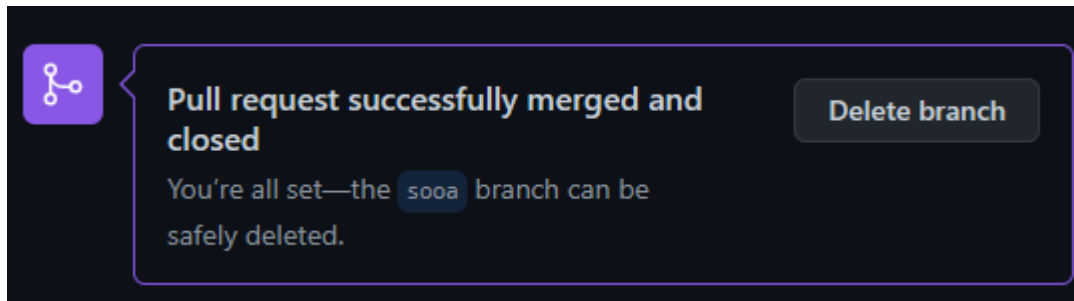


팀장



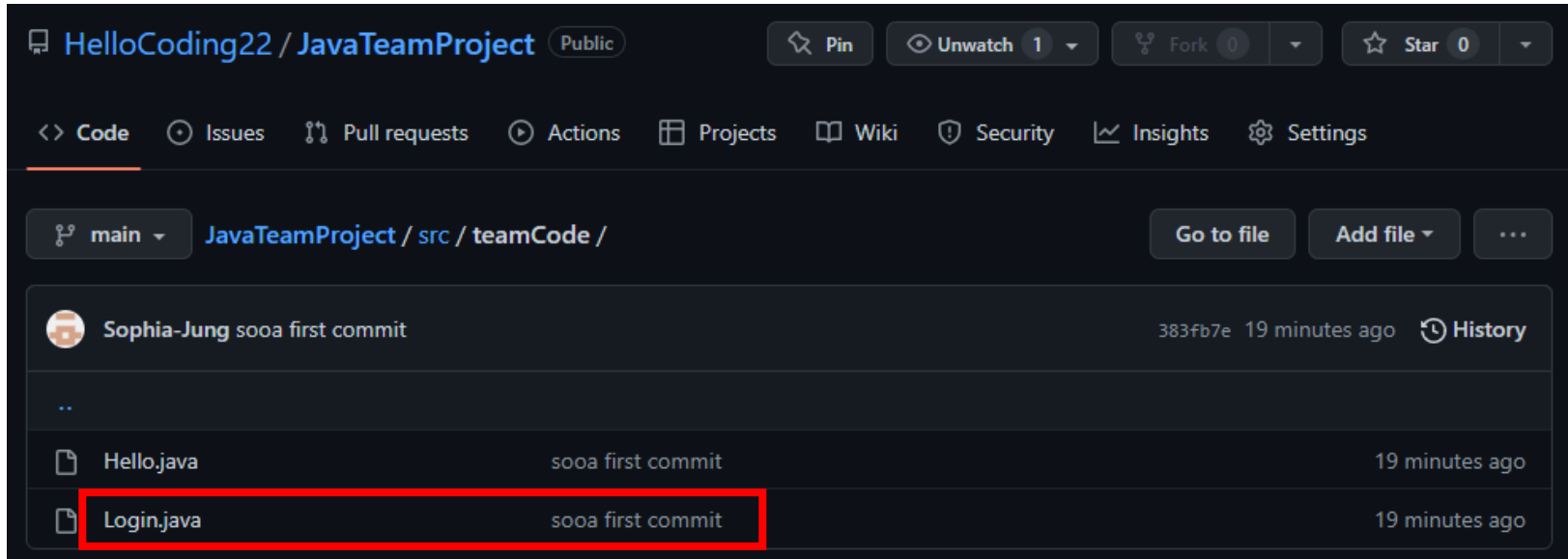
# [팀장] merge 버튼 클릭

## ❖ merge 완료



# merge 완료

## ❖ merge 완료



The screenshot shows the GitHub interface for the repository 'HelloCoding22 / JavaTeamProject'. The 'Code' tab is selected. The commit history for the 'main' branch is displayed, showing a commit by 'Sophia-Jung' titled 'sooa first commit' with the hash '383fb7e' and a timestamp of '19 minutes ago'. Below the commit details, a table lists the files changed in this commit:

