
SYNTHETIC INTELLIGENCE : GIT FROM GITHUB TO PRIVATE SERVER
SYNTHETIC INTELLIGENCE

module2

GETTING STARTED

- Getting to know git
- The simplified theory
- Knowing the tools and the scope
- What is a reprository
- What is branching
- What is remote reprository

Still there

Getting started

Getting started with git

Importantly GIT and GITHUB are Different. GIT is a VCS program while GITHUB is a repository service for version control.

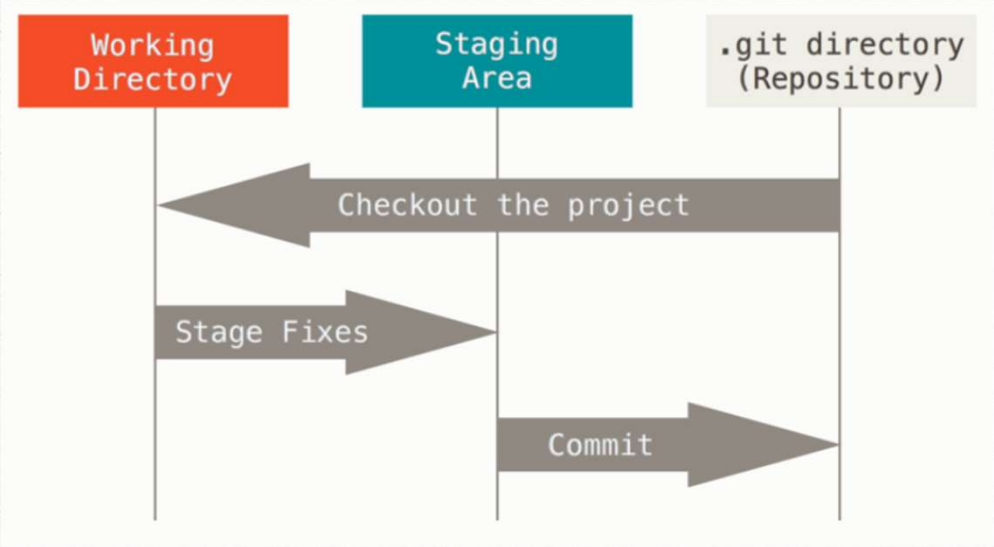
The git project was made by Linus Torvalds the man who also created Linux .It can be used in windows ,mac and Linux (of course).

The new parts of the codes are attached in branches . It is add only program so no data is lost. These are called snapshots. It takes the snapshots of the file and all actions are performed locally so no heavy lifting on server side. All code is mirrored to the developer. The codes are updated to the repos by several developers for continuous integration. It is D.V.C.S and open source . The repo hosting can be done on public service(github) or on private server .

So What is a repository

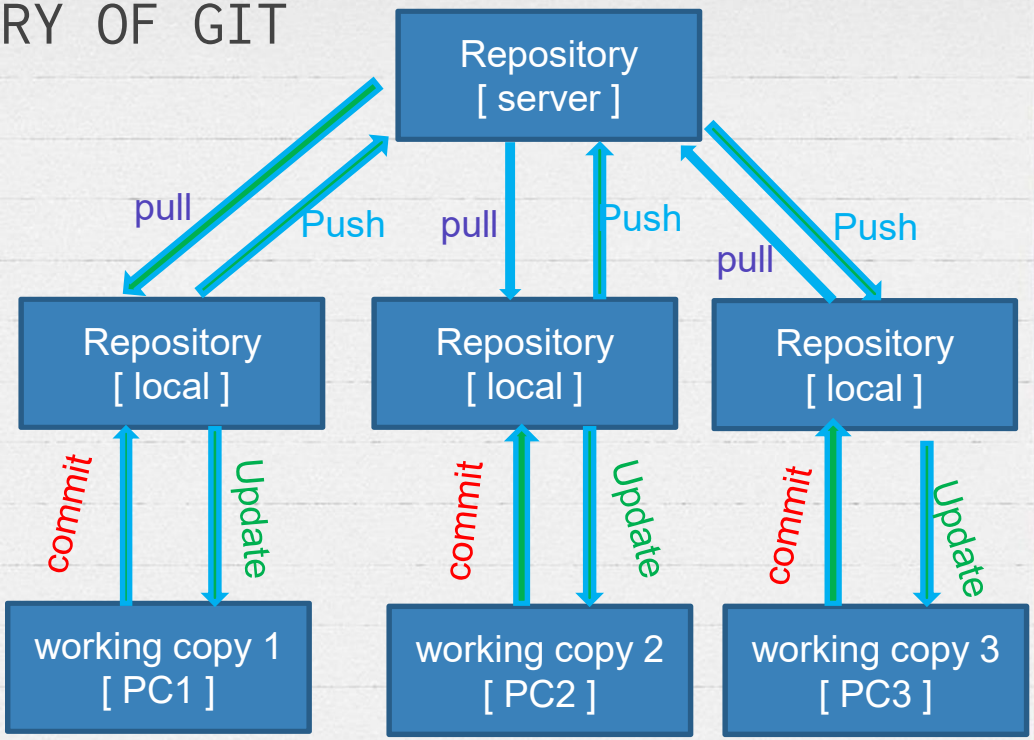
A repository is just a place where replicable files are stored . Just like a folder. The main thing is that the repositories are connected to he git so that the contents of the repos can be updated to the server or can be updated by the server. Any folder can be made into a repo by running the git init command. This is home of project files.

