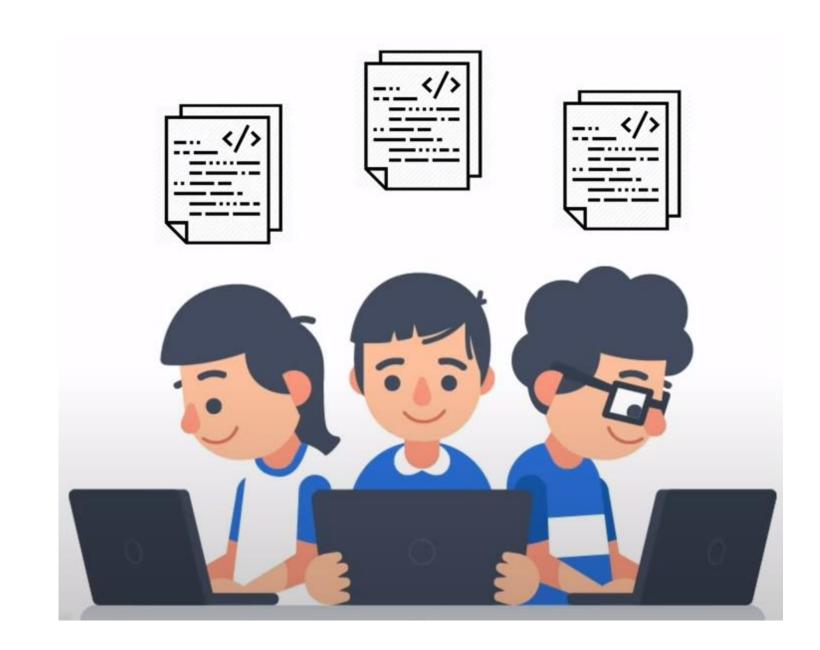
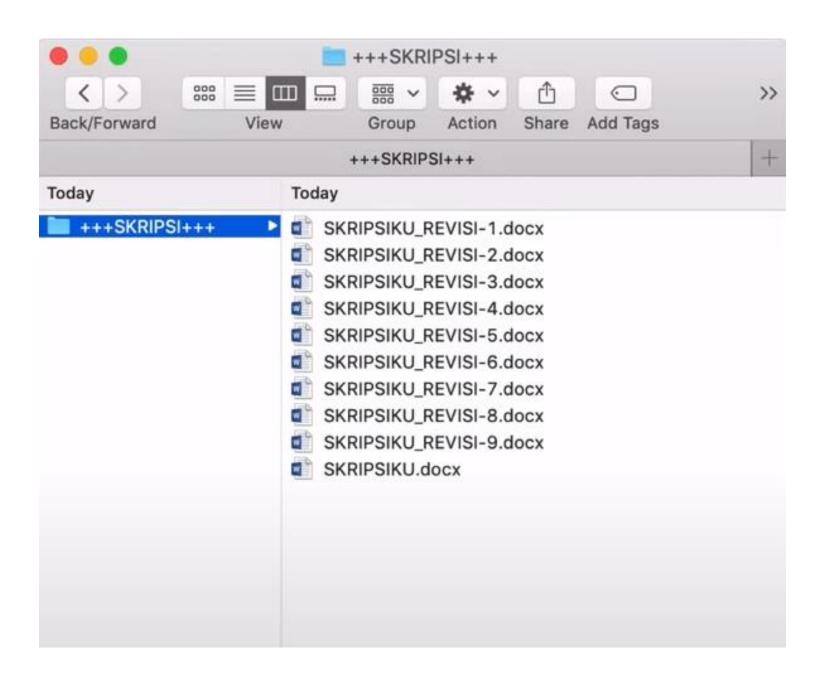


**Ahmad Irfani** 







#### Version Control System (VCS)

- Sistem yang mengelola perubahan dari sebuah dokumen, program computer, website atau kumpulan informasi lainnya (Wikipedia)
- Sistem yang dapat menyimpan riwayat/snapshot perubahan pada file
- Riwayat disimpan saat melakukan commit
- Nama lain: Revision Control System, Source Code Management

