

MinGIT

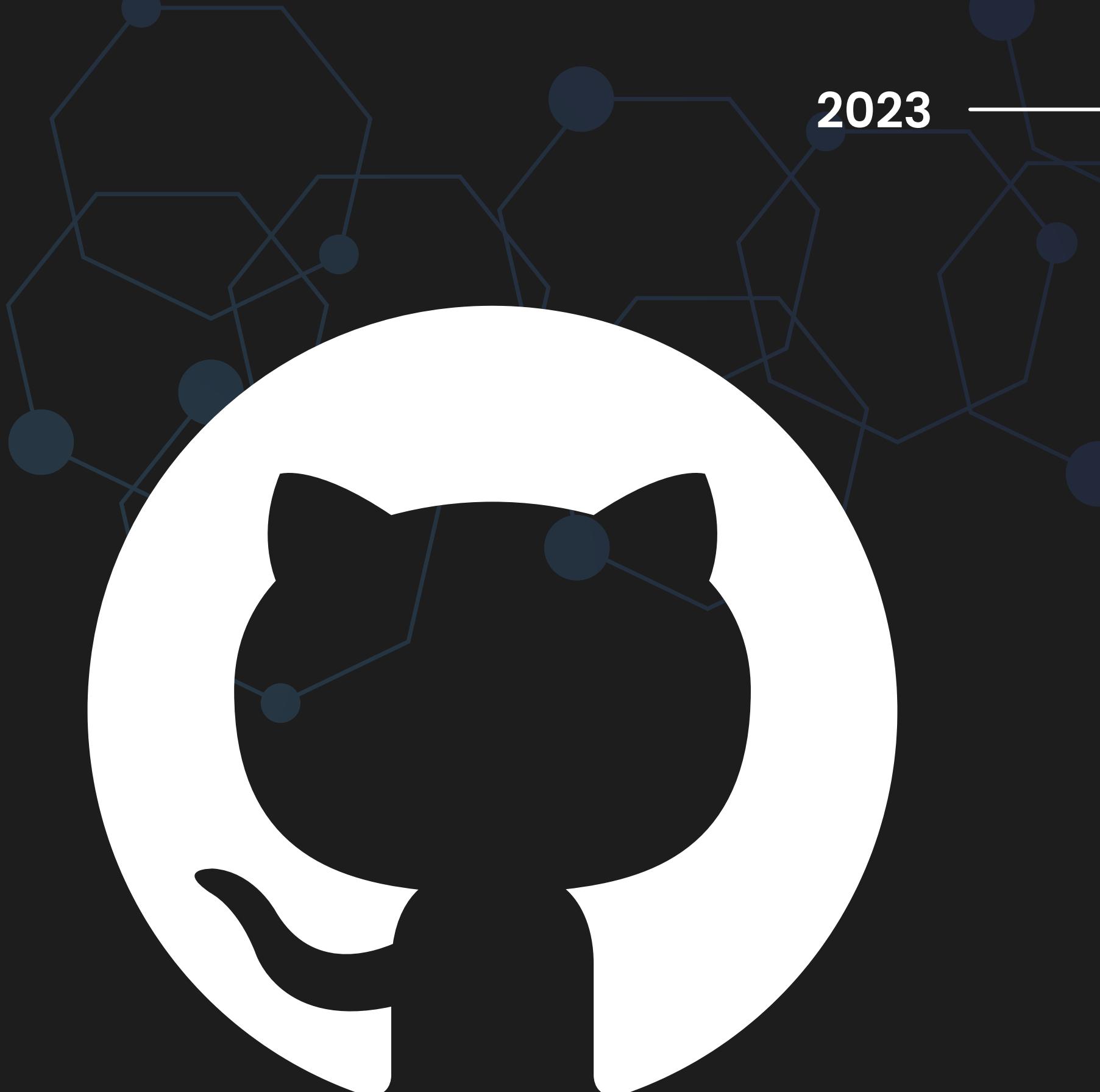
A mini version control system

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Introduction

Version control systems are essential software tools that aid software teams in effectively managing changes to their source code as it progresses over time. The Version Control Management System plays a key role in efficiently overseeing and organizing your code.



Features

User-Friendly Interface:

A user-friendly interface ensures ease of use.

Code Tracking and Staging:

Minigit simplifies code tracking with a straightforward "add" feature, allowing users to stage changes before committing.

Effortless Commits:

Committing changes is made easy with Minigit, providing a seamless process for saving and documenting project modifications.





Features

Rollback Capability

Minigit empowers users with the ability to rollback changes, providing a safety net for reverting to previous states when needed.

Minimalistic Design

As a minimal clone of Git, Minigit focuses on essential functionalities, providing a simplified version control system tailored to your needs.

