Suzanne Vogel

11/14/16

CS 361

GitHub Assignment

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

GitHub is a Git repository hosting service created by Linux creator Linus Torvalds in February 8, 2008. GitHub provides a graphical interface that is Web-based and provides access control and several collaboration features, including wikis and basic task managements for every project. There are three features for every project: fork, pull request, and merge that make GitHub such a powerful tool and it is one of the many reasons that GitHub is such a popular tool for open-source projects. Similar platforms that exist include GitLab, BitBucket, and Assembla.

Git Tutorial

Press enter to submit commands

> git init

$ git status

$ git status

$ git add octocat.txt

$ git status

$ 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 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 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

>

Definitions:

Repository: A repository contains a set of commit objects and a set of references to commit objects, called heads.

Commit: The commit command records a snapshot of the staging area.

Push: The push command in Git pushes your new branches and data into a remote repository.

Branch: A branch in Git lists, creates, and manages working contexts.

Fork: A fork is producing a copy of another person’s project.

Merge: To merge in Git means that you merge a branch context into your current one.

Clone: To clone in Git means to copy a Git repository so that you can add to it.

Pull: To pull in Git means that you merge upstream changes into your local repository. This is a single command you can use rather than use git fetch and git merge.

Pull Request: Pull Requests make it easier for developers to collaborate using GitHub by providing a user-friendly web interface for discussing proposed changes before integrating into the official project.