

# Ingeniera de Software 3

## TP 1: Git basico

### 4.1: Instalar git.

Ya a git lo tenia instalado por lo que no muestro screenshot. Uso Git Bash ya que me da una experiencia mas similar a linux.

### 4.2: Creamos e inicializamos el repositorio, tambien modificamos el archivo "Readme.md"

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~ (master)
$ cd Documents\Ing\ de\ Soft\ 3

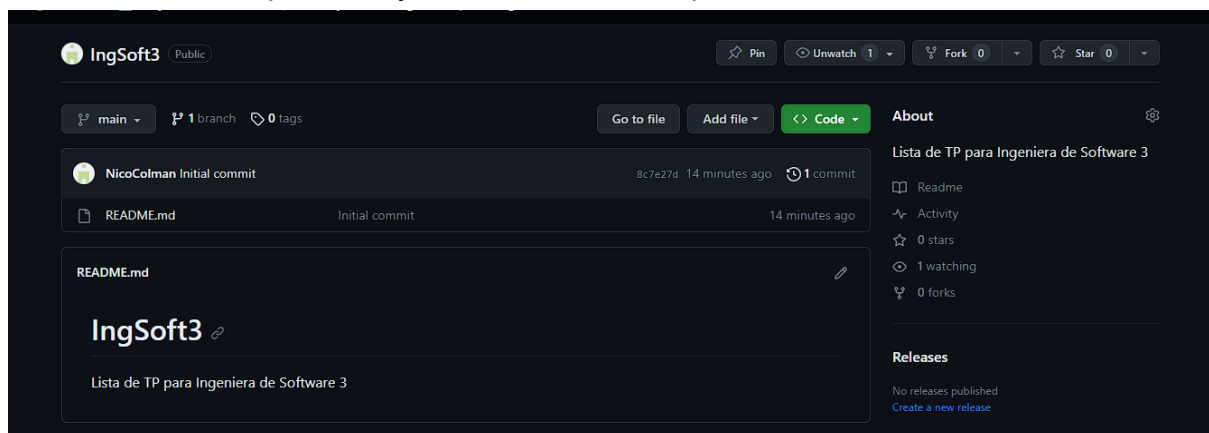
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ git init
Reinitialized existing Git repository in C:/Users/Nico/Documents/Ing de Soft 3/.git/

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ echo "Ingeniera de Software 3" > Readme.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ git commit -m "First commit"
On branch master
```

### 4.3: Instalar Notepad++ pero prefiero usar VSCode para edicion.

### 4.4: Creamos el repositorio y lo clonamos a la repo remota



Cambiamos la descripcion del "Readme.md" y creamos el .gitignore

```

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ echo "Trabajos practicos para Ingeniera de Software 3" > Readme.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ echo "*.bak" > .gitignore

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/Ing de Soft 3 (master)
$ git add .

```

Commiteamos y pusheamos

```

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/IngSoft3 (main)
$ git commit -m "First commit"
[main 40d6f4c] First commit
1 file changed, 1 insertion(+)
create mode 100644 .gitignore

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/IngSoft3 (main)
$ git init
Reinitialized existing Git repository in C:/Users/Nico/Documents/IngSoft3/IngSoft3/.git/

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/IngSoft3 (main)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 282 bytes | 282.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/NicoColman/IngSoft3.git
8c7e27d..40d6f4c main -> main

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/IngSoft3 (main)
$ |

```

#### 4.5: Hacemos lo mismo de vuelta

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~ (master)
$ cd Documents/IngSoft3/
IngSoft3/ tp1repo2/

Nico@DESKTOP-MDI8QUJ MINGW64 ~ (master)
$ cd Documents/IngSoft3/tp1repo2/

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ echo "Repo 2" > README.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ git remote add origin https://github.com/NicoColman/Prueba-2.git

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ echo .gitignore
.gitignore

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ git init
Initialized empty Git repository in C:/Users/Nico/Documents/IngSoft3/tp1repo2/.git/

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ git add.
git: 'add.' is not a git command. See 'git --help'.

The most similar command is
    add

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (master)
$ git commit -m "Commit"
[master (root-commit) eedcae6] Commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 216 bytes | 216.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/NicoColman/Prueba-2.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

#### 4.6: Creamos nueva rama, modificamos el "README.md y pusheamos

```

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git branch -M TP

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)
$ echo "Rama 2" >> README.md

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)
$ git commit -m "Rama 2"
[TP 90c3d9f] Rama 2
1 file changed, 1 insertion(+)

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)
$ git push -u origin TP
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 252 bytes | 252.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'TP' on GitHub by visiting:
remote:   https://github.com/NicoColman/Prueba-2/pull/new/TP
remote:
To https://github.com/NicoColman/Prueba-2.git
 * [new branch]      TP -> TP
branch 'TP' set up to track 'origin/TP'.

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)

```

#### 4.7: Hacemos merge FF

```

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (TP)
$ git checkout main
Switched to a new branch 'main'
branch 'main' set up to track 'origin/main'.

