

# Version Control System - GIT

Presented by



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# Software Development

## Software Development

Is software development  
a single player game or  
a multi-player game?

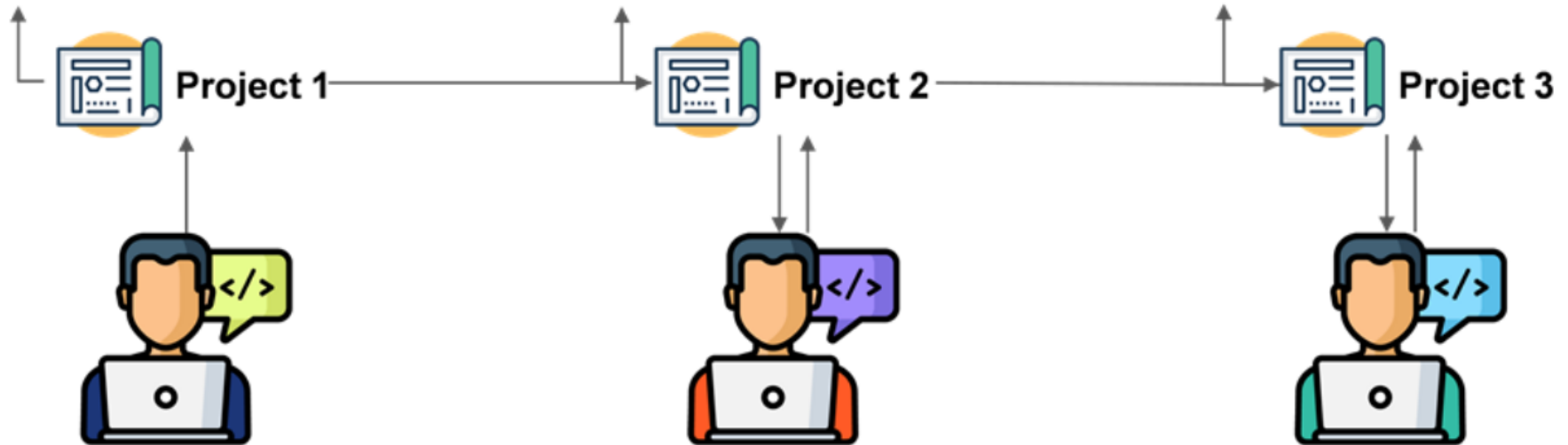


# Software Development Scenario

Jim works on a project, saves it as copy1, and sends it to Peter.

Peter makes changes to Jim's project, saves it as copy2, and sends it to Sam.

Sam makes further changes to the project and saves it as copy3.



Which is the main copy of the project?

What is the problem with this approach?

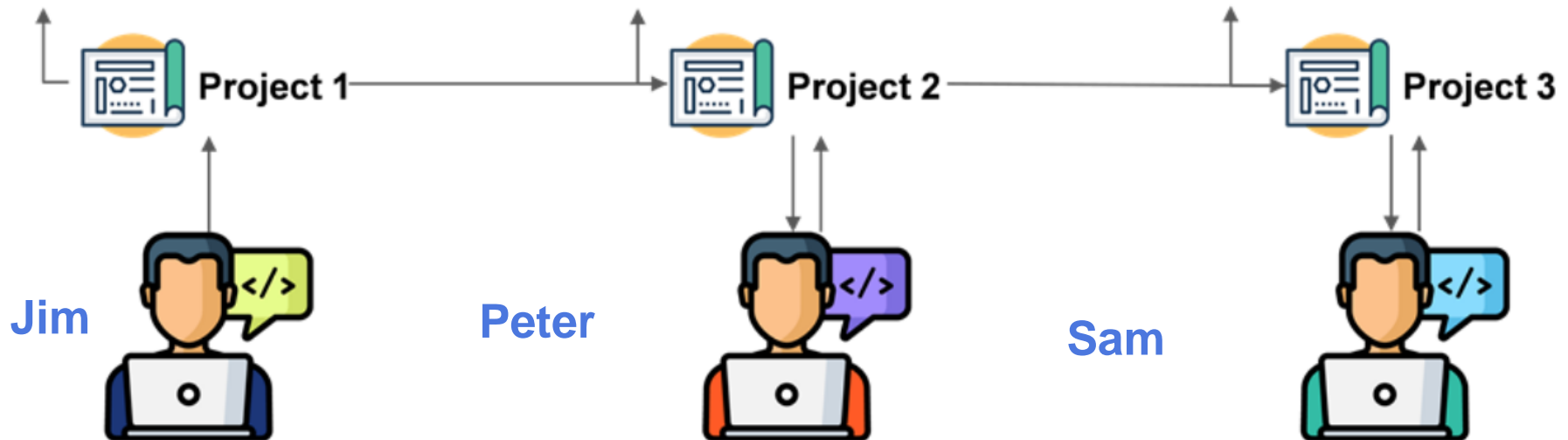
How will the changes made by all three developers get incorporated in the final copy of the project?

