GitHub Note

Git

**A version control system is a tool that helps to track changes in code**

Git is a Version Control System. It is:

* Popular
* Free and Open Source
* Fast and scalable

Git helps to works

* Track the history
* Collaborate

GitHub

**A website that allows developers to store and manage their code using Git.**

* Folder(repository)(repo)

Commit – change in GitHub

GitHub Account

* Create a new repository:
* Make our first commit

Note: We can change the readme file readme file is not a basic txt file it is html lite file.

**Setting up Git (git setup in our laptop )**

* Visual studio code
* Windows (git Bash)
* Mac (Terminal)

**Working on git bash.**

* Git – version
* ls- used to print all the directory
* clear (clear the windows)
* pwd (current working directory)

**Configuration Git**

There are two types of configuration in Git

* Global Configuration (all systems)
* Local Configuration (specific repo)

~ this sign represents we are in the primary folder of our system … means a starting point.

Process of configuration

* Git config –global user.name “rupeshdaha”
* git config –global user.email [daharupesh21@gmail.com](mailto:daharupesh21@gmail.com)
* git config –list (used to check the user name and email ID)

**Git Commands**

**Clone and Status**

* clone -this command helps to Clone a repository on our local machine
* git clone <- some link ->
* Status – displays the state of the code
* git status
* remote(GitHub) and local(system)
* Auto completion (tab)

Note: After modifying the file we have a two-way process……The first is to add and the second commit

**Different types of messages after the change.**

* Untracked (new files that git doesn’t yet track)
* Modified (changed)
* Staged (file is ready to be committed)
* Unmodified (unchanged)

**Add and Commit commands**

* Add – adds new or changed files in your working directory to the Git staging area
  + git add <- file name ->
    - commit – it is the record of change
  + git commit – m “some message”

**Push command ( now actually shown on the GitHub)**

* Push – upload local repo content to remote repo
  + ( -> git push origin main)
* Origin (current working folder)

**Init Command**

* Init – Used to create a new git repo
* git init
* git remote add origin <- link ->
* git remote -v ( to verify remote)
* git branch ( to check branch)
* git branch -M main ( to rename branch)
* git push -u origin main or git push origin main

**Workflow**

**Local Git**

* GitHub repo – clone – changes – add – commit – push

**Git Branches**