



git 101

git for everyday use cases

**How much do you rate yourself in git?
(1-5)**

Keep the answer to yourself.



What & Why git?

We won't cover that here.



What do we cover in this talk?

- What to do before cloning a repo?
- How Not to clone a repo?
- How to clone a repo?
- What to do after we clone a repo?
- How to update forked repo?
- How to update local?
- How to update upstream?
- Branching related stuff
- Stashing related stuff
- How to commit?
- How to revert commits?



BAE... before anything else...

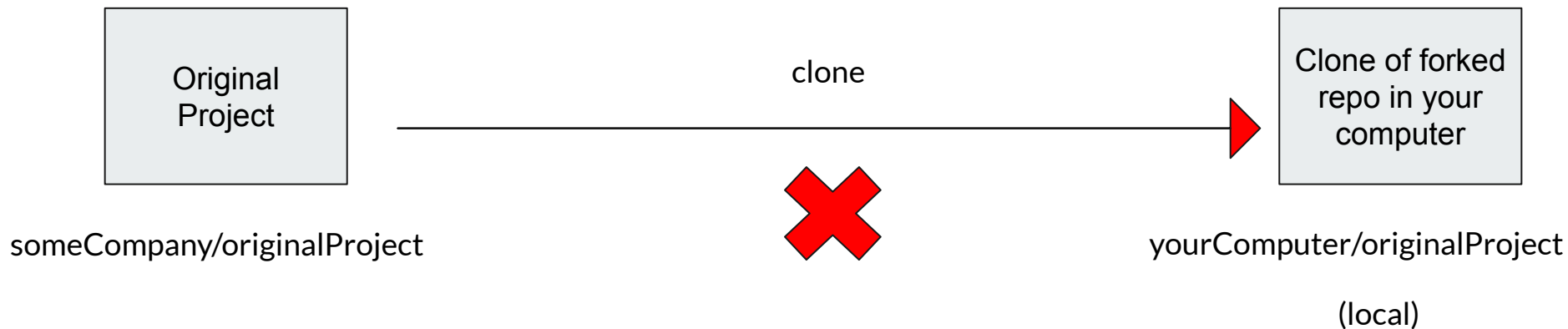
```
git config --global user.name "Manav Garg"
```

sets your username for git, it'll come up in your commits

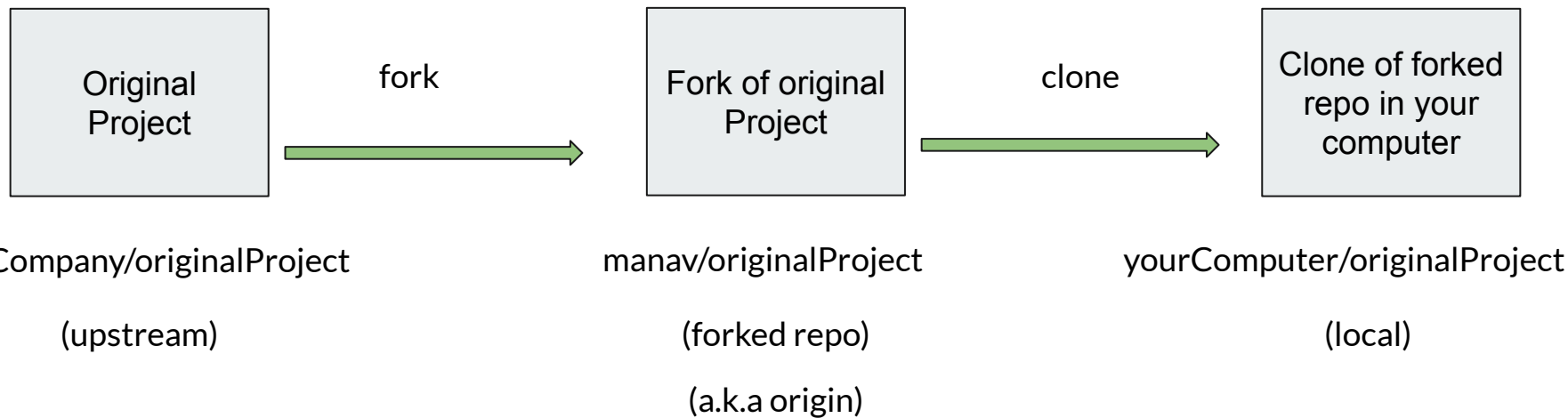
```
git config --global user.email "manav.garg@karkinos.in"
```

