Website without visitors is like
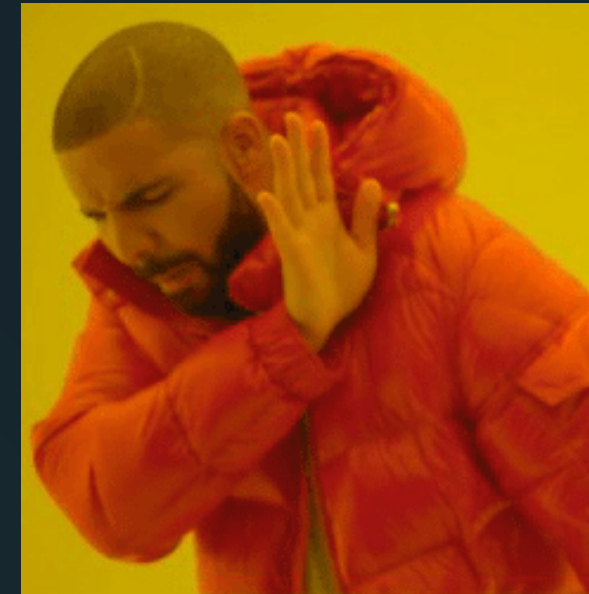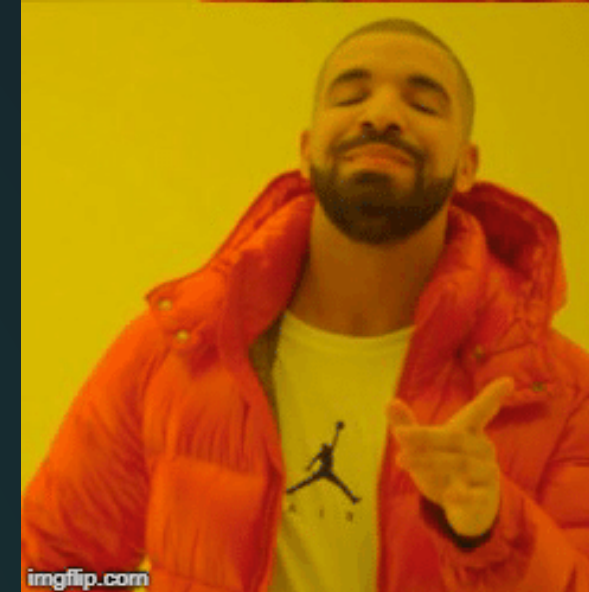a ship lost in the horizon.

— Dr. Christopher Dayagdag

Todays Agenda

- Git and GitHub.
- Git Repo
- Basic Git Command
- Uses of Git Status
- Uses of Git diff'
- Uses of the .gitignore file
- Git Branch
- How to find git commands.

