

팀 프로젝트 Repository 관리

1. 개인 github repositories에서 repository 생성 한 후 collaborator로 팀원 초대

Create a new repository

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

Required fields are marked with an asterisk (*).

Owner *	Repository name *
8253jang	/

Great repository names are short and memorable. Need inspiration? How about [special-octo-lamp](#) ?

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.

새로운 Repository > Settings > Collaborators > Add people

1) Repository URL: 8253jang / Git_295

2) Settings tab

3) Access dropdown: Collaborators

4) 'Add people' button

5) Search input: 조원 이름 or email 검색 (Search for member name or email)

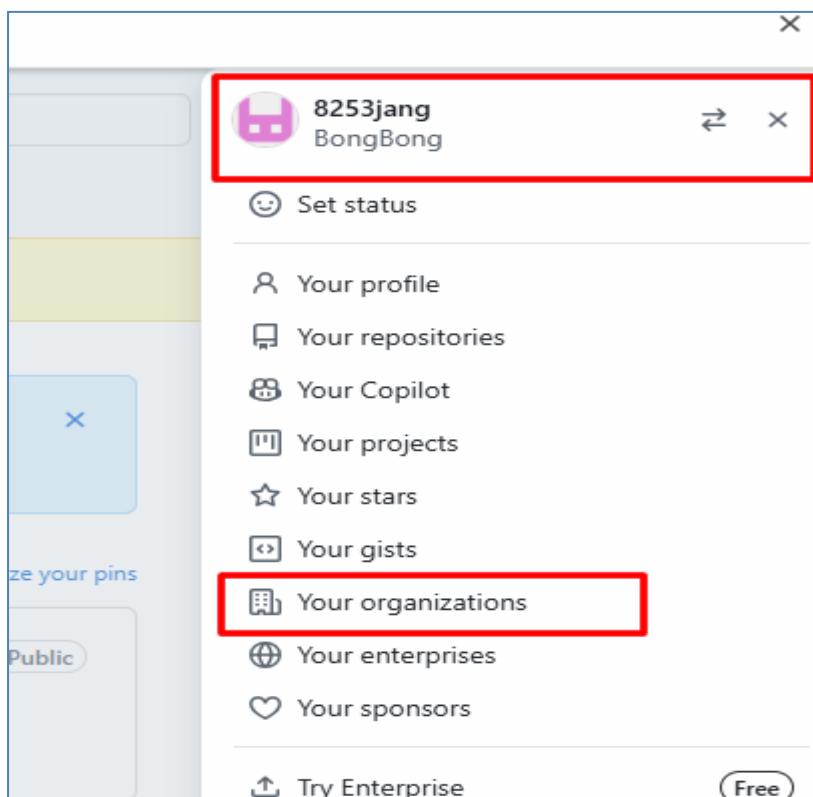
The screenshot shows the GitHub repository settings interface. The 'Collaborators' tab is selected under the 'Access' dropdown. A modal window titled 'Add people to Git_295' is open, showing a search bar with the placeholder 'Search by username, full name, or email'. Below the search bar is a list of users with their names and profile icons. At the bottom right of the modal is a green 'Add to repository' button, which is highlighted with a red box. The background shows the repository's general settings and other tabs like Code, Issues, Pull requests, Actions, Projects, Wiki, Security, and Insights.

초대된 팀원에게 초대장이 메일로 전송된다. > 팀원이 초대장을 수락하면 이제 github을 함께 관리 할 수 있다.

2. organization 생성 후 repository 생성

- ✓ collaborator 로 팀원초대
- ✓ 권한, 팀 등 관리 상세 관리 장점
- ✓ 일반적으로 회사에서 사용하는 방식

위 1의 방식은 Repository 를 생성한 팀원 github 에 조원이 기여 하는 방식 이라면 organization 은 팀원들 만의 조직을 만들고 함께 관리하는 방식이다. 또한 팀원들 마다 권한을 다르게 부여 할 수 도 있다.



The screenshot shows the 'Organizations' page on GitHub. On the left, there's a sidebar with various account settings like 'Public profile', 'Account', 'Appearance', etc. The main area shows a list of organizations the user owns or is a member of, including 'jang-org', 'kosta222test', and 'PosOffourth'. A red box highlights the 'New organization' button located at the top right of the organization list area.