sets your email for git, it'll come up in your commits

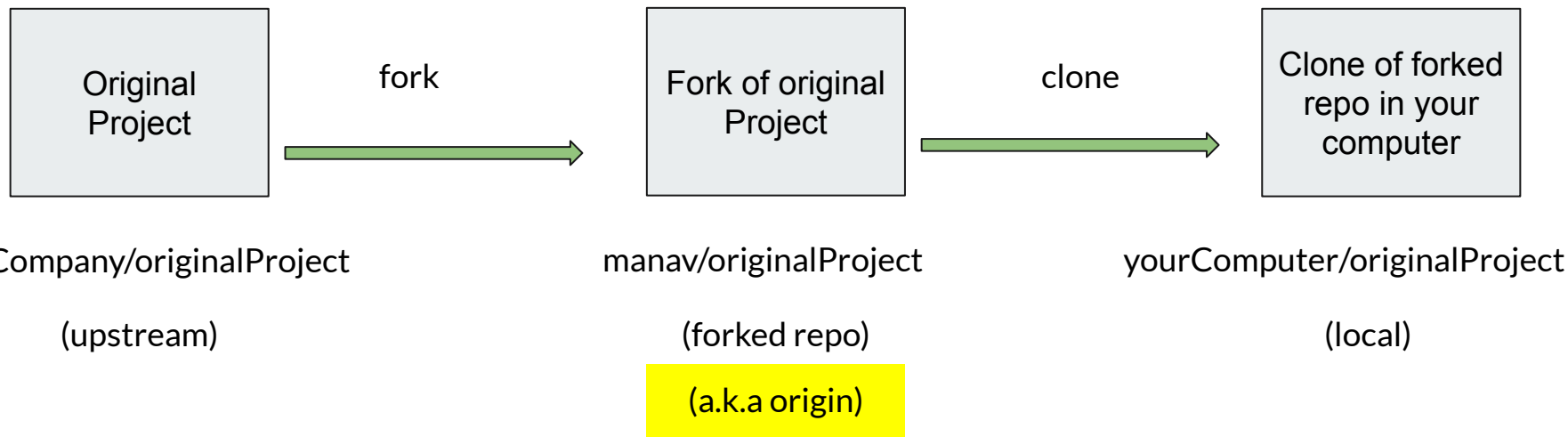
How NOT To Clone A Repo?



How To Clone A Repo?



How To Clone A Repo?





What to do after you clone your repo?

```
git remote -v
```

shows your remote repos - origin

```
git remote add upstream <original project url>
```