#### Fungsi VCS

- Menyimpan file sumber
- Merekam perubahan pada file
- Alat untuk kolaborasi tim
- Mengetahui apa, kapan dan oleh siapa perubahan dilakukan
- Memungkinkan kembali ke versi sebelum perubahan (checkout)

#### Commit

Inisialisasi project

Menambahkan view untuk login & registrasi

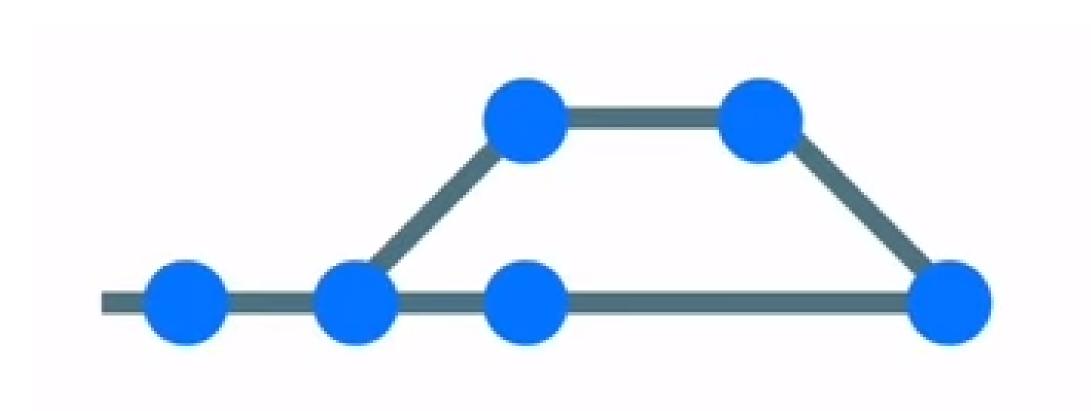
Membuat controller User

Membuat model Auth

mpu-login



## Repo, Branch, Merge

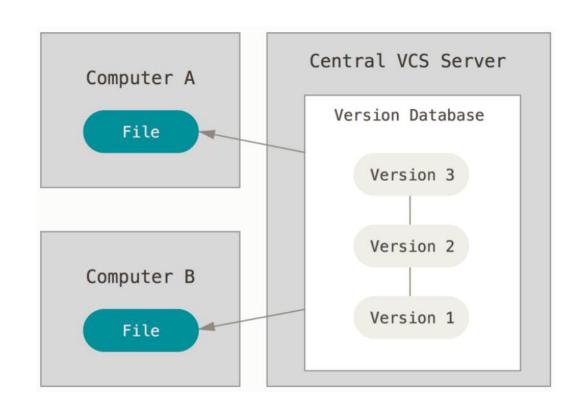




repo folder project kita commit rekaman / snapshot dari repo kita hash penanda unik pada sebuah commit checkout berpindah ke sebuah commit branch cabang bebas dari sebuah commit merge menggabungkan branch remote sumber yang memiliki repo clone mengambil repo dari remote push mengirimkan commit ke repo pull mengambil commit dari repo

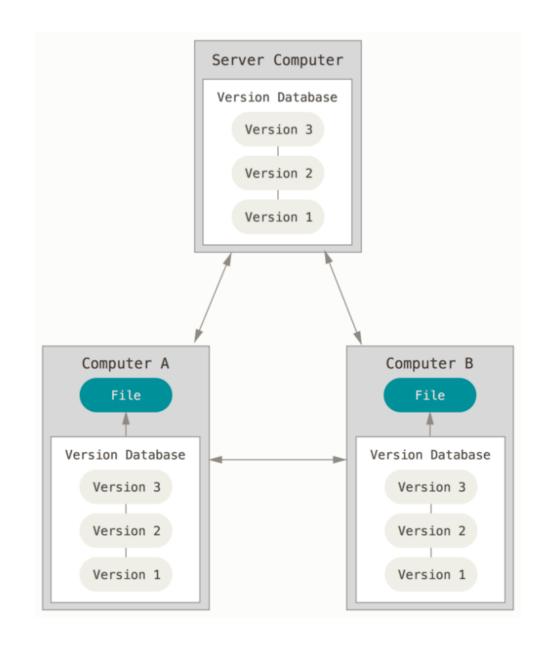
### VCS Terpusat

File disimpan pada server



# VCS Tersebar (DVCS)

Klien memiliki repository komplit yang sama dengan server



# Software VCS











VCS terdistribusi untuk mengelola perubahan file dalam folder (wiki)

