

GIT

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How to install Git?

To install Git click on this link <https://git-scm.com/downloads> Download as per your OS and install.

After installing Git open Git Bash.

Create a New folder and enter into that dir.

First we need to initialize the git repository

-> git init

After that we need to configure user name and email id

-> git config --global user.name "Polarapu"

-> git config --global user.email "polarapuprasad@gmail.com "

-> git config --list (here we can list all configurations)

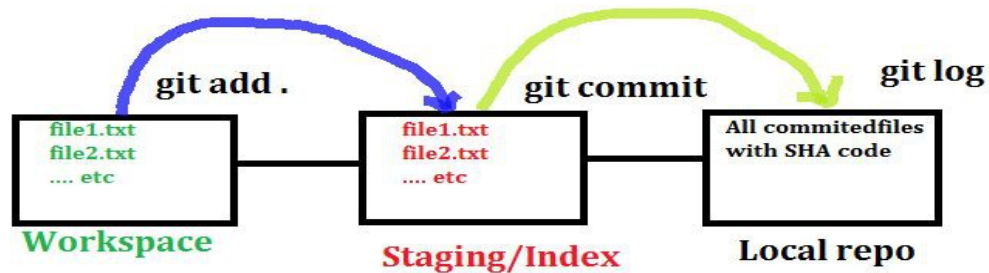
Create some sample files by using Touch or Vi or Cat commands

EX: Touch file1

vi file2

cat > file3

Git having three stages:



- 1) Workspace
- 2) Index / staging area
- 3) local repository

when we are creating the files it will under workspace area

-> `git status` (Now it will shows all files in workspace)

All workspace file names in **Red colour**

-> `git add filename`

(or)

-> `git add .` (here . indicates all files in workspace)

-> `git status`

Now all files in Index/staging area

All index/staging area files in **Green colour**

-> `git commit -m "sample message"`

All files committed from index area to local repository

-> `git status` (here it showing nothing to commit, working tree clean)

-> `git log`

`git log` is command here it will displays all log files

How to create Github repository

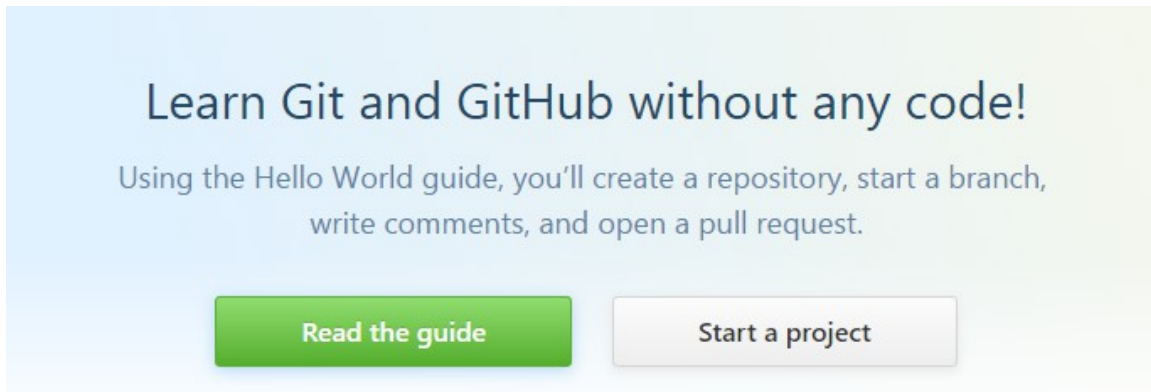
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devopstraining2015@gmail.com

<https://github.com/> create a github account

now login to github account

Click on start project option see the below snapshot



Give the repository name and click on initialize this repository with a README

Click on Create repository

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devopstraining2015@gmail.com

Owner: Prasa / Repository name: myrepo ✓

Great repository names are short and memorable. Need inspiration? How about **cautious-guacamole**.

Description (optional)

☒ **Public**
Anyone can see this repository. You choose who can commit.

☐ **Private**
You choose who can see and commit to this repository.

☒ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** | Add a license: **None** ⓘ

Create repository

Click on Clone or download tab and copy the path

Navigation: <> Code | 0 Issues | 0 Pull requests | 0 Projects | Wiki | Pulse | Graphs | Settings

No description, website, or topics provided. [Edit](#)

New [Add topics](#)

1 commit | 1 branch | 0 releases | 1 contributor

Branch: master | [New pull request](#) | [Create new file](#) | [Upload files](#) | [Find file](#) | **Clone or download**

Prasad Initial commit

README.md Initial commit

README.md

myrepo

Clone with HTTPS Use SSH
Use Git or checkout with SVN using the web URL.

[Open in Desktop](#) | [Download ZIP](#)

Now open git, create a new folder like central and enter into central dir

-> git clone path/of/github/repository

Ex:-

git clone <https://github.com/Prasadxyz/myrepo.git>

Enter into myrepo directrey

Now here create some sample text files

This all files Add and commit

-> git push path/of/github/repo Branch name

(by default Branch name is master)

ex:-

git push <https://github.com/Prasadxyz/myrepo.git> master

Now goto github and refresh it, here it will displays all files

How to create Branches

By default Branch name is master

-> git branch (To list all Branches)

-> git branch branchname

ex:- git branch polarapu

-> git branch --list or git branch

```
Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch
  list
  * master

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch --list
  list
  * master

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch polarapu

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch
  list
  * master
  polarapu

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ |
```

How to switch newly created branch

-> git checkout Branch name

ex:- git checkout polarapu

Now we are in polarapu branch

Please observe the below figure

```
Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch
  list
  * master
  polarapu

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git checkout polarapu
Switched to branch 'polarapu'

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ git branch
  list
  master
  * polarapu

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ |
```

How to delete a Branch

Before deleting branch we need to switch to different branch

git checkout master

git branch

git branch -d branch name

ex:- git branch -d polarapu

```
Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ git branch
  list
  master
* polarapu

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch -d polarapu
Deleted branch polarapu (was 10440b0).

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch
  list
* master

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ |
```

How to create Branch and How to switched branch with in single step

```
Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git branch
  list
* master

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (master)
$ git checkout -b polarapu1
Switched to a new branch 'polarapu1'

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu1)
$ git branch
  list
  master
* polarapu1

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu1)
$ |
```

git checkout -b New branch name

ex:-

git checkout -b polarapu1

Merge

Now create no.of files in two branches with diff names

ex:- git checkout polarapu (switch into 1st branch)

Create some files here like file1.txt, file2.txt , etc....

Do git Add and Commit

git checkout polarapu1 (switch into 2nd branch)

Create some files like file5.txt, file6.txt, etc...

Do git Add and commit

→ Now switch into polarapu branch (1st branch)

git checkout polarapu

issue the ls command

→ git merge other branch name

ex:- git branch polarapu1

```
Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu1)
$ git checkout polarapu
Switched to branch 'polarapu'

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ ls
file1.txt  file2.txt  file3.txt

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ git merge polarapu1
Updating a45491b..ba11146
Fast-forward
 file5.txt | 0
 file6.txt | 0
 file7.txt | 0
 3 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file5.txt
 create mode 100644 file6.txt
 create mode 100644 file7.txt

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ ls
file1.txt  file2.txt  file3.txt  file5.txt  file6.txt  file7.txt

Prasad@AC-0091 MINGW64 ~/Desktop/central/myrepo1 (polarapu)
$ |
```

→ ls (here it will display's all file)

please observe the below snapshot.