



El futuro digital
es de todos

MinTI

«Misión TIC 2022»



Git

Version control system software.

By Carlos Agudelo

Order.

- Context.
- What's git?
- What's Github? - There are others?
- How does git work's.
- Git practice - exploring commands.
- Conclusions.
- Bibliography.

```
{
  "name": "example_project",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "type": "module",
  ▶ Debug
  "scripts": {
    "start": "node index.js"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "express": "^4.17.1",
    "forever": "^4.0.1",
    "shelljs": "^0.8.4"
  }
}
```

```
{
  "name": "example_project",
  "version": "1.0.1",
  "description": "",
  "main": "index.js",
  "type": "module",
  ▶ Debug
  "scripts": {
    "start": "node index.js"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "express": "^4.17.1",
    "forever": "^4.0.1",
    "shelljs": "^0.8.4",
    "axios": "^0.21.1",
    "child_process": "^1.0.2"
  }
}
```

CVS

Concurrent Version System

Is a client-server software that save all changes of the project a different users can access on that. Have a problem with files edited by multiple users.

- CVSNET
- OpenCVS
- Subversion

SVN

Apache Subversion

Version control software like a OS file system saving historical changes, making branches, allow binary files and is powerful interred with apache.

- Subclipse
- RabbitSVN
- Versions

Git

Git is a commonly used decentralized source code repository. It was created by Linus Torvalds for the management of the Linux kernel source code since 2005.



“Git it’s the main tool on software implementations ‘cause allow work with multiple dev’s on the same file and same time without problems. Have a log of all changes made and historical information about it detect issues on your code and roll back the project when is necessary”.

THIS IS GIT. IT TRACKS COLLABORATIVE WORK
ON PROJECTS THROUGH A BEAUTIFUL
DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL
COMMANDS AND TYPE THEM TO SYNC UP.
IF YOU GET ERRORS, SAVE YOUR WORK
ELSEWHERE, DELETE THE PROJECT,
AND DOWNLOAD A FRESH COPY.



GitHub

Microsoft online platform the allow save git repository on the cloud making easy their usage and collaborate work with differences users.

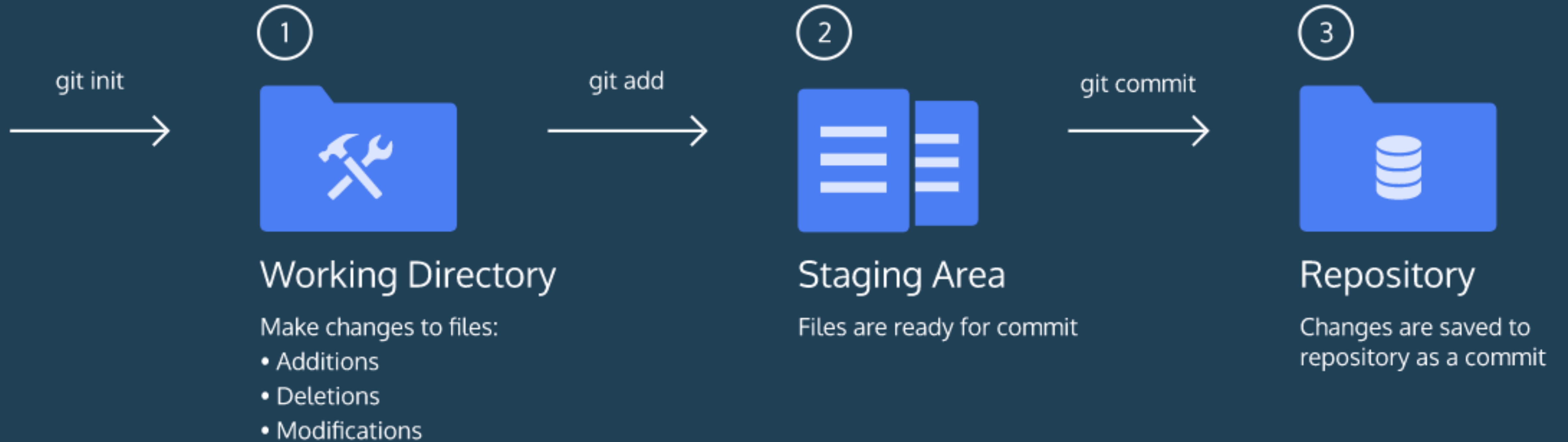




Advantages

- Free lawyer with project and users.
- Developers social network.
- Great community and actives forums.
- Public and private repos.
- **Online briefcase**
- Help and accept help on your code (**Pull Request**)
- **GitHub Copilot**

How it work's



Concept's

- **Staging**

Is on main memory when git prepare files before to send this to the remote repository.

- **Commit**

It's a change set identification on Git, It can be a uniq id or a simple message.

- **Branch**

It's a specific set of changes that no modify the main project, this just happens when merge the different branches.

- **Conflict**

It's a difference on a same file by two modifications different. Occurs when Git can solved automatically that.

Practice

Conclusions.

- Git is a version control system vs Github is a graphic environment and cloud storage that provides tools to work with git easiest.
- Git and GitHub are most used tools to version code on industry.
- There are another tools but are most specific for the project or implementation.
- Know how to use git it's just as important to know logic and a code syntax.
- Work with this tools is essential to work on group, have good practices and auditory of your changes.
- Git is more than push and pull.
- Your Github profile is so important to show how you know in specific language or framework implementation.

Documentation.

- <https://www.linode.com/docs/guides/how-to-install-git-on-linux-mac-and-windows/>
- <https://en.wikipedia.org/wiki/Git#History><https://platzi.com/blog/introduccion-a-graphql/>
- <https://developer.ibm.com/tutorials/d-learn-workings-git/>
- <https://docs.github.com/>
- <https://guides.github.com/>
- <https://www.notion.so/Curso-Profesional-de-Git-y-GitHub-4beee201a92040afbb6d82562b11c12a>



El futuro digital
es de todos

MinTI

«Misión TIC 2022»