Repository functioning in a folder locally

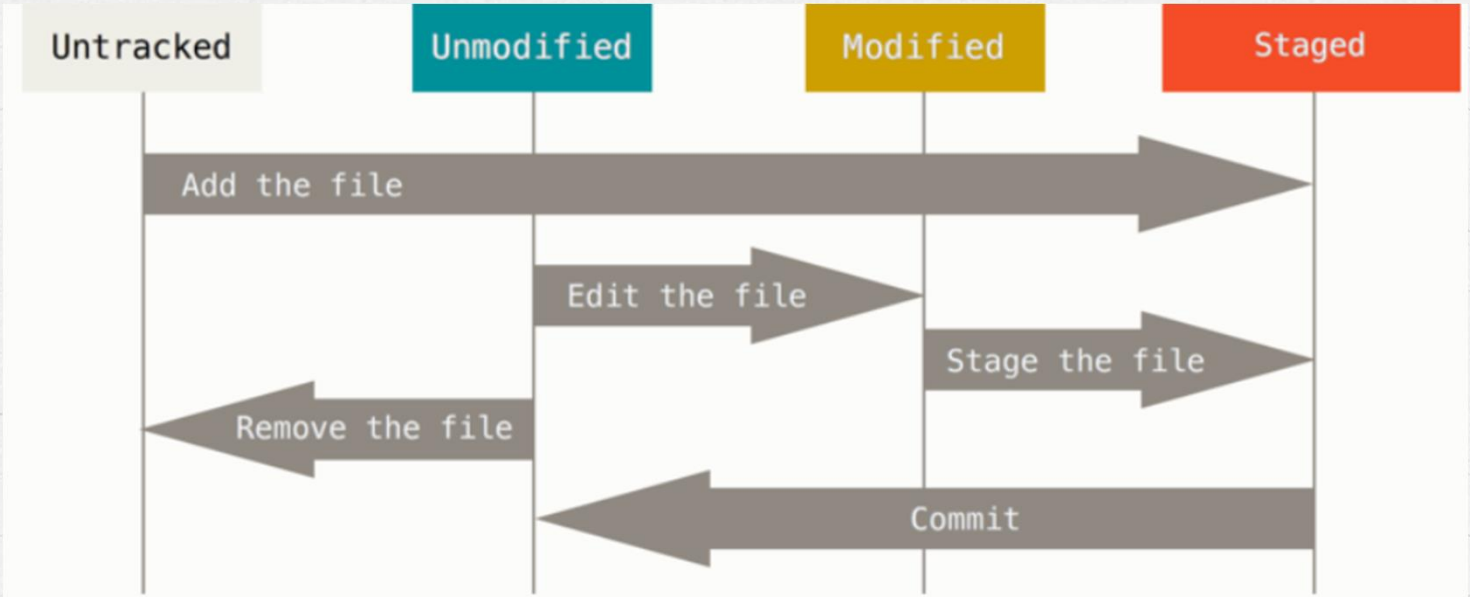


THE SIMPLIFIED THEORY OF GIT

Git flow . How the files are developed and the n sent to the master by one and the updated by all other and so each can have a updated copy of the program.



