



Terminal, Git and GitHub

your new friends...

***“ If the only tool you have is a hammer, you
tend to see every problem as a nail ”***

- Abraham Harold Maslow -

Basic Terminal Commands

Commands	For?
ls	Same as dir in windows
pwd	Print working directory
touch	Create new file
mkdir	Make directory
cp	Copy
cd	Change directory

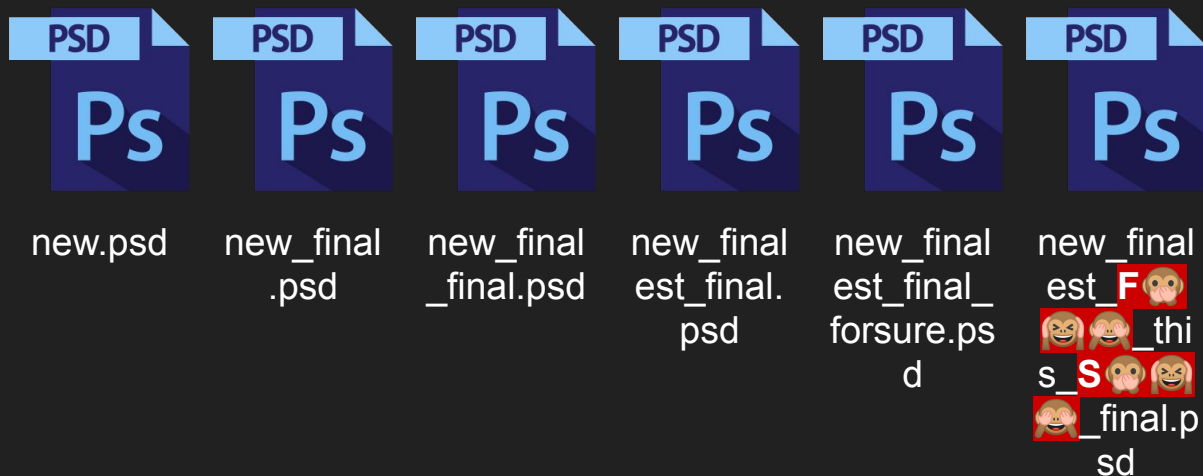
Commands	For?
mv	Move / cut
rm	Remove
rm -rf	Remove recursively
clear	Clear terminal
sudo	Become powerful 



Y U NO GUI??

