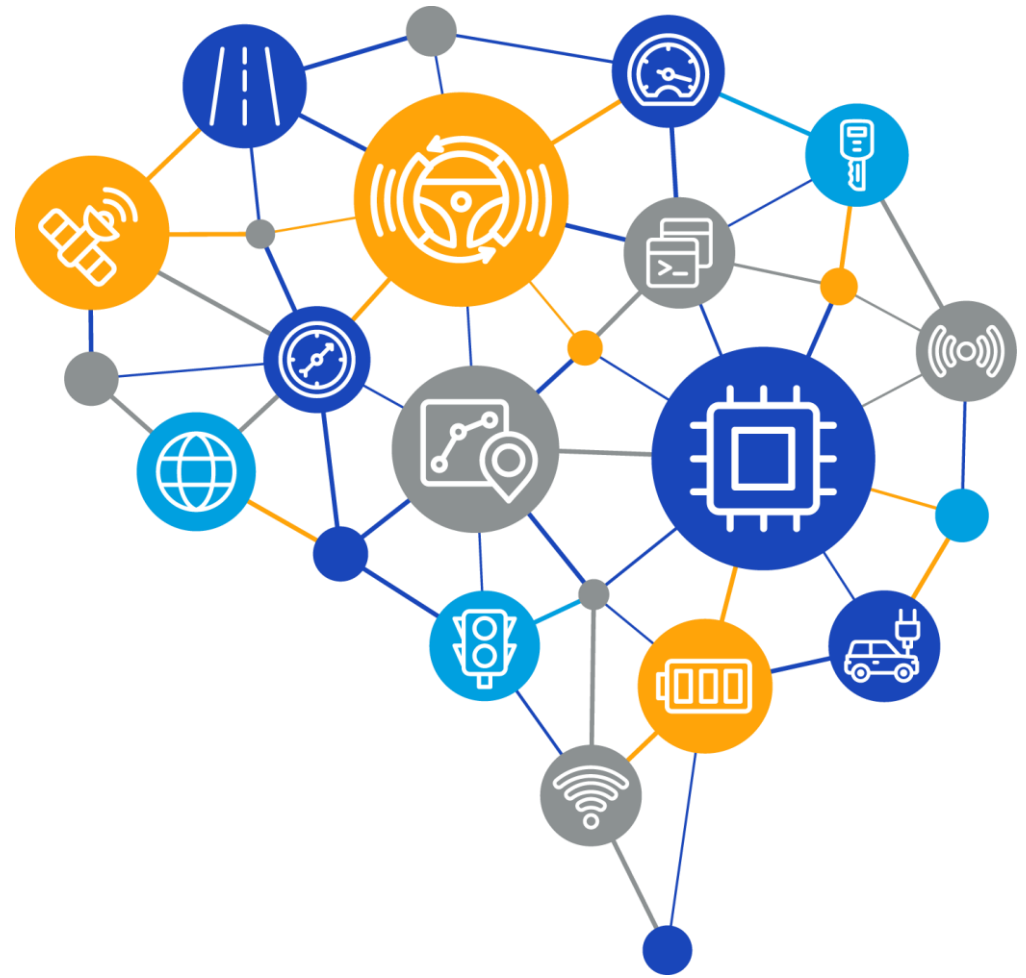


지역과 원격저장소 연동 기초 clone pull

Version Control and
Git & Github basics

2022.05

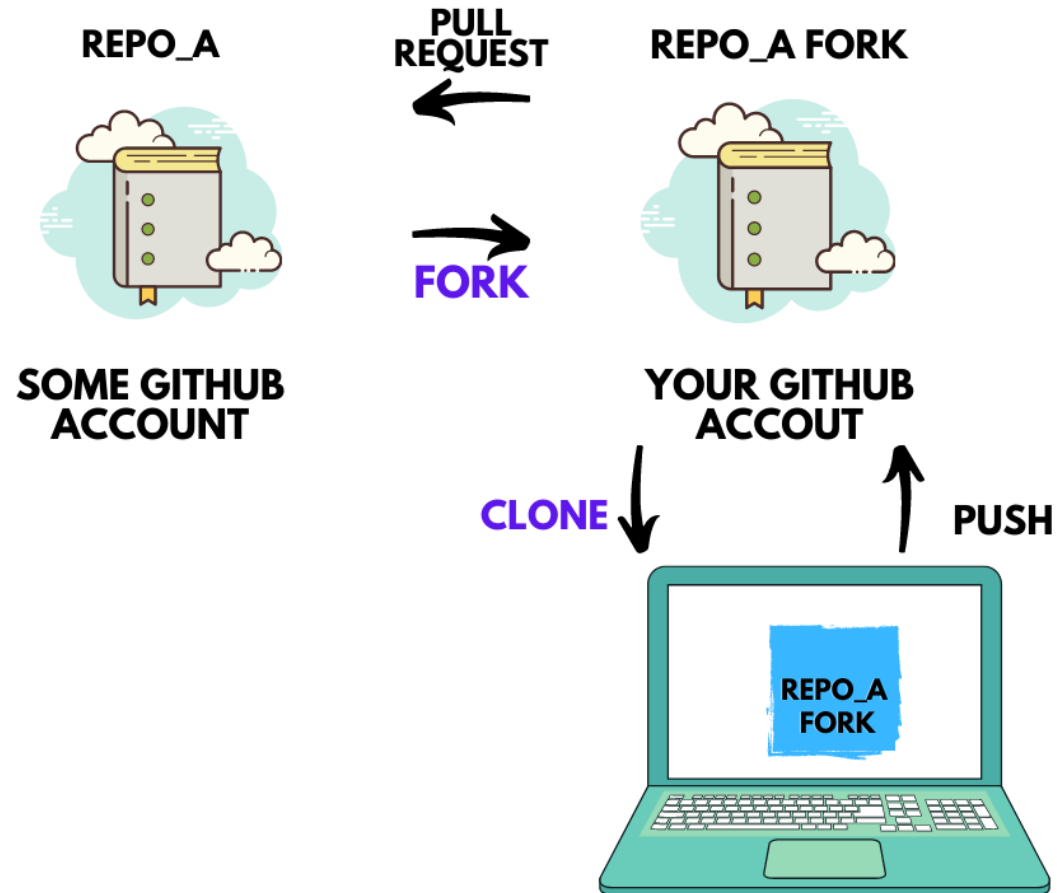
강환수 교수



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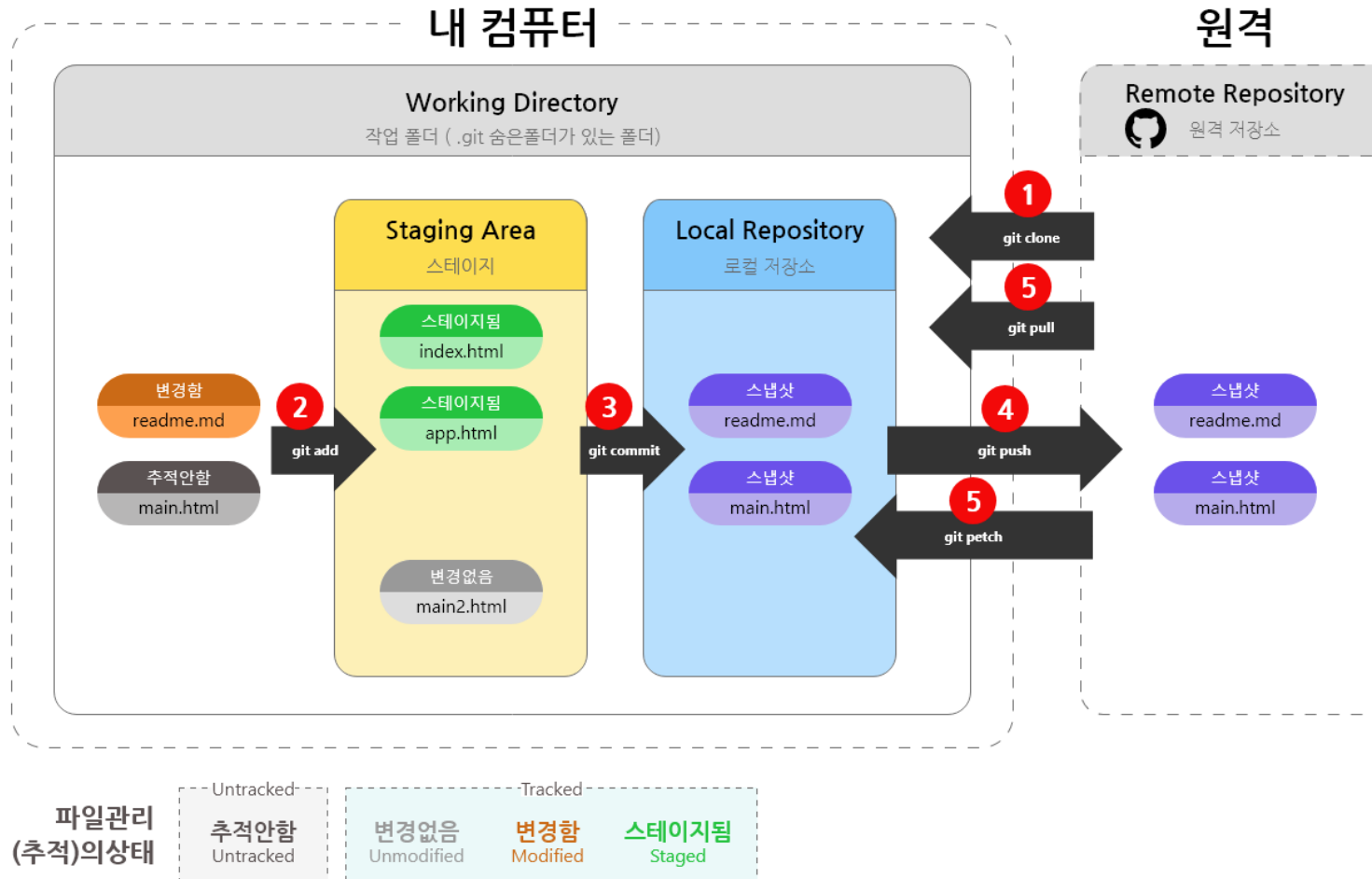
01

지역에서 깃허브 저장소 클론(clone)



 **CHEDY HAMMAMI**

- 원격 저장소를 지역 저장소에 복제
 - 공개된 저장소는 소유와 관계 없이 가능



- 1. 깃허브 원격저장소 생성
 - git-clone
 - https 주소 복사
- 2. PC 깃에서 원격저장소 복제(git clone)
 - \$ git clone [복사된-주소]
 - 원격저장소와 동일한 이름으로 복제
 - \$ git clone [복사된-주소] [새로운-폴더명]
 - 하부 폴더 [새로운-폴더명] 이름으로 복제
- 3. 원격 저장소 별칭 이름 점검
 - \$ git remote
 - 기본 이름 origin 점검
 - \$ git remote -v

- 이름 git-clone
- Add a README file 체크


Create a new repository


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

Owner * / Repository name *

Great repository names git-clone is available. orable. Need inspiration? How about [miniature-sniffle](#)?

