

# Git and GitHub

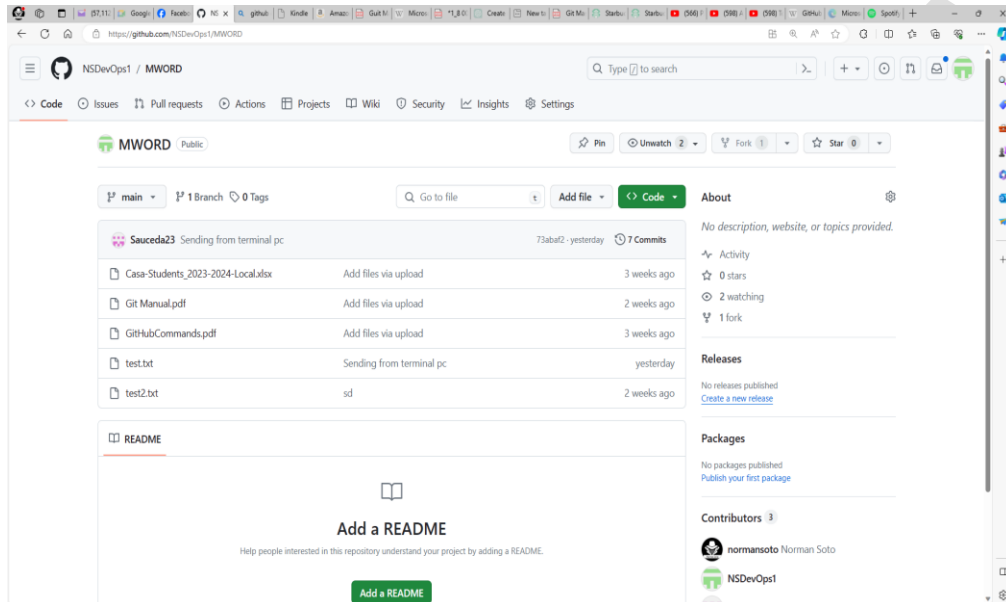
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## 1. GitHub (Application used as Version Control System in the Cloud)

### 1.1 Create An Account in github.com (Free source and License)

### 1.2 Guidelines

#### 1.2.1 Overview (Enviroment)



#### 1.2.1.1 Create Repository

#### 1.2.1.2

## 2. Git (Application used as Version Control System in Local Computer)

### 2.1 Git local application (Git Bash )

```
norma@NormanIT01 MINGW64 ~ (master)
$git Init -> "Initialize Git Application"
$git status -> "Verify if Git is Running"
$git git config --global user.name "Norman Soto"
$git config --global user.email norman_soto1977@yahoo.com
$ git clone https://github.com/NSDevOps1/MWORD.git -> "Mword is cloned"
Cloning into 'MWORD'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (21/21), done.
remote: Compressing objects: 100% (14/14), done.
remote: Total 21 (delta 6), reused 12 (delta 3), pack-reused 0
Receiving objects: 100% (21/21), 697.82 KiB | 6.46 MiB/s, done.
Resolving deltas: 100% (6/6), done.
Note: Once the Connection is established between git and GitHub
And we need to send any file from our local computer, we need to
run these basic commands
$git add . OR $git add <filename>
$git commit -m "Commit Message"
$git push
```

===== basic commands Bash Script Commands & windows MD/PowerShell=====

### Windows Commands

1.

Navigation:

	<ul style="list-style-type: none"> <li><code>cd</code>: Change directory. <ul style="list-style-type: none"> <li>Example: <code>cd Documents</code></li> </ul> </li> <li><code>dir</code>: List files and directories. <ul style="list-style-type: none"> <li>Example: <code>dir /w</code> (display in wide format), <code>dir /p</code> (display one page at a time).</li> </ul> </li> </ul>
2.	<b>File Manipulation:</b> <ul style="list-style-type: none"> <li><code>copy</code>: Copy files. <ul style="list-style-type: none"> <li>Example: <code>copy file1.txt file2.txt</code></li> </ul> </li> <li><code>move</code>: Move or rename files. <ul style="list-style-type: none"> <li>Example: <code>move file1.txt new_location\</code></li> </ul> </li> </ul>
3.	<b>Directory Manipulation:</b> <ul style="list-style-type: none"> <li><code>mkdir</code>: Create a new directory. <ul style="list-style-type: none"> <li>Example: <code>mkdir new_directory</code></li> </ul> </li> <li><code>rmdir</code>: Remove an empty directory.</li> <li><code>rd /s /q</code>: Remove a directory and its contents. <ul style="list-style-type: none"> <li>Example: <code>rd /s /q directory_to_remove</code></li> </ul> </li> </ul>
4.	<b>File Display and Editing:</b> <ul style="list-style-type: none"> <li><code>type</code>: Display the contents of a file. <ul style="list-style-type: none"> <li>Example: <code>type filename.txt</code></li> </ul> </li> <li><code>edit</code> or <code>notepad</code>: Open a text file for editing. <ul style="list-style-type: none"> <li>Example: <code>notepad filename.txt</code></li> </ul> </li> </ul>
5.	<b>File Inspection:</b> <ul style="list-style-type: none"> <li><code>more</code>: Display contents of a file one screen at a time. <ul style="list-style-type: none"> <li>Example: <code>more filename.txt</code></li> </ul> </li> <li><code>find</code>: Search for text in files. <ul style="list-style-type: none"> <li>Example: <code>find "pattern" filename.txt</code></li> </ul> </li> </ul>
6.	<b>File Permissions (Windows ACL):</b> <ul style="list-style-type: none"> <li><code>icacls</code>: View or modify Access Control Lists (ACLs) for files and directories. <ul style="list-style-type: none"> <li>Example: <code>icacls filename.txt</code></li> </ul> </li> </ul>
7.	<b>Searching and Finding:</b> <ul style="list-style-type: none"> <li><code>findstr</code>: Search for strings in files. <ul style="list-style-type: none"> <li>Example: <code>findstr "pattern" filename.txt</code></li> </ul> </li> <li><code>where</code>: Locate the executable of a command. <ul style="list-style-type: none"> <li>Example: <code>where command</code></li> </ul> </li> </ul>
8.	<b>System Information:</b> <ul style="list-style-type: none"> <li><code>systeminfo</code>: Display detailed configuration information about the computer.</li> <li><code>ipconfig</code>: Display network configuration information.</li> </ul>
9.	<b>Process Management:</b> <ul style="list-style-type: none"> <li><code>tasklist</code>: Display a list of currently running processes.</li> <li><code>taskkill</code>: Terminate a running process. <ul style="list-style-type: none"> <li>Example: <code>taskkill /F /IM process_name.exe</code></li> </ul> </li> </ul>
10.	<b>Miscellaneous:</b> <ul style="list-style-type: none"> <li><code>echo</code>: Display messages or enable/disable the echoing of commands. <ul style="list-style-type: none"> <li>Example: <code>echo Hello, World!</code></li> </ul> </li> </ul>

## Linux & MAC

1.	<b>Navigation:</b> <ul style="list-style-type: none"> <li><code>cd</code>: Change directory. <ul style="list-style-type: none"> <li>Example: <code>cd Documents</code></li> </ul> </li> <li><code>pwd</code>: Print working directory.</li> <li><code>ls</code>: List files and directories.</li> </ul>
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- Example: `ls -l` (detailed list), `ls -a` (show hidden files), `ls -lh` (human-readable file sizes).

## 2. File Manipulation:

- `touch`: Create an empty file.
  - Example: `touch filename.txt`
- `cp`: Copy files or directories.
  - Example: `cp file1.txt file2.txt`
- `mv`: Move or rename files or directories.
  - Example: `mv file1.txt new_location/`

## 3. Directory Manipulation:

- `mkdir`: Create a new directory.
  - Example: `mkdir new_directory`
- `rmdir`: Remove an empty directory.
- `rm -r`: Remove a directory and its contents recursively.
  - Example: `rm -r directory_to_remove`

## 4. File Display and Editing:

- `cat`: Display the contents of a file.
  - Example: `cat filename.txt`
- `more` or `less`: Display contents of a file one screen at a time.
- `nano` or `vim`: Text editors for creating or editing files.

## 5. File Inspection:

- `head`: Display the first few lines of a file.
  - Example: `head filename.txt`
- `tail`: Display the last few lines of a file.
  - Example: `tail filename.txt`
- `wc`: Count lines, words, and characters in a file.
  - Example: `wc filename.txt`

## 6. File Permissions:

- `chmod`: Change file permissions.
  - Example: `chmod +x script.sh` (add execute permission to a script)
- `chown`: Change file owner.
- `chgrp`: Change file group.

## 7. Searching and Finding:

- `grep`: Search for a pattern in files.
  - Example: `grep "pattern" filename.txt`
- `find`: Search for files in a directory hierarchy.
  - Example: `find /path/to/search -name "file*.txt"`

## 8. Process Management:

- `ps`: Display information about active processes.
  - Example: `ps aux`
- `kill`: Terminate a process.
  - Example: `kill PID` (replace PID with the process ID)

Microsoft Word  
Lab 4

Welcome to CASA