Understanding Version Control



Paolo Perrotta
FREELANCE DEVELOPER

@nusco

This module is optional if you already use version control

Tracking a Project's History

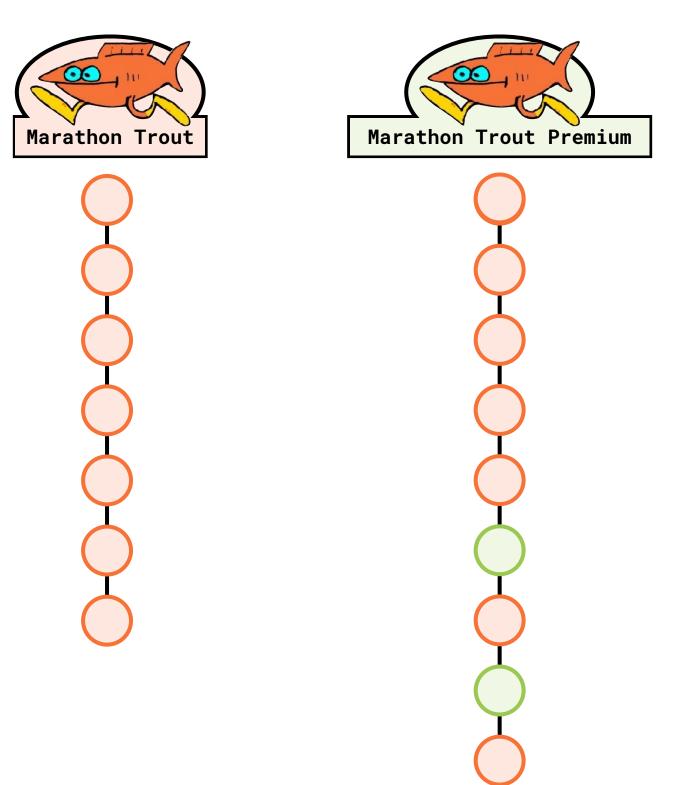
Disclaimer: version control isn't a backup

Version Control Is Useful To...

