

GIT

MasterClass

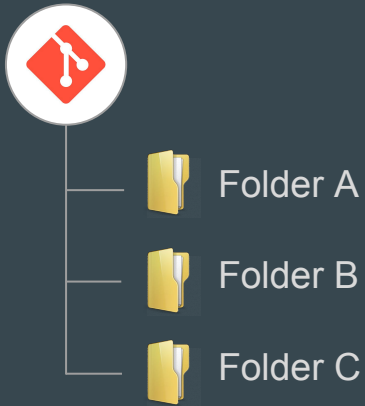
...

Submodules & Subtrees

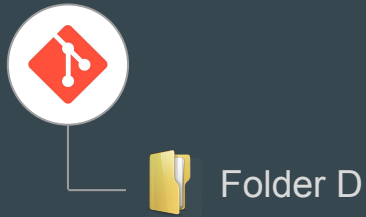
DRY - KISS

Submodules

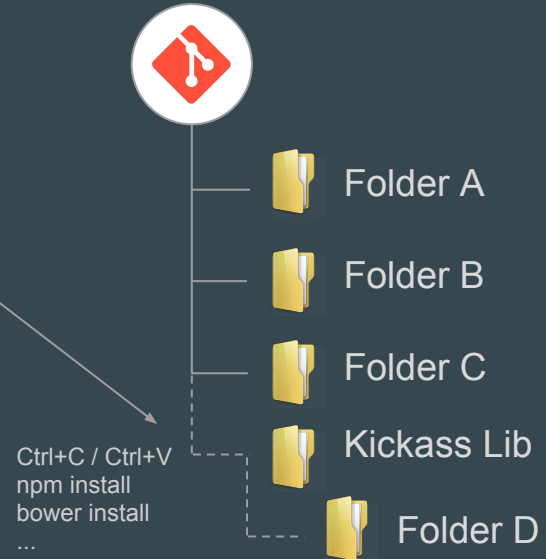
GIT REPO 1.
Wonderfull Project



GIT REPO 2.
Kickass Lib



GIT REPO 1.
Wonderfull Project



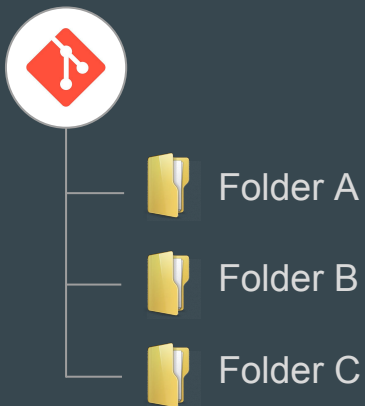
But Wait...

- Updating “Kickass Lib” while in “Wonderfull project” ?
 - Changing repository to “Kickass Lib”
 - Doing something
 - Save
 - Publish
 - Changing repository to “Wonderfull Project”
 - Updating
 - Test
 - If (you’re a good developper) Job Done !
 - Else Repeat.

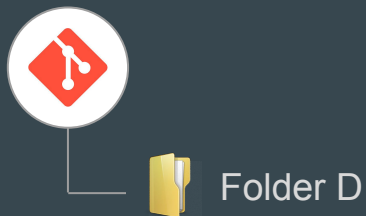
Solution => Submodule

Submodules

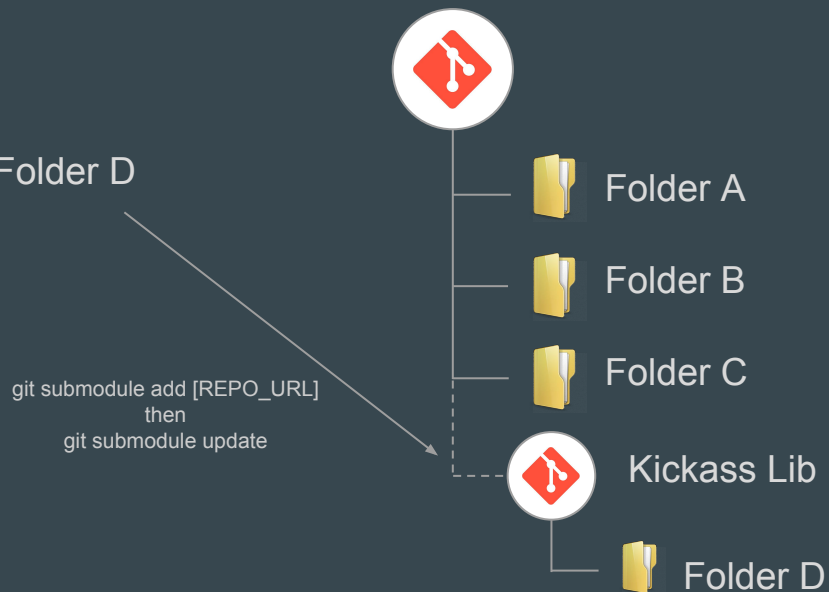
GIT REPO 1.
Wonderfull Project



GIT REPO 2.
Kickass Lib



GIT REPO 1.
Wonderfull Project



And then...

- Updating “Kickass Lib” while in “Wonderfull project” ?
 - Changing directory to “Kickass Lib”
 - Doing something
 - Save
 - Test
 - If (you’re a good developer)
 - Push Repository
 - Else Repeat.

**Very less PITA in fact...
but...**



DANGER

One fit them all ?! Hu... No... Clearly not.

- You must limit yourself to few (one) submodule
- You loose log visibility of submodule
- Very hard workflow when mixed with git-flow
- Headaches when using multiple remote
- All is breaking easily and badly

**When misused,
submodules will burn your house down.**

So when should I use it ?

