

What is Version Control?

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Version control is a system that records/manages changes to ~~documents~~ ~~computer~~ programs etc over time. It helps us tracking changes when multiple people work on the same project



Problems before Version Control

Imagine, Developer A creates a software, and starts a company with this software.



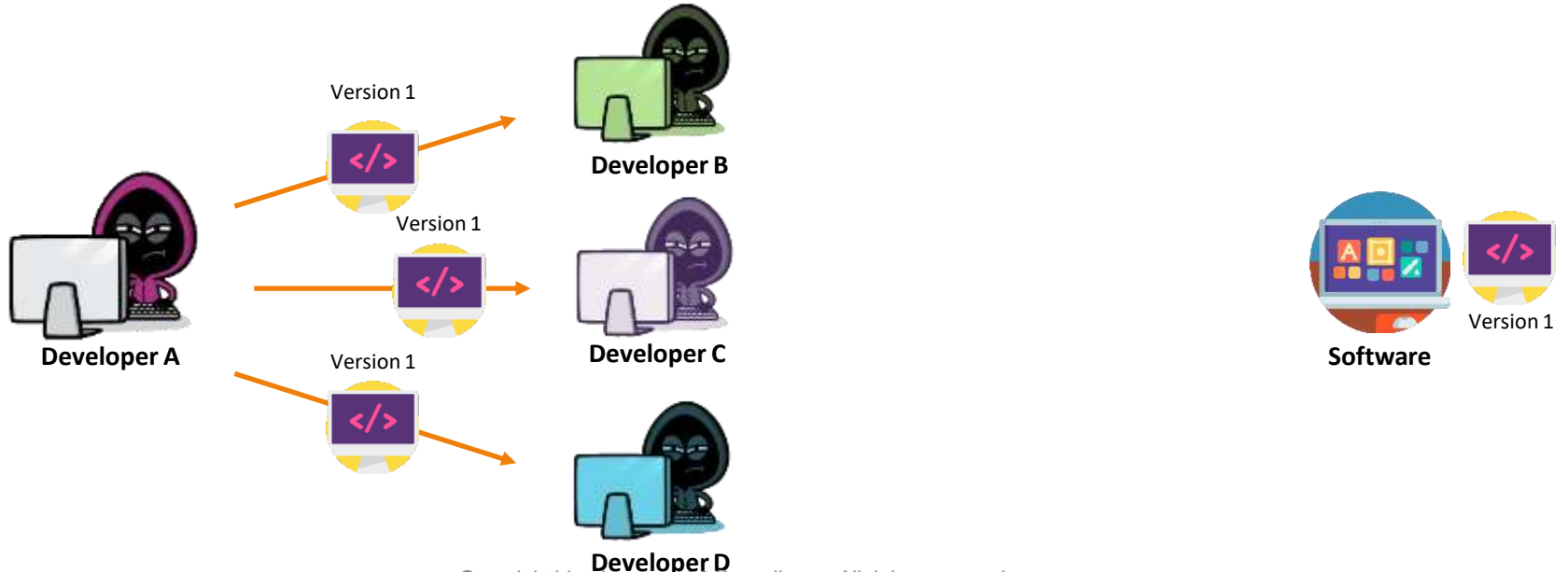
Developer A



Software

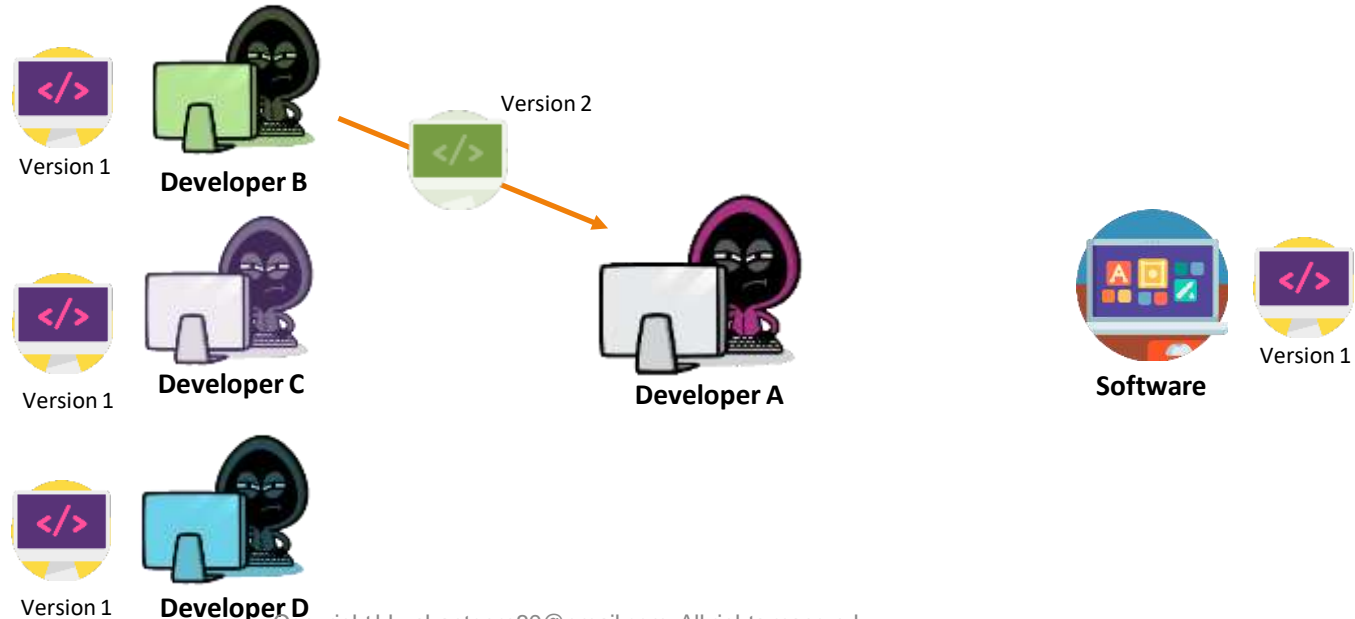
Problems before Version Control

As the company grows, Developer A hires more people to enhance the features of the software. Developer A shares the source code copy with each one of them to work on.



