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| GitHub Command Data List RCL-I-CMQA1Team: Configuration Management and Quality Assurance 8/28/2013 -- Revision: - |  |

Revision History

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| --- | --- | --- | --- | --- | --- |
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| - | 8/28/2013 | Initial Release | Tom Moline | Tyler Olson | All |
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# Background

This document contains information on interfacing with GitHub version control software, as well as the most common commands utilized in the making, saving, editing, and sharing of information over said version control software system.

# Common GitHub Commands

## Creating a Directory

Before any work can be done on a project at a local computer, a directory for the project must be make. The command structure for accomplishing this is as follows:

Mkdir ~/Rascal\_Senior\_Design

This creates a directory in the user folder of your C:/ drive on your local computer. Before any files can be created or pushed to this directory, it is necessary to set up Git so that it properly refers to it.

## Setting a Directory

If one wishes to work within a particular directory on his or her computer, he or she must input the following command:

cd ~/Rascal\_Senior\_Design

If this command has been successfully executed, the command prompt should read:

~/Rascal\_Senior\_Design (master)

## Initializing Git Files

Now it is necessary to initialize the files git requires in order to be properly run within the established directory. This is accomplished by executing the following command:

git init

If this command has be successfully executed, the following prompt should be displayed:

Initialized empty Git repository in c:/Users/tmoline/Rascal\_Senior\_deign/.git/

## Creating a Reference to a Remote Repository

A remote repository is a directory on a remote server that contains all files (“commits”) associated with a particular project. If any member of the project development team wishes to edit any such files, it is necessary to “push” them to his or her local computer. Before this can be accomplished, one must make sure that he or she is referring to the correct remote repository. This is accomplished thourh the following command:

Git remote add origin https://github.com/tomamoline/Rascal\_Senior\_Design

The “origin” designation inserted before the repository URL refers to a name that one wants to associate with said URL. In this case, in lieu of typing in the URL for every command that requires it, one only has to type in “origin” or any other name associated with a specific URL repository.

## Pushing Commits from a Remote Repository to a Local Directory

To gain access to files located on a remote repository, it is necessary to transfer them to a local directory. This is accomplished with the following command:

git pull origin master

Master refers to the name of a particular branch in the origin repository. A branch is a part of the repository that has a pointer associated with a specific set of commits. Multiple branches can exist in one repository, referring to different commits of the same file. This allows for multiple people to work on one file simultaneously without interfering with each other or risking the loss of any information that has been created or documented.