File	Commit	Time
..		
Hello.java	sooa first commit	19 minutes ago
Login.java	sooa first commit	19 minutes ago

The 'Login.java' row is highlighted with a red border, indicating the file that was merged.

# 코드 작성 중 main 브랜치 변경 발생

## ❖ [전체] 기존에 작성하던 코드 저장

```
package teamCode;

public class Hello {
    public static void main(String[] args) {
        System.out.println("안녕하세요");
        System.out.println("팀장 -> 코드 작성 중");
    }
}
```

# 코드 작성 중 main 브랜치 변경 발생

## ❖ [전체] 스테이징하기

```
$ git add .
```

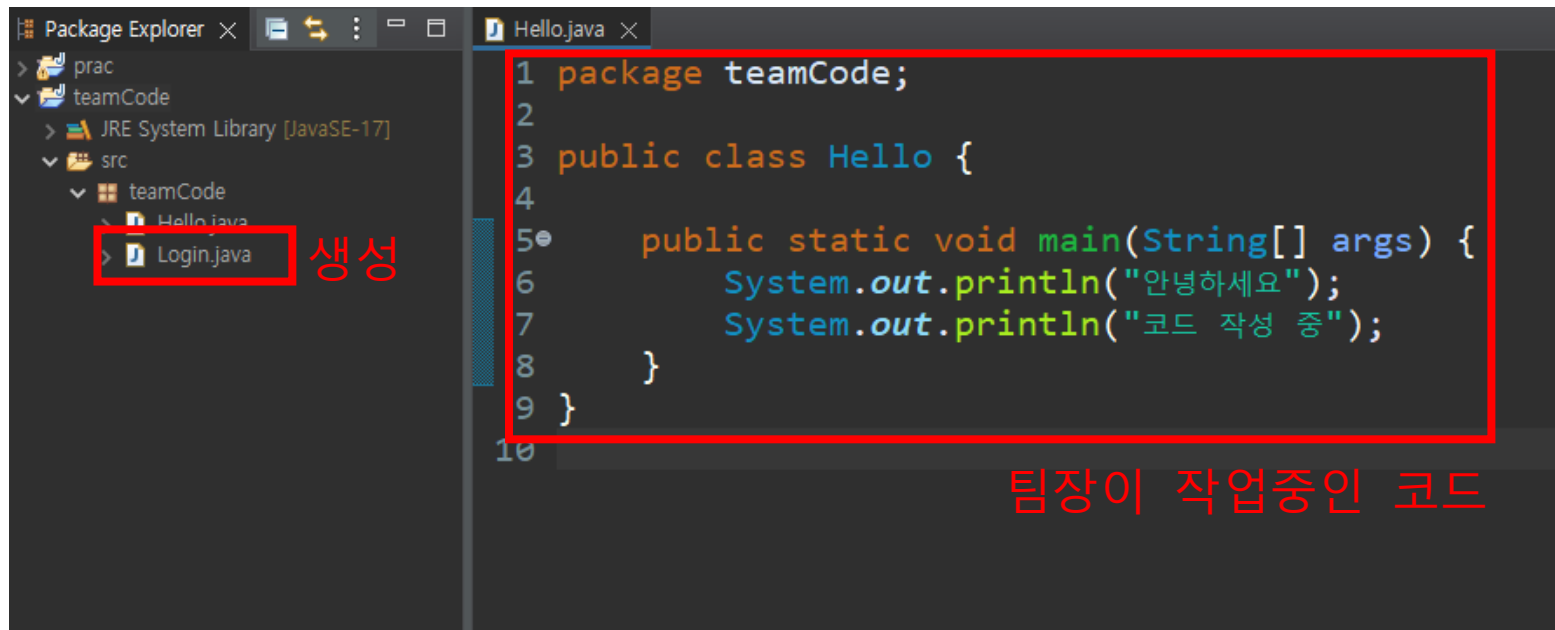
## ❖ [전체] 커밋하기

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

# [전체] 최신 프로젝트 pull

## ❖ main 브랜치로부터 최신 파일 다운로드(동기화)

```
$ git pull origin main
```



# [전체] 작업 완료 파일 업로드

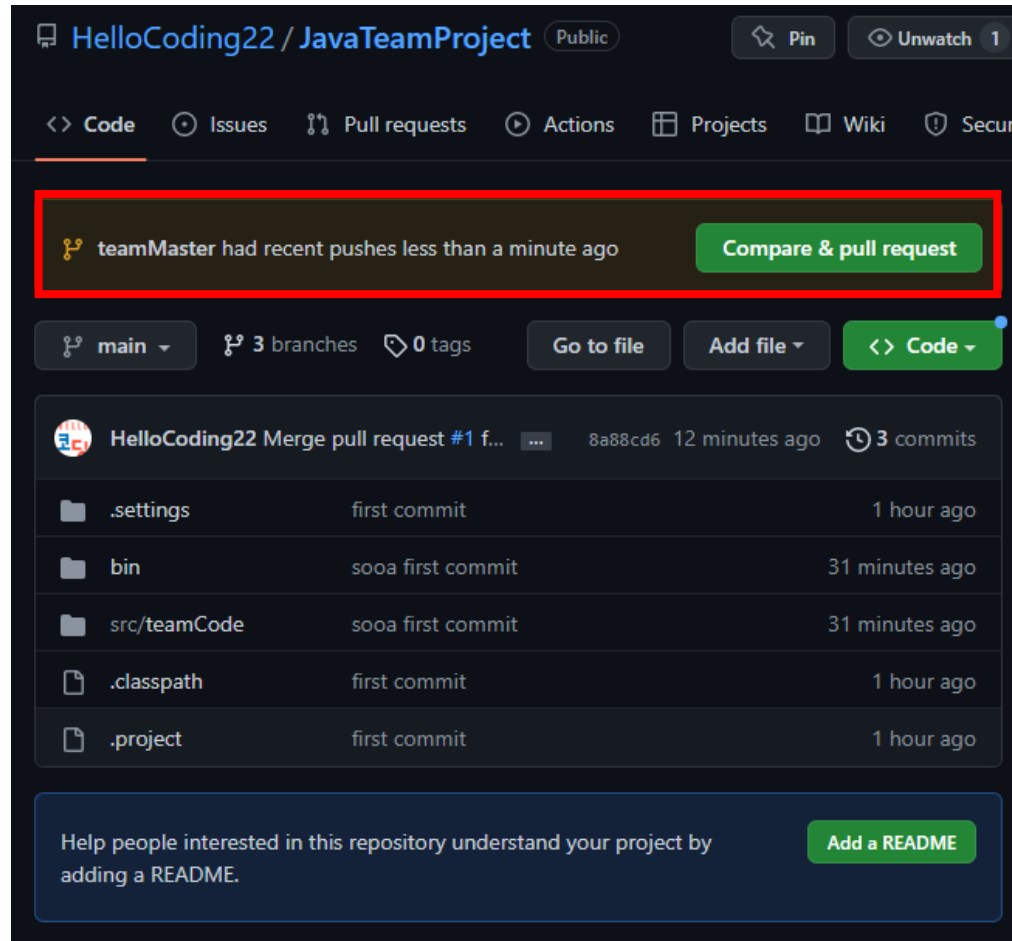
## ❖ 깃허브 저장소에 파일 push

- 예) teamMaster(팀장) 브랜치에 파일 업로드

```
$ git push origin teamMaster
```

# [전체] 작업 완료 파일 업로드

## ❖ Pull request 요청하기





**THANK 😊 YOU**