# COMP1531

- Teamwork
- 9.3 Git Resets & Amending

### In this lecture

### Why?

 Sometimes we make mistakes using git, and we need tools 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 --hard [hash]

Sets all of your code to a specific commit. 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 --soft [hash]

Keeps all of your current code the same, but just changes what commit you're pointing to. 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.

## Feedback

