

git Tutorial

What is git?

Git is an open source version control system. Version Control is the time machine equivalent for programmers. If you use git you will have a so called local repository on your machine and one remote repository which is on some server. In our case it is hosted on github.com

How is the workflow on git?

You will always work on the local copy of your files. If you do a 'git commit' it means you are checking in the current version of your files. If you want to add files to the repository you need to do a 'git add'. All these operations can be done with GitX which we already downloaded. GitX is a graphical interface for the terminal commands.

To update/sync with the server you will need to push your code. For that you need to do a 'git push origin master'.

Which commands do we need?

If you use GitX to add and commit you will just need two commands:

- git pull origin master (update from the server)
- git push origin master (push your version to the server)

What do I need to do when vim opens up or I need to merge?

Git will ask you for a merge when the server version of your repository differs from the local version. If student 1 uploaded new files and student 2 doesn't have them on their machine this will happen. You will basically just have to type this when in vim (terminal editor program which automatically opens up when a merge conflict appears):

```
:wq
```

Order of operations

1. When you want to check in new code you need to first go to the Terminal APP and cd to your IDM folder. Then do a:

- `git pull origin master`

2. Open up GitX (go to commit view) and then the IDM folder in GitX

- stage your changes (move them from the left to the right box)
- write a commit message and type commit

3. Go back to the terminal and your IDM folder. Then type

- `git push origin master`