LifeCycle of the File in the project



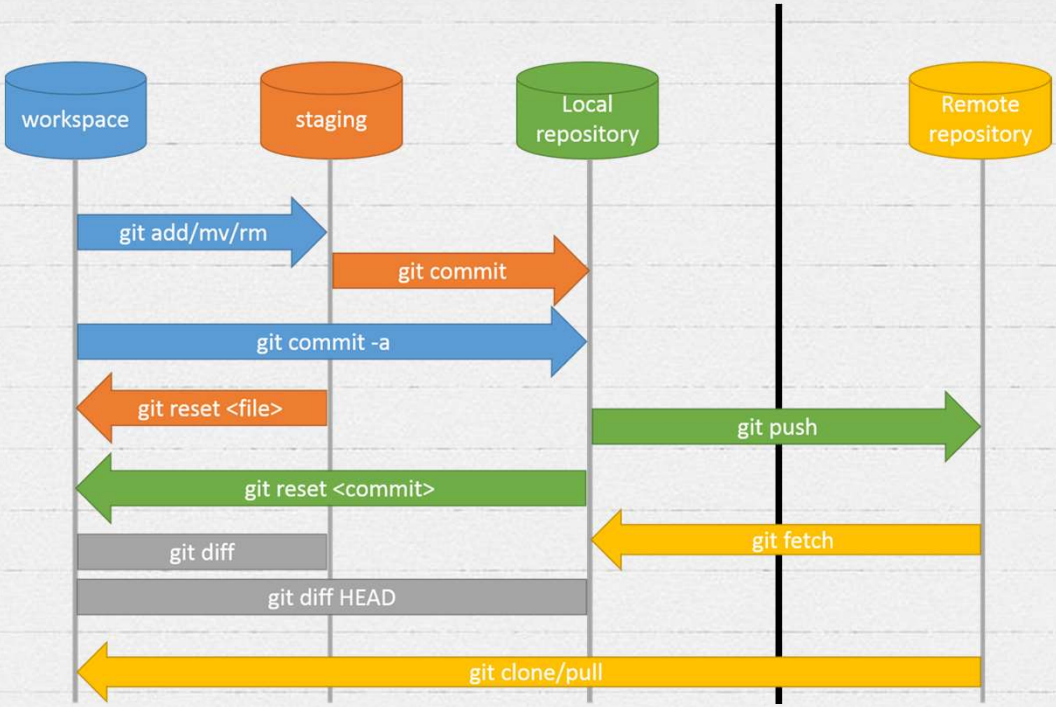
KNOWING THE TOOLS AND SCOPE

The full git includes of the key thing are
GIT program , that can be downloaded at git-scm.com
A repo hosting service that is GITHUB or GITLAb .
It is available of all the OS.

It can be run using GUI or CLI but CLI is preferred as servers servers may not have GUI facility .
It can be integrated with IDEs like sublime text or VS code .
Github and gitlab are the repo hosting services where you can host repo public or private that is paid in github.

SOME OF THE GIT COMMAANDS

- ✓ Git init
- ✓ Git clone
- ✓ Git commit
- ✓ Git add .
- ✓ Git add -a/A
- ✓ Git commit -m "comment"
- ✓ Git push
- ✓ Git pull
- ✓ Git fetch
- ✓ Git remote add "link"
- ✓ Git branch branchname
- ✓ Git checkout branchname
- ✓ Git stash
- ✓ Git config
- ✓ Git merge
- ✓ Git log
- ✓ Git status
- ✓ Git reset
- ✓ Git diff
- ✓ ssh-keygen -t rsa -b 4096 -C "*your_email@example.com*"