...track a project's history

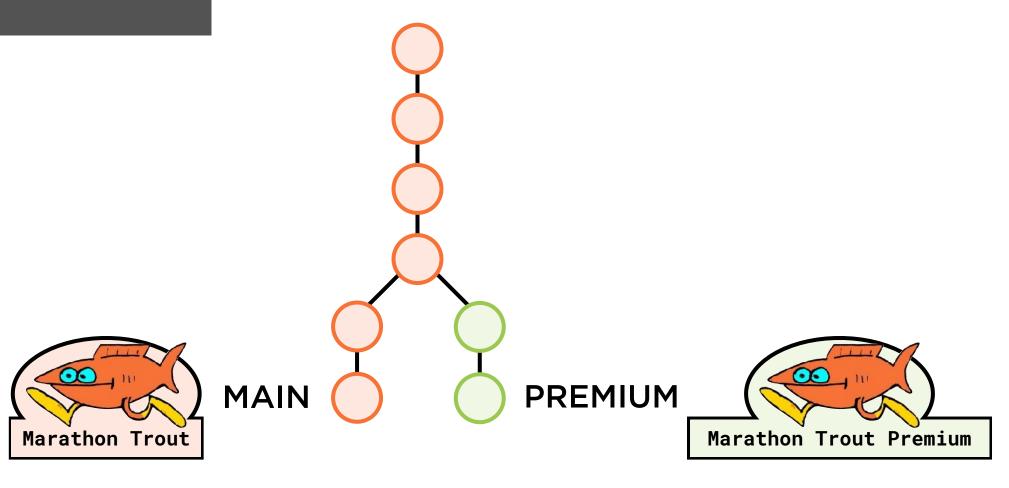
Managing Multiple Versions of a Project

The Marathon Trout App

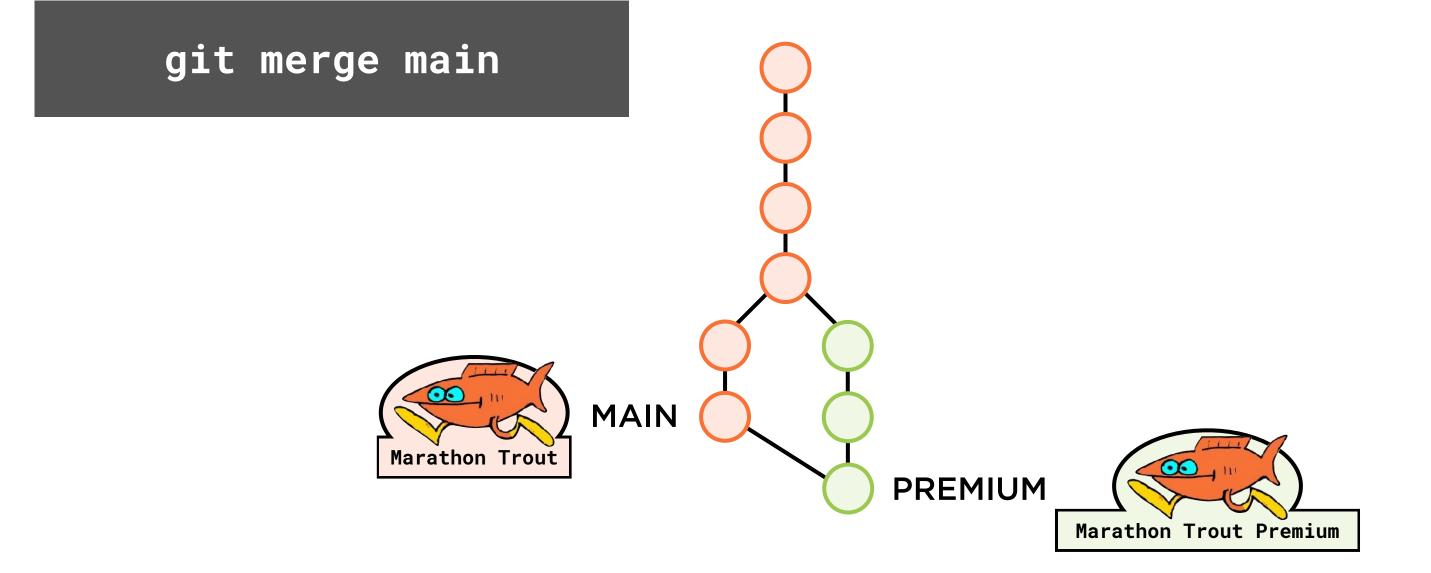


Branching

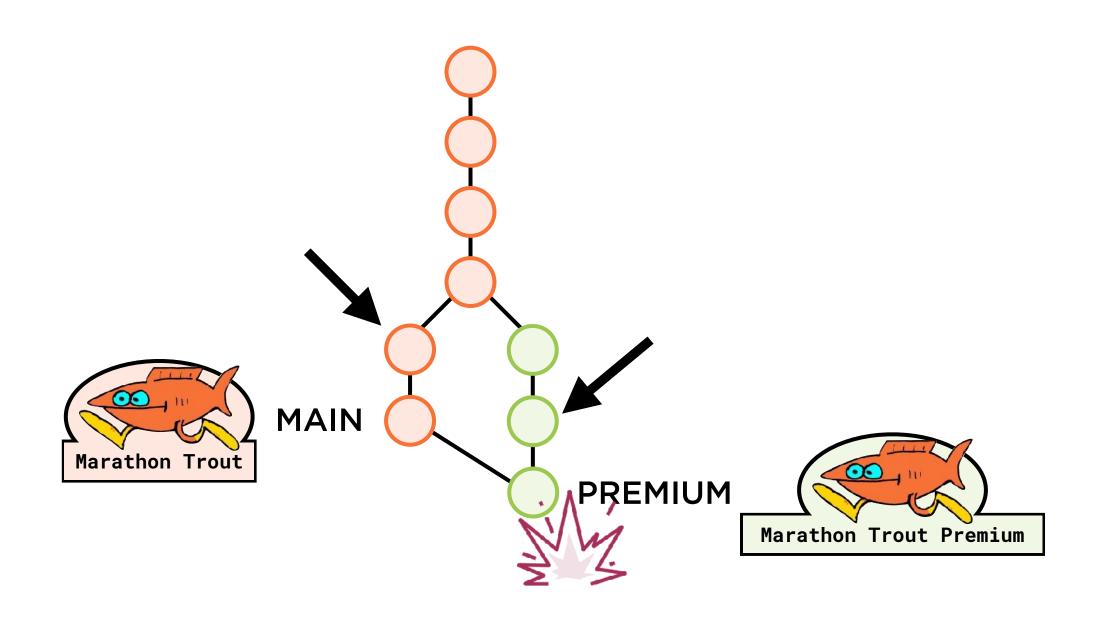
git branch premium



Merging



Conflicts



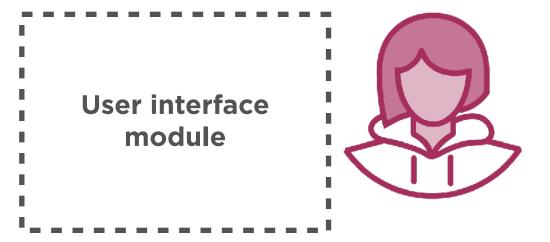
Version Control Is Useful To...