adds original projects url to remote repos

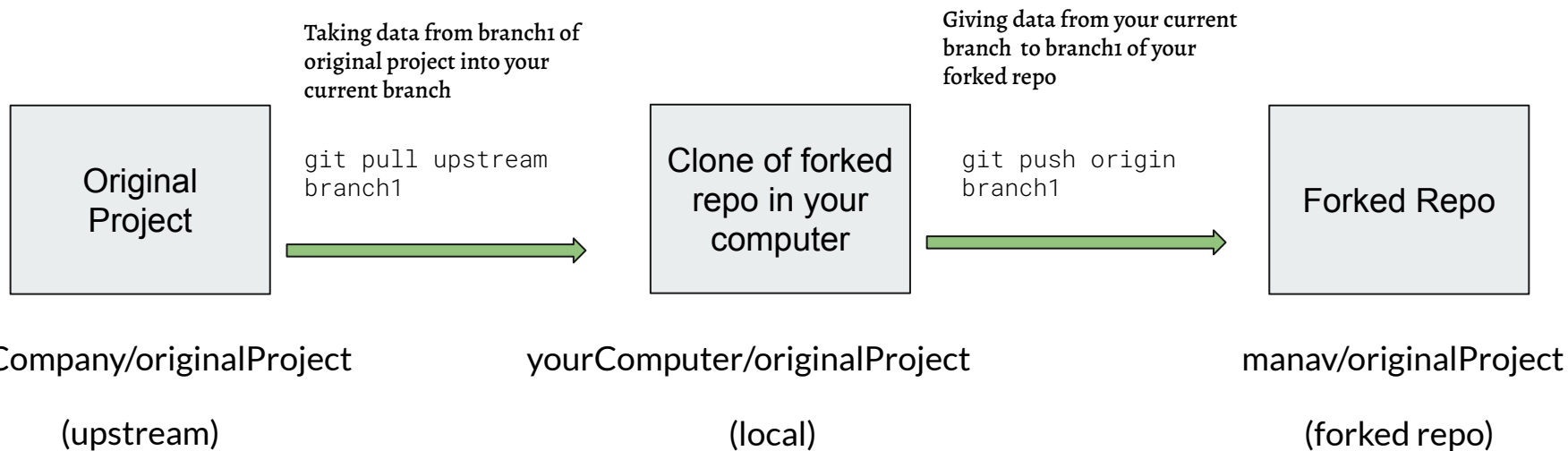
```
git remote -v
```

shows your remote repos - origin, upstream

```
git checkout -track origin/branch1
```

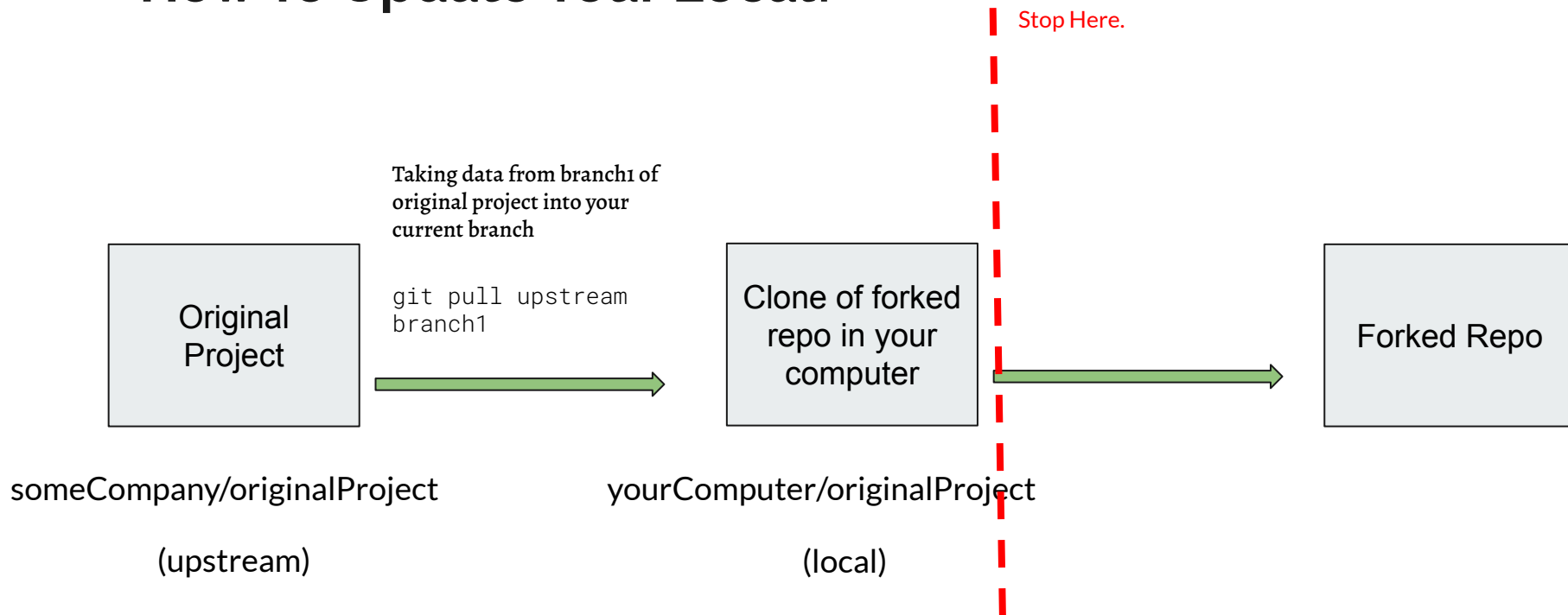
downloads branch1 from origin to local and sets it as current branch

How To Update Your Forked Repo?





How To Update Your Local?