#### Tanpa Git





SKRIPSIKU\_REVISI-3.docx

SKRIPSIKU\_REVISI-4.docx

SKRIPSIKU\_REVISI-5.docx



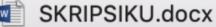
Mulai mengerjakan BAB 1

Menambahkan latar belakang

Memperbaiki analisis

Menghapus teori yang tidak relevan

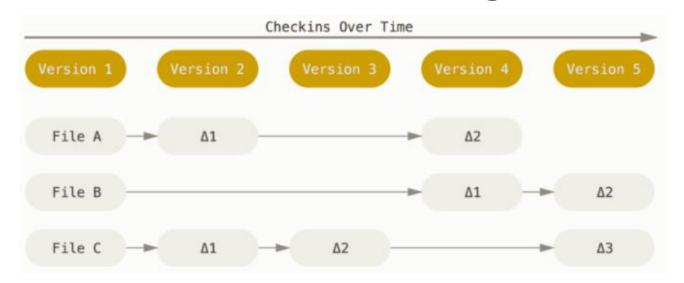




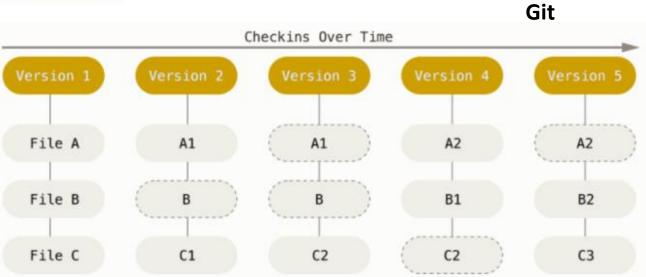


- 1992 2002: Kernel Linux adalah proyek perangkat lunak terbuka yang melibatkan programmer dari seluruh dunia
- 2002: BitKeeper digunakan sebagai alat kolaborasi & menyimpan arsip perubahan
- 2005: BitKeeper mencabut status bebas biaya
- 2005: Linus dan komunitas pengembang Linux membuat VCS sendiri yang dinamakan Git