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.


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.](#)

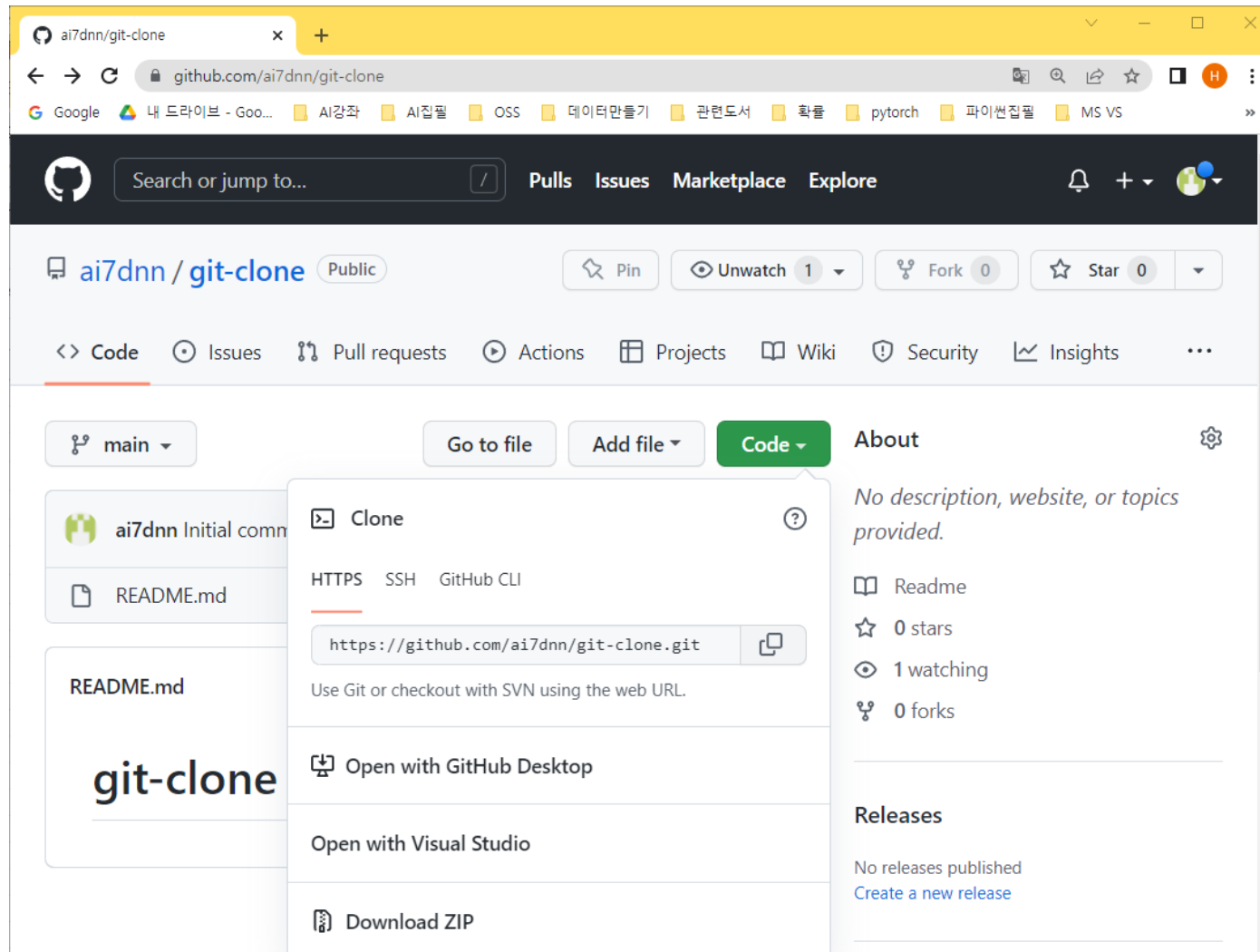
Add .gitignore
Choose which files not to track from a list of templates. [Learn more.](#)

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

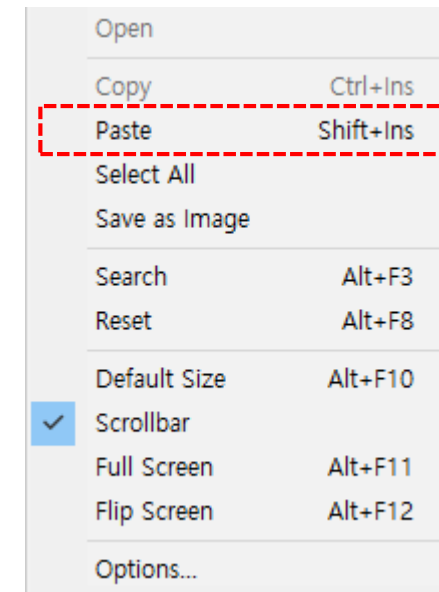
This will set  **main** as the default branch. Change the default name in your [settings](#).