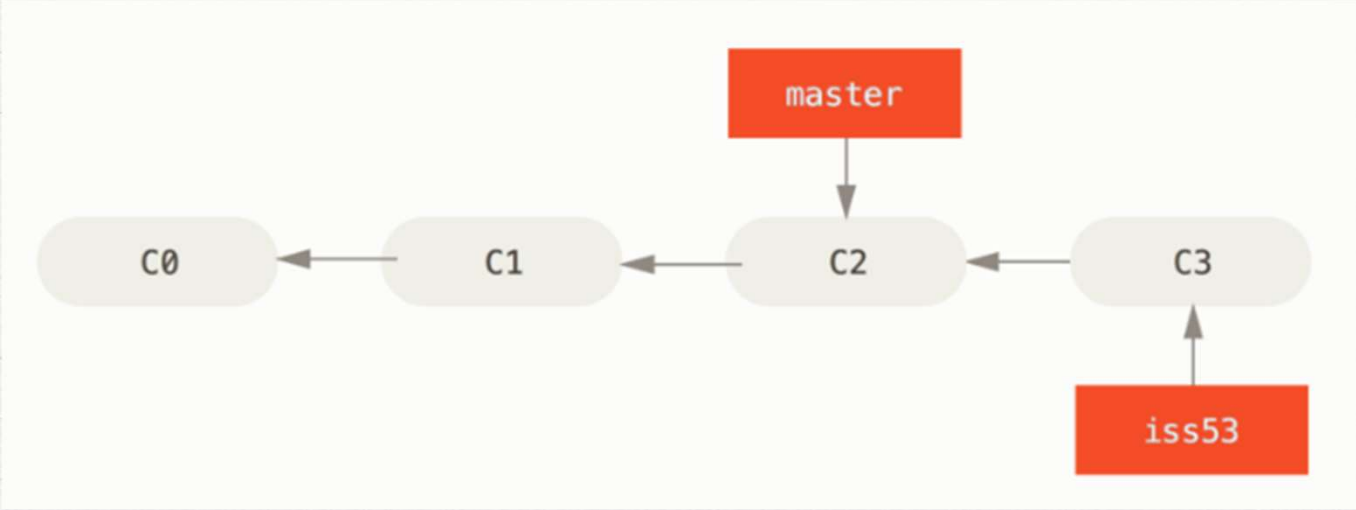
And what is branching and merging

Lets say in the main code [master branch] some files are to be added but that is not confirmed for the project so for that purpose a new director is created along with the master that is called branch. Its files have the original master files as well as the new files added to it. The branch is along with the master but the master files are not altered . By this method it makes the whole process of adding the files to the project easy as the file to be added to the project are first stored parallel in a branch to test the new functionality .

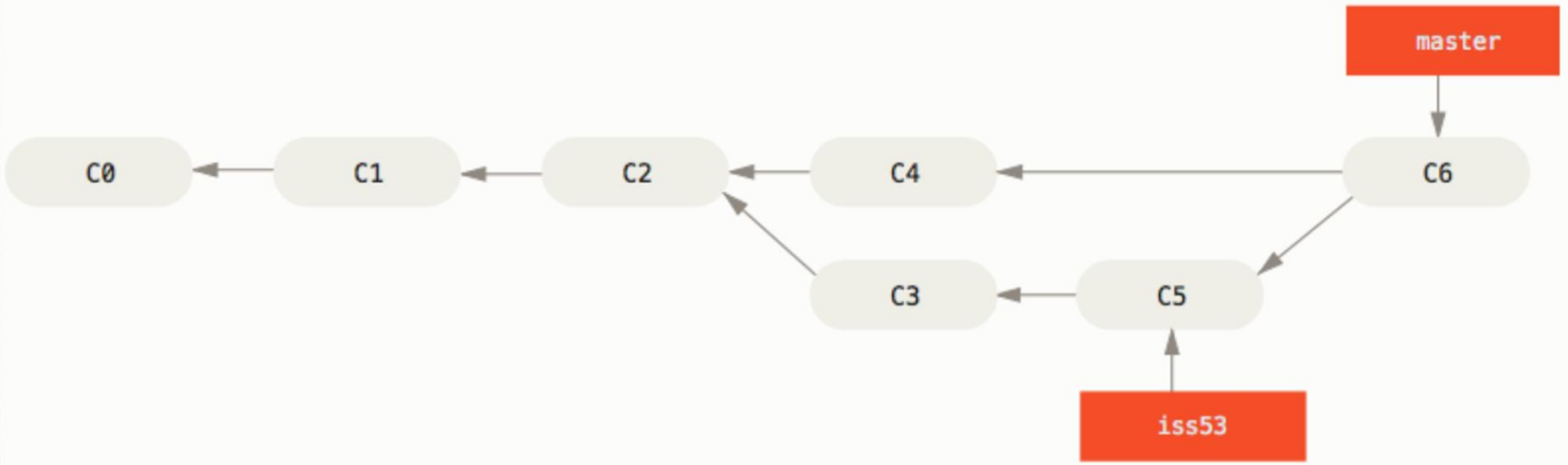
If the files that are added to the branch are said to be useful to the master than the method of joining the branch along with the master is done . This is called merging.

