**Tutorial on GitHub, Git and Waffle.io**

**Part 3 : Answer the following questions**

What is GitHub? When was it created? Why? By who? What similar platforms exist? Why would you use such a platform? (Answer between 5 and 10 lines)

GitHub is a web-based repository service for projects that use the Git revision control system. It was created in 2008 by P.J.Hyett, Chris Wanstrath and Tom Preston-Werner, to allow open collaboration to the world. Developpers can work together on the same project with code versionning, bug tracking, task management and wikis.

There are many alternatives to Github, as Bitbucket, GitLab, Redmine, SourceForge, Gogs (Go Git Service), GitBucket and so on.

I would like to use such a platform because, it allows a team to work on the same project, on differents computers, at different time. When we start a project, we do a lot of lines of code and if at the end there is a bug, we are obliged to start all the job to zero. But, with a platform of subversion, we can save part of our code which work fine and continue to code, if we have a bug later, we can come back to the latest version.

**Part 4: Complete the Git tutorial:**[https://try.github.io](https://try.github.io/).

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..d4a357d master -> master

Success!

**Part 5 : Define the following terms in the context of Git (2 lines maximum)**

* **Repository :** It is a hidden directory where Git operates.
* **Commit :** It is a record of changes files to the repository. The commit command allaw to keep records of what changes were mage, when and by who.
* **Push :** it refers to sending your committed changes to a remote repository such as GitHub.com, so that others may access them.
* **Branch :** It is a parallel version of a repository allowing you to work freely without disrupting the "live" version.
* **Fork :** It is a personal copy of another user's repository that lives on your account.
* **Merge :** It is to take the changes from one branch (in the same repository or from a fork), and applies them into another.
* **Clone :** It is a copy of a repository that lives on your computer instead of on a website's server somewhere. To clone is the act of making a copy of a repository.
* **Pull :**  It refers to when you are fetching in changes and merging them.
* **Pull request :** It is proposed changes to a repository submitted by a user and accepted or rejected by a repository's collaborators.