Git Hub

Git is a distributed version control system .

This means we can recall the project at any point in time. We can collaborate on the project and have their own versions of it.

-git –version : this used to check the version of the git.

-git config –global user.name username : these commands are used to enter the username so that git is knowing as who is making the modifications and it can keep the track.

-git config –global user.email email : these commands are used to enter the email so that git is knowing as who is making the modifications and it can keep the track .

-At the heart of git at there is a concept called repositories.They can be stored in the local or in some remote area i.e git hub.These are tracked by the git

-Commit are the safe points where we can recover the configuration from that point.

There are different stage : modified , staging , commit stages.

Modified: when we have changed some code in the file but are not ready for comiting.

Staging : These contain the modified files.

Commit : These contain the files that are commited to the changes and the snapshots of the commit history are stored in the commit history.

When we start the main branch is known as master branch.

-git init :This is the command used to initialize the git repository.

-git status : This is the command used to see the changed files

-git add filename : This is the command used to add the files to the staging area

-git add . :This is the command used to add more than one file to the staging area.

-git rm –cached filename : This is used to delete the files from the staging area.

-git commit –m “the message about the changes to commit” :This is used to commit the changes.

-git log –This command indicates the history of commits done with the id

-git log -–oneline –This gives all the commit history in a single line

We can undo the the commits in 3 ways

-checkout commit:This commit shows the commit at a certain point in time.we cannot delete the any commit changes since this is in read only

-git checkout idnumber: this takes back the stage to the earlier commit.

-git checkout master :this command is used to get back to the top of the stack that is the latest commit, in above command we detached from the master and went to the particular commit

-revert commit: it reverts all the changes as it never happened.

-git revert idno : this reverts the commit of a particular commit

-reset commit:This permanently deletes the commits and we can go to a particular commit.

-git reset idno –hard :this permanently deletes the commit till some stage

Branch:

-git branch nameofthe branch : this creates a new branch

-git branch –a :this shows in which branch we are in

-git checkout branch name : This switches to the branch.

-git branch –D branch name : this is to delete the branch

-git checkout –b branch name: this creates a branch and checkout as well

-git merge branch name :this is to merge the branch with the master

If we are working on the same files in master and branch we need to resolve the conflict first.

GitHub

We should create a online account and then create a new repository , we get a link there copy that link

Connecting local rep with online rep

-git push link of new rep name master.

Creating alias for the link

-git remote add name for the alias link

So instead of link we can use name of the alias here.

-git clone link of the clone –This is used to create a local copy from the git hub.

-git pull name of the clone master : this is to pull the data from the remote to the local repo

Fork is a feature which is used to not let other developers to alter the source file in the git hub without the permission of the main developer.