# Scenario - 1

Jim works on a project, saves it as copy1, and sends it to Peter.

Peter makes changes to Jim's project, saves it as copy2, and sends it to Sam.

Sam makes further changes to the project and saves it as copy3.

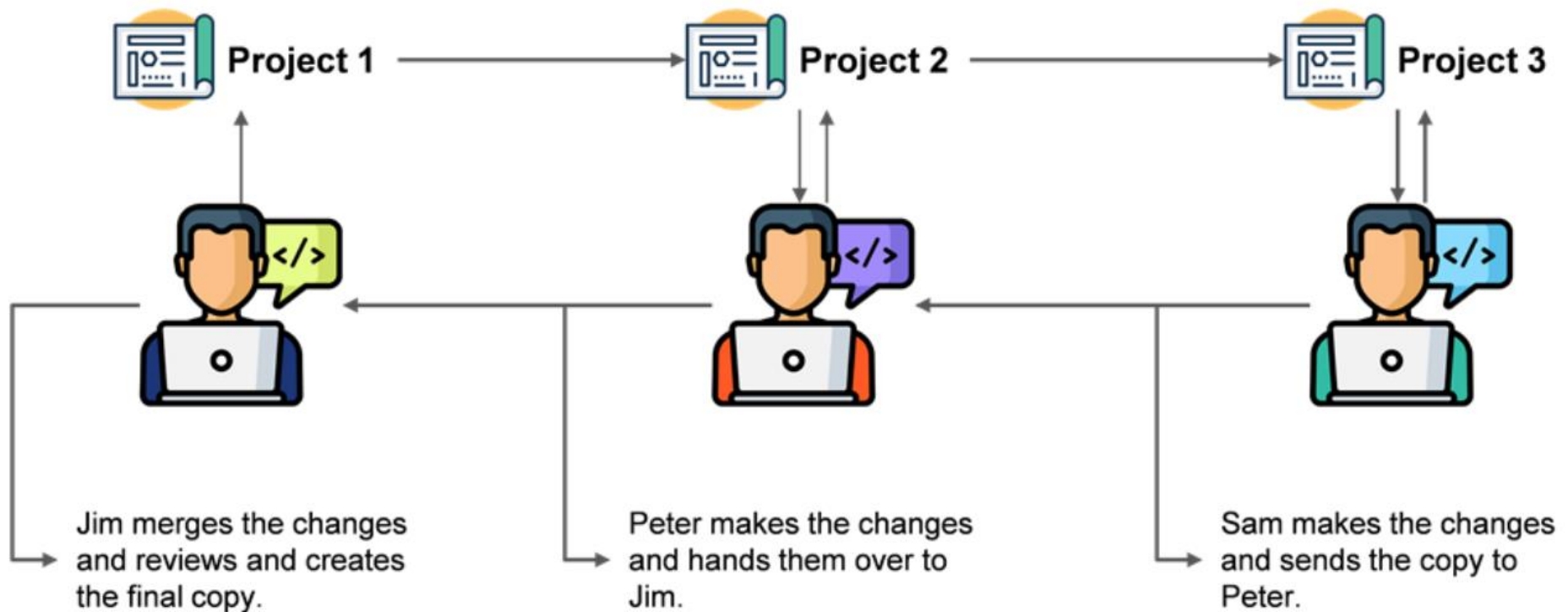


Which is the main copy of the project?

