

What is version control and GIT?
How does it help team work?

01.

Challenges

02.

- COLLABORATION
- STORING VERSIONS
- RESTORING PREVIOUS VERSIONS
- FIGURE OUT WHAT HAPPENED
- BACKUP

03.

SOLUTION

Version Control System

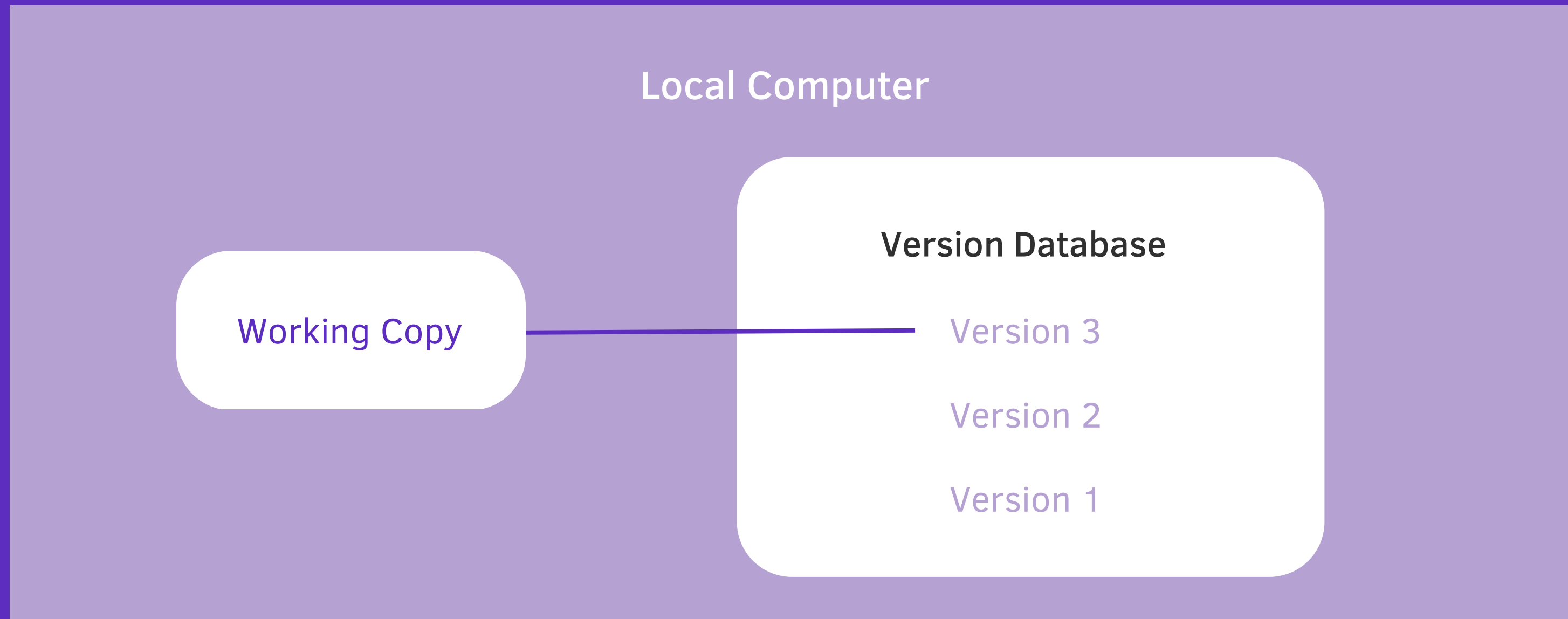
Version Control

04.

Version control is a management system that allows you to record and track changes in your source code and files so that you can recall certain versions later.