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git merge TP
Updating eedcae6..90c3d9f
Fast-forward
 README.md | 1 +
1 file changed, 1 insertion(+)

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git branch -d TP
Deleted branch TP (was 90c3d9f).

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git log
commit 90c3d9fe7672434c4e0b5899b7c47584c64cbb93 (HEAD -> main, origin/TP)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:04:46 2023 -0300

    Rama 2

commit eedcae6c5a2234f58ffcded499868a63386d8d4f (origin/main)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 17:58:59 2023 -0300

    Commit

nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$

```

Ahora merge no FF

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git merge --no-ff tp
Merge made by the 'ort' strategy.
 README.md | 2 ++
 1 file changed, 2 insertions(+)
```

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git log
commit 0c6dd5ae6403d0580a269b84aa38654a015de735 (HEAD -> main)
Merge: eedcae6 ad81dc6
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:15:11 2023 -0300

    Merge branch 'tp'
    merge no-ff

commit ad81dc60fe5921b2eb63d61e9e0cf738cff4c223 (origin/tp, tp)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:14:33 2023 -0300

    commit

commit 90c3d9fe7672434c4e0b5899b7c47584c64cbb93
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:04:46 2023 -0300

    Rama 2

commit eedcae6c5a2234f58ffcded499868a63386d8d4f (origin/main)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 17:58:59 2023 -0300

    ...skipping...

commit 0c6dd5ae6403d0580a269b84aa38654a015de735 (HEAD -> main)
Merge: eedcae6 ad81dc6
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:15:11 2023 -0300

    Merge branch 'tp'
    merge no-ff

commit ad81dc60fe5921b2eb63d61e9e0cf738cff4c223 (origin/tp, tp)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:14:33 2023 -0300

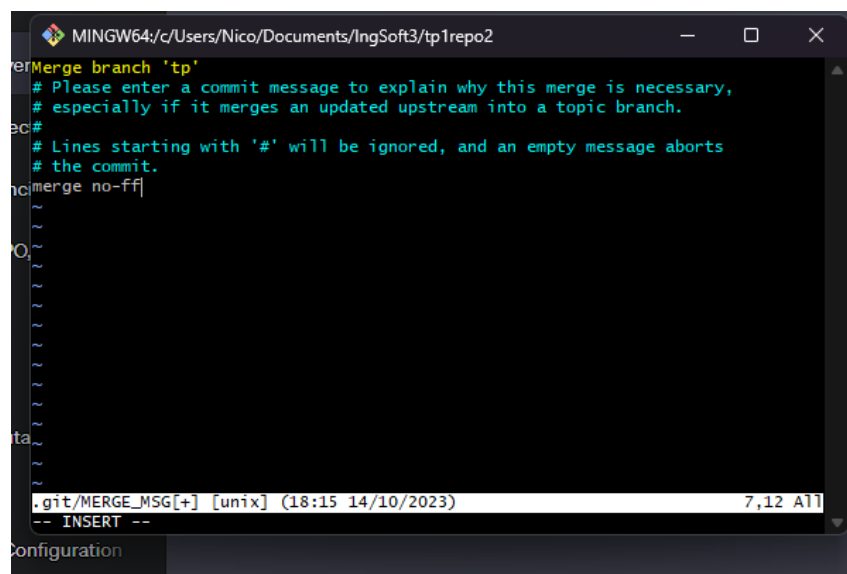
    commit

commit 90c3d9fe7672434c4e0b5899b7c47584c64cbb93
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 18:04:46 2023 -0300

    Rama 2

commit eedcae6c5a2234f58ffcded499868a63386d8d4f (origin/main)
Author: NicoColman <nicolman01@gmail.com>
Date: Sat Oct 14 17:58:59 2023 -0300

    Commit
```



## 5.8: Configuro ByondCompare, creo branch y modifico los "README.md"

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global diff.tool bc3

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global difftool.bc3.path "C:/Program Files/Beyond Compare 4/BComp.exe"

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global merge.tool bc3

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global mergetool.bc3.path "C:/Program Files/Beyond Compare 4/BComp.exe"

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global mergetool.prompt false

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git config --global difftool.prompt false

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git branch -M ConflictBranch

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (ConflictBranch)
$ echo "Conflict" > README.md
```

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (ConflictBranch)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (ConflictBranch)
$ git commit -m "Conflict"
[ConflictBranch 13d870c] Conflict
1 file changed, 1 insertion(+), 3 deletions(-)

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (ConflictBranch)
$ git checkout main
Switched to a new branch 'main'
branch 'main' set up to track 'origin/main'.

