**Part 3. 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 service that provides Git (version control) repositories mostly for collaborative coding. It was founded in April 2008 by Tom Preston-Werner, Chris Wanstrath, and PJ Hyett. Other git hosting services are Beanstalk, Bitbucket, GitLab, Source Forge, Apache Allura, AWS CodeCommit, GitKraken, and so on.

So far, I have only tried GitHub. It allows me and my teammates to upload codes, to view version history, and to make changes to a master. The thing I like most about GitHub is its code review feature. Additionally, no matter which platform you choose and how powerful it can be, good communications between developers are always important.

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

**Repository**: a repository is an on-disk data structure which contains a historical record of changes in the repository, set of commit objects, and a set of references to commit objects, called heads.

**Commit**: a commit adds the latest changes to the source code to the repository, making these changes part of the head revision of the repository.

**Push**: to update remote refs using local refs, while sending objects necessary to complete the given refs.

**Branch**: Branching is the duplication of an object under revision control so that modifications can happen in parallel along both branches. A branch in git is a lightweight movable pointer to one of these commits. The default branch name in Git is master.

**Fork**: a project fork happens when developers take a copy of source code from one software package and start independent development on it.

**Merge**: to join two or more development histories (branches) together.

**Clone**: to clone a repository into a new directory.

**Pull**: to fetch from and integrate with another repository or a local branch.

**Pull request**: A pull request is requesting the maintainer of a repository about changes you've pushed to a repository on GitHub.

**Part 7. List the commands and strategy you use to do the GitHub exercise.**

1. Fork the repository from paceuniversity/courses to my GitHub. *(During my several unsuccessful attempts, nothing showed up after clicking the “Fork” button. This is the place I got stuck and went to other directions, such as branching from paceuniversity/courses without access rights to creating the upstream branch. I guess sometimes GitHub is just acting weird.)*
2. On my forked GitHub repository, clone with HTTPS.
3. Git Bash in my local workspace, type in the following commands in terminal:
   1. git clone https://github.com/wyfapril/courses.git
   2. cd courses (directed to local master, make changes to README.md)
   3. git add .
   4. git commit -m "add Wang,Yunfei 09/24/2017 16:29"
   5. git push origin master
4. On paceuniversity/courses GitHub repository, click on “New pull request” button.
5. On “Compare Changes” page, click on “compare across forks” link
6. Keep “paceuniversity/courses” as the base fork, select “wyfapril/courses” as the head fork.
7. Write the title and leave some comments, click on “Create pull request” button.
8. Once got proved from paceuniversity/courses, the fork is merged.