What is the problem with this approach?

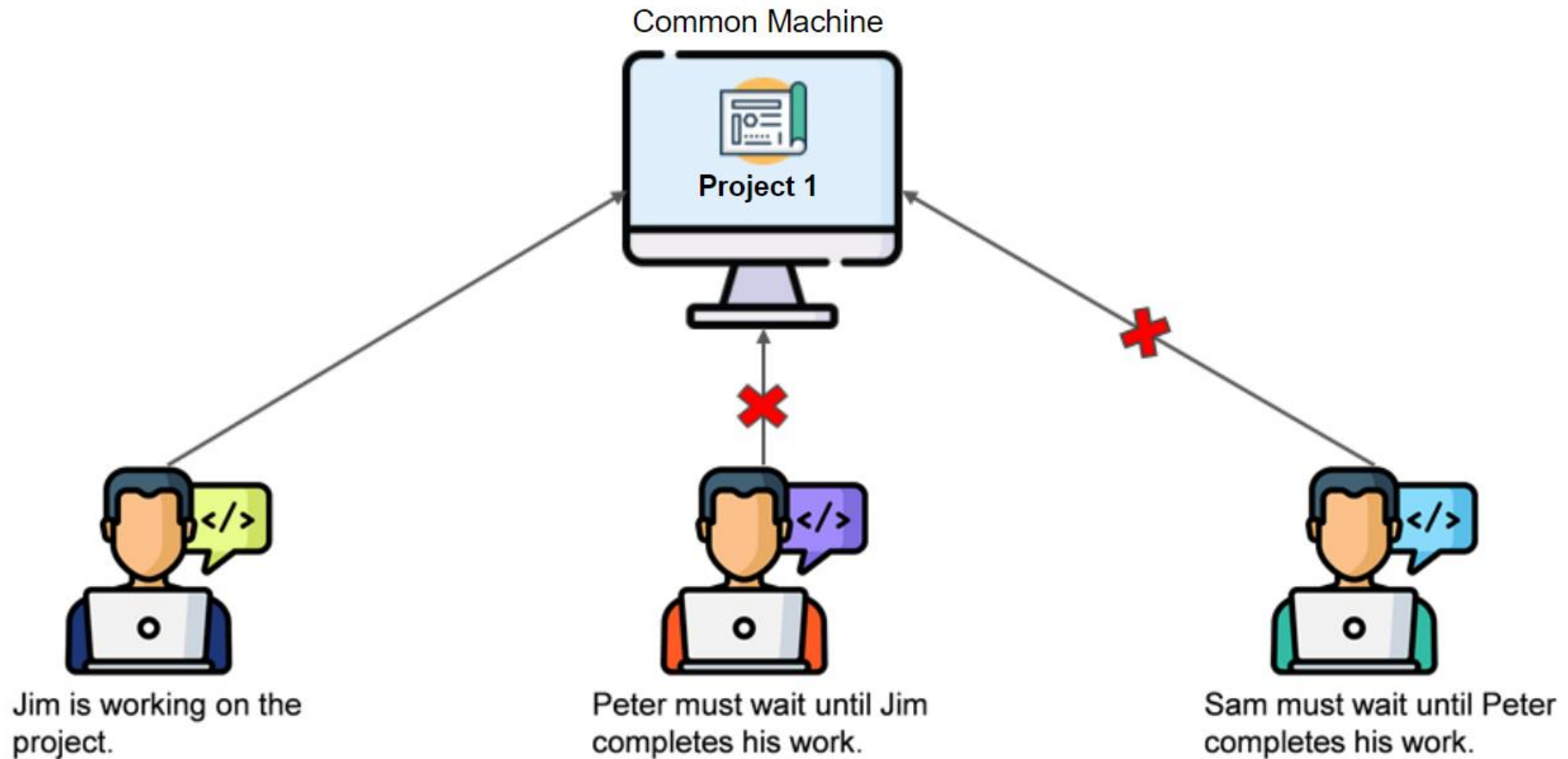
How will the changes made by all three developers get incorporated in the final copy of the project?

