Exercise on GitHub & Git

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## PART 3

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

**Ans.** GitHub is Git or version control repository which is a hosted on web hence allowing distributed version control and management of source code for a more collaborative support on a project. Version control or source code management is helpful because during collaboration it’s easier to track changes done by others while also explore and develop new features. It was founded by Tom Preston-Werner in 2008. Other popular platforms are Bitbucket, SourceForge, GitLab and etc. It has become a practice in industries developing or managing projects which has some programming involved because of above mentioned benefits but selecting a particular platform varies for use case by use case depending upon what’s the requirement.

## PART 4

**Go through the Git tutorial here:** [**https://try.github.io**](https://try.github.io)**. While doing the tutorial, save your work the *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx* file.**

**Conclusion:**

After completing the recommended tutorial these were the commands which were tried, primarily a person taking tutorial creates a repository, commits two changes and then push it to a remote repository specified by a url. Add another change within local repo and then stage it and then remove it. After that, a new branch is created where all the files specified with the wildcards are deleted and then changes are merged into master and new branch is deleted and changes are pushed.

> git init

$ git status

$ git status

$ git add octocat.txt

$ git status

$ git commint -m "Add cute octocat story"

$ git commit -m "Add cute octocat story"

$ git add "\*.txt"

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

$ git log

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

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

$ git push -u origin master

$ git pull origin master

$ git diff HEAD

$ git add octofamily/octodog.txt

$ git diff --staged

$ git reset octofamily/octodog.txt

$ git checkout --octocat.txt

$ git checkout -- octocat.txt

$ git branch clean\_ip

$ git branch clean\_up

$ git checkout clean\_up

$ git rm '\*.txt'

$ git commit -m "remove all the cats"

$ git checkout master

$ git merge clean\_up

$ git branch -d clean\_up

$ git push

## PART 5

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

**Repository** – a location (remote or local) where data is stored and managed while developing a project.

**Commit** – record changes made to the repository

**Push** – Updates remote repository using local ref with associated objects

**Branch** – Create an identical copy of primary repository to explore new features without altering the “master” branch and then add back to “master” branch

**Fork** – Similar to Branch but used to build a different project based of the project branching from

**Merge** – Combine the changes made in branch to the main code base so developed features can be added to main project

**Clone** – create a local copy of a repository for working or understanding the implementation of a project

**Pull** – merges files from remote repository to local repository

**Pull Request** – allows you to work or define what changes you have made in local branch and comparison with the “master” repository.