Choose a plan

Pick a plan for your organization

Free

The basics for individuals and organizations

\$ 0 USD per user/month

[Create a free organization](#)

> Unlimited public/private repositories
> Automatic security and version updates

MOST POPULAR

Team

Advanced collaboration for individuals and organizations

\$ 4 USD per user/month

[Continue with Team](#)

< Everything included in Free, plus...
> Access to GitHub Codespaces

Enterprise

Security, compliance, and flexible deployment
Starting at

\$ 21 USD per user/month

[Start a free trial](#) [Contact Sales](#)

< Everything included in Team, plus...
> Data residency

Tell us about your organization

Set up your organization

Organization name *

 → 전세계적으로 유일해야한다.

This will be the name of your account on GitHub.
Your URL will be: <https://github.com/kosta-295>.

Contact email *

This organization belongs to:

My personal account
i.e., 8253jang (BongBong)

A business or institution
For example: GitHub, Inc., Example Institute, American Red Cross

Verify your account

github 주소를 확인해보자 - <https://github.com/kosta-295>

The screenshot shows the GitHub organization settings page for 'jang-org'. The 'People' tab is selected. A modal window titled 'Invite a member to jang-org' is open, containing a search bar and an 'Invite' button. The 'Invite member' button in the top right corner of the main interface is also highlighted with a red box.

People > invite member 를 클릭해서 조원을 초대한다.

3.fork 방식

포크는 branch 를 생성해서 push 할 수 있는 권한이 없는 외부 기여자가 Pull Request 하기 위한 목적으로 사용하는 방법이다.

- ✓ PR 은 Repository 에 대한 권한이 없어도 요청 가능하다.
- ✓ 주로 Opensource 에 기여할 때에 일반적으로 사용하는 방식이다.

Spring security 는 오픈소스이므로 구글에서 검색을 통해 github 에 들어가 fork 해보자

The screenshot shows a Google search results page for 'spring security github'. The first result is a link to the 'spring-projects/spring-security' repository on GitHub. The snippet shows that Spring Security provides security services for the Spring IO Platform and requires Spring 6.0.

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장희정

The screenshot shows the GitHub repository page for 'spring-security'. At the top right, there is a 'Fork' button with a value of '6k', which is highlighted with a red box. Below the header, there is a yellow banner with the text: 'Please configure another 2FA method to reduce your risk of permanent account lockout. If you use SMS for 2FA, we strongly recommend against SMS as it is prone to fraud and delivery may be unreliable depending on your region.' The repository details include: 42 branches, 337 tags, 17,701 commits, and several recent pull requests from 'sjohnr' and 'github'. The repository is described as 'Spring Security' and has Java, security, framework, and spring tags.

The screenshot shows the 'Create a new fork' form on GitHub. It asks for the owner (8253jang) and repository name (spring-security). A note says 'spring-security is available'. There is a description field containing 'Spring Security', a checked checkbox for 'Copy the main branch only', and a note about contributing back to the upstream repository. At the bottom, there is a 'Create fork' button, which is highlighted with a red box.

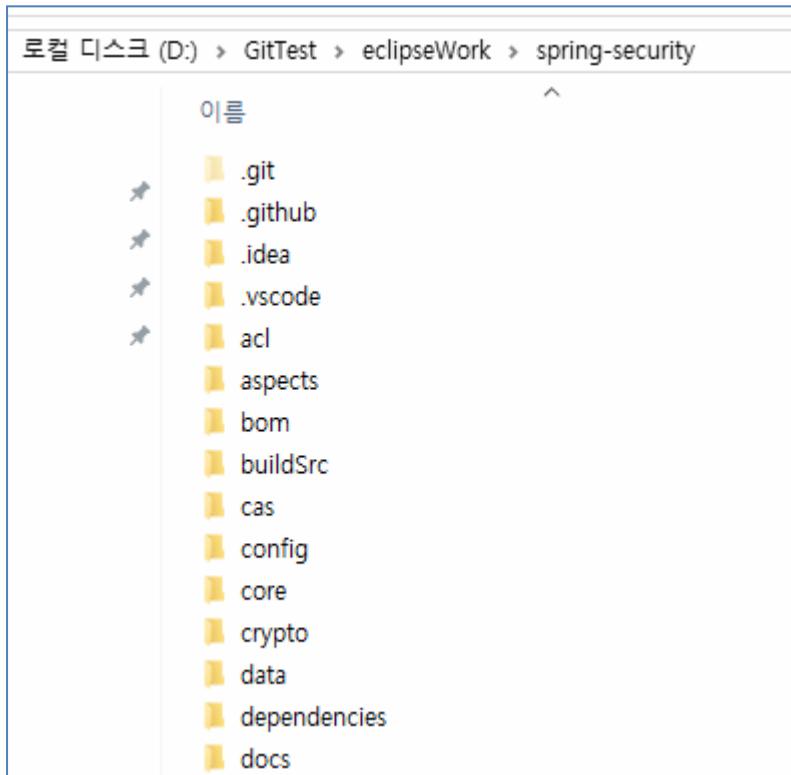
Create fork를 완료하고 나면 자신의 github에 spring-security Repository가 생긴다.