 You are creating a public repository in your personal account.

Create repository



- 명령어
 - \$ `gi clone` 저장소주소 [저장소폴더명]
- 자신의 지역 저장소에 복사 명령
 - \$ `git clone https://github.com/ai7dnn/git-clone.git`
 - 오른쪽 마우스 팝업 메뉴로 붙여 넣기
- 복사된 폴더 확인



```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
```

```
$ pwd  
/c/[git tutorial]
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
```

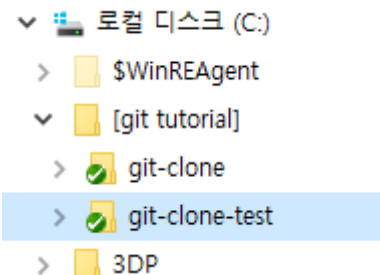
```
$ git clone https://github.com/ai7dnn/git-clone.git  
Cloning into 'git-clone'...  
remote: Enumerating objects: 3, done.  
remote: Counting objects: 100% (3/3), done.  
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0  
Receiving objects: 100% (3/3), done.
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
```

```
$
```


- `git clone https://github.com/ai7dnn/git-clone.git` 하부폴더명

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
$ git clone https://github.com/ai7dnn/git-clone.git git-clone-test
Cloning into 'git-clone-test'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
```



- **\$ git remote**
 - 원격 저장서 이름 목록만
- **\$ git remote -v**
 - 원격 저장서 주소와 이름 목록

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
$ pwd
/c/[git tutorial]
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]
$ cd git-clone
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]/git-clone (main)
$ pwd
/c/[git tutorial]/git-clone
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]/git-clone (main)
$ git remote -v
origin https://github.com/ai7dnn/git-clone.git (fetch)
origin https://github.com/ai7dnn/git-clone.git (push)
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git tutorial]/git-clone (main)
$
```

```
PC@DESKTOP-482NOAB MINGW64 /c/[git
tutorial]/git-clone (main)
$ git remote
origin
```

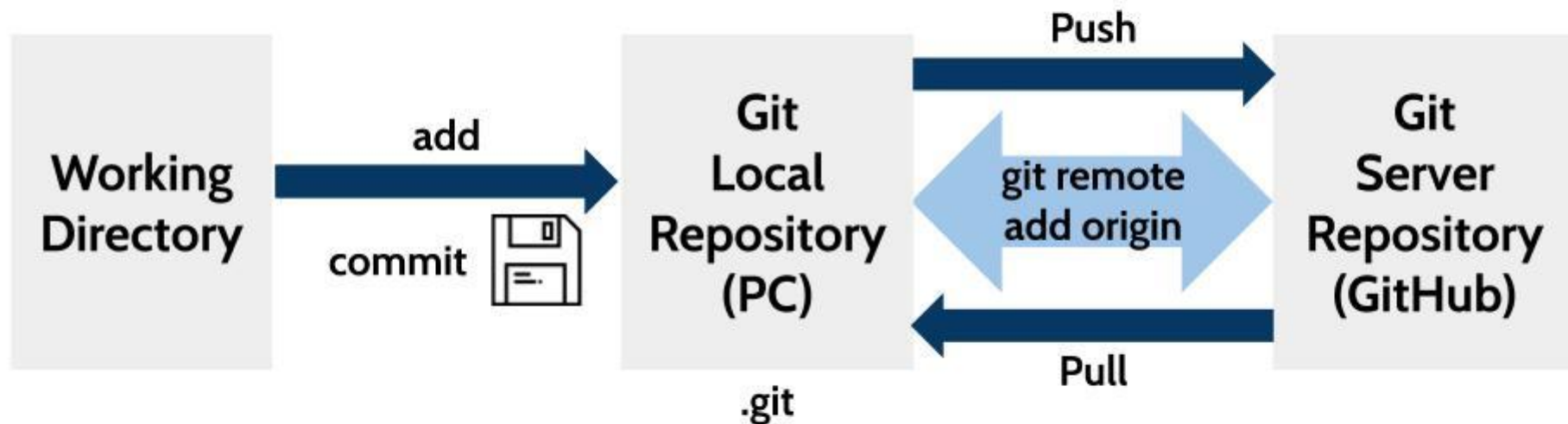
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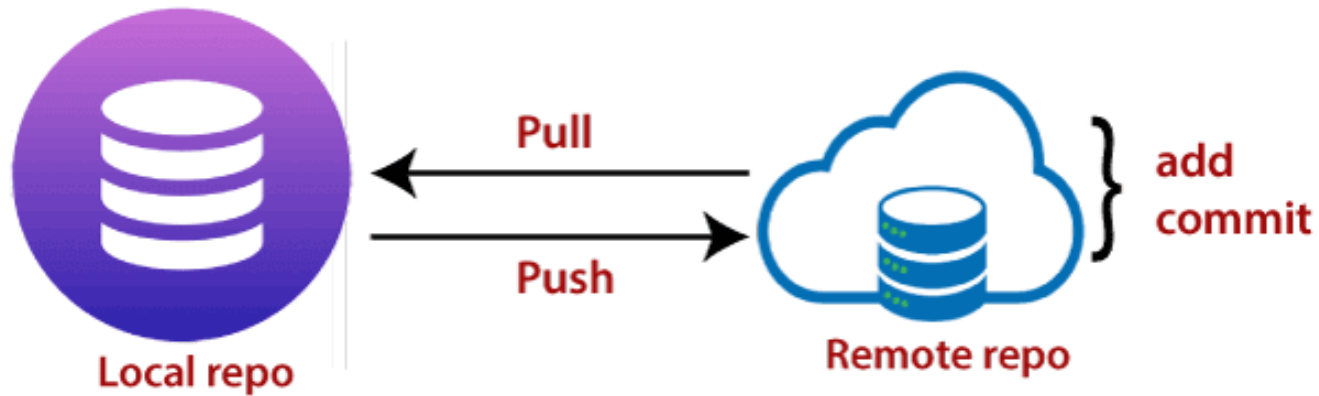
02

