Raami Sharif

CS 361

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

GitHub is an online git repository hosting service, which allows users to track changes and issues in their code. In other words, it is a hosting service that hosts git repositiories. Because of its many features for version control it can be used for large teams to collaborate easily. It is also used a lot by open source projects.

GitHub was founded in 2008 by Tom Preston-Werner, Chris Wanstrath, and PJ Hyett, in order to help larger teams collaborate on projects, or more specifically open source projects.

A similar platform to github is bitbucket. They can both be used to collaborate with other people. I would use these platforms if I was working in a team with other developers or if I wanted to share some code I had written. I could also use it to collaborate on already popular open source projects.

Git Tutorial Work:

git init

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

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

* Repository: The git repository a file or data structure in which git stores the commits, references, etc. for a project.
* Commit: A commit is like a snapshot of the work as of that moment. When you commit, you are adding the work to the repository so that the changes could be tracked.
* Push: Moves your commits from the local repository to the remote repository so they can be shared with other project members.
* Branch: A branch is a different path that you may create when you are adding a new feature. This is done so the original work is not broken while the feature is being added.
* Fork: A fork is the copying of a repository from one person to another. That second person can now make changes to the fork
* Merge: A merge is bring together two or more different branches or forks. This reunites the specified branches.
* Clone: Copying a repository from on online location to the local machine.
* Pull: Pulls any changes that may have been made to the remote git repository, down to the local machine, so that the local repository stays updated with any changes.
* Pull request: A request for the owner of a git repository to pull your changes into the main project. This is done if the person doesn’t have control of the repository.

Part 7:

Retrieve the README.md file at:

<https://github.com/paceuniversity/courses>

Add your name (lastname, firstname) in the file, **add a comment (date and time) (REQUIRED)**, and update the README.md file at: <https://github.com/paceuniversity/courses>. Your name should appear at the provided <https://github.com/paceuniversity/courses>. Please check the work of previous students.

List the commands and strategy you use to do this part of the exercise in the *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx* file and push it to: <https://github.com/yourpseudo/CSXXX2016>.

Please note that I may have to accept the change before it appears for you. Hint: I will have to merge your pull request and you will get an email when I will do it.

I first forked the repository so that I could make push my changes to github.

Raamis-MacBook-Pro:githubproject rsharif$ **git clone https://github.com/rshar1/courses.git**

Cloning into 'courses'...

remote: Counting objects: 553, done.

remote: Compressing objects: 100% (12/12), done.

remote: Total 553 (delta 4), reused 0 (delta 0), pack-reused 541

Receiving objects: 100% (553/553), 84.69 KiB | 31.00 KiB/s, done.

Resolving deltas: 100% (164/164), done.

Checking connectivity... done.

Raamis-MacBook-Pro:githubproject rsharif$ **git status**

fatal: Not a git repository (or any of the parent directories): .git

Raamis-MacBook-Pro:githubproject rsharif$ cd courses

Raamis-MacBook-Pro:courses rsharif$ git status

On branch master

Your branch is up-to-date with 'origin/master'.

nothing to commit, working directory clean

Raamis-MacBook-Pro:courses rsharif$ **nano README.md**

Raamis-MacBook-Pro:courses rsharif$ ls

total 24

-rw-r--r-- 1 rsharif staff 2.1K Nov 2 11:10 ImageDownloader.java

-rw-r--r-- 1 rsharif staff 3.9K Nov 2 11:11 README.md

-rw-r--r-- 1 rsharif staff 2.9K Nov 2 11:10 README.md~

Raamis-MacBook-Pro:courses rsharif$ git status

On branch master

Your branch is up-to-date with 'origin/master'.

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

modified: README.md

no changes added to commit (use "git add" and/or "git commit -a")

Raamis-MacBook-Pro:courses rsharif$ **git add \***

Raamis-MacBook-Pro:courses rsharif$ ls

total 24

-rw-r--r-- 1 rsharif staff 2.1K Nov 2 11:10 ImageDownloader.java

-rw-r--r-- 1 rsharif staff 3.9K Nov 2 11:11 README.md

-rw-r--r-- 1 rsharif staff 2.9K Nov 2 11:10 README.md~

Raamis-MacBook-Pro:courses rsharif$ git **commit -m "updated readme"**

[master 21cfed4] updated readme

1 file changed, 1 insertion(+)

Raamis-MacBook-Pro:courses rsharif$ **git push**

Counting objects: 3, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 375 bytes | 0 bytes/s, done.

Total 3 (delta 1), reused 0 (delta 0)

remote: Resolving deltas: 100% (1/1), completed with 1 local objects.

To https://github.com/rshar1/courses.git

8a12c52..21cfed4 master -> master

Finally, I submitted a pull request on github.com so my changes could be merged with the original repository.