Agenda

1. **What is Version Control and Git?**

* Version Control
* Git history
* Usage of Git
* GitHub, GitLab ?
* Git setup and configuration

1. **Git basics**

* Creating Git repositories
* Adding files to a Git repository
* Internal structure of a Git repository
* Remote repositories

1. **Git history**

* Accessing different versions of the files
* Temporary saving changes with git stash

1. **Branches**

* Local and Remote branches
* Synchronizing branches

1. **Working with remote repositories**

* Configuration of remote repositories
* Receiving changes from remote Git repositories
* Pushing changes to remote repositories
* Creating pull requests

1. **Merging changes**

* Merging changes with the merge command
* Merging changes with the rebase command
* Selecting individual changes
* Merge and rebase best practices

1. **Change analysis**

* Differences between two commits
* See the changed files between two commits

1. **Best practices**

* Specific branches (Master, Feature, Bugfix)
* Avoiding and solving merge conflicts
* Best practices for working with Git

1. **Git Tools**

* Git Bash
* Sourcetree
* VS
* Code