깃허브 저장소 수정 후 풀(pull)



git structure





- 깃허브 저장소 git-clone에서 작업
- 1. README.md 파일 수정
 - Markdown 학습
 - [Markdownguide.org](https://www.markdownguide.org) 참조
 - 이력 확인
- 2. PC에서 지역저장소와 원격저장소가 다른 것을 점검
 - \$ cat README.md
 - README.md 파일 수정 미반영
- 3. PC 지역저장소에서 원격저장소 끌어(가져)오기 pull
 - \$ git pull
 - \$ cat README.md

- 파일 README.md 수정 후 커밋

git-clone

파일 수정 1회 후 커밋, 헤드라인 마크다운

- # The largest heading
- ## The second largest heading
- ##### The smallest heading

Commit changes

Update README.md

파일 수정 1회 후 커밋

☒ Commit directly to the `main` branch.

☐ Create a **new branch** for this commit and start a pull request. [Learn more about pull requests.](#)

Commit changes

Cancel

- 문서 형식화 언어

- 마크다운은 일반 텍스트 문서에 형식 요소를 추가하는 데 사용할 수 있는 경량 마크업 언어
- 현재 세계에서 가장 인기 있는 마크업 언어 중 하나

- 2004년 존 그루버가 개발

- <https://www.markdownguide.org/>

Markdown Cheat Sheet

A quick reference to the Markdown syntax.

Overview

This Markdown cheat sheet provides a quick overview of all the Markdown syntax elements. It can't cover every edge case, so if you need more information about any of these elements, refer to the reference guides for [basic syntax](#) and [extended syntax](#).

Basic Syntax

These are the elements outlined in John Gruber's original design document. All Markdown applications support these elements.

Element	Markdown Syntax
Heading	# H1 ## H2 ### H3
Bold	bold text

Link

[Markdown Guide](<https://www.markdownguide.org>)

Image

![alt text](<https://www.markdownguide.org/assets/images/tux.png>)


Extended Syntax

These elements extend the basic syntax by adding additional features. Not all Markdown applications support these elements.

Table

Syntax Description
----- -----
Header Title
Paragraph Text


- 2 minutes ago | 2 클릭


 main ▾


Go to file





Add file ▾









Code ▾

 ai7dnn Update README.md ... 2 minutes ago ⌚ 2

 README.md Update README.md 2 minutes ago


 ai7dnn / git-clone Public


 Pin  Unwatch 1  Fork 0  Star 0


 Code  Issues  Pull requests  Actions  Projects  Wiki  Security  Insights ...

Update README.md

파일 수정 1회 후 커밋

 main


 ai7dnn committed 3 minutes ago Verified 1 parent [a8273a1](#) commit [b25494fd9618e446b273815a2a0ce3606462ea82](#)

 Showing 1 changed file with 6 additions and 1 deletion. Split Unified

7

■■■■■

README.md



...	@@ -1 +1,6 @@	
1	- # git-clone	1 + # git-clone
		2 +
		3 + ## 파일 수정 1회 후 커밋, 헤드라인 마크다운
		4 + - # The largest heading
		5 + - ## The second largest heading
		6 + - ##### The smallest heading

- `git pull <원격 저장소 명> <branch 명>`
- `$ git pull`
 - 현재 origin에서 기본 브랜치로 가져 오기
- 결과 확인
 - `$ cat readme.md`

