

# Version control

- Bigger projects have many files to track, with variants to be used for different versions, different platforms
- “version control” refers to techniques for keeping them all organized and accessible
- Lots of version control tools available, at lots of price points
- We’ll be using git (will discuss in later session)

# Common version control actions

- Set up a new repository (repo) – a collection of files to be placed under version control
- Add/change/remove files in repo, “commit” alterations we decide to keep
- Create a new snapshot (checkpoint), remembering what every file in repo looks like right now
- Search for an earlier snapshot, possibly by name, date, id number, etc
- Compare what changed between one snapshot and another
- Control/coordinate file access between multiple programmers

# Branching and merging

- Sometimes want to take existing code base and create a new variant (e.g. we have a windows version, we want to create a linux variant)
- We create a branch – a new copy of the previous version, allows us to change both versions independently
- Can switch between branches to work on one or other
- Can also merge branches together into single branch