Dealing with non-fast-forward errors

Sometimes, Git can't make your change to a remote repository without losing commits. When this happens, your push is refused.

If another person has pushed to the same branch as you, Git won't be able to push your changes:

git push origin master

To https://github.com/*USERNAME*/*REPOSITORY*.git

! [rejected] master -> master (non-fast-forward)

error: failed to push some refs to 'https://github.com/*USERNAME*/*REPOSITORY*.git'

To prevent you from losing history, non-fast-forward updates were rejected

Merge the remote changes (e.g. 'git pull') before pushing again. See the

'Note about fast-forwards' section of 'git push --help' for details.

You can fix this by [fetching and merging](https://help.github.com/articles/fetching-a-remote) the changes made on the remote branch with the changes that you have made locally:

git fetch origin

# Fetches updates made to an online repository

git merge origin *YOUR\_BRANCH\_NAME*

# Merges updates made online with your local work

Or, you can simply use git pull to perform both commands at once:

git pull origin *YOUR\_BRANCH\_NAME*

# Grabs online updates and merges them with your local work

As the error message says: git pull before you try to git push. Apparently your local branch is out of sync with your tracking branch.

Depending on project rules and your workflow you might also want to use git pull --rebase