#### Perbedaan Git dengan VCS Lain

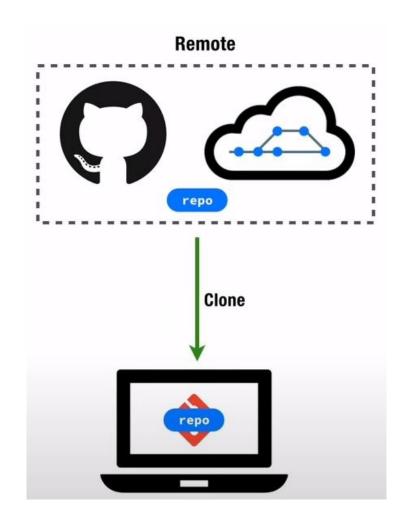


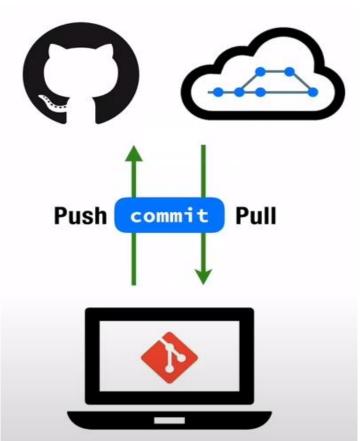
**Other CVSs** 

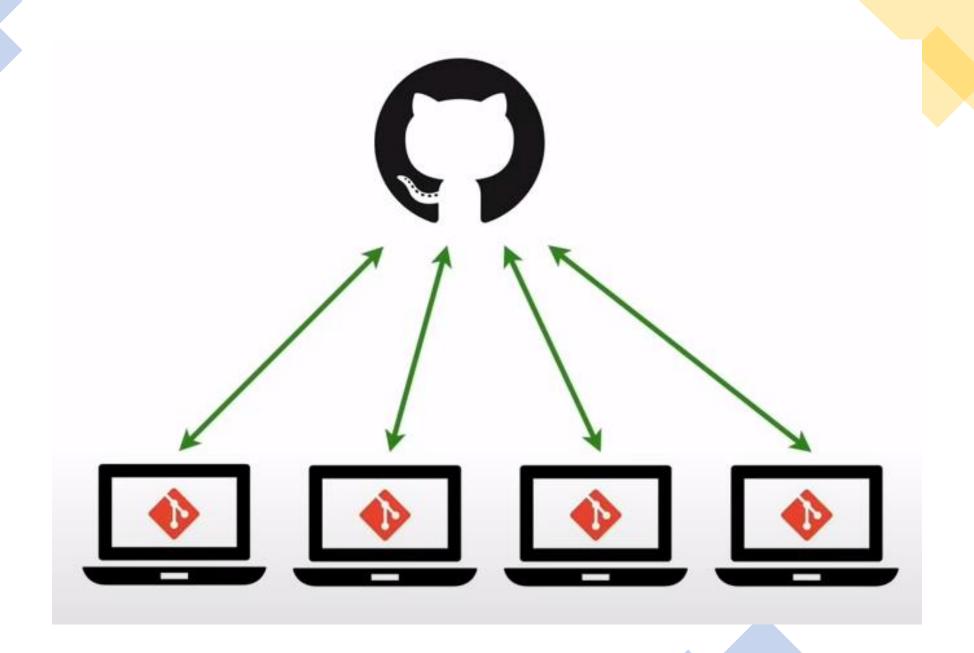




- Layanan Cloud untuk menyimpan project (repo git)
- Mirip social media programmer







#### Alternatif GitHub

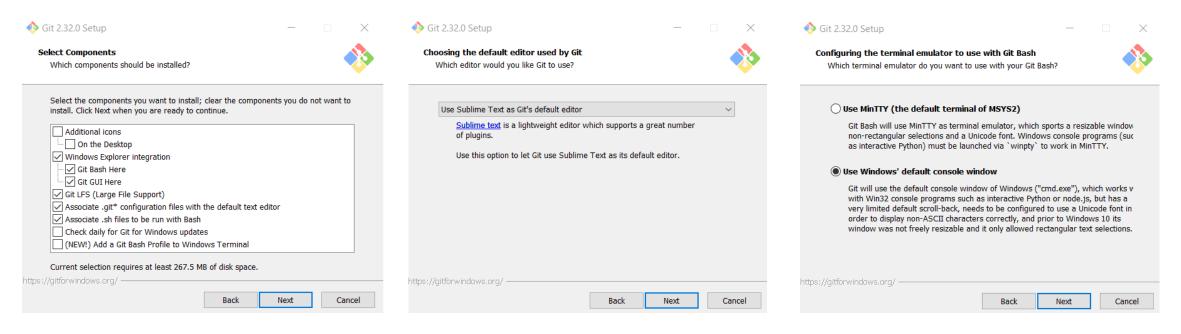


#### Lets Start

- https://git-scm.com/downloads
- https://git-scm.com/book/id/v2

#### Lets Start

- 1. Download Git <a href="https://git-scm.com/downloads">https://git-scm.com/downloads</a>
- 2. Install Git



#### Git Command

```
MINGW64:/c/Users/ahmadi
 HMADI@AHMADI02 MINGW64 ~
 git
usage: git [--version] [--help] [-C <path>] [-c <name>=<value>]
[--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
             [-p | --paginate | -P | --no-pager] [--no-replace-objects] [--bare]
            [--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
            [--super-prefix=<path>] [--config-env=<name>=<envvar>]
            <command> [<args>]
These are common Git commands used in various situations:
start a working area (see also: git help tutorial)
                      Clone a repository into a new directory
  init
                      Create an empty Git repository or reinitialize an existing
one
work on the current change (see also: git help everyday)
                      Add file contents to the index
  add
                      Move or rename a file, a directory, or a symlink
                      Restore working tree files
  restore
                      Remove files from the working tree and from the index
Initialize and modify the sparse-checkout
  sparse-checkout
```