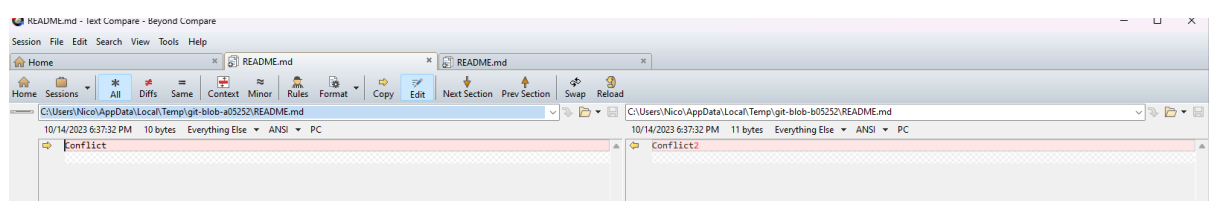
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ echo "Conflict2" > README.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git commit -m "Conflict2"
[main 5e4edf0] Conflict2
1 file changed, 1 insertion(+), 1 deletion(-)
```

Hacemos una comparacion entre los dos commits usando los SHA

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (ConflictBranch)
$ git difftool 13d870c3e3de9f9eda2f76eeb59e733129d1b6bb 5e4edf0bb3cd6b563f92b12c1d0b813ef1bd45c8
```

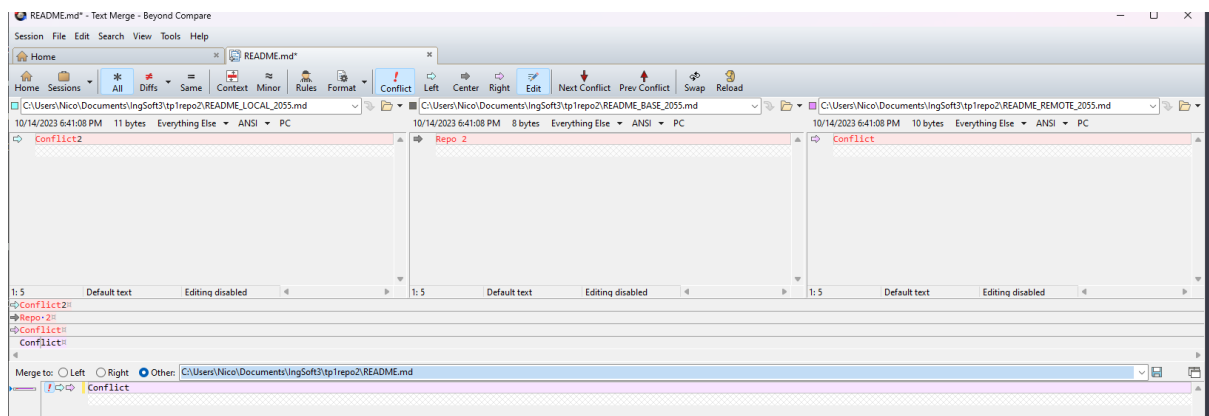


Intentamos mergear y resolvemos los conflictos con mergetool

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git merge ConflictBranch
Auto-merging README.md
CONFLICT (content): Merge conflict in README.md
Automatic merge failed; fix conflicts and then commit the result.

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main|MERGING)
$ git mergetool
Merging:
README.md

Normal merge conflict for 'README.md':
  {local}: modified file
  {remote}: modified file
```



Resolvemos los conflictos y pusheamos

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git add .

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git commit -m "Merge"
[main 0258d35] Merge
1 file changed, 5 insertions(+)
create mode 100644 README.md.orig

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git merge ConflictBranch
Already up to date.

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ echo ".orig" >> .gitignore

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git add .
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time Git touches it

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git commit -m "Conflicts solved"
[main dbd282a] Conflicts solved
1 file changed, 1 insertion(+)
create mode 100644 .gitignore

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git push -u origin main
Enumerating objects: 18, done.
Counting objects: 100% (18/18), done.
Delta compression using up to 16 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (14/14), 1.26 KiB | 1.26 MiB/s, done.
Total 14 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/NicoColman/Prueba-2.git
   eedcae6..dbd282a  main -> main
branch 'main' set up to track 'origin/main'.
```



## 5.9: Creamos un pull request:

```
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (main)
$ git branch -M PullRequest

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (PullRequest)
$ echo "Pull request" >> README.md

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (PullRequest)
$ git add .
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it
g
Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (PullRequest)
$ git commit -m "Pull request"
[PullRequest e7dbe8a] Pull request
1 file changed, 1 insertion(+)

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (PullRequest)
$ git pull origin main
From https://github.com/NicoColman/Prueba-2
 * branch      main       -> FETCH_HEAD
Already up to date.

Nico@DESKTOP-MDI8QUJ MINGW64 ~/Documents/IngSoft3/tp1repo2 (PullRequest)
$ git push origin PullRequest
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 330 bytes | 330.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'PullRequest' on GitHub by visiting:
remote:   https://github.com/NicoColman/Prueba-2/pull/new/PullRequest
remote:
To https://github.com/NicoColman/Prueba-2.git
 * [new branch]      PullRequest -> PullRequest
```

### Pull request #1

NicoColman wants to merge 1 commit into `main` from `PullRequest`

Conversation 0

Commits 1

Checks 0

Files changed 1

NicoColman commented now

Owner

No description provided.

Pull request

e7dbe8a

Add more commits by pushing to the `PullRequest` branch on `NicoColman/Prueba-2`.

Require approval from specific reviewers before merging

Branch protection rules ensure specific people approve pull requests before they're merged.

Add rule

X

Continuous integration has not been set up

GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.

This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request

▼

You can also open this in GitHub Desktop or view command line instructions.



10:

