

# **Introduction to git and version control**

by Dan Prince

# What is version control?

*“Version control is a system that records changes to a file or set of files over time so that you can recall specific versions later.”*

<https://git-scm.com/book/en/v2/Getting-Started-About-Version-Control>

- version control is a standard tool for software developers
- users commit changes after new fixes or features are created
- code “repositories” are saved on centralized servers
- many users can communicate and synchronize work through the use of

# What is git?

git is a *distributed* version control system

- all users contain the history of *every single* commit of the codebase
- allows for flexible workflows, server not required

# Why should I use version control?

*“Have you ever:*

- *Made a change to code, realised it was a mistake and wanted to revert back?*
- *Lost code or had a backup that was too old?*
- *Had to maintain multiple versions of a product?*
- *Wanted to see the difference between two (or more) versions of your code?*
- *Wanted to prove that a particular change broke or fixed a piece of code?*
- *Wanted to review the history of some code?*
- *Wanted to submit a change to someone else's code?*
- *Wanted to share your code, or let other people work on your code?*
- *Wanted to see how much work is being done, and where, when and by whom?*
- *Wanted to experiment with a new feature without interfering with working code?*

*In these cases, and no doubt others, a version control system should make your life easier.”* <http://stackoverflow.com/questions/1408450/why-should-i-use-version-control>

**How do I use git?**

# For more information

## Pro Git

by Scott Chacon and Ben Straub

<http://git-scm.com/book/en/v2>