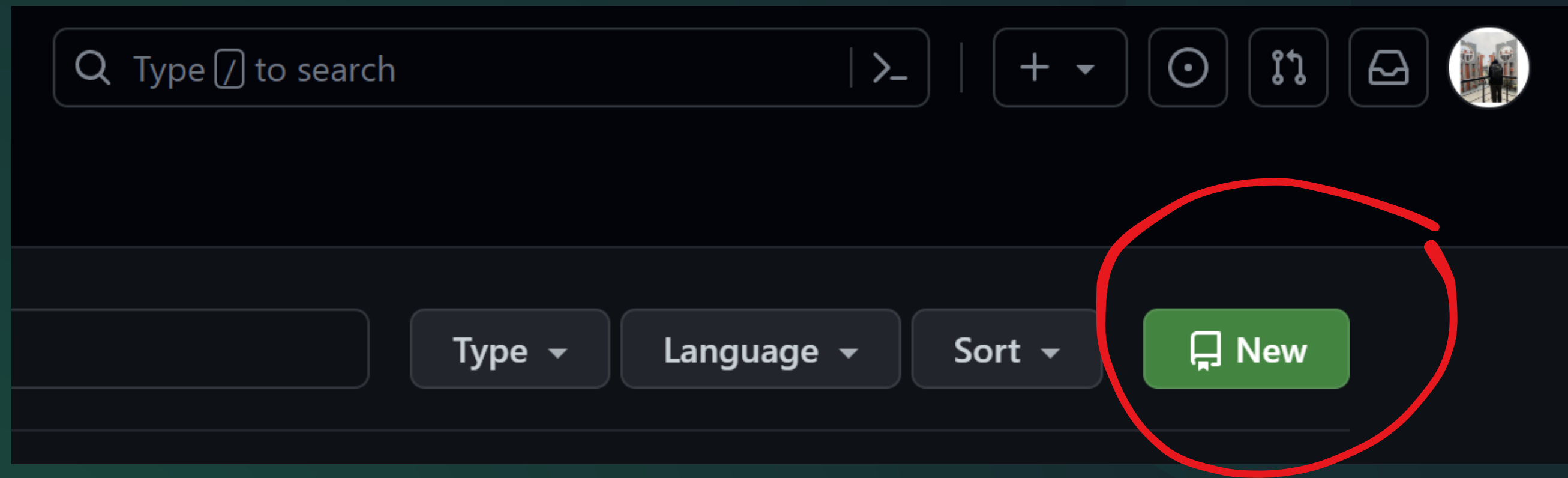# Why we need to learn git & GitHub.

Git & GitHub

Git and GitHub: Git is a distributed version control system that allows multiple people to collaborate on a project efficiently. It tracks changes to files and enables users to merge changes made by different team members. GitHub is a web-based hosting service that utilizes Git for version control, providing additional features like repositories, collaboration tools, and a platform for sharing and contributing to open-source projects

Creating a repo on GitHub

To create a repository using the "New" button on GitHub:

1. On the GitHub homepage, click on the "New" button.
2. Fill in the repository details such as name, description, and other optional settings, and click "Create repository" to create a new repository on GitHub with the specified settings.

Basic Git Command

it command: Git commands are used to interact with Git repositories. These commands include

- 'git init' (to initialize a new repository),
- 'git add' (to add files to the staging area),
- 'git commit' (to create a new commit with the staged changes),
- 'git push' (to upload local commits to a remote repository), and many more.
- 'git pull' (Command used to fetch and merge changes from a remote repository into your local repository, keeping your local branch up to date with the latest changes.)

Git Branch

A Git branch is a parallel version of a repository that allows developers to work on separate features or bug fixes without affecting the main codebase.

Uses of Git Status

'git status' is a command that displays the current state of the repository. It shows which files have been modified, added, or deleted since the last commit, and which files are staged or untracked. It helps users understand the status of their repository and what actions need to be taken.

Uses of Git diff'

'git diff' is a command used to show the differences between different versions of files in the repository. It displays the changes made to files that are not yet staged for commit or the differences between the working directory and the last commit. It helps users review modifications before committing them.

Uses of .gitignore file

The .gitignore file is used to specify files and folders that Git should ignore and not include in the version control system. It helps prevent certain files, such as temporary files, logs, or build artifacts, from being tracked or uploaded to the repository. It ensures that only relevant files are included in the repository.

How to find git commands.

Online resources such as cheat sheets, official documentation, and tutorials specific to the tool or technology can be helpful. Websites like Stack Overflow provide a platform to ask specific questions and get answers from the community.

Git Basics Exercises – 1

- Initialize an empty git repository.
- Add first.txt to the staging area.
- Commit with the message "adding first.txt".
- Check out your commit with git log.
- Create another file called second.txt.
- Add second.txt to the staging area.
- Commit with the message "adding second.txt"
- Remove the first.txt file
- Add this change to the staging area
- Commit with the message "removing first.txt"
- Check out your commits using git log
- Create a github repository with your own name
- Push your code to same repository
- Host the repository on github pages

Happy Learning