GitHub

What is it? — a code repository to
store your code

> created by Linus Torvelds, April 2005
> replaces BitKeeper to manage Linux k.
> cross platform

Git: the access & applications to access
the repository

Version Control System (VCS):
- a way to manage files &
  directories
- track changes over time
- recall previous versions
- source control is a subset of
VCS

Distributed Version Control (DVC)
- No need to connect to central server
- Can work without internet connect.
- No single failure point
- Developers can work independdly

Repository (Repos)
- Used to organize a single project
- Can contain folders, files, images, videos, spreadsheets, + any other data constructs

Branching - When working on project there will be lots of different features & ideas in progress & some are ready to go & some are not. Branching exists to help manage workflow

Main
- the main starting branch
- this has the latest working commit
- normally this is not changed directly

- Branching is a core concept in git, the entire Github flow is based upon it
- Anything in the main brach, is always deployable
- Because of this, it's extremely important that your new brach is created off Main when working on a feature or a fix.

Commits

- Once your new brach off main has been created, it is fine to start making changes
- Whenever you add, edit, or delete a file, you are making commits.
- Keeps track of your progress while you work
- Each commit has a associated commit message
- Write clear concise committee messages

Pull Requests

- Pull Requests initiate discussion about your commits
- Can be done when?
  - > Share something.
  - > stuck & need help
  - > Review your work
- great for collaboration or help

Merge & Deploy

- Once your pull requests has been reviewed & the branch passes your tests, you can deploy your changes to verify them in production
- If your branch causes issues, you can roll it back by deploying the existing main branch into production
- This is searchable to find out why things have been done

Visual Studio & Coding Standards

Refactoring: Making code less complex but retaining same functionality

Intellisece: Code completion aid