

GIT DOCS

Different approaches to operate git account:

1. Console
- 2 command prompt

1 Introduction to git:

Git is a distributed version control system used to track changes in source code during software development

It helps developers:

- > track files
- > collaborate with teams
- > maintain version history
- > manage branches

2 Installation and getting started:

Install in windows–

Verify version- git–version

Configure git (first time setup)

```
git config --global user.name "Manikantabandari"
```

```
git config --global user.email "ayappabandari.2003@gmail.com"
```

3 Create a Local Repository:

i create a project folder

```
Mkdir myproject
```

```
Cd myproject
```

ii initialize git repository

```
Git init ( this creates a hidden .git folder to track changes.)
```

```
Git status(to check status)
```

4 commit to a local repository

Step 1 : create a file

```
Touch app.py
```

Step 2: add file to staging area

```
Git add app.py
```

```
Git add .
```

Step 3: commit changes

```
Git commit -m "initial change"
```

```
Git log(to check history commit)
```

5 create a local repository

Remote repository are typically created on platform like:

>github

>gitlab

>bitbucket

Steps:

1.login to git

2 click new repo

3 enter repo

4 click create

Copy url : next

6 push to a remote rep

Step 1: connect local repo to remote

Git remote add origin https://github.com/anvesh1723/Git_practice.git

Check remote:

Git remote -v

Step 2:push code:

Git push -u origin main/master

After first push, next time simply(git push)

7 git references(imp):

Command desc

Git status check current status

Git add add a file to staging

Git commit save changes

Git log view commit history

Git diff view file changes

Git branch list branch

Git checkout switch branch

Git merge merge branches

Git pull fetch+merge remote changes

Git clone copy remote repo

8 branch and merging:

Branching allows parallel development without affecting main code.

Create new branch:

Git checkout feature1

or(shortcut):

Git checkout -b feature1

Make changes and commit:

Git add.

Git commit -m "Added new feature"

Merge Branch into Main

 Switch to main branch:

 Git checkout main

 Merge:

 Git merge feature 1

Delete Branch(Optional)

Git branch -d feature1

9 Basic Git Workflow

Working directory

!

Staging area(git add)

!

Local repository

!

Remote Repository