

Actividad Gitflow

Realizado por:

Keneth Anderson Mejía Lopera

Camilo Casas Loaiza

Ficha:

2928818

Instructor:

Christian Gámez

Competencia:

GitHub

SENA

ADSO

2025

Investigación

1. ¿Qué es Gitflow?

Gitflow es una metodología o estrategia de ramificación que organiza el uso de ramas en Git.

Su objetivo es mantener un flujo de trabajo ordenado dentro de los equipos de desarrollo, definiendo para qué sirve cada rama y en qué momento debe crearse o fusionarse.

De esta forma, facilita la colaboración y el control de versiones en proyectos de software.

2. ¿Qué ramas principales se usan en Gitflow?

Gitflow utiliza dos ramas principales y tres ramas de soporte:

Ramas principales:

- **main (o master):** Contiene la versión estable y final del proyecto, lista para producción.
- **develop:** Es la rama donde se integran las nuevas funciones que están en desarrollo.

Ramas de soporte:

- **feature:** Se usan para desarrollar nuevas funcionalidades o mejoras.
- **release:** Se crean cuando el proyecto está casi listo para lanzarse y se hacen los últimos ajustes.
- **hotfix:** Se crean para corregir errores urgentes directamente en la versión de producción.

3. ¿Cuál es el propósito de cada tipo de rama en Gitflow?

- **Main:** Guardar el código estable del proyecto
- **Develop:** integrar las nuevas funciones que están listas para probar
- **Feature:** Desarrollar una nueva funcionalidad o mejora
- **Release:** Preparar una nueva versión antes del lanzamiento
- **Hotfix:** Corregir errores urgentes en la versión en producción

5. ¿Cuáles son los pasos para implementar Gitflow en un proyecto real?

- **Inicializar Gitflow en el repositorio:**

`git flow init`

- **Crear una nueva rama feature:**

`git flow feature start nombre-feature`

- **Finalizar la feature (fusiona con develop):**

`git flow feature finish nombre-feature`

- **Crear una rama release para preparar el lanzamiento:**

`git flow release start 1.0.0`

- **Finalizar la release (fusiona con main y develop):**

`git flow release finish 1.0.0`

- **Crear un hotfix para corregir errores en producción:**

`git flow hotfix start nombre-hotfix`

`git flow hotfix finish nombre-hotfix`

6. ¿Qué es un pull request? ¿Qué es un merge?

Pull Request (PR):

Es una solicitud que se hace en GitHub para revisar y fusionar los cambios de una rama (por ejemplo, una feature) con otra rama principal (como develop o main). Permite que otros miembros del equipo revisen el código antes de unirlo.

Merge:

Es la acción de **unir los cambios** de una rama con otra.

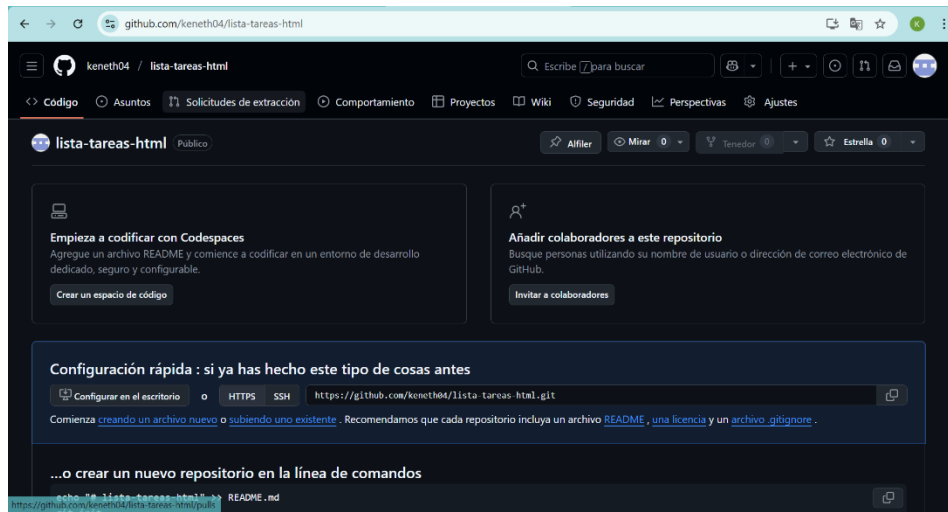
Por ejemplo, unir la rama feature/login con develop después de terminar una nueva funcionalidad.