- Sub-project or library almost dedicated to the main project
- Heavy library development in correlation of the main project
- You are sharing the project and the sub-project together.

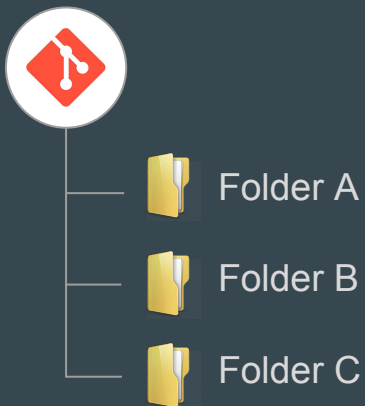
Subtrees



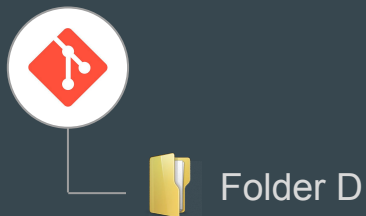
Strategy over tools

Subtrees

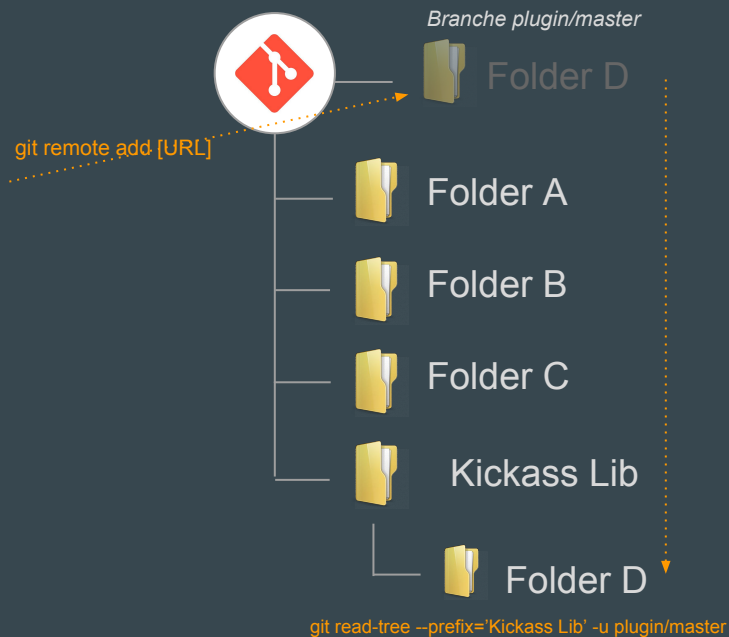
GIT REPO 1.
Wonderfull Project



GIT REPO 2.
Kickass Lib



GIT REPO 1.
Wonderfull Project



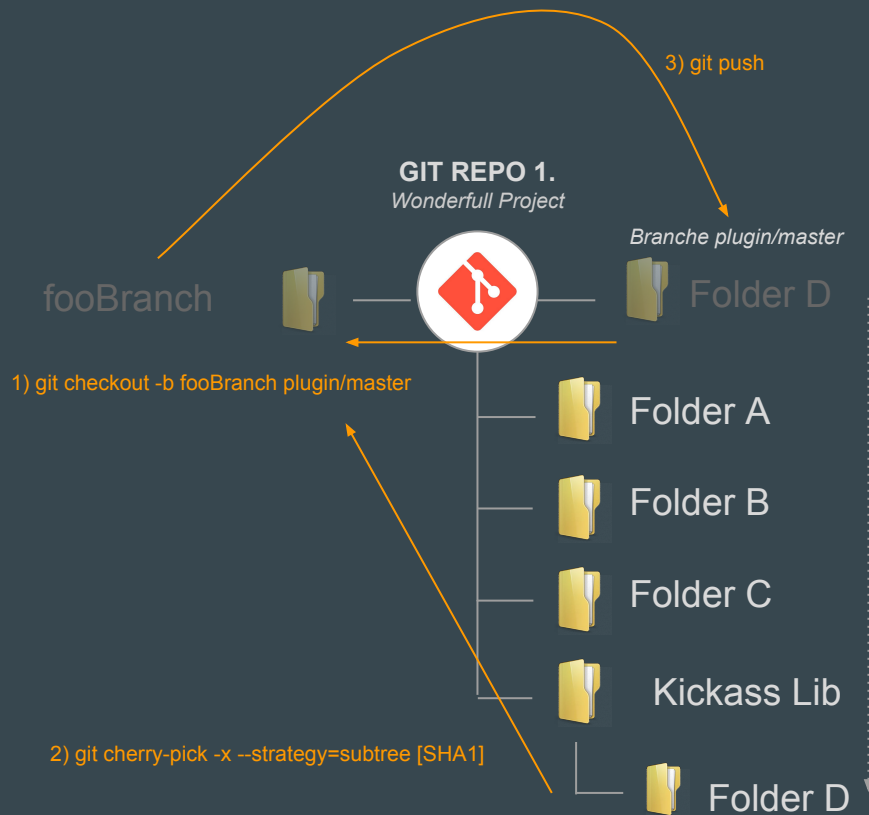
Updating "Folder D"

```
git fetch plugin
git merge -s subtree --squash plugin/master --allow-unrelated-histories
```

Benefits

- You can alter/commit over the other branch
- “submodule updates” not needed anymore ! Teamates are always up to date.
- Commit everything in one commit (but you’ll be a nasty boy if you do that)
- Choose what “plugin” commit you want in your repo
- “Safer” if used with roles
- Almost easy to update

Subtrees



Credits

<http://somethingsinistral.net/blog/git-submodules-are-probably-not-the-answer/>