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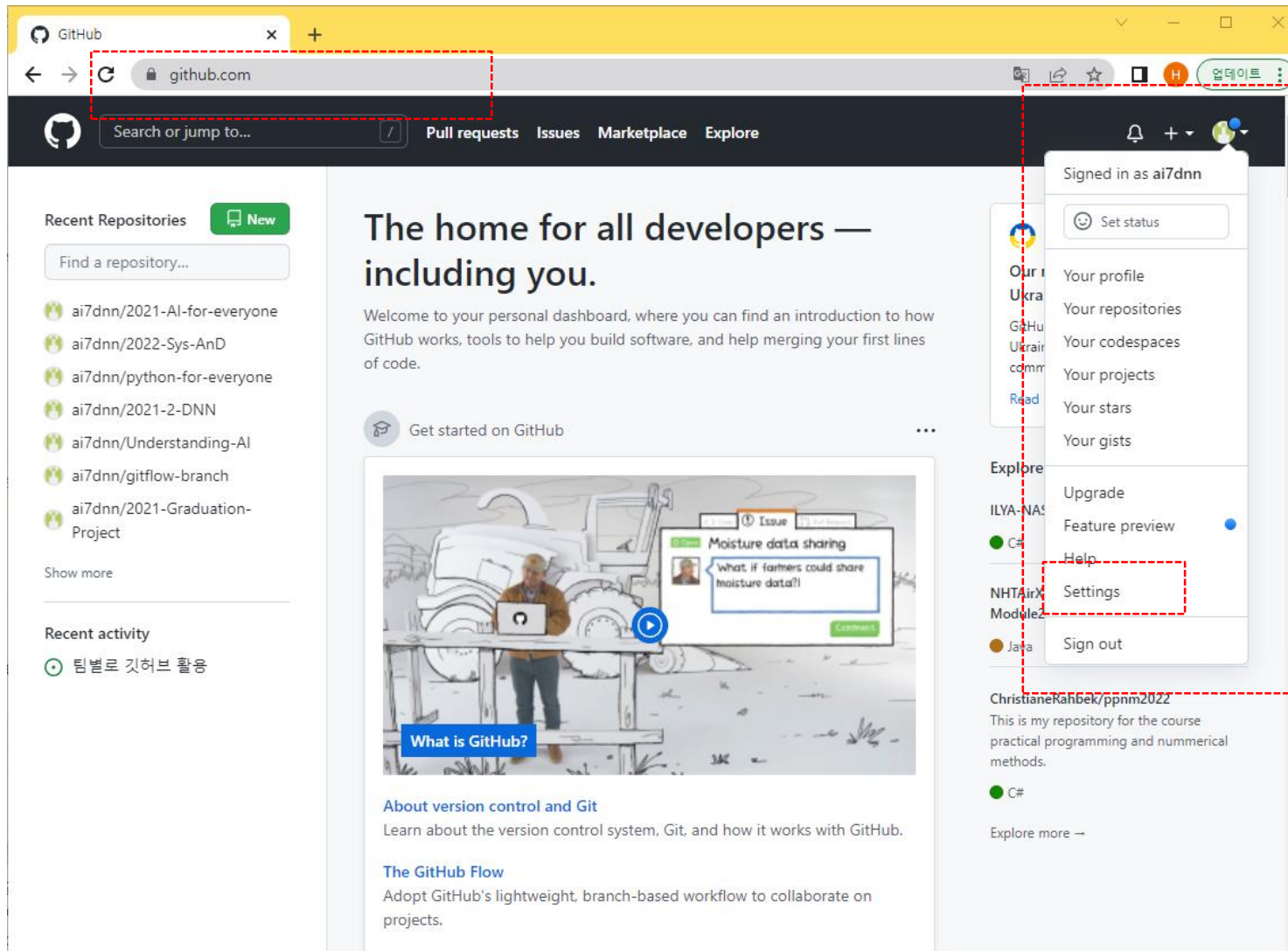
03

