

git hub for Windows

성한울

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Download and Github Account

- Gitbash 설치 for Windows
 - <https://gitforwindows.org>
- Create github account
 - <https://github.com>
 - email: smu.ac.kr
 - user name: 이름-SMU
- Create new repository
 - hello_git

Git init

- create git directory
 - mkdir /c/Users/Hanul/git_dir
- Git init
 - git init
 - Initialized empty Git repository in ~~~~
 - ls -l
 - .git/
- Add repository
 - git remote add origin <https://~~~>
 - directory .git

Git add/commit/push

- Create file
 - vim hello.c
- git add
 - git add .
- git commit
 - git commit -m “commit test”
 - Please tell me who you are
 - git config --global user.email hanul.sung@smu.ac.kr
 - git config --global user.name “HanulSung-SMU”
 - 1 file changed...
- git push
 - git push origin master

Git clone/branch/push

- make another directory for 자료구조
 - mkdir 디렉토리
 - cd 디렉토리
- git clone
 - git clone <https://github.com/HanulSung-SMU/DataStructure-2021.git>
- git branch
 - git checkout -b “이름”
 - create an new file
 - git add .
 - git commit -m “description..”
 - git push origin “branch이름”

repository 만들기



HanulSung-SMU

Edit profile

Joined 6 days ago

Overview

Repositories 3

Projects

Packages



ProTip! Updating your profile with your name, location, and a profile picture helps other GitHub users get to know you.

Edit profile



Find a repository...

Type ▾

Language ▾

Sort ▾

New

DataSet-2021

1 Updated 19 hours ago

Star

hello_git

C Updated 5 days ago

Star

Statistics-2021

Updated 5 days ago

Star



repository 만들기

Create a new repository

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

Owner *



HanulSung-SMU ▾

Repository name *



test_repo



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

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.](#)

Create repository

repository 만들기

- create repository 클릭하면, 아래 창 뜸
- 끄지 마세요

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

 Set up in Desktop or **HTTPS** **SSH**

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

local computer에 directory 생성

- `pwd`
 - 현재 내가 위치하는 디렉토리 위치를 보여주는 명령어
- `mkdir ($directory_name)`
 - 현재 위치에서 디렉토리 생성
- `cd ($directory_name)`
 - 생성한 디렉토리로 들어가기
- `pwd`
 - 해당 디렉토리로 내가 생성한 디렉토리로 들어왔는지 확인

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~  
$ pwd  
/c/Users/Hanul Sung  
  
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~  
$ mkdir test_dir  
  
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~  
$ cd test_dir/  
  
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir  
$ pwd  
/c/Users/Hanul Sung/test_dir
```

local computer에 git 셋팅

- `git init`
 - 해당 디렉토리에 git 을 사용하기 위한 초기화

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir
$ git init
Initialized empty Git repository in C:/Users/Hanul Sung/test_dir/.git/
```

- `ls -al`
 - git 이 잘 초기화 되었는지, 해당 명령어를 통해, `.git/` 디렉토리가 생성되었는지 확인


```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ ls -al
total 20
drwxr-xr-x 1 Hanul Sung 197121 0 Apr  7 12:40 ./
drwxr-xr-x 1 Hanul Sung 197121 0 Apr  7 12:40 ../
drwxr-xr-x 1 Hanul Sung 197121 0 Apr  7 12:42 .git/
```

git address 연결

- `git remote add origin $github address`
 - 아까 끄지 말라고 했던 창에, 복사 버튼을 누르면, github address가 복사됨
 - 위의 명령어를 통해 로컬 컴퓨터와 리모트 github 클라우드를 연결 하는 것임

