

# Git 101

## Initialising

1. First create a repository on github.com
2. From the folder you wish to add to your repository, run `git init`
3. Add all files using `git add .`
4. Check the status with `git status`, this will show the files in the repository in green
5. Commit with `git commit -am "initial version"`
6. Link to your repository with `git remote add origin https://github.com/USERNAME/PROJECT.git`
7. Push to the online repository with `git push -u origin master`
8. To clone the repo use: `git clone https://https://github.com/USERNAME/PROJECT.git`

## Workflow

<code>git pull</code>	Pull changes
<code>...</code>	Do some work
<code>...</code>	Get project into working state
<code>git status</code>	see what's changed
<code>\$ git add X</code>	track new files
<code>...</code>	edit .gitignore to ignore files
<code>\$ git commit -am "..."</code>	(take a snapshot)
<code>git push</code>	Push changes

## Branching

Branches allow changes to be made to the existing codebase whilst keeping the default (`master`) branch unchanged. This is ideal for feature additions and code rewrites.

```
git checkout -b newbranchname
git commit -am "..."
```

`git push --set-upstream origin newbranchname`

## Zipping

To zip the current snapshot use: `git archive master -o project.zip`

## Committing

After a `commit`, `status` should return nothing.

The `-a` option says to commit all the changes and additions you have made. The `-m` option says to include a one-line message describing the changes made since the last commit.