Fuentes:

- <https://www.atlassian.com/git/tutorials/comparing-workflows/gitflow-workflow>
- <https://nvie.com/posts/a-successful-git-branching-model/>
- <https://docs.github.com/>

Ejercicio practico

1. Creación del repositorio:



2. Clonación del repositorio:

```
LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow (master)
$ git clone https://github.com/keneth04/lista-tareas-html
Cloning into 'lista-tareas-html'...
warning: You appear to have cloned an empty repository.

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow (master)
$ cd lista-tareas-html

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas
-html (main)
$ |
```

3. Creación de archivos iniciales y primer commit.

```
ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas
$ cat > index.html
<html> (main)
$ echo '<!DOCTYPE html>'
<html>
<head>
  <meta charset='utf-8'>
  <title>Lista de tareas</title>
</head>
<body>
  <h1>Lista de tareas</h1>
</body>
</html>' > index.html

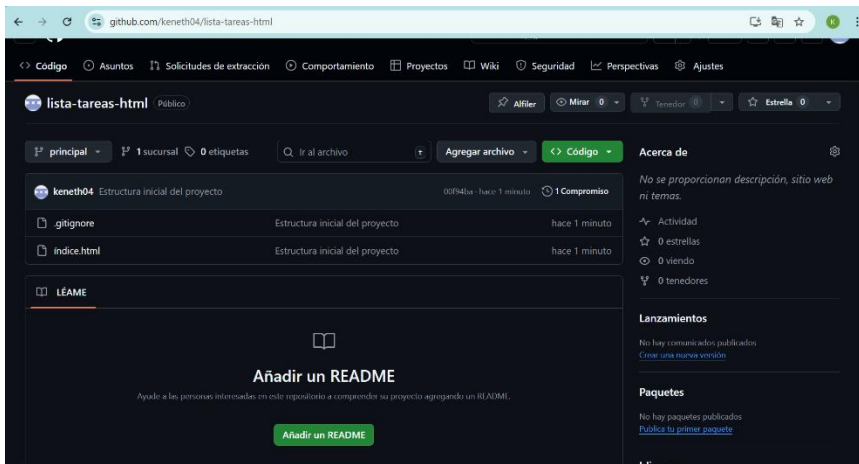
ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas-html (main)
$ echo "node_modules/" > .gitignore

ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas-html (main)
$ git add .
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time Git touches it

ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas-html (main)
$ git commit -m "Estructura inicial del proyecto"
[main (root-commit) 00f94ba] Estructura inicial del proyecto
2 files changed, 11 insertions(+)
create mode 100644 .gitignore
create mode 100644 index.html

ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas-html (main)
$ git push -u origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 385 bytes | 385.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/keneth04/lista-tareas-html
 * [new branch] main -> main
branch 'main' set up to track 'origin/main'.

ENOV@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/GitFlow/lista-tareas-html (main)
$ |
```



4. Instalación de gitflow:

```
PowerShell 7 (x64)
Chocolatey detected you are not running from an elevated command shell
(cmd/powershell).

You may experience errors - many functions/packages
require admin rights. Only advanced users should run choco w/out an
elevated shell. When you open the command shell, you should ensure
that you do so with "Run as Administrator" selected. If you are
attempting to use Chocolatey in a non-administrator setting, you
must select a different location other than the default install
location. See
https://docs.chocolatey.org/en-us/choco/setup#non-administrative-install
for details.

For the question below, you have 20 seconds to make a selection.

Do you want to continue?([Y]es/[N]o): y

Installing the following packages:
gitflow-avh
By installing, you accept licenses for the packages.
gitflow-avh v0.0.0.20200718 already installed.
Use --force to reinstall, specify a version to install, or try upgrade.

Chocolatey installed 0/1 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Warnings:
- gitflow-avh - gitflow-avh v0.0.0.20200718 already installed.
Use --force to reinstall, specify a version to install, or try upgrade.
PS C:\Users\LENOVO> |
```

```
LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git flow version
1.12.3 (AVH Edition)
```

5. Ramas principales:

```
LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git flow init

Which branch should be used for bringing forth production releases?
- main
Branch name for production releases: [main]
Branch name for "next release" development: [develop]

How to name your supporting branch prefixes?
Feature branches? [feature/]
Bugfix branches? [bugfix/]
Release branches? [release/]
Hotfix branches? [hotfix/]
Support branches? [support/]
Version tag prefix? []
Hooks and filters directory? [C:/Users/LENOVO/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1/.git/hooks]

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (develop)
$ git push -u origin develop
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote: https://github.com/keneth04/lista-tareas-htm1/pull/new/develop
remote:
To https://github.com/keneth04/lista-tareas-htm1
 * [new branch] develop -> develop
branch 'develop' set up to track 'origin/develop'.

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (develop)
$ git branch -a
* develop
  main
  remotes/origin/develop
  remotes/origin/main

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (develop)
$ |
```

