Git Cheat Sheet



Git Basics		
git init <directory></directory>	Create empty Git repo in specified directory. Run with no arguments to initialize the current directory as a git repository.	
git clone <repo></repo>	Clone repo located at <repo> onto local machine. Original repo can be located on the local filesystem or on a remote machine via HTTP or SSH.</repo>	
git config user.name <name></name>	Define author name to be used for all commits in current repo. Devs commonly useglobal flag to set config options for current user.	
git add <directory></directory>	Stage all changes in <directory> for the next commit. Replace <directory> with a <file> to change a specific file.</file></directory></directory>	
git commit -m " <message>"</message>	Commit the staged snapshot, but instead of launching a text editor, use <message> as the commit message.</message>	
git status	List which files are staged, unstaged, and untracked.	
git log	Display the entire commit history using the default format. For customization see additional options.	
git diff	Show unstaged changes between your index and working directory	
Undoing Changes		
git revert	Create new commit that undoes all of the changes made in <commit>, then apply it to the current branch.</commit>	
git reset <file></file>	Remove <file> from the staging area, but leave the working directory unchanged. This unstages a file without overwriting any changes.</file>	
git clean -n	Shows which files would be removed from working directory. Use the -f	

flag in place of the -n flag to execute the clean

Rewriting Git History			
git commitamend	Replace the last commit with the staged changes and last commit combined. Use with nothing staged to edit the last commit's message	ł.	
git rebase <base/>	Rebase the current branch onto <base/> . <base/> can be a commit ID, a branch name, a tag, or a relative reference to HEAD.	+	
git reflog	Show a log of changes to the local repository's HEAD. Addrelative-date flag to show date info orall to show all refs.		
Git Branches			
git branch	List all of the branches in your repo. Add a <branch> argument to create a new branch with the name <branch>.</branch></branch>		
git checkout -b 	Create and check out a new branch named <branch>. Drop the -b flag to checkout an existing branch.</branch>		
git merge <branch></branch>	Merge <branch> into the current branch.</branch>		
Remote Repositories			
git remote add	Create a new connection to a remote repo. After adding a remote, you can use <name> as a shortcut for <url> in other commands.</url></name>	ı	
<pre>git fetch <remote> <branch></branch></remote></pre>	Fetches a specific branch>, from the repo. Leave off branch> to fetch all remote refs.		
git pull <remote></remote>	Fetch the specified remote's copy of current branch and immediately merge it into the local copy.	+	
git push <remote></remote>	Push the branch to <remote>, along with necessary commits and</remote>	+	



Additional Options +



git config		
git configglobal user.name <name></name>	Define the author name to be used for all commits by the current user.	
git configglobal user.email <email></email>	Define the author email to be used for all commits by the current user.	
<pre>git configglobal alias.<alias-name> <git-command></git-command></alias-name></pre>	Create shortcut for a Git command. E.g. alias.glog "loggraphoneline" will set "git glog" equivalent to "git loggraphoneline"	
<pre>git configsystem core.editor <editor></editor></pre>	Set text editor used by commands for all users on the machine. <editor> arg should be the command that launches the desired editor (e.g., vi).</editor>	
git configglobal edit	Open the global configuration file in a text editor for manual editing.	
git log		
git log - <limit></limit>	Limit number of commits by imit> . E.g. "git log -5" will limit to 5 commits	
git logoneline	Condense each commit to a single line.	
git logstat	Include which files were altered and the relative number of lines that were added or deleted from each of them.	
git logstat		
	were added or deleted from each of them.	

Show commits that occur between <since> and <until>. Args can be a

commit ID, branch name, HEAD, or any other kind of revision reference.

--graph flag draws a text based graph of commits on left side of commit

msgs. --decorate adds names of branches or tags of commits shown.

Only display commits that have the specified file.

	git diff
git diff HEAD	Show difference between working directory and last commit.
git diffcached	Show difference between staged changes and last commit.
	git reset
git reset	Reset staging area to match most recent commit, but leave the working directory unchanged.
git resethard	Reset staging area and working directory to match most recent commit and overwrites all changes in the working directory.
git reset <commit></commit>	Move the current branch tip backward to <commit>, reset the staging area to match, but leave the working directory alone.</commit>
git resethard <commit></commit>	Same as previous, but resets both the staging area & working directory to match. Deletes uncommitted changes, and all commits after <commit>.</commit>
	git rebase
git rebase -i <base/>	Interactively rebase current branch onto <base/> . Launches editor to enter commands for how each commit will be transferred to the new base.
	git pull
git pullrebase <remote></remote>	Fetch the remote's copy of current branch and rebases it into the local copy. Uses git rebase instead of merge to integrate the branches.
	git push
git push <remote></remote>	Forces the git push even if it results in a non-fast-forward merge. Do not use theforce flag unless you're absolutely sure you know what you're doing.
git push <remote></remote>	Push all of your local branches to the specified remote.
git push <remote></remote>	Tags aren't automatically pushed when you push a branch or use theall flag. Thetags flag sends all of your local tags to the remote repo.



git log

<since>..<until>

git log -- <file>

git log --graph

--decorate