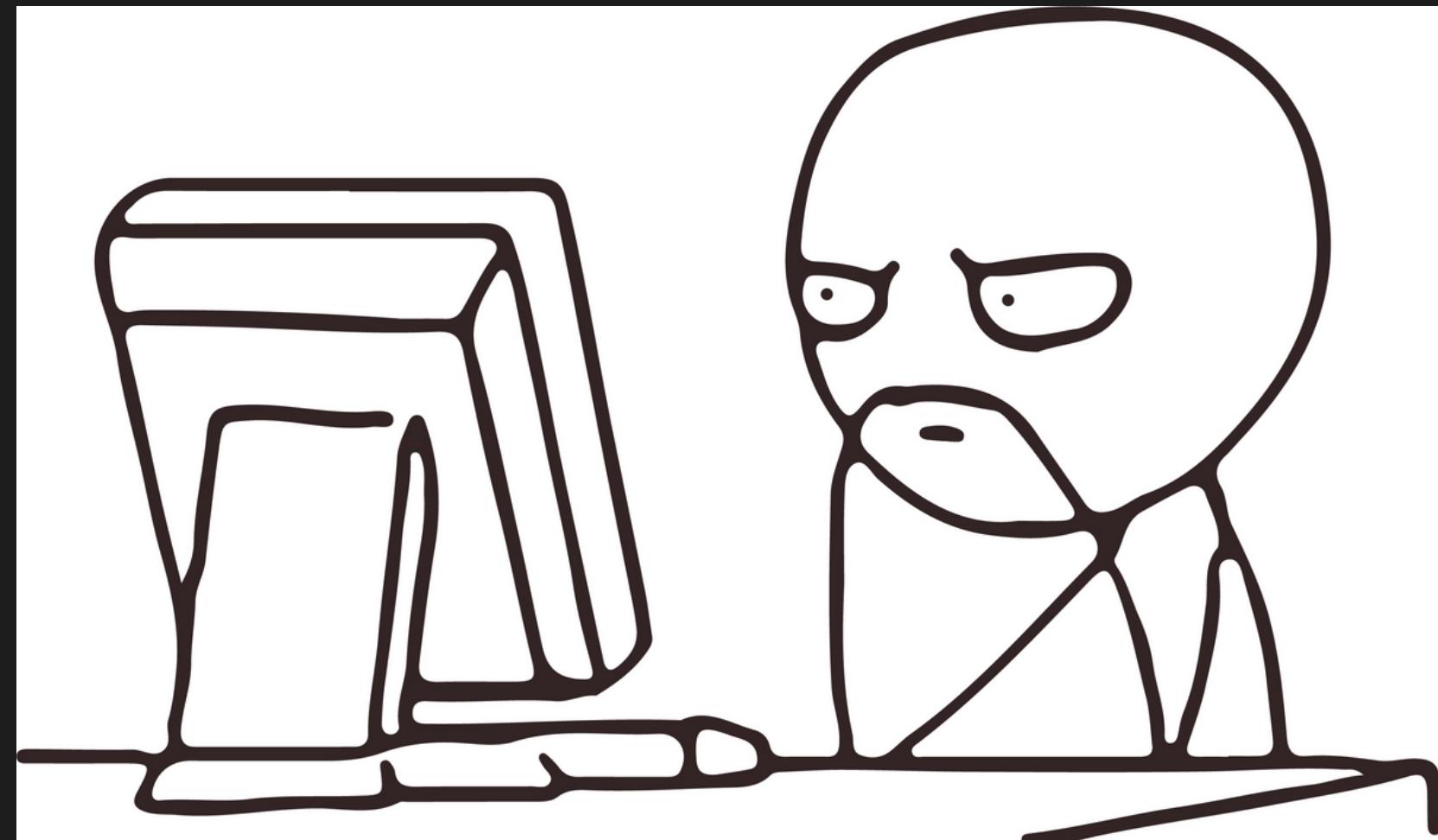


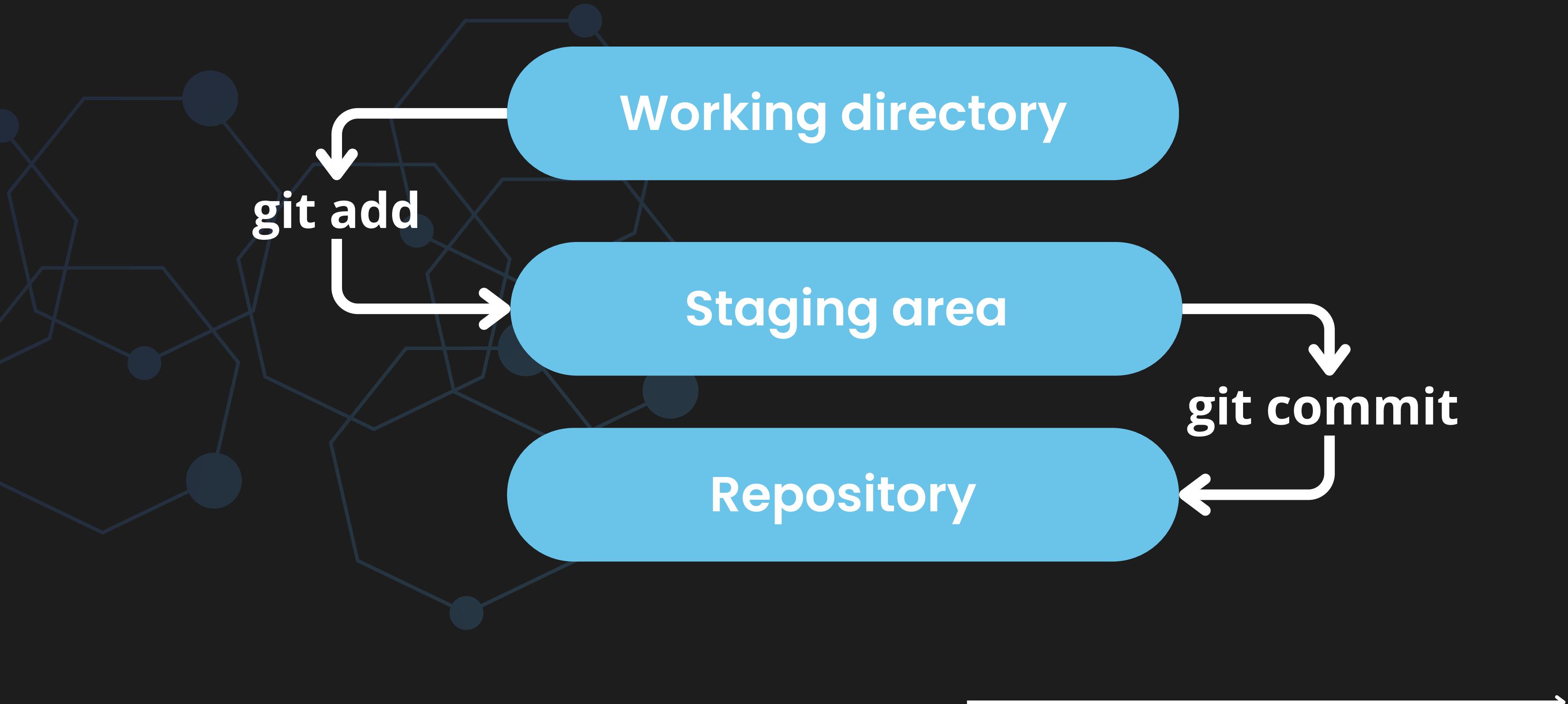


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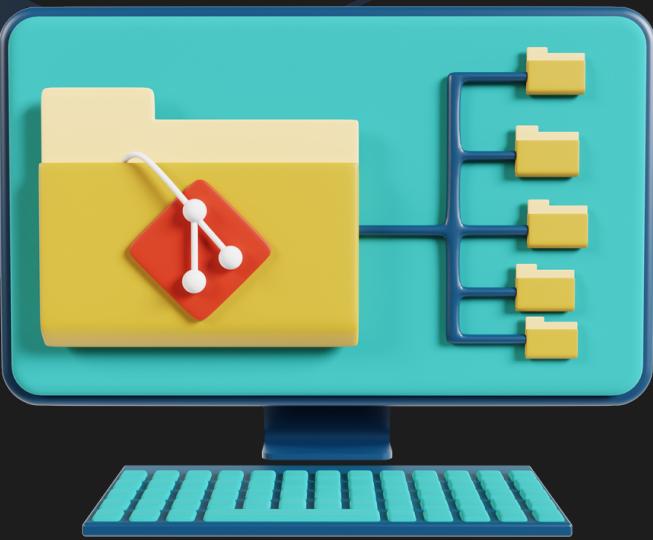
How does it work ?

Basically It's divided
into 3 Main Parts





Additional features



Secure File Tracking:

Minigit goes beyond standard file tracking. When adding a new file, Minigit ensures security by checking for a **magic number** at the beginning and a **checksum** in the last 4 bytes. This extra layer helps verify file integrity and prevents unauthorized modifications.



Additional features

Efficient Folder Handling:

Minigit streamlines the process of copying files within nested folders. With **multithreading** capabilities, Minigit optimizes file copying, enhancing the efficiency of handling complex directory structures.

File Locking Mechanism:

Minigit incorporates file locking to ensure data consistency and prevent conflicts. Whether adding, reverting, or performing other operations, **file locks** safeguard against concurrent modifications, fostering a secure and stable version control environment.

Fault-Tolerant Logging:

Minigit prioritizes fault tolerance through comprehensive **logging**. In case of unexpected events or errors, the logging system captures detailed information, aiding in the identification and resolution of issues while maintaining the integrity of version control activities.



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Thank you for your attention

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