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

Linus Torvalds Invented GitHub. GitHub is where developers store their projects and network with likeminded people. GitHub was created in 2008. It makes projects to be made because it provides access control bug tracking and task management. Platforms like BitBucket are similar to GitHub as well as Beanstalk. You would use it to have better security, and because it provides a Web-based graphical interface. Which makes it easier to interact with computer hardware.

> git init

Initialized empty Git repository in /.git/

$ git status

# On branch master

#

# Initial commit

# nothing to commit (create/copy files and use "git add" to track)

$ 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)

$ git add octocat.txt

$ git status

# On branch master

#

# Initial commit

#

# Changes to be committed: # (use "git rm --cached <file>..." to unstage)

#

# new file: octocat.txt

#

$ 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

$ git add '\*.txt'

$ 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

$ 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

$ git remote add origin <https://github.com/try-git/try_git.git>

$ git push -u origin master

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

$ git pull origin master

Updating 3852b4d..3e70b0f

Fast-forward

yellow\_octocat.txt | 1 +

1 file changed, 1 insertion(+)

create mode 100644 yellow\_octocat.txt

$ 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

add octofamily/octodog.txt

$ 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

$ git reset octofamily/octodog.txt

$ git checkout -- octocat.txt

$ git branch clean\_up

$ git checkout clean\_up

Switched to branch 'clean\_up'

$ git rm '\*.txt'

rm 'blue\_octocat.txt'

rm 'octocat.txt'

rm 'octofamily/baby\_octocat.txt'

rm 'octofamily/momma\_octocat.txt'

rm 'red\_octocat.txt'

$ 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

$ git checkout master

Switched to branch 'master'

$ 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

$ git branch -d clean\_up

Deleted branch clean\_up (was ec6888b).

$ git push To https://github.com/try-git/try\_git.git 3e70b0f..fc7d18a master -> master

Repository- a place where something is disposed of or stored.

Commit- is a revision or an individual change to a file, which allows you to keep record of what changes were made when and by who.

Push- refers to sending your committed changes to a remote repository

Branch- is simply a lightweight movable pointer to one of these commits.

Fork- is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Merge- command lets you take the independent lines of development created by gitbranch and integrate them into a single

Clone- that you create a local copy of the code provided by developer.

Pull- is a style of network communication where the initial request for data originates from the client, and then is responded to by the server.

Pull request- lets you tell others about changes you've pushed to a GitHub repository