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git remote add origin https://github.com/HanulSung-SMU/test_repo.git
```

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

 Set up in Desktop or ☐ HTTPS ☐ SSH

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

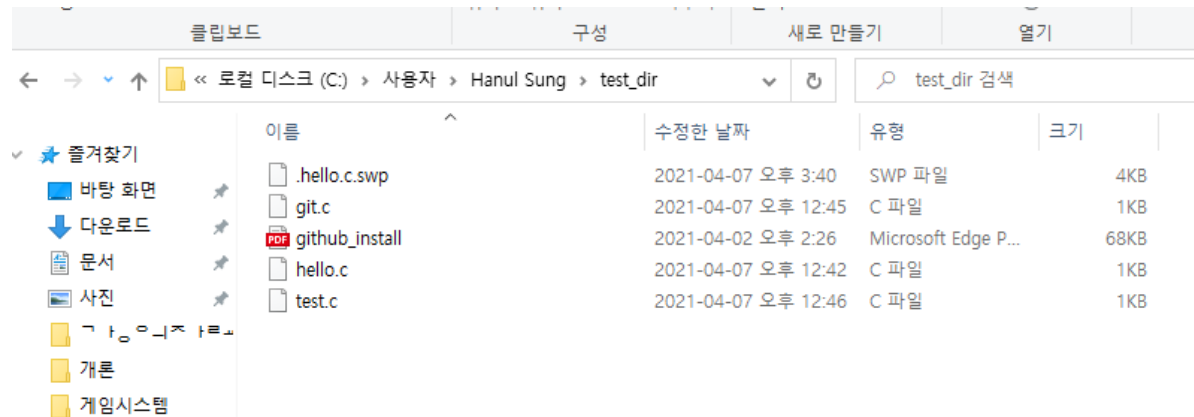
...or create a new repository on the command line

local computer 에 파일 생성

- vim (\$file_name)

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ vim hello.c
```

- i : 눌러서 글자가 써질 수 있도록 바꾸고, 텍스트 입력
- esc 누르고 :wq 눌러서 파일 저장하고 빠져나오기
- 위의 방법으로 파일 만들기 어렵다면, 파일(윈도우)탐색기를 통해, 해당 디렉토리에 파일을 갖다 넣어도 됨



git add, commit

- `git add .`
 - 지금까지 추가 혹은 수정한 파일들을 git에 표시하기 위한 작업

```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git add .
warning: LF will be replaced by CRLF in hello.c.
The file will have its original line endings in your working directory
```

- `git commit -m "description"`
 - 지금 추가 혹은 수정한 파일들이 어떤 수정이였는지 나중을 위해 설명해 놓음
 - 아래와 같은 문구가 나오면 성공

```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git commit -m "add test files"
[master (root-commit) 9017497] add test files
2 files changed, 1 insertion(+)
create mode 100644 github_install.pdf
create mode 100644 hello.c
```

git add, commit

- `git commit -m "description"`
 - 아래와 같은 문구가 나오면 git 계정을 로컬 컴퓨터에 연결해야 함
- `git config --global user.email $내 github email address`
- `git config --global user.name $내 github ID`
- 그 후, 다시 `git commit -m "description"` 하면 앞장과 같은 문구가 나와야 함

```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git commit -m "test"
Author identity unknown

*** Please tell me who you are.

Run

    git config --global user.email "you@example.com"
    git config --global user.name "Your Name"

to set your account's default identity.
Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'Hanul Sung@DESKTOP-1IGCT5C.(none)')
```

git add, commit

- 혹시 계정 연결할 때, 계정이 꼬인 것 같다면 아래 명령어를 실행 한 후, 다시 계정 연결하는 부분부터 다시 시작하기

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git config --unset user.name
```

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git config --unset user.email
```

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git config --unset --global user.name
```

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/test_dir (master)
$ git config --unset --global user.email
```

git push

- **git push origin master**
 - 위의 명령어를 통해, 내가 지금까지 생성한 파일들을 github cloud에 업로드

HanulSung-SMU / test_repo

Unwatch

<> Code ⓘ Issues 🔑 Pull requests ▶ Actions 📁 Projects 📖 Wiki 🛡 Security 📊 Insights ⚙ Settings

master 1 branch 0 tags

Go to file

Add file

Code

About

No description, website, or topics provided.

Releases

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

Packages

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

HanulSung-SMU test

6816676 4 minutes ago 3 commits

git.c	git config unset	3 hours ago
github_install.pdf	add test files	3 hours ago
hello.c	add test files	3 hours ago
test.c	test	4 minutes ago

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

Add a README

git push

- **git push origin master**
 - 실제 github 에 가보면 내가 추가/수정했던 파일들이 업로드 된 것을 확인할 수 있음

HanulSung-SMU / test_repo

Unwatch

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

master 1 branch 0 tags

Go to file

Add file

Code

HanulSung-SMU test

6816676 4 minutes ago 3 commits

git.c	git config unset	3 hours ago
github_install.pdf	add test files	3 hours ago
hello.c	add test files	3 hours ago
test.c	test	4 minutes ago

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Add a README

About

No description, website, or topics provided.

