# Session 2 – Git

Rebasing and Merging

|  |  |
| --- | --- |
| Rebasing | Merging |
| It merges changes to the base commit. | It merges two or more commied changes from one branch to another |
| Command: git rebase <branchName> | Command: git merge <branchName> |
| It resolves merge conflicts by commit | Resolves all commits in single merge commit |

Git Stash

It is used to keep our current changes aside and lets user work on another feature or branch. These changes can be temporarily undone so user can work on other code or file and then get the original stashed changes back without need to commit or merge.

Git flow

In Git flow there are, A - main or production branch, B – Development branch and other branches such as hotfixes. These are useful for large projects which have planned releases.

On the other hand GitHub flow is where we are continuously making changes to the main branch.

Trunk Based Development vs Branch Based Development

Trunk based development is where we are committing changes to a main branch known as trunk continuously. It is used as small incremental changes merging them with main branch as soon as possible.

Branch based Development also known as Feature Based Development/GitFlow Model, here there are multiple branches One Main/Production branch and other feature branches where developers can take days or weeks or even more time to develop a feature and once it is tested thoroughly it can be merge to main branch.

How git helps collaboration

Git is version control system where multiple people can work on a single project and as per the progress changes can be commit and versioning can be done is simpler way. It allows multiple people/developers to work on the project and merge, pull, commit changes at same time