The screenshot shows the newly created GitHub repository page for '8253jang / spring-security'. It is a fork of the original 'spring-security' repository. The page includes a 'Clone' section with HTTPS, SSH, and GitHub CLI options, and a link to the repository's URL: <https://github.com/8253jang/spring-security.git>. The repository has 1 branch and 0 tags. The sidebar shows basic repository statistics: 0 stars, 0 forks, and 0 watching.

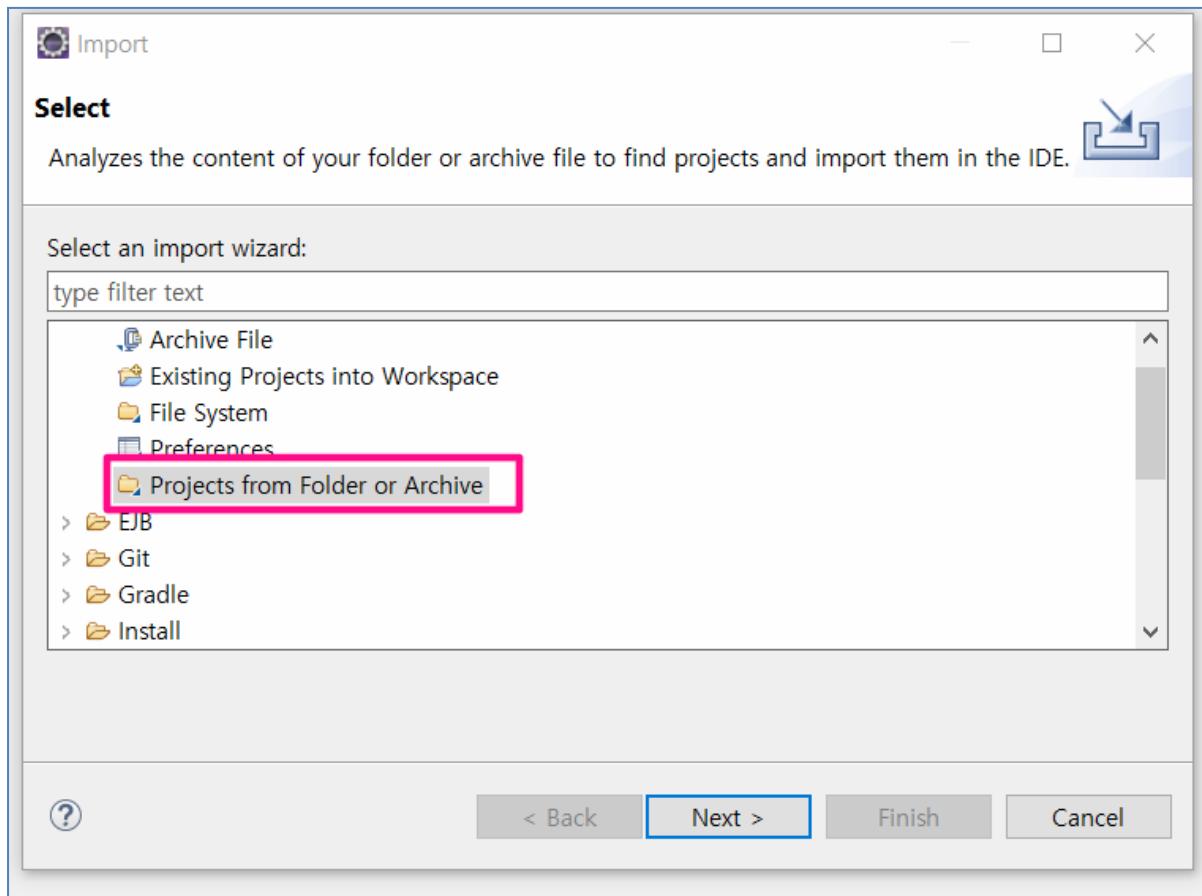
자신의 로컬 pc에 git clone 한다.

```
KOSTA@DESKTOP-ZP1AKSP MTNCGW64 /d/GitTest/eclipseWork
$ git clone https://github.com/8253jang/spring-security.git
Cloning into 'spring-security'...
remote: Enumerating objects: 346232, done.
remote: Counting objects: 100% (33/33), done.
remote: Compressing objects: 100% (29/29), done.
remote: Total 346232 (delta 9), reused 4 (delta 4), pack-reused 346199 (from 3)
Receiving objects: 100% (346232/346232), 74.40 MiB | 6.96 MiB/s, done.
Resolving deltas: 100% (172193/172193), done.
Updating files: 100% (5107/5107), done.
```

폴더에 생긴 프로젝트를 확인한다.