# Scenario-1 ...

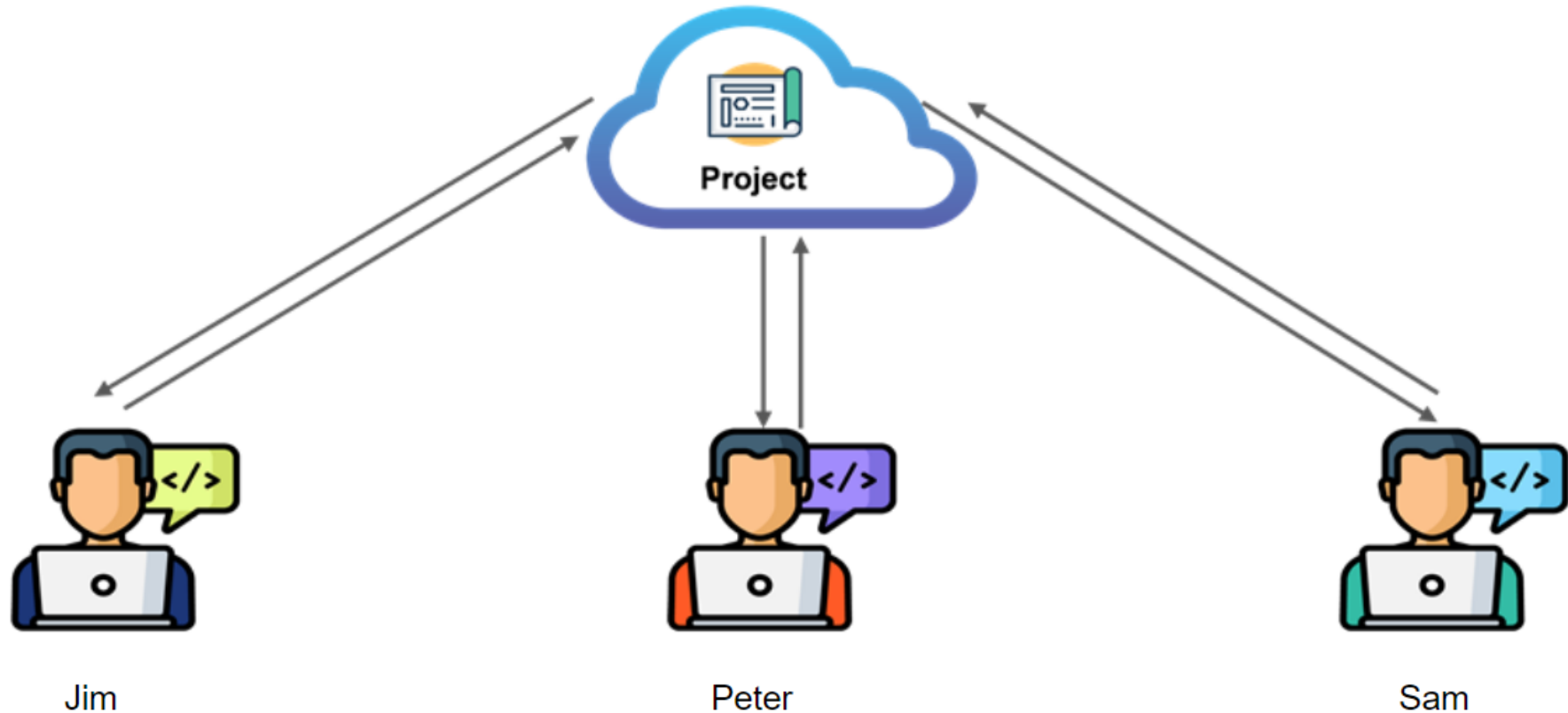


Is this an efficient way to handle this problem?  
Can we depend on this solution?