6. Nuevo feature agregar-tarea:

```
Now, start committing on your feature. When done, use:

git flow feature finish agregar-tarea

LENOVO\DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/Github/Gitflow/lista-tareas-htm1 (feature/agregar-tarea)
$ git add index.html
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time Git touches it
LENOVO\DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/Github/Gitflow/lista-tareas-htm1 (feature/agregar-tarea)
$ git commit -m "Colocacion de formulario para agregar tareas"
[feature/agregar-tarea e614831] Colocacion de formulario para agregar tareas
1 file changed, 6 insertions(+)
```

```
LENOVO\DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/Github/Gitflow/lista-tareas-htm1 (feature/agregar-tarea)
$ git flow feature publish agregar-tarea
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 460 bytes | 460.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/agregar-tarea' on GitHub by visiting:
remote: https://github.com/keneth04/lista-tareas-htm1/pull/new/Feature/agregar-tarea
To https://github.com/keneth04/lista-tareas-htm1
 * [new branch] feature/agregar-tarea -> feature/agregar-tarea
branch 'feature/agregar-tarea' set up to track 'origin/feature/agregar-tarea'.
Already on 'feature/agregar-tarea'.
Your branch is up to date with 'origin/feature/agregar-tarea'.

Summary of actions:
- The remote branch 'feature/agregar-tarea' was created or updated
- The local branch 'feature/agregar-tarea' was configured to track the remote branch
- You are now on branch 'feature/agregar-tarea'

LENOVO\DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/Github/Gitflow/lista-tareas-htm1 (feature/agregar-tarea)
$ git branch -a
* feature/agregar-tarea
main
remotes/origin/HEAD -> origin/main
remotes/origin/develop
remotes/origin/feature/agregar-tarea
remotes/origin/main
```

7. Pull request y merge de colocación de formulario para agregar tareas:

base: develop compare: feature/agregar-tarea ✓ Able to merge. These branches can be automatically merged.

Add a title

Colocacion de formulario para agregar tareas

Add a description

Write Preview

Add your description here...

Markdown is supported Paste, drop, or click to add files

Create pull request

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#)

Reviewers: No reviews

Assignees: No one — assign yourself

Labels: None yet

Projects: None yet

Milestone: No milestone

Development: Use **Closing keywords** in the description to automatically close issues

Helpful resources: [GitHub Community Guidelines](#)

Merged Colocacion de formulario para agregar tareas #1

keneth04 merged 1 commit into develop from feature/agregar-tarea now

keneth04 commented 1 minute ago

No description provided.

Colocacion de formulario para agregar tareas e614831

keneth04 merged commit 48300e6 into develop now

Pull request successfully merged and closed

You're all set — the feature/agregar-tarea branch can be safely deleted.

Delete branch

Add a comment

Write Preview

Add your comment here...

Reviewers: No reviews Still in progress? Comment to draft

Assignees: No one — assign yourself

Labels: None yet

Projects: None yet

Milestone: No milestone

Development: Successfully merging this pull request may close these issues

8. Release 1.0.0:

```
MINGW64/c/Users/LENOVO/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1
(use "git push" to publish your local commits)
fatal: no tag message?
Fatal: Tagging failed. Please run finish again to retry.

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ AC

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git tag -a v1.0.0 -m "Versión 1.0.0 estable lista para producción"

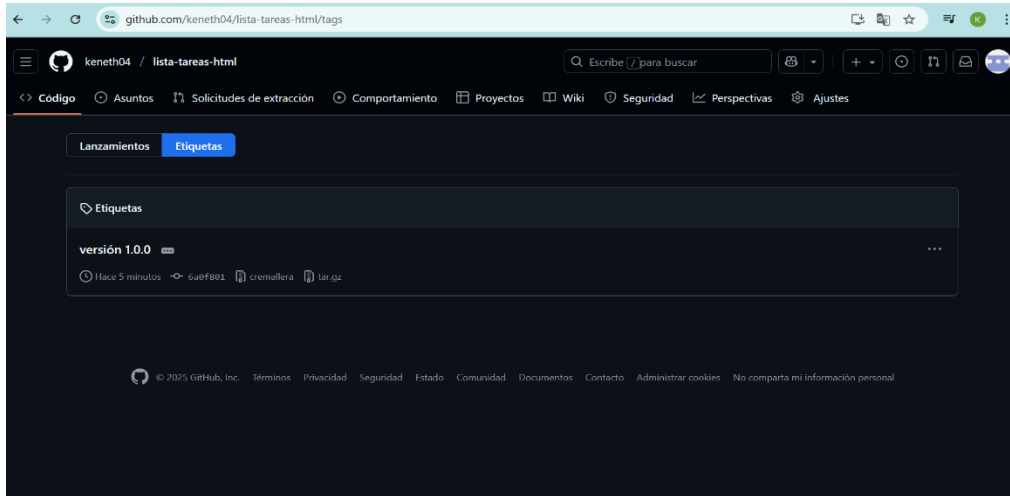
LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git tag
v1.0.0

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 499 bytes | 499.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/keneth04/lista-tareas-htm1
    00f94ba..6a0f801  main -> main

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push origin develop
Everything up-to-date

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push origin --tags
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 189 bytes | 189.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/keneth04/lista-tareas-htm1
 * [new tag]          v1.0.0 -> v1.0.0

LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git branch -a
  develop
  feature/agregar-tarea
* main
  release/1.0.0
  remotes/origin/HEAD -> origin/main
  remotes/origin/develop
  remotes/origin/feature/agregar-tarea
  remotes/origin/main
```



