Git Setup on Local System:

Step 1 : check if git is already installed

git --version

Step 2 : download Git installer from https://git-scm.com/

Step 3 : Run installer and install git

Step 4 : Check if git is installed git --version

Create GitHub Account:

Step 1 : Goto https://github.com/ and sign up

Step 2 : Login to GitHub

Step 3 : Create a new Repository

Git Commands

Step 1 : Create a new folder and open Git Bash/CMD and goto the folder location

Step 2 : Run Commands

git config --global user.email "yourGitHub@email.com"

git config --global user.name "yourGitHubusername"

Step 3 : Initialize Git git init

Step 4 : Add some files in the folder

Step 5 : Run commands git status

git add

git commit -m “…..”

Step 6 : Add the remote repo url

git remote add origin url\_of\_hithub\_repo

Step 7 : Push the changes to repository git push -u origin master

Step 8 : Check output of following commands

git log

git --help

Git Branches:

1. What are branches

2. How to create branch

3. How to checkout branch

4. How to merge branch to master

5. How to delete branch (local and remote)

Step 1 : Create branch git branch “branch name”

Step 2 : Checkout branch git checkout “branch name”

Step 3 : Make some changes in your project

Do add, commit, push git push -u origin newbranch

Check the branch is visible on GitHub repository

Step 4 : On local checkout master branch - git checkout master

Step 5 : Merge new branch in master branch git merge “branch name”

Step 6 : Push the changes - git push -u origin master

Step 7 : Delete branch

git branch -d “branch name” // will delete from local

git push origin --delete “branch name” // will delete from remote

Git Tags:

1. What are tags / releases

2. Why should i create TAGs

3. When to create TAGs

4. How to create TAGs in git

create | show | publish | delete

Step 1: Checkout the branch where you want to create the tag

git checkout "branch name"

example : git checkout master

Step 2: Create tag with some name

git tag "tag name"

example : git tag v1.0

Step 3: Display or Show tags git tag

git show v1.0

git tag -l “v1.\*”

Step 4: Push tags to remote git push origin v1.0

Step 5: Delete tags (if required only)

to delete tags from local : git tag -d v1.0

git tag --delete v1.0

to delete tags from remote :git push origin -d v1.0

git push origin --delete v1.0

git push origin :v1.0

to delete multiple tags at once:

git tag -d v1.0 v1.1 (local)

git push origin -d v1.0 v1.1 (remote)

Checking out TAGS

We cannot checkout tags in git

We can create a branch from a tag and checkout the branch

git checkout -b "branch name" "tag name"

example : git checkout -b ReleaseVer1 v1.0

Creating TAGS from past commits

git tag "tag name" "reference of commit"

example : git tag v1.2 5fcdb03

To generate Access Token

1. Login to your GitHub account

2. Verify your email address, if it hasn't been verified yet.

3. In the upper-right corner of any page, click your profile photo, then click Settings.

4. In the left sidebar, click Developer settings.

5. In the left sidebar, click Personal access tokens.

6. Click Generate new token.

7. Give your token a descriptive name.

8. To give your token an expiration, select the Expiration drop-down menu, then click a default or use the calendar picker

9. Select the scopes or permissions, you'd like to grant this token. To use your token to access repositories from the command line, select repo.

10. Click Generate token