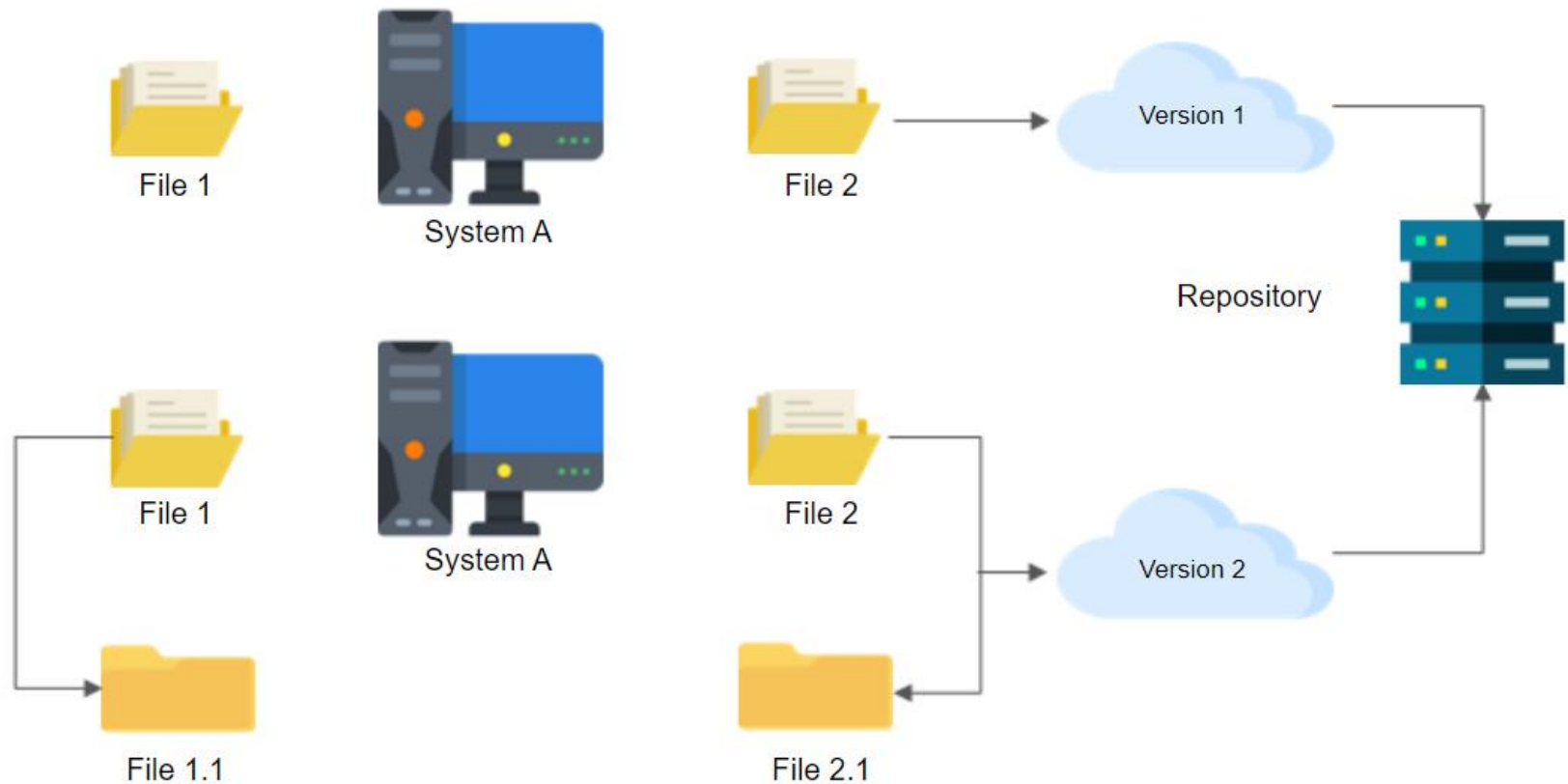
# Scenario - 2



# Version Control System



# How VCS Works?





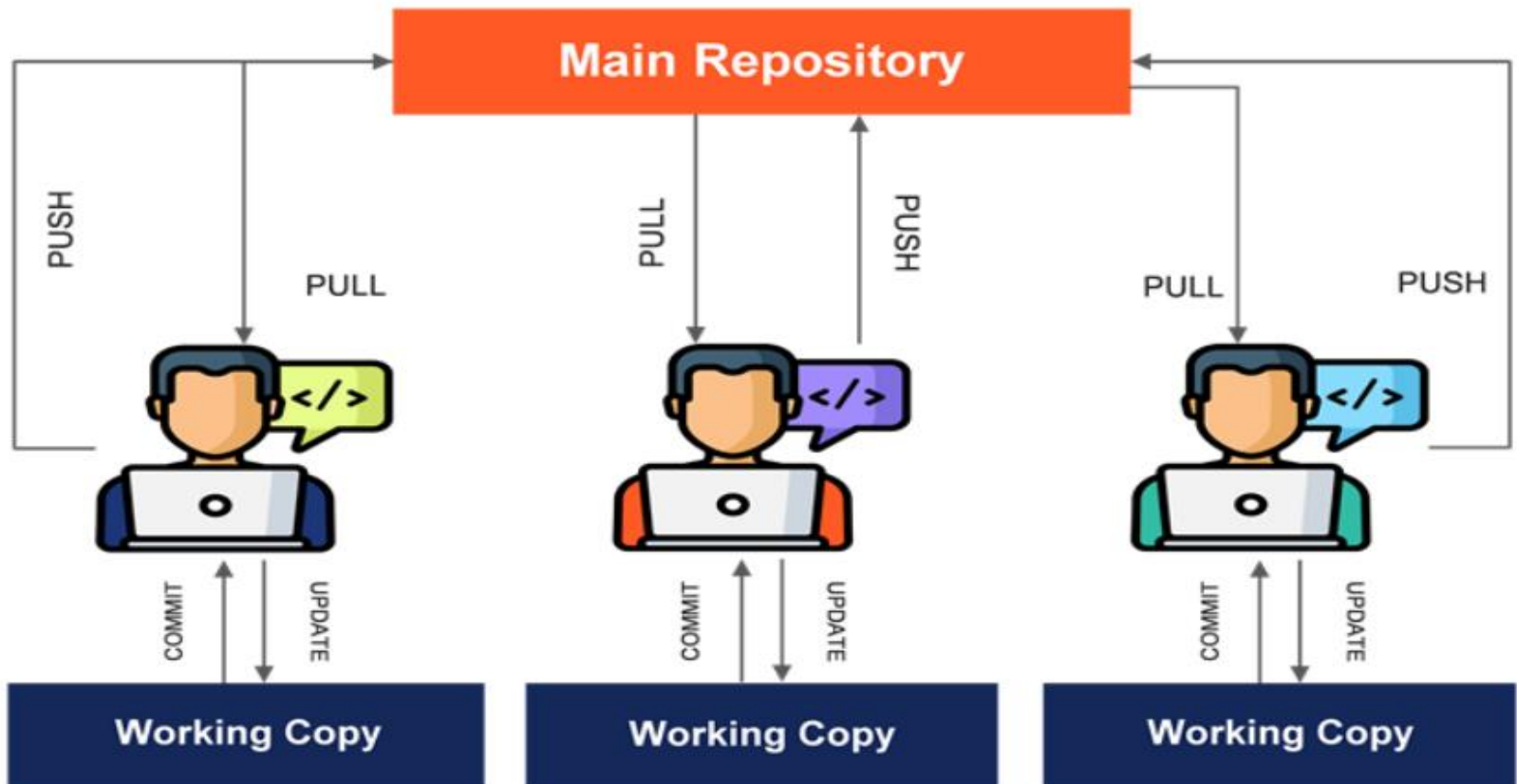
# Types of VCS

**Localized**

**Centralized**

**Distributed**

# Distributed Version Control System

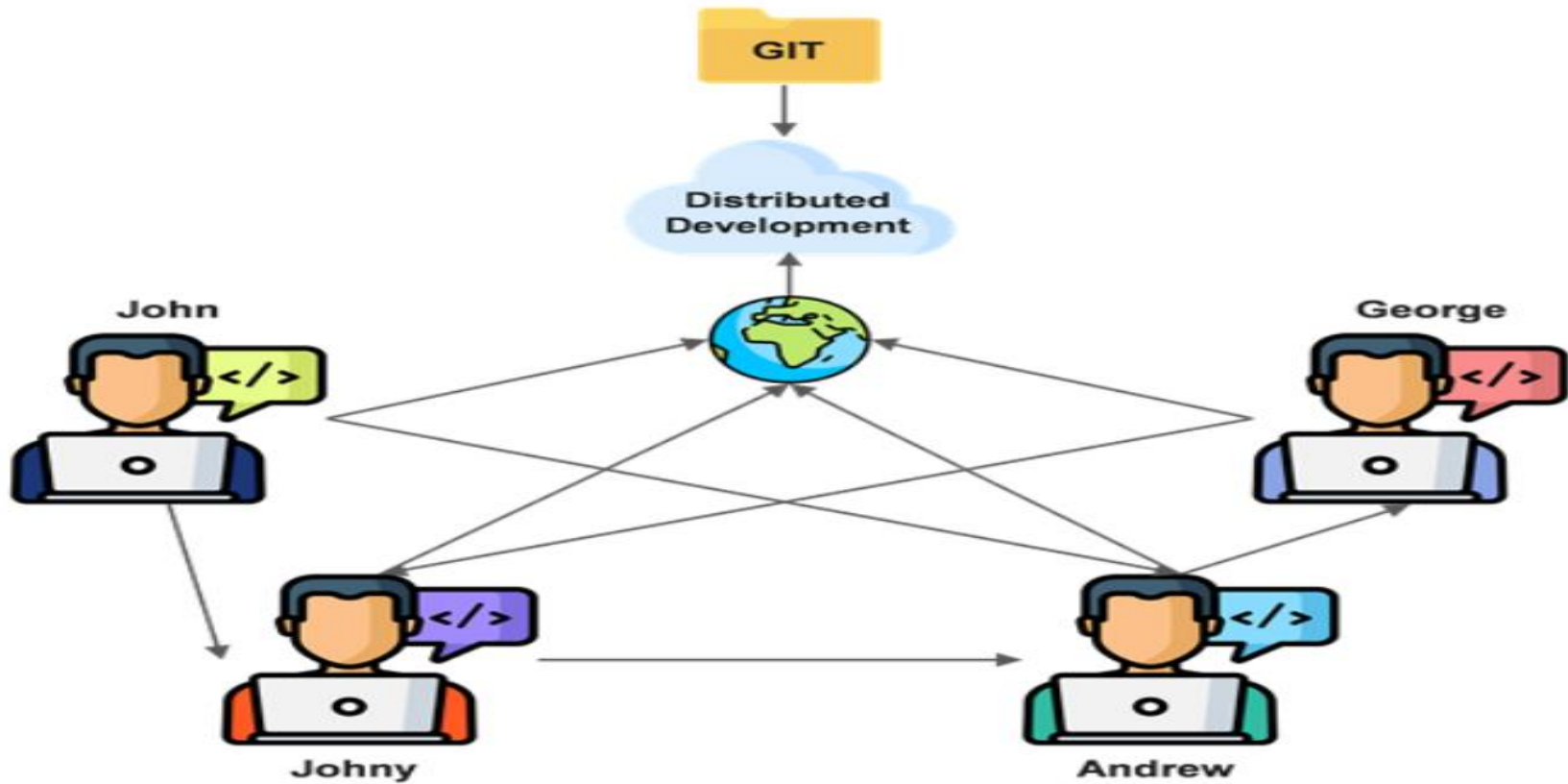


# Distributed VCS



I am planning to use a distributed version control system for my project. Which tool should I use?

# GIT



# Features of GIT

- Secure
- High Speed
- Open Source
- Non-linear Development – Many developers can work together in parallel
- Tracks history
- Open source
- Scalable



# GIT vs GitLab

## Git vs. GitLab

Git	GitLab
Git is a distributed version control system tool.	GitLab is a cloud-based collaboration platform used to host a Git repository.
It can be installed in a local system.	It is hosted on the web.
It is a command-line tool.	It is administered through the web.
No user management	Built-in user and access management.



# Using Git and GitLab

How can we implement Git and GitLab?

- Configure Git to your local system.
- Create a new project using the GitLab service.
- Fork the repository you wish to work on.
- Clone the repository in your local system after forking.
- Make the changes in the repository.
- Push the changes to the remote repository.