깃허브 PAT 생성

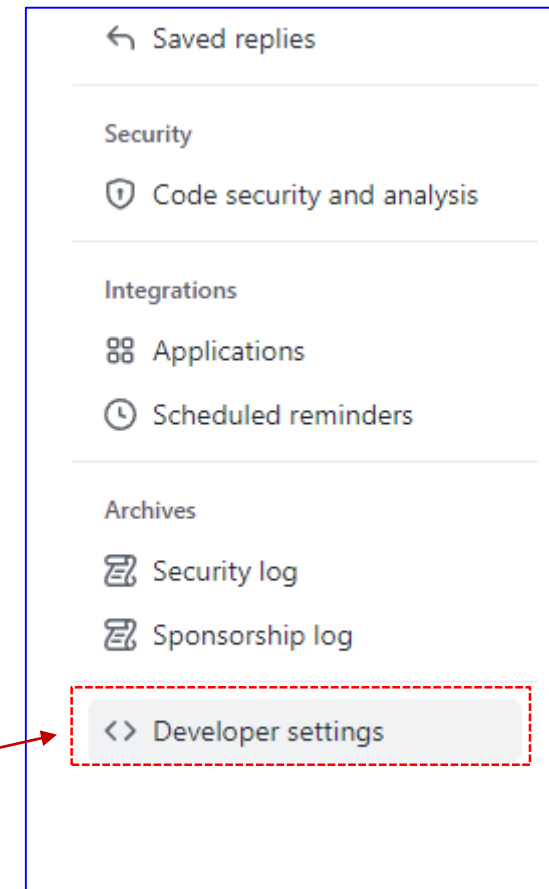
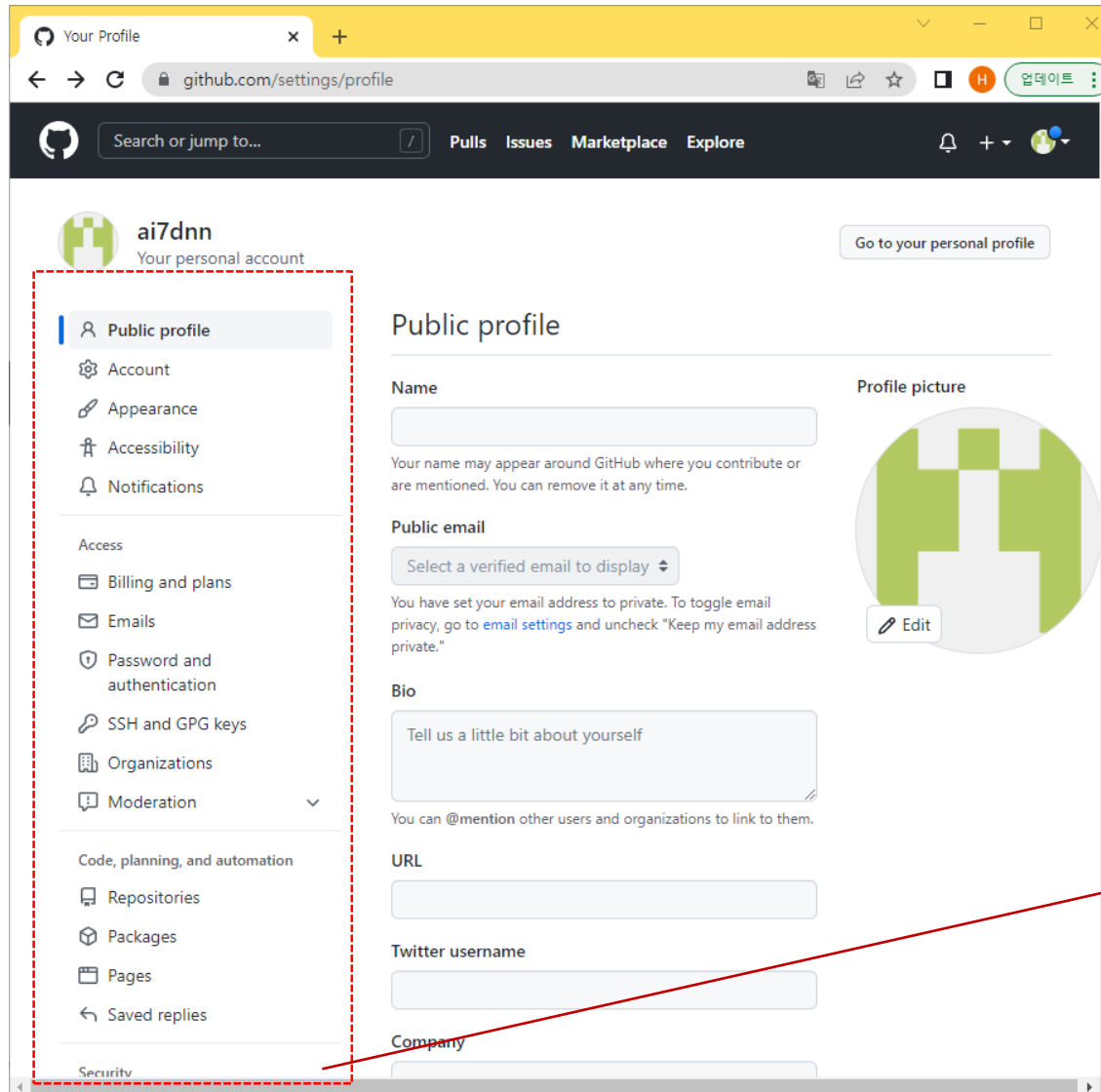
- 개인 프로젝트를 진행하던 중 아래와 같은 에러 메시지가 발생
 - Support for password authentication was removed on August 13, 2021. Please use a personal access token instead. ... The requested URL returned error: 403
 - 이유는 2021년 8월 13일 이후부터는 기존의 비밀번호 대신 토큰을 사용해서 접근하도록 변경되었기 때문입니다. 따라서 github에서 Personal access token을 발급 받아 설정해주어야 합니다.
- 비밀번호 인증 대신 사용하는 강화된 인증 방법
- 깃허브 계정마다 토큰 생성 필요



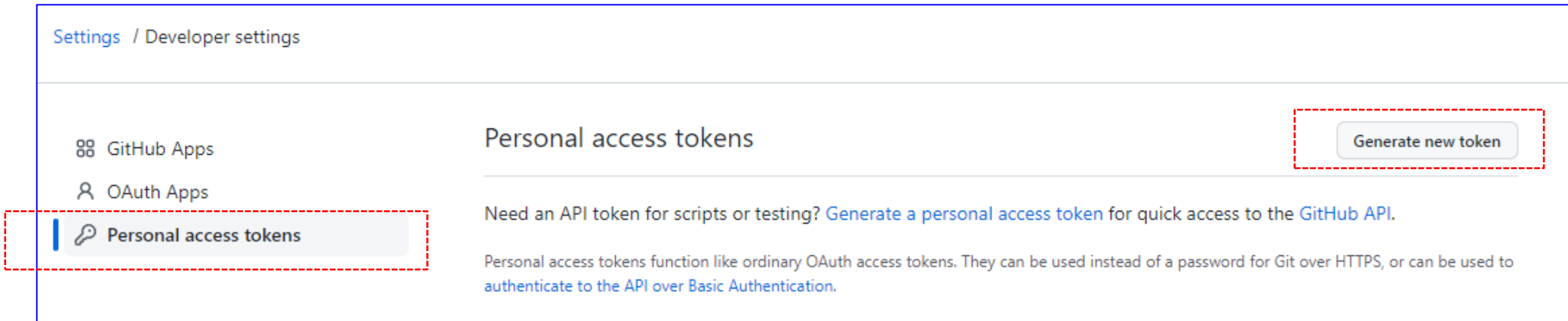
- 프로필 메뉴
 - 로그인 후 GitHub.com에서 우측 메뉴 Settings



- 왼쪽 메뉴 가장 하단: Developers settings



- Generate new token



The screenshot shows the GitHub 'Developer settings' page. On the left sidebar, 'Personal access tokens' is highlighted with a red dashed box. The main content area is titled 'Personal access tokens' and features a 'Generate new token' button in the top right corner, also highlighted with a red dashed box. Below the title, there is explanatory text about API tokens and a link to 'Generate a personal access token'.

