Git Course

Session One - Crib Notes

The structure of a Git command...

git <verb> *[args]*	*All commands use this format*
git help <verb>	*Documentation of all commands is available*

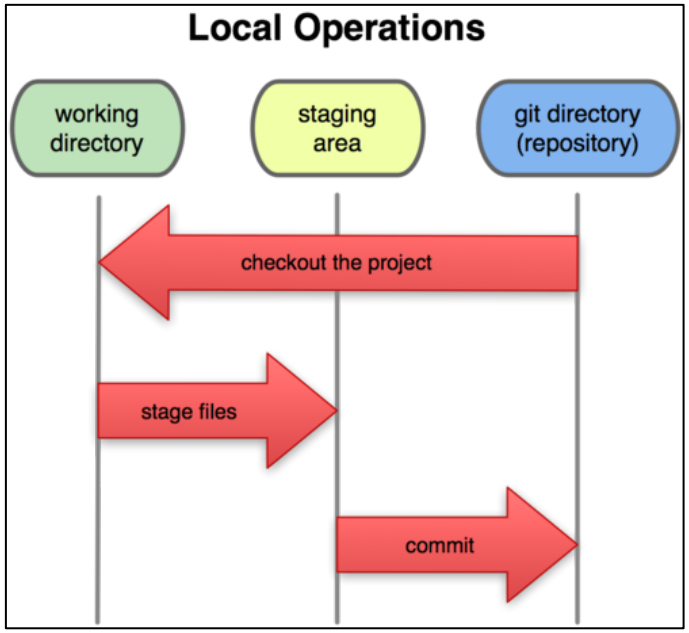
Git conventions

master	*The main branch of the repository*
origin	*The name given to the remote you cloned a repository from*
origin/branch_name	*Where to find remote branches after fetching them*
HEAD	*The top of your current branch*
HEAD^	*The parent of HEAD*
HEAD~4	*Four commits ago (the great-great grandparent of HEAD)*

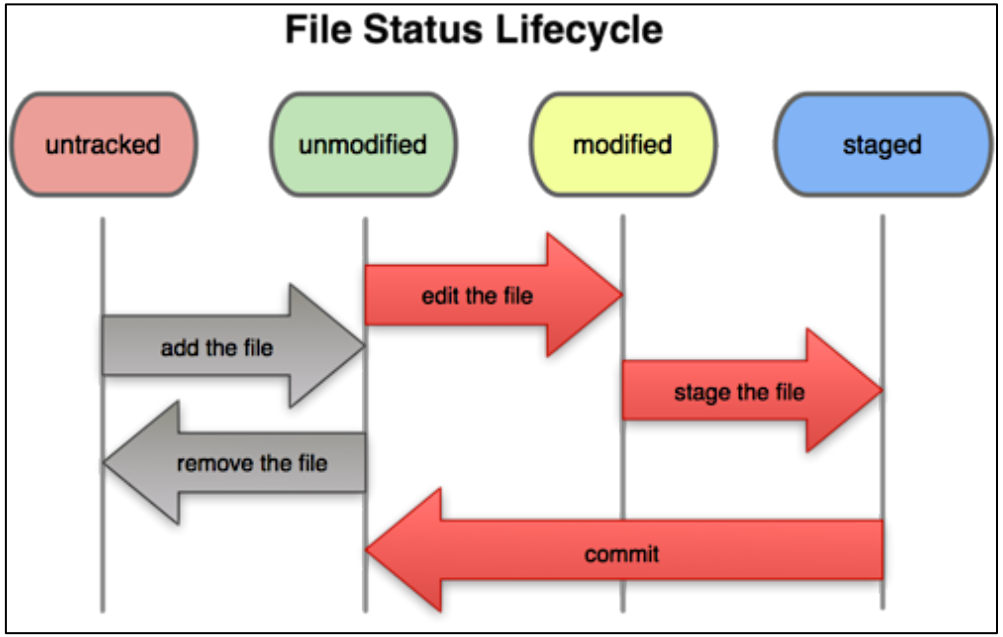
Useful things to know about the Terminal...

ls -a	*Lists files in current directory (-a includes hidden files)*
mkdir	*Makes a new directory*
cd <dir name>	*Changes current directory*
cd ..	*Changes directory - one level up from current*
<dir1>/<dir2>/readme.txt	*The directory slash is the reverse of the windows console*
[TAB]	*Tab completion is supported in many places*
q	*Press 'q' to quit certain screens (e.g. help screens)*

The three states:



File lifecycle:



Commands you will need to use for Exercise 1...

`git init`	*Create a new local repository in current directory*
`git status`	*See changes in working directory*
`git add -A`	*Add all files to staging area*
`git commit -m"commit message"`	*Commit staged files to repository*
`git log`	*Show all commits*

New commands you will need for Exercise 2…

`git checkout -b branch_name`	*Create a new branch and switch to it*
`git checkout branch_name`	*Switch to an existing branch*
`git branch`	*List all branches*
`git branch -D branch_name`	*Delete a branch*
`git merge branch_name`	*Merge the specified branch into your current HEAD*
`gitk &`	*Open a graphical view of the repository*

New commands for Exercise 3…

`git reset --hard`	*Undo changes in working directory*
`git reset --hard HEAD~1`	*Go back one commit*
`git mergetool`	*Open the merge tool you have configured git to use*
`git whatchanged`	*See what files changed in all commits (or specify a commit by providing it's SHA hash)*
`git diff`	*See what changed inside files in working directory (or specify a commit)*
`git clean -f`	*Remove untracked files from working directory*

New commands for Exercise 4…

`git clone remote_location`	Clone a copy of the remote repository to your local disk
`git push remote_name branch_name`	Push specified branch to remote repository
`git remote -v`	List currently referenced remote repositories (use –v for verbose information)
`git fetch remote_name`	Fetch all changes on remote repository into local repository
`git branch -r`	List branches on remote repository that have been 'fetched'

Remote repository to play with:

https://github.com/DrivenSoftware/GitCourseDemo