프로젝트를 IDE로 import 한다.



Fork한 프로젝트를 자신의 github에 push 하여 커밋 이력을 남기는 것은 얼마든지 할 수 있다.
변경된 정보를 spring-security에 기여하고 싶으면 pull Request를 요청한다.

Git tag 관리

main 브랜치에서 tag 를 붙여 버전을 명시한다. 일반적으로 release(특정 버전의 소프트웨어를 배포하거나 배포 준비가 완료된 상태)를 하고자 할 때 tag 사용한다.

사용자가 이용 가능한 상태가 되었을 때 주로 release 한다.

관련 명령어

git tag 버전명(v1.0)

: 마지막 커밋을 대상으로 tag 설정

git tag -a v1.0 -m "message"

: tag 에 메시지 기록

git push origin 버전명(v1.0)

: 소스코드 변경사항에 대한 commit, push 와는 상관없이 별개로 진행

git tag

: 태그 목록 조회

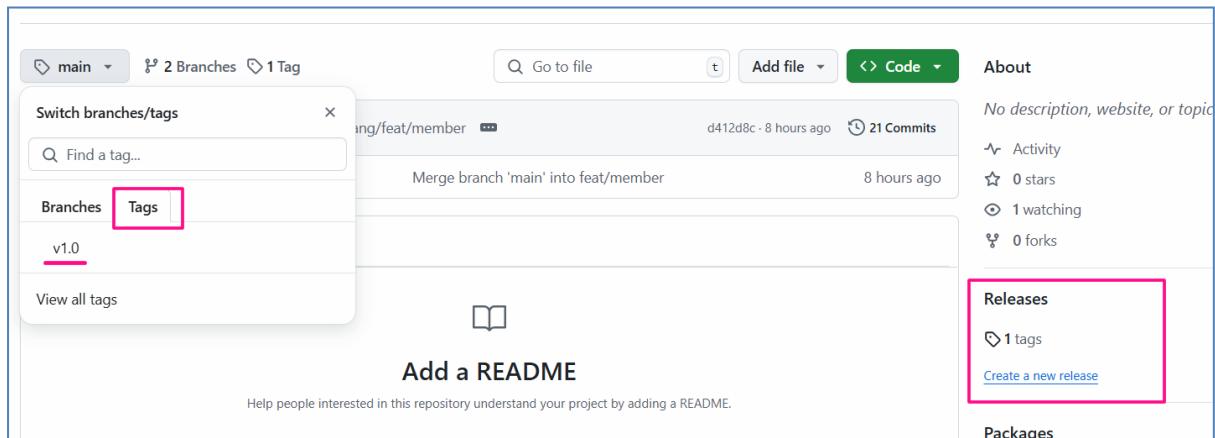
github 에 switch 된 branch 기준으로 tag 별 release 가 생성되고,
release 에는 source 코드가 압축파일로 생성된다.

```
KOSTA@DESKTOP-7PLAKSP MINGW64 /d/GitTest/eclipsework/Git_295 (main)
$ git tag v1.0
```

```
commit d412d8c1258e18b501ae67935b168b2a077df184 (HEAD -> main, tag: v1.0, origin/main)
Merge: 4b50049 bb0465d
Author: BongBong <8253jang@daum.net>
```

```
KOSTA@DESKTOP-7PLAKSP MINGW64 /d/GitTest/eclipsework/Git_295 (main)
$ git push origin v1.0
```

Github에 저장소를 확인해본다.



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장희정

The screenshot shows a GitHub repository interface. At the top, there are two tabs: 'Releases' and 'Tags'. The 'Tags' tab is selected and highlighted in blue. Below the tabs, there is a section titled 'Tags' with a small icon. Underneath this, a single tag is listed: 'v1.0'. To the right of the tag name is a 'Verified' badge with a green checkmark and three dots. Below the tag name, it says '8 hours ago' and 'd412d8c'. To the right of the commit hash are two download links: 'zip' and 'tar.gz', each preceded by a small file icon.