...manage multiple versions of a project

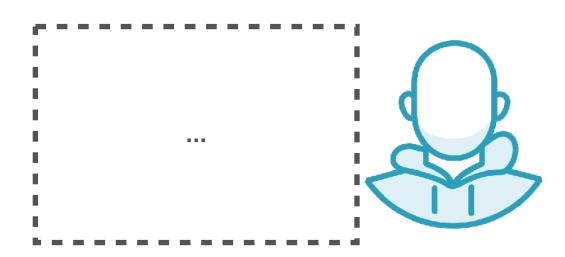
Sharing Code Amongst Developers

A Project without Version Control

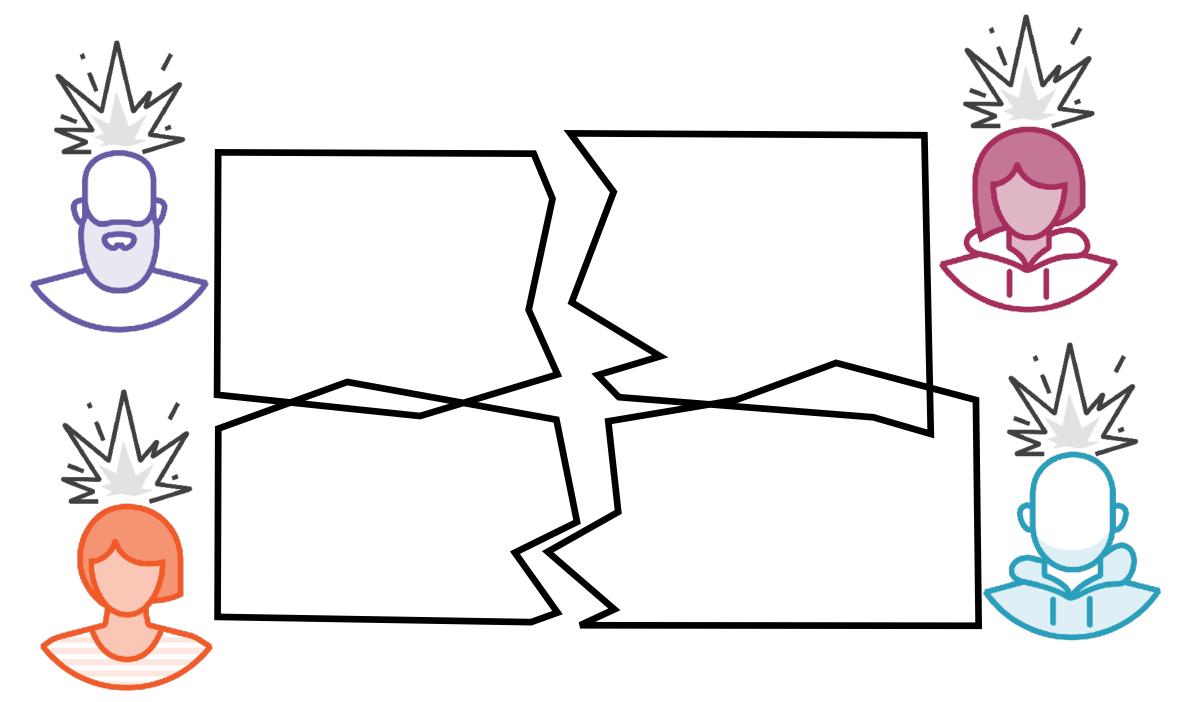




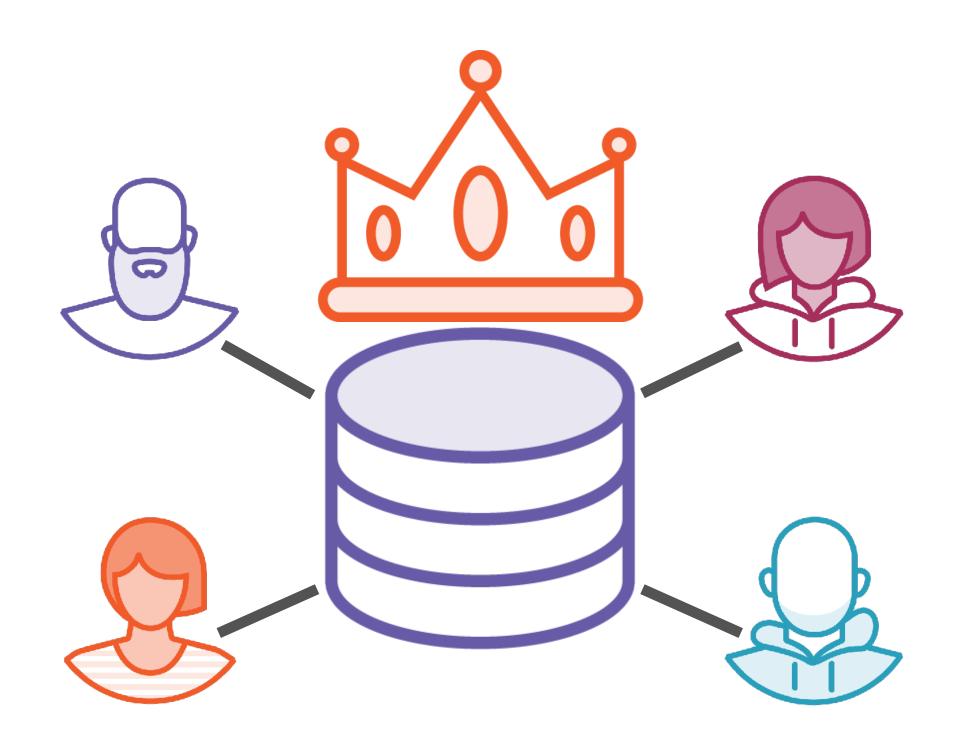




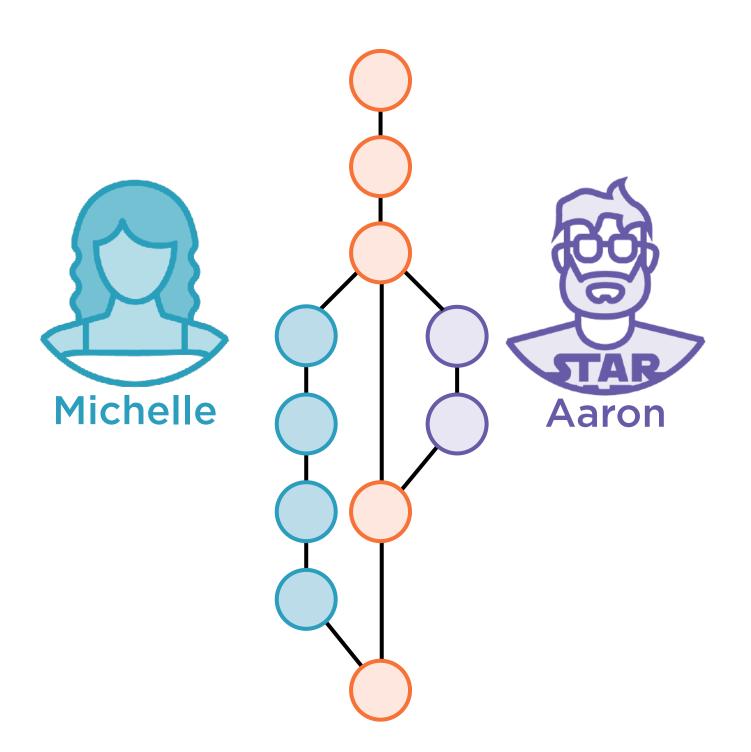
The Integration Phase



A Project with Version Control



A Project with Version Control



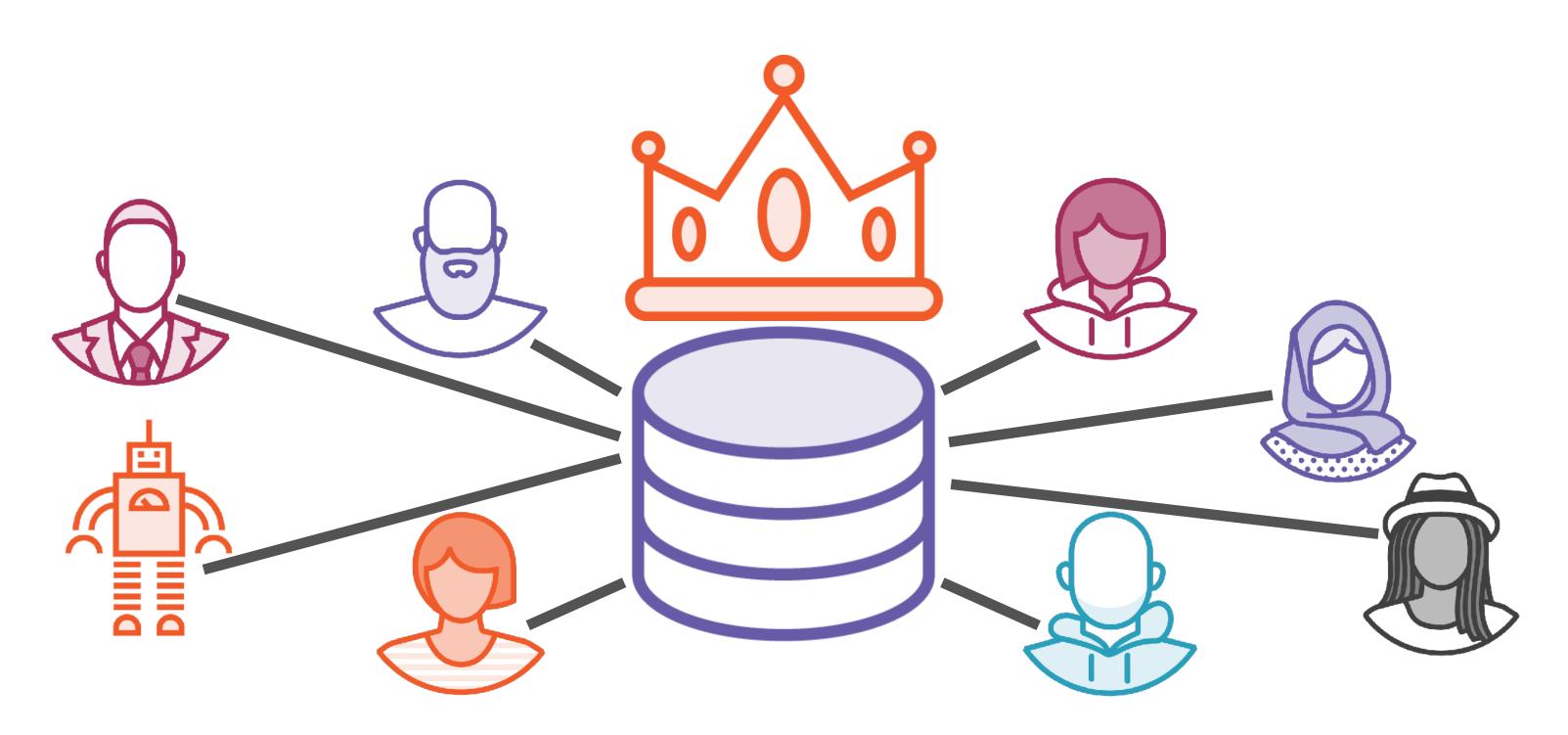
"If it hurts, do it more often."

