Version Control

A version control system (VCS) such as GIT, records changes made to a project over time. Each time a person makes a change to a file, the exact modifications made are recorded, allowing one to see what the change was, when it happened, who made it, and why they made it.

One benefit of a VCS is that it allows for effective collaboration in projects. Everyone can work on the full project at the same time without overwriting each other’s work. If an error does occur, a VCS allows you to recall/revert to any previous versions of the project, making sure that the project stays safe.

In a software development team, each team member can work on different features of the full project locally, test it, and when ready; commit the changes to the project in the main repository, while also providing documentation about the changes made and why. This allows the software development team to work together well. If someone does accidentally make a change that leads to an error in the software, the team can revert to a previous version, before the mistake was made.

An example of a command used in the GIT VCS is: ‘git commit -m “Added new password generation feature”. This command commits and syncs the changes made to the project with a message describing the changes made.