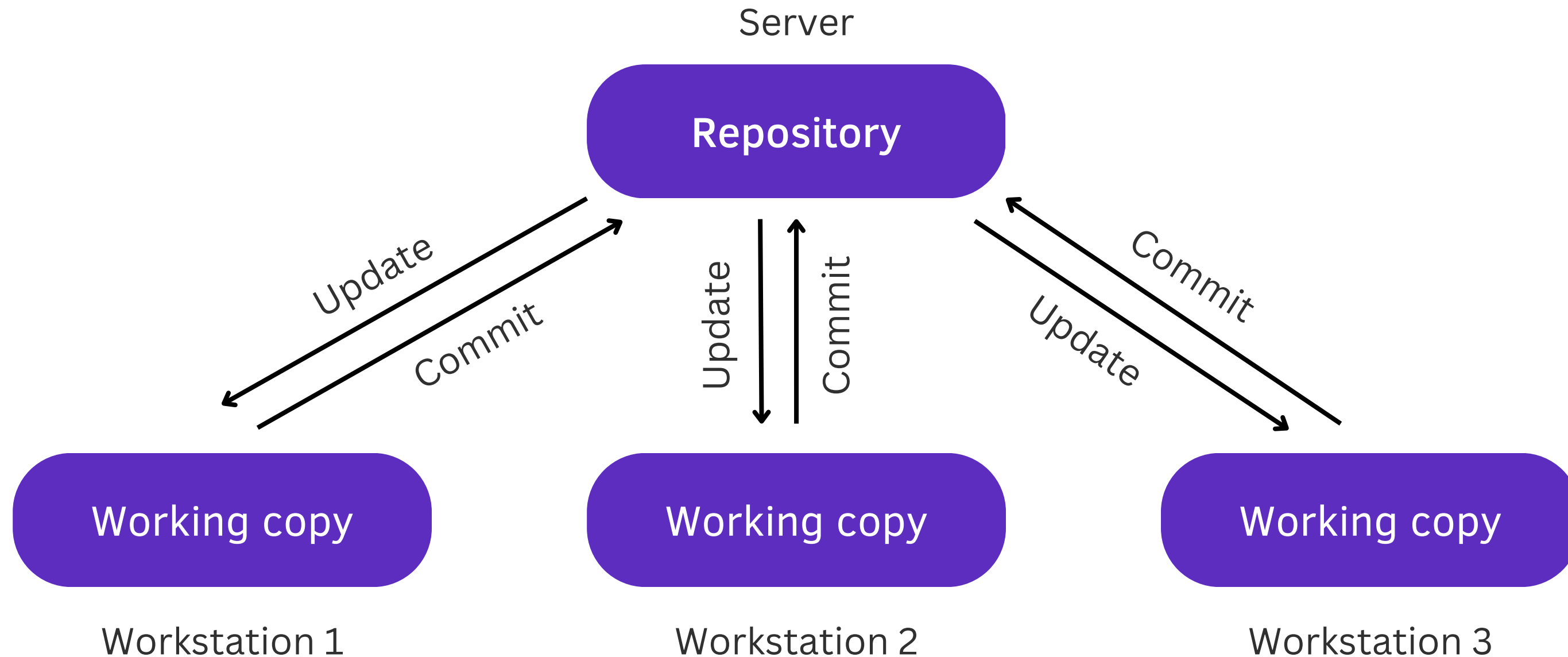
05.