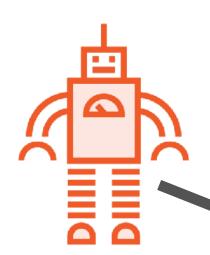
Martin Fowler

Version Control Is Useful To...

...share code amongst developers

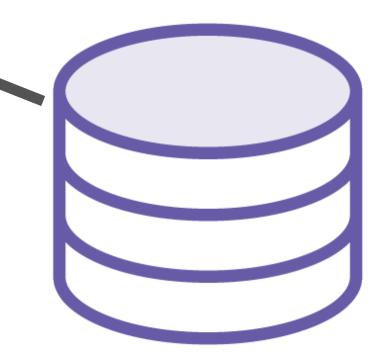
The Source of Truth



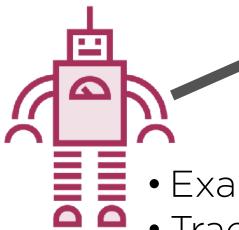


Bug Trackers

- Example: Bugzilla, Mantis
- Stores bug reports



Project Management Tools

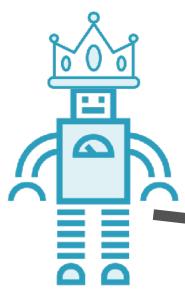


• Example: Jira

- Tracks work
- Allocates tasks



The Build Machine



- Example: Jenkins
- Builds and packages the system
- Deploys to testing
- Runs code metrics
- Runs automated tests
- Sometimes even deploys to production!

Version Control Is Useful To...

...coordinate teamwork

Summary

Tracking a project's history

- Plus time travel!

Managing multiple versions of a project

- Branching and merging

Sharing code amongst developers

Coordinating teamwork

- The center of the project for people and tools