**GITHUB**

GitHub is the single largest host for Git repositories, and is the central point of collaboration for millions of developers and projects. A large percentage of all Git repositories are hosted on GitHub, and many open-source projects use it for Git hosting, issue tracking, code review, and other things.

**GIT INSTALLATION**

* $ sudo yum install git

**GIT CONFIGURATION**

* $ git config --global user.email "FVENKAT007@GMAIL.COM"
* $ git config --global user.name "VENKATESH"
* $ git config --list

Default editor

* $ git config --global core.editor "'C:/Program Files/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noplugin"
* $ git config --system core.editor "'C:/Program Files/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noplugin"
* P4MERGE INSTALL
* Download P4MERGE tool from <https://www.perforce.com/downloads/visual-merge-tool>
* $ git config –global diff.tool p4merge
* $ git config --global difftool.p4merge.path "C:/Program Files/Perforce/p4merge.exe"
* $ git config --global difftool.prompt false
* $ git config --global mergetool.p4merge.path "C:/Program Files/Perforce/p4merge.exe"
* $ git config --global mergetool.prompt false
* Alias
* $ git config --global alias.**hist** "log --oneline --graph --decorate --all"
* $ git **hist**

**Git Basics**

* $ git init
* $ git add <filename>
* $ git commit -m <message>
* $ git status
* $ git log
* $ git show
* $ git commit -am <message>
* $ git restore <filename> ……………undo in working directory
* $ git restore --staged <filename> ……….undo stage file
* $ git log --oneline --graph
* $ git log --oneline --graph --decorate --all

**Git Advanced**

$ git diff <hash id> <HEAD>

$ git difftool <hashID> <HEAD>

**Branching & Merging**

HEAD >>>>> points to last commit of current branch >> can be moved

$ git branch

$ git branch <branch name>

**GITHUB**

**Account Setup and Configuration**

**1] Sign up github**

**2] Creating a Github Repo**

**3] Linking to our Github Repo**

**…create a new repository on the command line**

* echo "# dummy" >> README.md
* git init
* git add README.md
* git commit -m "first commit"
* git branch -M main
* git remote add origin git@github.com:fvenkat/dummy.git
* git push -u origin main

### …or push an existing repository from the command line

* git remote add origin git@github.com:fvenkat/dummy.git
* git branch -M main
* git push -u origin main