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[Create a new release](#)

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

공용 repository 이용하기

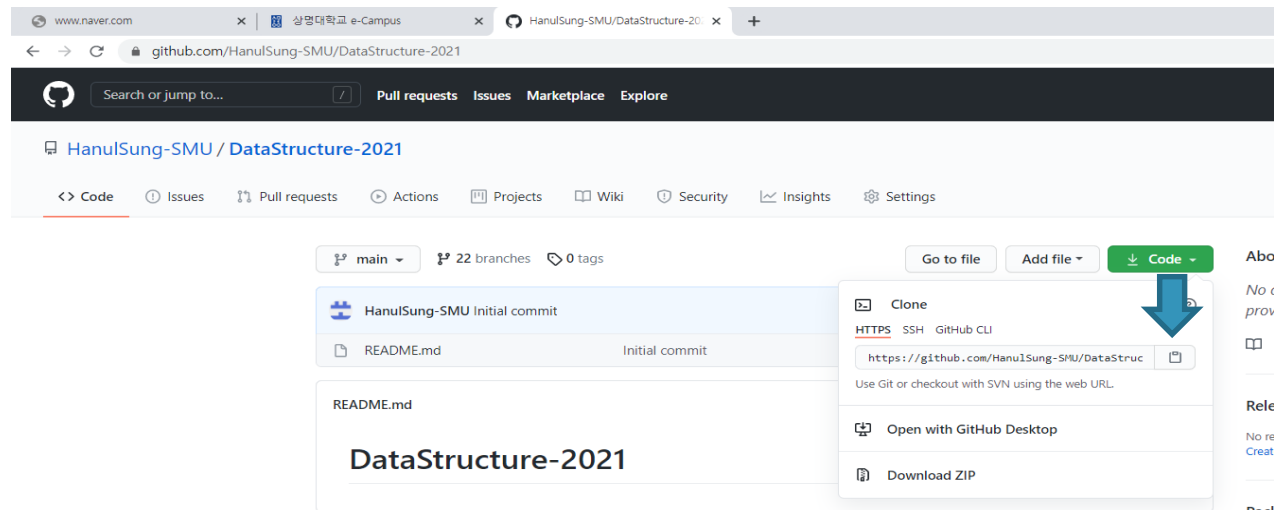
- 공용 repository 이용을 위한 새로운 디렉토리를 로컬 컴퓨터에 생성하기
 - 만약, 하위 디렉토리로 가고 싶다면 `cd ..` 명령어를 사용하면 됨
 - `mkdir $directory_name`
- 그 후, 생성한 디렉토리로 들어가기
 - `cd $directory_name`

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~  
$ mkdir struct_git  
  
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~  
$ cd struct_git/
```

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git  
$ pwd  
/c/Users/Hanul Sung/struct_git
```

공용 리포지토리 로컬 컴퓨터로 가져오기

- `git clone $repository_address`
 - 해당 주소로 가서, 복사 버튼을 눌러서 `repository_address`를 복사하고, 아래와 같이 `git clone` 명령어를 수행함



```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git
$ git clone https://github.com/HanulSung-SMU/DataStructure-2021.git
Cloning into 'DataStructure-2021'...
remote: Enumerating objects: 73, done.
remote: Counting objects: 100% (73/73), done.
remote: Compressing objects: 100% (55/55), done.
remote: Total 73 (delta 3), reused 63 (delta 1), pack-reused 0
Receiving objects: 100% (73/73), 9.24 KiB | 430.00 KiB/s, done.
Resolving deltas: 100% (3/3), done.
```