Settings / Developer settings

GitHub Apps
OAuth Apps
Personal access tokens

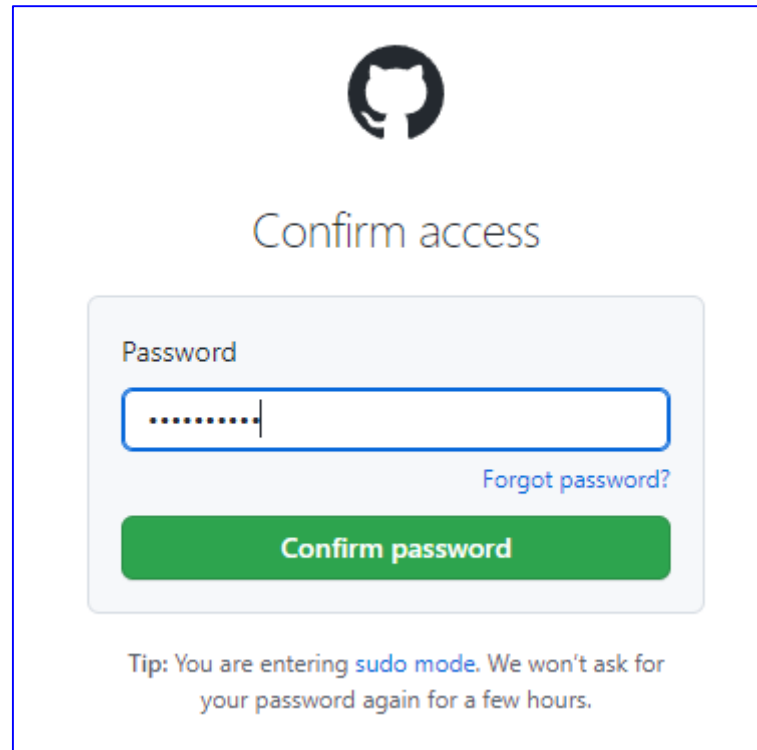
Personal access tokens

Generate new token

Need an API token for scripts or testing? [Generate a personal access token](#) for quick access to the [GitHub API](#).

Personal access tokens function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

- 암호 인증



The screenshot shows the GitHub 'Confirm access' screen. It features the GitHub logo at the top, followed by the title 'Confirm access'. Below this is a password input field with a 'Password' label and a 'Forgot password?' link. A green 'Confirm password' button is positioned below the input field. At the bottom, a tip message states: 'Tip: You are entering sudo mode. We won't ask for your password again for a few hours.'

Confirm access

Password

.....

[Forgot password?](#)

Confirm password

Tip: You are entering [sudo mode](#). We won't ask for your password again for a few hours.

값 입력

- Generate token
- 범위 선택
 - 모두 선택
 - Publish 기능을 위해
 - 상황에 따라
 - Repo, Workflow, gist 정도 선택

New personal access token

Personal access tokens function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

Note

token of repo workflow gist

What's this token for?

Expiration *

90 days The token will expire on Fri, Jul 22 2022

Select scopes

Scopes define the access for personal tokens. [Read more about OAuth scopes](#).

- ☒ repo Full control of private repositories
- ☐ repo:status Access commit status
- ☒ repo:deployment Access deployment status
- ☒ public_repo Access public repositories
- ☒ repo:invite Access repository invitations
- ☒ security_events Read and write security events

- ☒ workflow Update GitHub Action workflows
- ☐ write:packages Upload packages to GitHub Package Registry
 - ☐ read:packages Download packages from GitHub Package Registry
- ☐ delete:packages Delete packages from GitHub Package Registry
- ☐ admin:org Full control of orgs and teams, read and write org projects
 - ☐ write:org Read and write org and team membership, read and write org projects
 - ☐ read:org Read org and team membership, read org projects
- ☐ admin:public_key Full control of user public keys
 - ☐ write:public_key Write user public keys
 - ☐ read:public_key Read user public keys
- ☐ admin:repo_hook Full control of repository hooks
 - ☐ write:repo_hook Write repository hooks
 - ☐ read:repo_hook Read repository hooks
- ☐ admin:org_hook Full control of organization hooks
- ☒ gist Create gists
- ☐ notifications Access notifications
- ☐ user Update ALL user data
 - ☐ read:user Read ALL user profile data
 - ☐ user:email Access user email addresses (read-only)
 - ☐ user:follow Follow and unfollow users
- ☐ delete_repo Delete repositories
- ☐ write:discussion Read and write team discussions
 - ☐ read:discussion Read team discussions
- ☐ admin:enterprise Full control of enterprises
 - ☐ manage_runners:enterprise Manage enterprise runners and runner-groups
 - ☐ manage_billing:enterprise Read and write enterprise billing data
 - ☐ read:enterprise Read enterprise profile data
- ☐ admin:pgp_key Full control of public user GPG keys (Developer Preview)
 - ☐ write:pgp_key Write public user GPG keys
 - ☐ read:pgp_key Read public user GPG keys

Generate token

Cancel

- 잘 보관 필요
 - 후에 토큰이 표시되지 않음