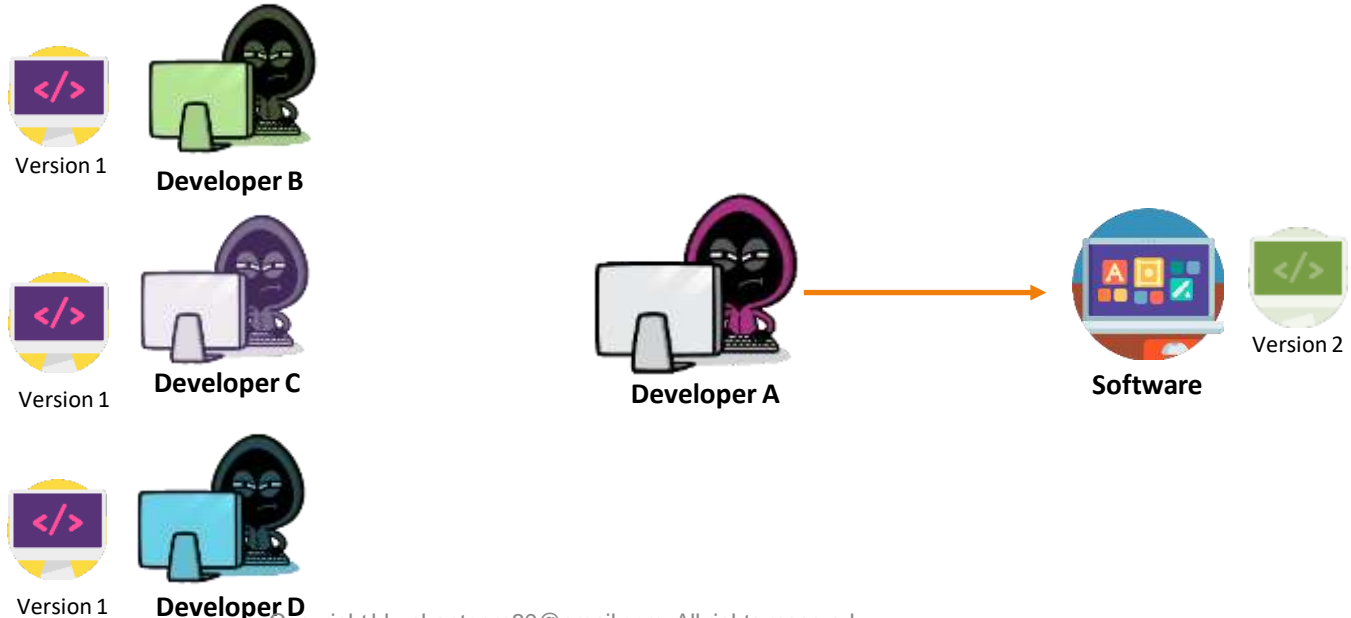
Problems before Version Control

Developer B, enhances the software with a feature and submits it to Developer A



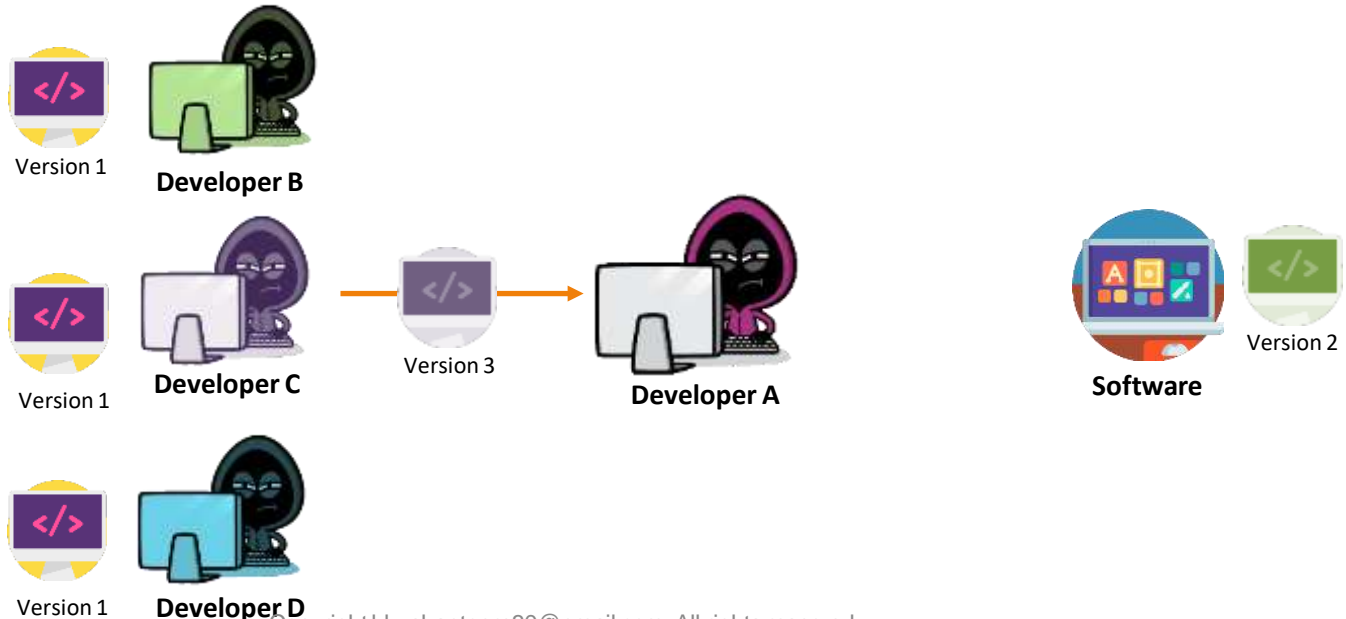
Problems before Version Control

Developer A, verifies the changes, and if all looks well, simply replaces the code of the main software