공용 리포지토리 로컬 컴퓨터로 가져오기

- `ls -al`
 - 위의 명령어를 통해 DataStructure-2021 디렉토리가 로컬컴퓨터로 다운로드 된 것을 볼 수 있음

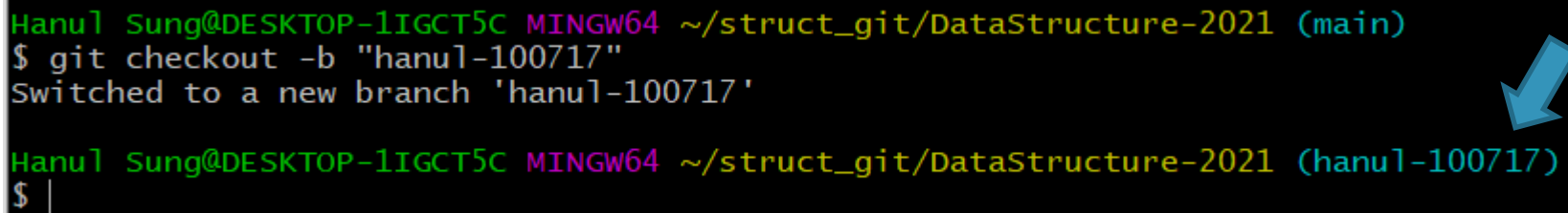
```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git
$ ls -al
total 16
drwxr-xr-x 1 Hanu1 Sung 197121 0 Apr  7 16:11 ./
drwxr-xr-x 1 Hanu1 Sung 197121 0 Apr  7 16:07 ../
drwxr-xr-x 1 Hanu1 Sung 197121 0 Apr  7 16:11 DataStructure-2021/
```

- `cd`를 이용하여 해당 디렉토리로 이동

```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git
$ cd DataStructure-2021/
```

git bransh

- `git checkout -b "$branch name(이름-학번)"`
 - 아래와 같은 명령어로 나만의 브랜치를 리포지토리에 생성함
 - 화살표를 보면 알 수 있듯이, branch가 이동했음을 알 수 있음



```
Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git/DataStructure-2021 (main)
$ git checkout -b "hanu1-100717"
Switched to a new branch 'hanu1-100717'

Hanu1 Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git/DataStructure-2021 (hanu1-100717)
$ |
```

The terminal screenshot shows the execution of the `git checkout -b "hanu1-100717"` command. The prompt changes from `(main)` to `(hanu1-100717)`, indicating a successful branch switch. Two blue arrows point to the branch name in the prompt before and after the command.

- 해당 디렉토리에 파일 생성해보기
 - `vim husung.c` (앞의 슬라이드 참고)
 - 윈도우 탐색기를 이용하여 파일 이동시켜도 됨
- `git add .`
- `git commit -m "remote repository test"`
-

git branch

- `git add .`
- `git commit -m "remote repository test"`
- `git push origin "$본인 branch 이름"`

```
Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git/DataStructure-2021 (hanul-100717)
$ git add .
warning: LF will be replaced by CRLF in husung.c.
The file will have its original line endings in your working directory

Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git/DataStructure-2021 (hanul-100717)
$ git commit -m "remote repo test"
[hanul-100717 6a1098c] remote repo test
1 file changed, 2 insertions(+)
create mode 100644 husung.c

Hanul Sung@DESKTOP-1IGCT5C MINGW64 ~/struct_git/DataStructure-2021 (hanul-100717)
$ git push origin "hanul-100717"
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'hanul-100717' on GitHub by visiting:
remote:   https://github.com/HanulSung-SMU/DataStructure-2021/pull/new/hanul-100717
remote:
To https://github.com/HanulSung-SMU/DataStructure-2021.git
* [new branch]      hanul-100717 -> hanul-100717
```

git branch

- github branch를 내 branch로 바꾸고 나면, 내가 업로드 한 파일을 확인할 수 있음

hanul-100717 had recent pushes 2 minutes ago

main 23 branches 0 tags

Switch branches/tags

Find or create a branch...

Branches

- JeongsuKim_201611125
- Leejaeyu_202010798
- SeungcholCho_201810809
- SooGiKim_201810762
- WoojaeJeong_202010812
- YEBIN-SUM_202011095
- Yunsubin_202010792
- gyeori_202010935
- hanul-100717
- husung_ex4
- master

View all branches

Initial commit

This branch is 1 commit ahead of main.

HanulSung-SMU remote repo test

README.md	Initial commit
husung.c	remote repo test

README.md