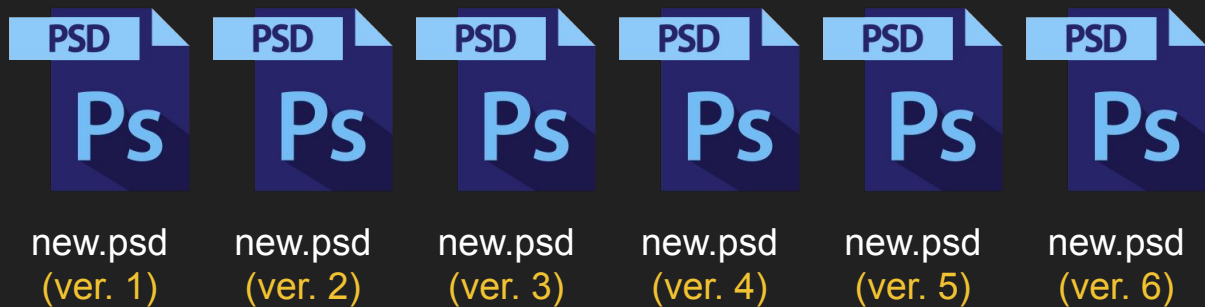
Versioning

What you humans will do



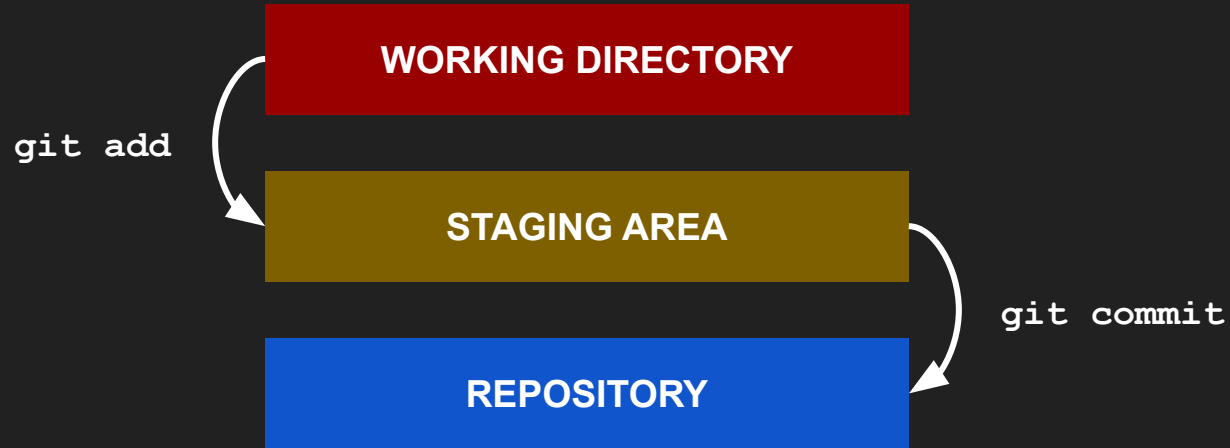
Versioning

What Git will do



Git ≠ GitHub

How Git Works (Simplified)



Basic Git Commands (Part 1)

Commands*	For?
<code>init</code>	Initialize a local directory to be a Git repository
<code>add/reset</code>	Add/remove something to be tracked by Git, or move it to staging area
<code>commit</code>	Commit the changes to Git repository
<code>status</code>	Check the status
<code>log</code>	View the log, you can get hash code for a specific version from here
<code>show [hash]:[filename]</code>	Show the content of a file in a specific version (matched by hash code)
<code>checkout [hash]</code>	Update files in the working tree to match a specific version (matched by hash code)

* Every command preceded with `git`

Working Scenario - Local Git Repository

1. Create a local Git repository
2. Create a [file], name it as you please
3. Put some random text in the [file]
4. Commit to your local Git repository
5. Add some more random text in the [file]
6. Commit to your local Git repository
7. Add another random text in the [file]
8. Commit to your local Git repository
9. Revert back the [file]'s state to point 6
10. Commit to your local Git repository

Git \neq GitHub

Basic Git Commands (Part 2)

Commands*	For?
<code>remote add origin</code>	Connect your local Git repository with remote repository
<code>push -u origin master</code>	Upload local Git repository content to a remote repository
<code>pull</code>	Update the local repository from a remote repository
<code>clone</code>	Copies an existing Git repository
<code>fetch</code>	Get the latest history of a repository

* Every command preceded with `git`

Working Scenario - GitHub Repository



Bob (Client)



Requests a
complicated
custom software

*DCS*Software

Developer

Working Scenario - GitHub Repository



Working Scenario - GitHub Repository (Dog side 1)

1. Create GitHub repository
2. Create a local Git repository
3. Create a [file]
4. Commit the [file] to local Git repository
5. Connect local Git repository with GitHub repository
6. Push something to GitHub repository

Working Scenario - GitHub Repository (Cat side)

1. Make a new folder for cloning purpose
2. Clone a GitHub repository to local Git repository
3. Make some changes in [file]
4. Push those changes to GitHub repository
5. Catto tels Doggo that he made some changes to the source code

Working Scenario - GitHub Repository (Dog side 2)

1. Pull the changes from GitHub repository
2. Done



Bob said: Thanks



Group Project E-Commerce

1. Menggunakan HTML dan CSS,
2. Tidak menggunakan JavaScript dan database,
3. Tidak menggunakan framework,
4. Dikerjakan menggunakan Git (satu repository bersama-sama),
5. Host di GitHub page,
6. Minimal ada 4 HTML yang tidak identik :
 - a. Login/Register,
 - b. Content Products,
 - c. Testimonial,
 - d. About Us,
 - e. Invoice.

Tip for Challenges on Den

```
function ubahHuruf(kata) {  
  // you can only write your code here!  
}
```

```
// Written test cases only help you to check your program.  
// Passing all test cases doesn't always mean your program 100%  
// correct. Try to break your own program by making your own test  
// cases.
```

```
console.log(ubahHuruf('wow'));           // xpx  
console.log(ubahHuruf('developer'));     // efwfmpqfs  
console.log(ubahHuruf('javascript'));    // kbwbtdsjqu  
console.log(ubahHuruf('keren'));         // lfsfo  
console.log(ubahHuruf('semangat'));      // tfnbohbu
```