9. Rama hotfix, commits y merge de hotfix en GitHub:

```
switched to branch 'main'
Your branch is up to date with 'origin/main'.
Merge made by the 'ort' strategy.
index.html | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
fatal: no tag message?
fatal: Tagging failed. Please run finish again to retry.

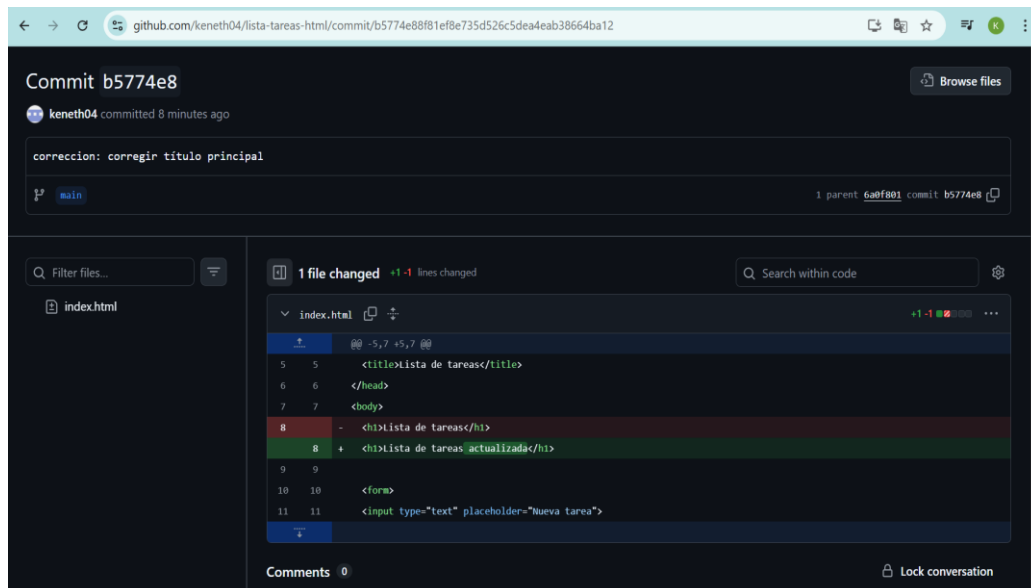
ENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 412 bytes | 412.00 KiB/s, done.
Total 4 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 2 local objects.
To https://github.com/keneth04/lista-tareas-htm1
   6a0f801..b4c9a7a  main -> main

ENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push origin develop
Everything up-to-date

ENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git push --tags
Everything up-to-date

ENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
$ git branch -a
  develop
  feature/agregar-tarea
  hotfix/1.0.1
  main
  release/1.0.0
remotes/origin/HEAD -> origin/main
remotes/origin/develop
remotes/origin/feature/agregar-tarea
remotes/origin/main

ENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-htm1 (main)
```



10. Arbol GitHub:

```
LENOVO@DESKTOP-LEH3939 MINGW64 ~/Desktop/Trimestre_7/GitHub/Gitflow/lista-tareas-html (main)
$ git log --oneline --graph --decorate --all
* b4c9a7a (HEAD -> main, origin/main, origin/HEAD) Merge branch 'hotfix/1.0.1'
|
| * b5774e8 (hotfix/1.0.1) correccion: corregir título principal
|/
* 6a0f801 (tag: v1.0.0) Merge branch 'release/1.0.0'
|
| * 6fbc2f3 (release/1.0.0) tarea(release): preparar versión 1.0.0
| * 40300e6 (origin/develop, develop) Merge pull request #1 from keneth04/feature/agregar-tarea
|/|
| * e614831 (origin/feature/agregar-tarea, feature/agregar-tarea) Colocacion de formulario para agregar tareas
|/
* 00f94ba Estructura inicial del proyecto
```

Repositorio:

<https://github.com/keneth04/lista-tareas-html>