### COMP1531 K Coding Together - Git - Undo Lecture 9.4

Author(s): Hayden Smith



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# In This Lecture

- Why? 🤔
  - Sometimes we make mistakes using git, and we need methods to be able to resolve them (carefully)

#### • What?

- Doing a hard reset to a point in time
- Altering the git history
- Amending a commit

# Mistakes

- Everything we've done until this point continues to build on the git history. But we've largely considered the git history immutable.
- With git, sometimes we make mistakes. Sometimes we want to undo things, or change history.
- Two ways we're going to discuss this are:
  - git resets
  - git commit amend

# Git Reset

Atlassian has a very clear article about git reset. We will use this as guidance. We will mainly discuss hard and soft resets through a demonstration.

## Git Reset

#### git reset --hard [hash]

Sets all of your code to a specific commit **hash**. This is used for saying "I want to go back in time, and I don't care about anything that's happened since that point I'm going back to."

### Git Reset

#### git reset --soft [hash]

Keeps all of your current code the same, but just changes what commit you're pointing to (i.e. point to a new **hash**). This is used for saying "I like the code I have, so let's not change anything, but I want to alter the history of commits that got me here."

# Git Commit --Amend

git commit --amend -m "Commit"

- Sometimes we need to update our previous commit name. We can do that easily by making another commit that over-rides it.
- The - amend flag will make the commit, but it will replace the most recent commit with the new commit instead of adding another commit to the history
- Let's do a demonstration.





Or go to the form here.