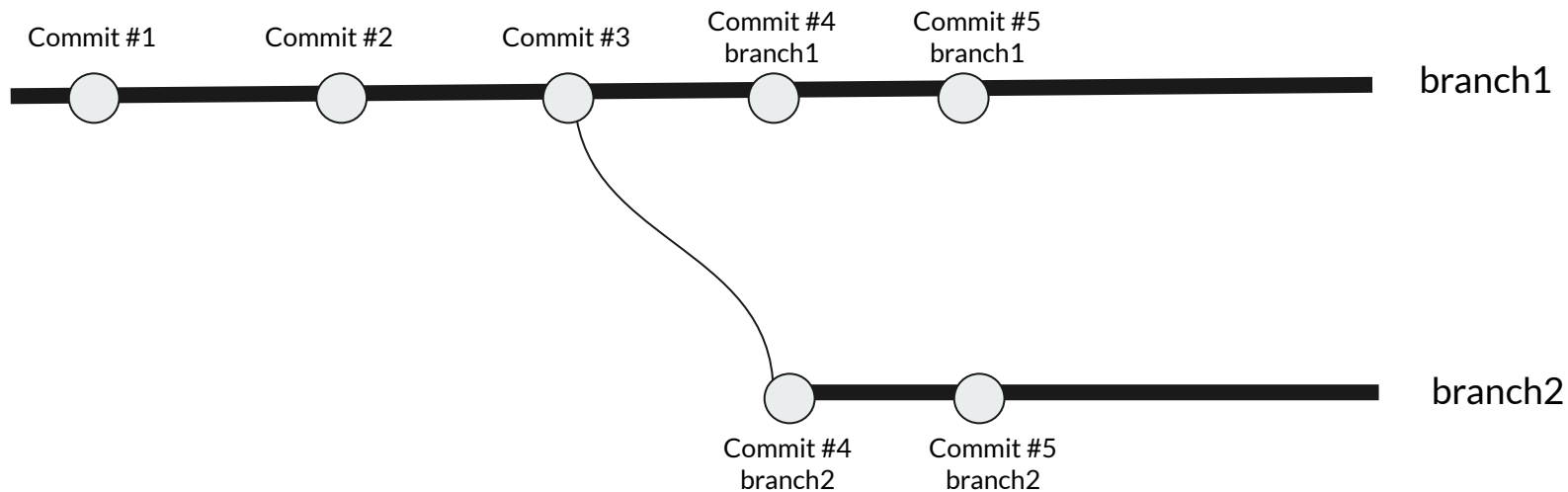
How to update your upstream?




How to update your upstream?

Create a merge request from your forked repo.

What's a branch?





How to pull a new branch from upstream?

```
git fetch upstream  
git checkout -track upstream/branch2
```

How to push a new branch to origin?

```
git push -u origin branch2
```

**error: Your local changes to the
following files would be
overwritten...**

**...Please commit your changes or
stash them before...**

Aborting



What does this error means?



What does this error means?

There are unsaved changes in your local, save them before making any changes, (please).



What does this error means?

There are unsaved changes in your local, save them before making any changes, (please).

Stash



How to stash your changes?

```
git stash
```

```
# temporarily moves your unsaved changes  
from current branch to a separate memory
```

How to un-stash your changes?

```
git stash pop
```

```
# moves your unsaved changes from separate  
memory to current branch
```



How to remove all unsaved changes?

```
git reset --hard
```

returns your branch to last commit



How to Commit?

Not for people who have commitment issues.



Changed files

main.dart

folder1/file1.dart

folder2/file2.dart

folder3/file3.dart

folder3/file3.dart

Add files

```
git add *
```

adds all changed files to commit

```
git add .
```

adds all changed files to commit

```
git add folder1/file1.dart folder2/file2.dart
```

adds only two files to commit



Commit

```
git commit -m "my commit message"
```




Oops! I committed something awful...

```
git reset HEAD~
```

```
# undos last commit
```

**How much do you rate yourself in git?
(1-5)**

Keep the answer to yourself.

Where do you go from here?

—

For practising and understanding: <https://learngitbranching.js.org/>

For looking things up: <https://git-scm.com/docs/gittutorial>

For understanding more basics: <https://rogerdudler.github.io/git-guide/>

Something interesting: <http://think-like-a-git.net/>

Where do you go from here?