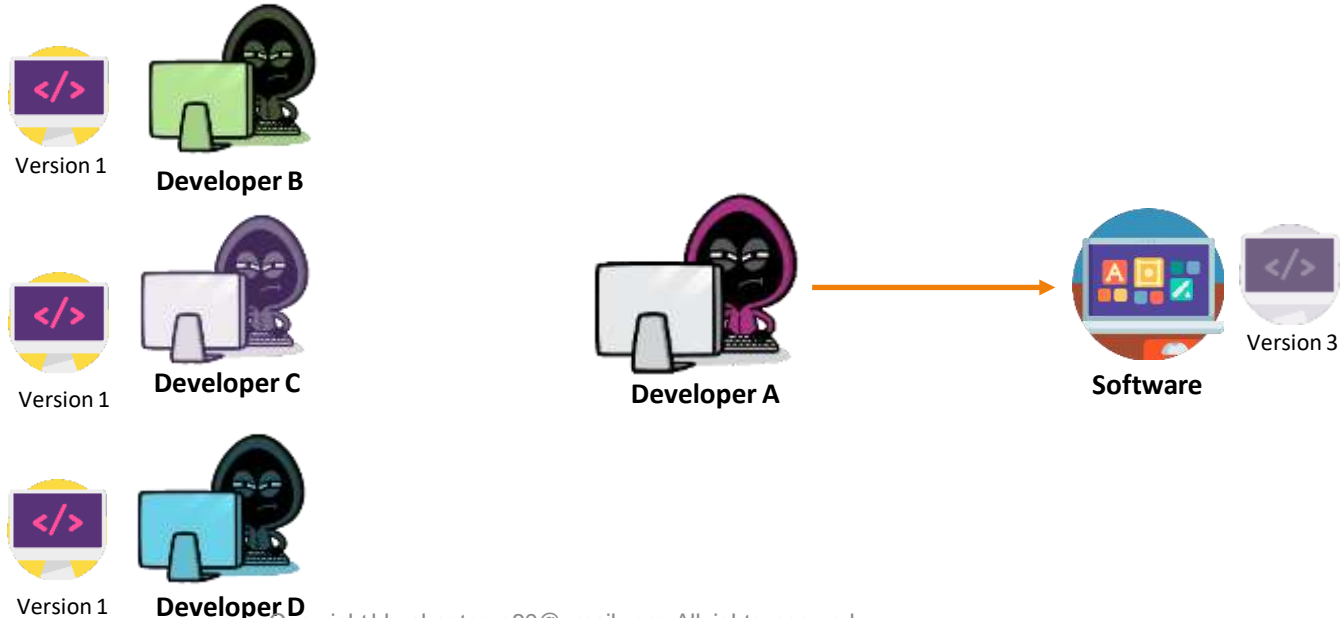
Problems before Version Control

Now, the problem starts here, Developer C also finished his work, and submits ~~to~~ ~~to~~ Developer A. But, Developer C worked on the code of Version 1.



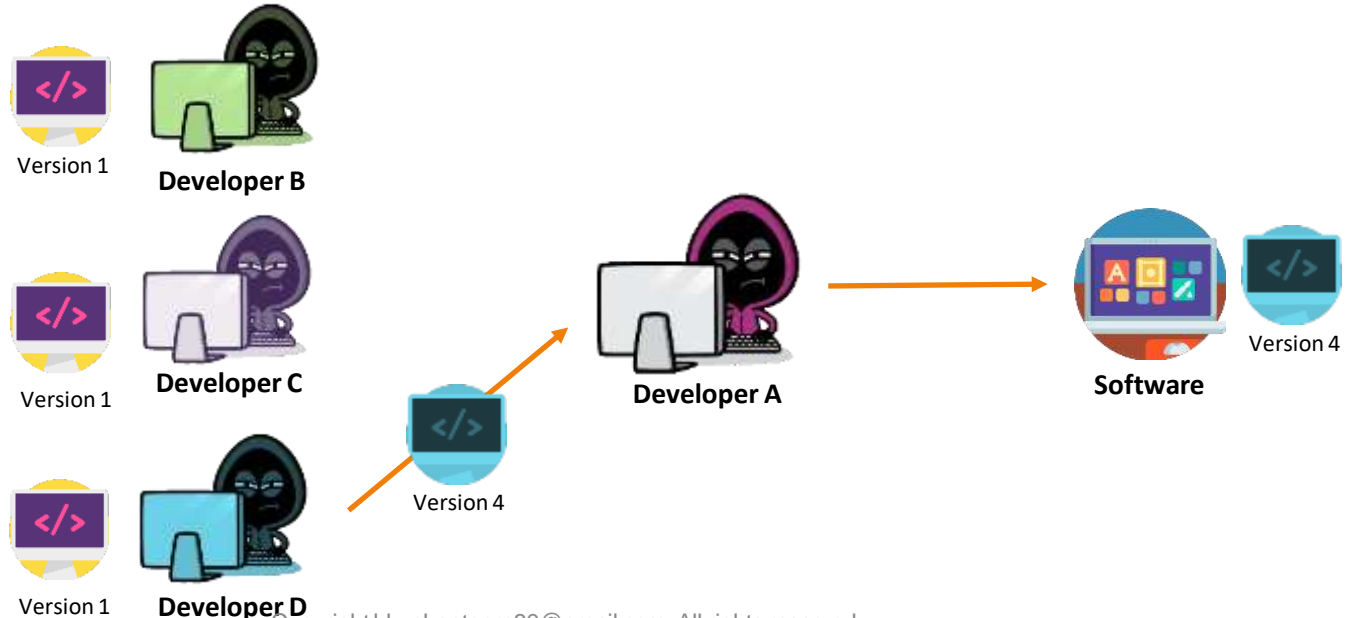
Problems before Version Control

Developer A certifies the features, takes the code changes and manually integrates them with version 2 code



Problems before Version Control

Similarly when Developer C is done with his work, submits the work to Developer A
Developer A verifies it, manually integrates the changes with Version 3



Problems before Version Control



- ❌ Versioning was manual
- ❌ Team Collaboration was assigned hectic task
- ❌ No easy access to previous version
- ❌ Modified version took lots of space

Advantages of Version Control



- ✓ Versioning is Automatic
- ✓ Team Collaboration is Simple
- ✓ Easy Access to previous version
- ✓ Only modified code is stored across different location