What is GitHub?

Github is an online service that provides use of the git version control software and hosting of instances of those repositories. Github provides a platform as a service, which is online hosting and interface for git repositories.

When was it created? Why? By who?

Github was started in 2007 by PJ Hyett, Chris Wanstrath, and Tom Preston-Warner as a side project.

What similar platforms exist?

Similar platforms include launchpad, gnu savannah, bitbucket, codeplex, and Gna.

Why would you use such a platform?

Online code repositories can be used to share open source code with the public, allow remote teams to collaborate, and even host files for a static website.

Repository

The container in which the files to keep track of live.

Commit

Add a revision to the history of the repository.

Push

Submit changes to the local repository to a remote repository. SOlidify those changes in the repository.

Branch

Take the current repository and from a past revision, take a different direction and make new revisions that differ from the original repository. Analogous to writing two books that might be the same until chapter 4, where both stories now differ radically.

Fork

Make a branch of the repository for the purpose of creating pull requests.

Merge

Take two branches in the repository that differ by files and combine the revisions over each other. One revision will have to take priority over the other in case of conflicts in files where one file changes something another file has also changed.

Clone

Create an exact duplicate of a repository into a local directory.

Pull

Pull syncs the local repository with a remote repository. It differs from push in that push adds new commits from a local repository to a remote repository while pull merges the local repository to the remote repository.

Pull request

In collaborative projects on github, a pull request is when an individual has forked the project, made changes to it, and wishes to contribute those changes back to the original project. They pull the project with the original project as the remote project to be merged with the local copy.

Part 7

Making a pull request

A pull request can be made by first forking a repository and making local changes. Once those changes have been pushed to the fork, that fork can be merged or pulled with the main repository.

The github website provides an interface for forking and pull request. On a repository’s web page, select the fork option. Then clone the forked repository to a local directory and make changes to the files. Commit and push those changes to the fork. On the web page for the fork, there will be an option to make a pull request. Then the owner of the original repository has to approve the pull request.