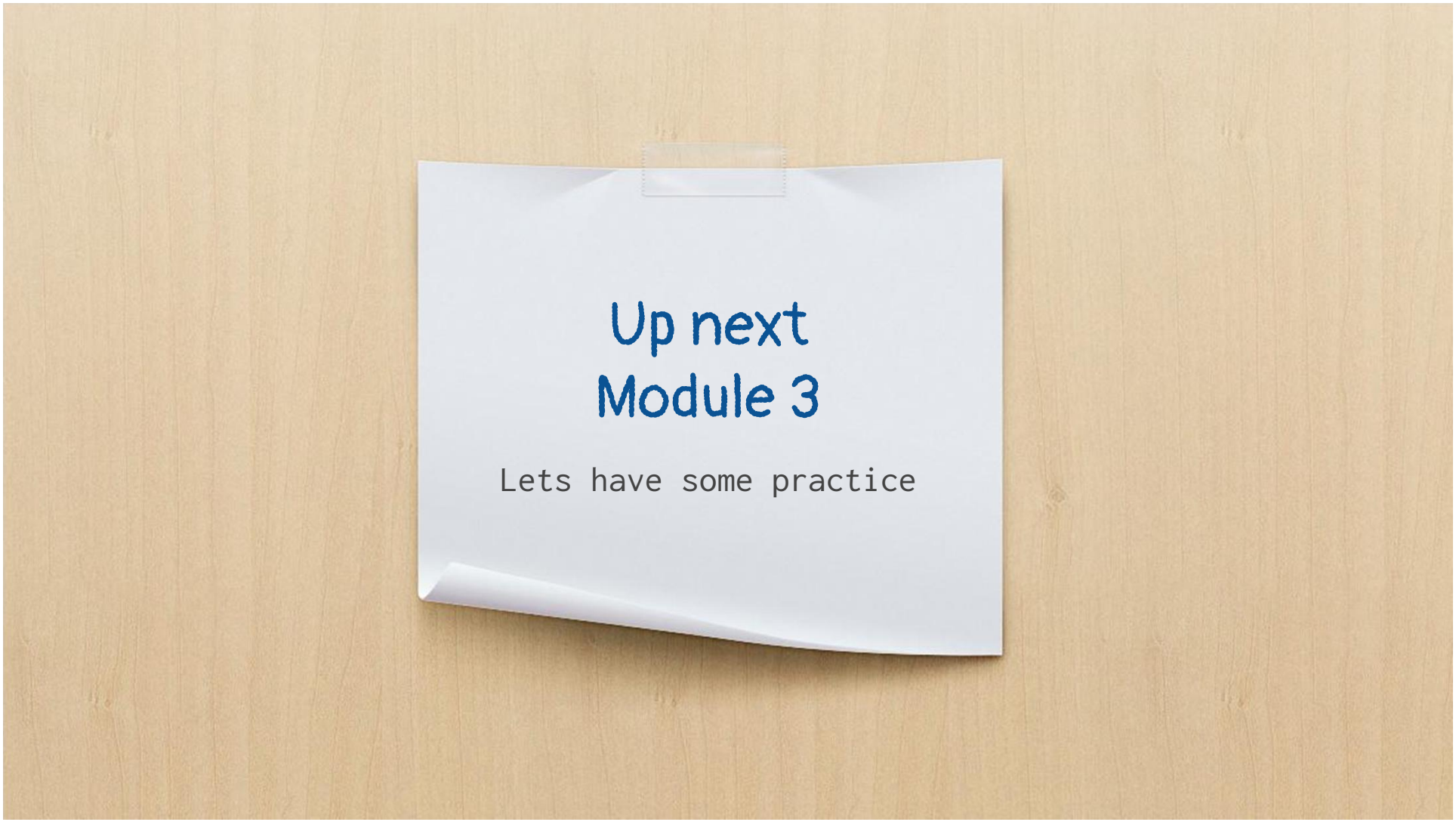
a branch can be created locally or at the repo hosting platform.

Branching example



Merging example




Up next
Module 3
Lets have some practice