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Q. **What is GitHub? When was it created? Why? By who? What similar platforms exist? Why would you use such a platform?**

Githib is a web based GIT repository hosting service which offers features like SCM, distributed revision control, access control, bug tracking and wikis for every repository. GIT is a distributed revision control system developed by Linus Torvalds for kernel development of Linux in 2005 to support non-linear distributed workflow and a version control system. It is free and used to host personal, enterprise and opensource projects. It is licensed under GNU GPL2.

Other platforms include GITLAB, SVN, Bitbucket etc. The purpose of using a vcs is to keep track of code and issues. Differences between versions and different development stages.

**try.github.io tutorial**

Press enter to submit commands

> git init

Initialized empty Git repository in /.git/

Success!

 $ git status  
# On branch master  
#  
# Initial commit  
#  
nothing to commit (create/copy files and use "git add" to track)

Success!

$ git status

# On branch master  
#  
# Initial commit  
#  
# Untracked files:  
# (use "git add <file>..." to include in what will be committed)  
#  
# octocat.txt  
nothing added to commit but untracked files present (use "git add" to track)

Success!

$ git add octocat.txt

Nice job, you've added octocat.txt to the Staging Area

$ git status  
# On branch master  
#  
# Initial commit  
#  
# Changes to be committed:  
# (use "git rm --cached <file>..." to unstage)  
#  
# new file: octocat.txt  
#

Success!

$ git commit -m "Add cute octocat story"

[master (root-commit) 20b5ccd] Add cute octocat story  
1 file changed, 1 insertion(+)  
create mode 100644 octocat.txt

Success!

$ git add '\*.txt'

Success!

$ git commit -m 'Add all the octocat txt files'

[master 3852b4d] Add all the octocat txt files  
4 files changed, 4 insertions(+)  
create mode 100644 blue\_octocat.txt  
create mode 100644 octofamily/baby\_octocat.txt  
create mode 100644 octofamily/momma\_octocat.txt  
create mode 100644 red\_octocat.txt

Success!

$ git log

commit 3852b4db1634463d0bb4d267edb7b3f9cd02ace1  
Author: Try Git <try\_git@github.com>  
Date: Sat Oct 10 08:30:00 2020 -0500  
  
Add all the octocat txt files  
  
commit b652edfd888cd3d5e7fcb857d0dabc5a0fcb5e28  
Author: Try Git <try\_git@github.com>  
Date: Sat Oct 10 08:30:00 2020 -0500  
  
Added cute octocat story

Success!

$ git remote add origin https://github.com/try-git/try\_git.git

Success!

$ git push -u origin master

Branch master set up to track remote branch master from origin.

Success!

$ git pull origin master

Updating 3852b4d..3e70b0f  
Fast-forward  
yellow\_octocat.txt | 1   
1 file changed, 1 insertion(+)  
create mode 100644 yellow\_octocat.txt

Success!

$ git diff HEAD

diff --git a/octocat.txt b/octocat.txt  
index 7d8d808..e725ef6 100644  
--- a/octocat.txt  
+++ b/octocat.txt  
@@ -1 +1 @@  
-A Tale of Two Octocats  
+[mA Tale of Two Octocats and an Octodog

Success!

$ git add octofamily/octodog.txt

Success!

$ git diff --staged

diff --git a/octofamily/octodog.txt b/octofamily/octodog.txt  
new file mode 100644  
index 0000000..cfbc74a  
--- /dev/null  
+++ b/octofamily/octodog.txt  
@@ -0,0 +1 @@  
+[mwoof

Success!

$ git reset octofamily/octodog.txt

Success!

$ git checkout -- octocat.txt

Success!

$ git branch clean\_up

Success!

$ git checkout clean\_up

Switched to branch 'clean\_up'

Success!

$ git rm '\*.txt'

rm 'blue\_octocat.txt'  
rm 'octocat.txt'  
rm 'octofamily/baby\_octocat.txt'  
rm 'octofamily/momma\_octocat.txt'  
rm 'red\_octocat.txt'  
Success!

$ git commit -m "Remove all the cats"

[clean\_up 63540fe] Remove all the cats  
5 files changed, 5 deletions(-)  
delete mode 100644 blue\_octocat.txt  
delete mode 100644 octocat.txt  
delete mode 100644 octofamily/baby\_octocat.txt  
delete mode 100644 octofamily/momma\_octocat.txt  
delete mode 100644 red\_octocat.txt

Success!

$ git checkout master  
Switched to branch 'master'

Success!

$ git merge clean\_up

Updating 3852b4d..ec6888b  
Fast-forward  
blue\_octocat.txt | 1 -  
octocat.txt | 1 -  
octofamily/baby\_octocat.txt | 1 -  
octofamily/momma\_octocat.txt | 1 -  
red\_octocat.txt | 1 -  
5 files changed, 5 deletions(-)  
delete mode 100644 blue\_octocat.txt  
delete mode 100644 octocat.txt  
delete mode 100644 octofamily/baby\_octocat.txt  
delete mode 100644 octofamily/momma\_octocat.txt  
delete mode 100644 red\_octocat.txt

Success!

$ git branch -d clean\_up

Deleted branch clean\_up (was ec6888b).

Success!

$ git push

To https://github.com/try-git/try\_git.git  
3e70b0f..d25b27a master -> master

Success!

**Q.Define the following terms in the context of Git (2 lines maximum):**

* **Repository:** A space where all the files of a project, all its version, issues, commits reside.
* **Commit:** Recording changes made to the local changes.
* **Push:**  Updating remote repository for the changes made & committed in local repo.
* **Branch:** Different version of code/project in a repository.
* **Fork:** Copy of a repo in one’s account without making changes to original project.
* **Merge:** merging two different branchs or a forked repo once changes are finalized.
* **Clone:** Copying a repo on localhost/machine to grab a copy of code/project to use.
* **Pull:** Fetching and merging lastest commit from a remote repo.
* **Pull request**: Request to merge two branches or a frok and base branch.