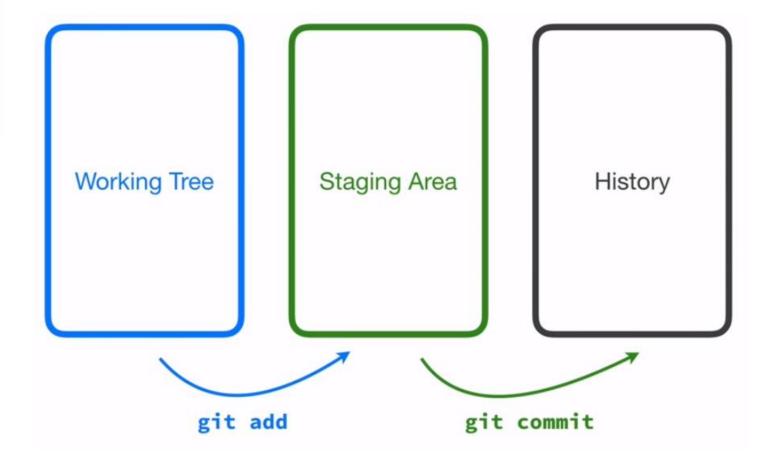
```
• $ git init
• $ git add <file(s)>
• $ git status
• $ git commit
• $ git config

    $ git branch

• $ git help
```

#### 3 Area Repo Git

- Working tree
- Staging areaHistory



- 1. Download & Install Git
- 2. Buat akun GitHub.com
- 3. Klik profile -> yourrepositories -> new
- 4. Buka folder project di explorer-> click kanan git bash here
- 5. Ketik git config –global user.name "<nama user>"
- 6. Ketik git config –global user.email "<email user>"

- 7. git config
- 8. git init
- 9. git status

```
MINGW64:/c/Android/GitRepo/CRUD
 MADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD
 git config --global user.name "Achmadirfani"
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD
 git config --global user.email "ahmadirfani@gmail.com"
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD
 git init
Initialized empty Git repository in C:/Android/GitRepo/CRUD/.git/
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
 git status
On branch main
No commits yet
Untracked files:
 (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
```

10. git add <file>

```
HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
$ 1s
connection.php delete.php insert.php retrieve.php update.php
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
 git add connection.php
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
 git status
On branch main
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
Untracked files:
  (use "git add <file>..." to include in what will be committed)
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
```

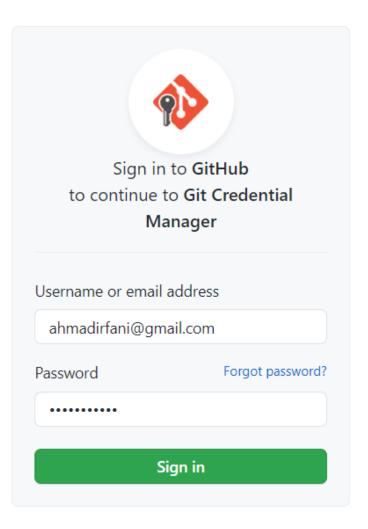


#### 10. git remote origin & git push

```
HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
 git remote add origin https://github.com/Achmadirfani/crud.git
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
git push -u
fatal: The current branch main has no upstream branch.
To push the current branch and set the remote as upstream, use
   git push --set-upstream origin main
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
 git push --set-upstream origin main
Select an authentication method for 'https://github.com/':

    Web browser (default)

 2. Personal access token
option (enter for default): 1
info: please complete authentication in your browser...
```



#### 10. Pastikan login berhasil



#### **Authentication Succeeded**

You may now close this tab and return to the application.

```
HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
$ git push --set-upstream origin main
Select an authentication method for 'https://github.com/':
 1. Web browser (default)
 2. Personal access token
option (enter for default): \1
Invalid option '\1'. Expected a number.
Select an authentication method for 'https://github.com/':

    Web browser (default)

 2. Personal access token
option (enter for default): 1
info: please complete authentication in your browser...
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 4 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 1.29 KiB | 658.00 KiB/s, done.
Total 7 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/Achmadirfani/crud.git
* [new branch]
                    main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
 HMADI@AHMADI02 MINGW64 /c/Android/GitRepo/CRUD (main)
```

#### 10. Pastikan file sudah terupload di GitHub