Local Version Control Systems

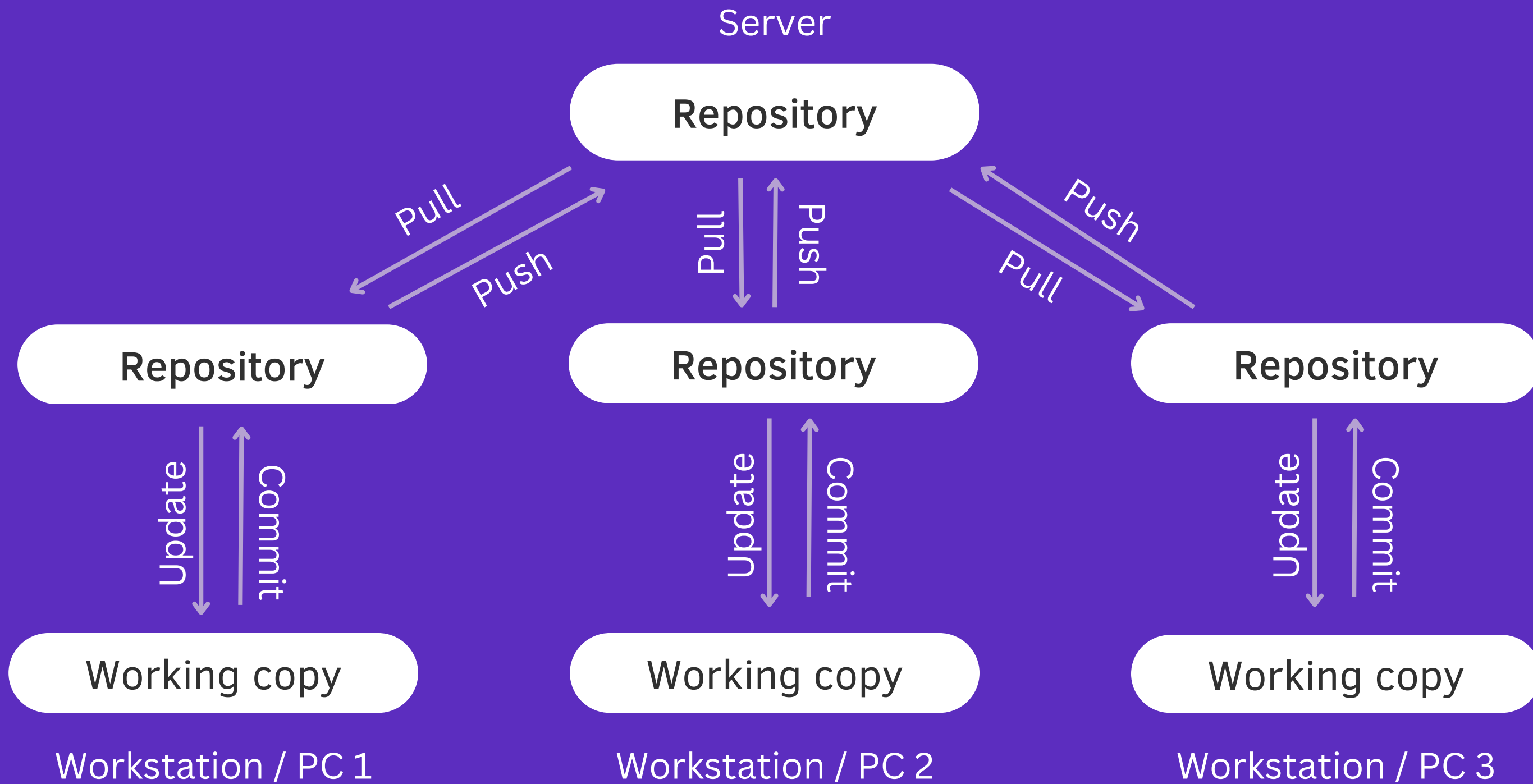


Centralized Version Control System

06.



Distributed Version Control System



Benefits of Version Control

08.

✓ **Team Work**

Without a version control system, working on the same source code at once is challenging. VCS makes it more easily to merge changes, which makes team members significantly easier to collaborate on projects.

09.

Other benefits

- Managing and Protecting the Source Code
- Keeping Track of All the Modifications Made to the Code
- Comparing Earlier Versions of the Code
- Supports the Developers' Workflow and Not any Rigid Way of Working

GIT

10.

GIT is a popular version control software for developers. It updates changes during a project and allows multiple people work together by enabling them make adjustments or contributions and creates a possibility of being able to revert back to earlier versions of the same project for various purposes.

GIT

GIT installation occurs first from <https://git-scm.com/>
Then we register with a GIT hosting service provider e.g
Bitbucket, Gitlab, Github etc.

GIT

12.

GIT makes use of what is called a repository. This is a folder or file containing the project. It creates one locally on our system and another is created on the repository hosting service.

Whatever changes is done locally will be updated on server of the repository hosting service

13.

GIT

- Once the repository has been created we have what is called the main or the master branch. However while working on a project it is best to create secondary branches and have them named.
- This secondary branch is a copy of the master branch but it is here we can run our trials. As soon as the desired result is achieved, it can now be merged to the master branch

GIT

14.

testbr 2 branches 0 tags

Go to file Add file

Switch branches/tags

Branches	Tags
main	default
✓ testbr	

[View all branches](#)

.gitignore	Initialize project using Create React App
README.md	Initialize project using Create React App
package-lock.json	first commit
package.json	first commit

GIT

- git init

It initializes git or activates git on our project. It creates a local repository of our project on our system. Which tracks the changes for later uploads to the server of our preferred git host.

```
TERMINAL  COMMENTS  PROBLEMS  OUTPUT  DEBUG CONSOLE

% git init
Initialized empty Git repository in /Users/
% █
```

```
columns.html  U
index.html    U
LICENSE       U
media.html    U
README.md     U
```


GIT

- git add

Creates a staging area for files we want to commit.(git add .)

Prepares all the files in the current directory. However we can still decide to select which file we want to add for staging e.g

```
git add index.html
```

Staged Changes	2	4	<met
index.html	A	5	<tit
style.css	A	6	<lin
Changes	0	7	<lin
		8	<lin
		9	<lin
		10	</head>

Staged Changes	1	4	<meta
index.html	A	5	<titl
Changes	1	6	<link
style.css	U	7	<link
		8	<link
		9	<link
		10	</head>
		11	<body>

18.

Staging Files

```
git add FILENAME  
# git add --all  
# git add -A  
# git add .  
git commit -m "First Commit"
```

GIT

12.

- `git commit -m`

This can be referred to as a particular version of work done at a particular point. When a commit is initiated in GIT, it is a new version of work that is being uploaded which is considered a new landmark in our work. (`git commit -m "First commit"`)

GIT

Git push this command pushes our files to the remote repository with our git service host

```
git push -u origin main
```

22.

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main 1 branch 0 tags

Go to file

Add file

<> Code

first commit

855b62a on Dec 30, 2022 1 commit

index.html	first commit	2 months ago
style.css	first commit	2 months ago
tools.js	first commit	2 months ago

23.


GIT

- Git clone – copying the source code from server to a local repository.


The URL is copied and pasted on the command line terminal

Go to file Add file ▾ **<> Code ▾**


Local Codespaces **New**


 Clone ?

HTTPS SSH GitHub CLI

https://github.com/[redacted]/glowdev.git 

Use Git or checkout with SVN using the web URL.

 Open with GitHub Desktop

 Download ZIP

Created a new Expo app

app page issues

buttons added

buttons added

Created a new Expo app

buttons added

Created a new Expo app

Thanks for listening!