PRE-JOINING LEARNING PATH

1.GIT - GITHUB

VERSION CONTROL

1. What is Git?

- Git is a version control system, It is a tool that helps to track changes in code.

2.GitHub for Windows

- https://windows.github.com

3.Main commands

- git init

  initialize an existing directory as a Git repository

  git clone [url]

  retrieve an entire repository from a hosted location via URL

4. Commands used mostly in GitHub.

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- git clone [url]: retrieve an entire repository from a hosted location via URL
- git push [alias] [branch]: Transmit local branch commits to the remote repository branch
- git pull: fetch and merge any commits from the tracking remote branch
- git fetch:Downloads objects and refs from another repository but doesn't merge them.
- git commit -m "[descriptive message]": commit your staged content as a new commit snapshot
- add [file]: add a file as it looks now to your next commit (stage)
- git status: show modified files in working directory, staged for your next commitgit

5. How to create Repository from local environment?

- Step 1: Initialize a Local Repository

```
git init
```

Step 2: Create a New Repository on GitHub

Go to GitHub and Click on the **"+"** icon and select "New repository**."**

Fill in the repository name and description.

Click on the "Create repository" button.

Step 3: Link Local Repository to GitHub

```
git remote add origin [repository-url]
```

To verify that the remote was added correctly, run:

```
git remote -v
```

Step 4: Check and Rename the Branch

To check the current branch, run:

```
git branch
```

If your branch is named master and you want to rename it to main, run:

```
git branch -M main
```

Step 5: Stage and Commit Your Changes

If you have any files to add

```
git add .
```

Step 6: Push Your Changes to GitHub

```
git push -u origin main
```

6. How to undo changes in github?

- git reset :

clear staging area, rewrite working tree from specified commit