Command Line Git Cheat Sheet

Definitions:

Repository or **Repo** – a collection of code or other work that is part of a single project and is kept together

Branch – a complete set of the code that is part of the repository, used for working on code; branching is like making a complete copy of the code to a new directory, working on it, and then more easily moving the changes into the original

Master Branch – the official version of the code from which all other branches are ultimately derived; the rule for an established project is that anything in the master branch is ready to use and works correctly

Commit – to record a change on a branch

Pull request – a suggestion to another developer to pull changes from a branch into another branch, often the master branch

Merge – actually taking changes from one branch and putting them in another branch, resolving any conflicts

Local repo – a repo that is on an individual computer rather than on Github or another server

Clone – a complete copy of a repo made to separate, often local, repo; different from **branch**, which is part of the same repo

Commands

Initialize a local repo, git initialize
```
git init
```

List changed files
```
git status
```

Show changes to tracked files
```
git diff
```

Add all current changes to next commit
```
git add .
```

Commit changes
```
git commit -a -m “comment”
```

Push working copy to server
```
git push
```

Show all commits, starting with newest
```
git log
```

Who changed what and when in <file>
```
git blame
```

List all existing branches
```
git branch -av
```

Create a new branch
```
git branch <new-branch>
```

Check out a branch in a local repository
```
git checkout <branch>
```

Delete a local branch
```
git branch -d <branch>
```

Merge <branch>
```
git merge <branch>
```

Discard all local changes to a working directory
```
git reset --hard HEAD
```

Revert a commit
```
git revert <commit>
```

Push back up to the server
```
git git push origin <location>
```

Remove local repository directory
```
rmdir /s /q
```