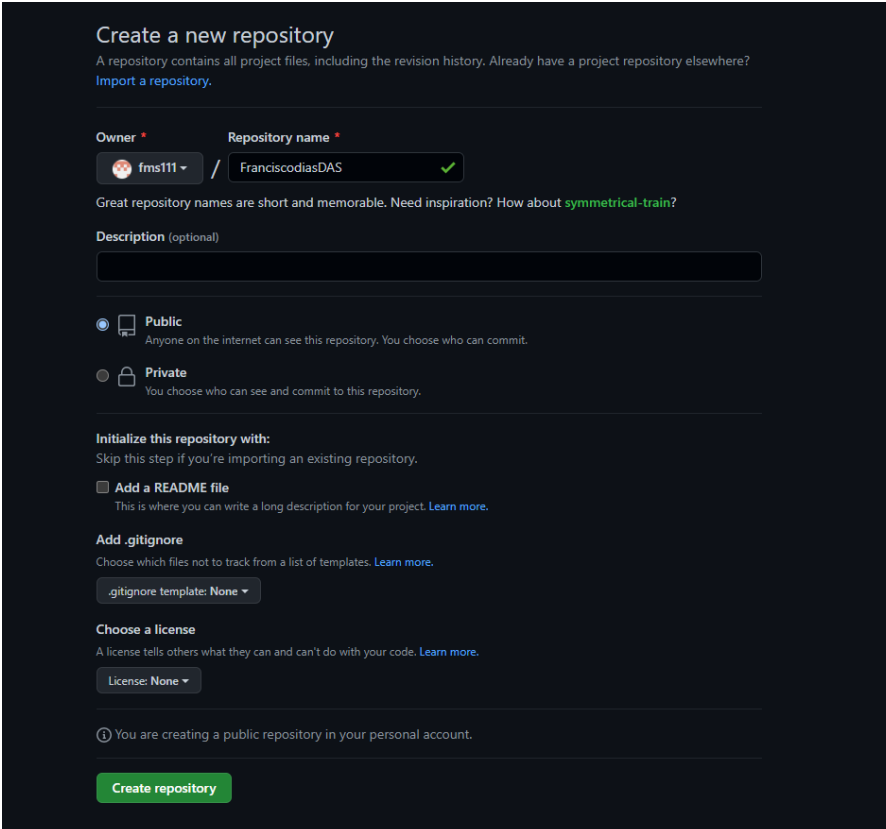


Relatório Trabalho Final DAS - Francisco Dias 2022095

Link Repositório: <https://github.com/fms111/FranciscodiasDAS>

1. Criar o Repositório no GitHub e as branches do mesmo



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner ^{*} Repository name ^{*}

fms111 / FranciscodiasDAS ✓

Great repository names are short and memorable. Need inspiration? How about [symmetrical-train?](#)

Description (optional)

☒ Public
Anyone on the internet can see this repository. You choose who can commit.

☐ Private
You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

☒ Add a README file
This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

.gitignore template: None

Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

License: None

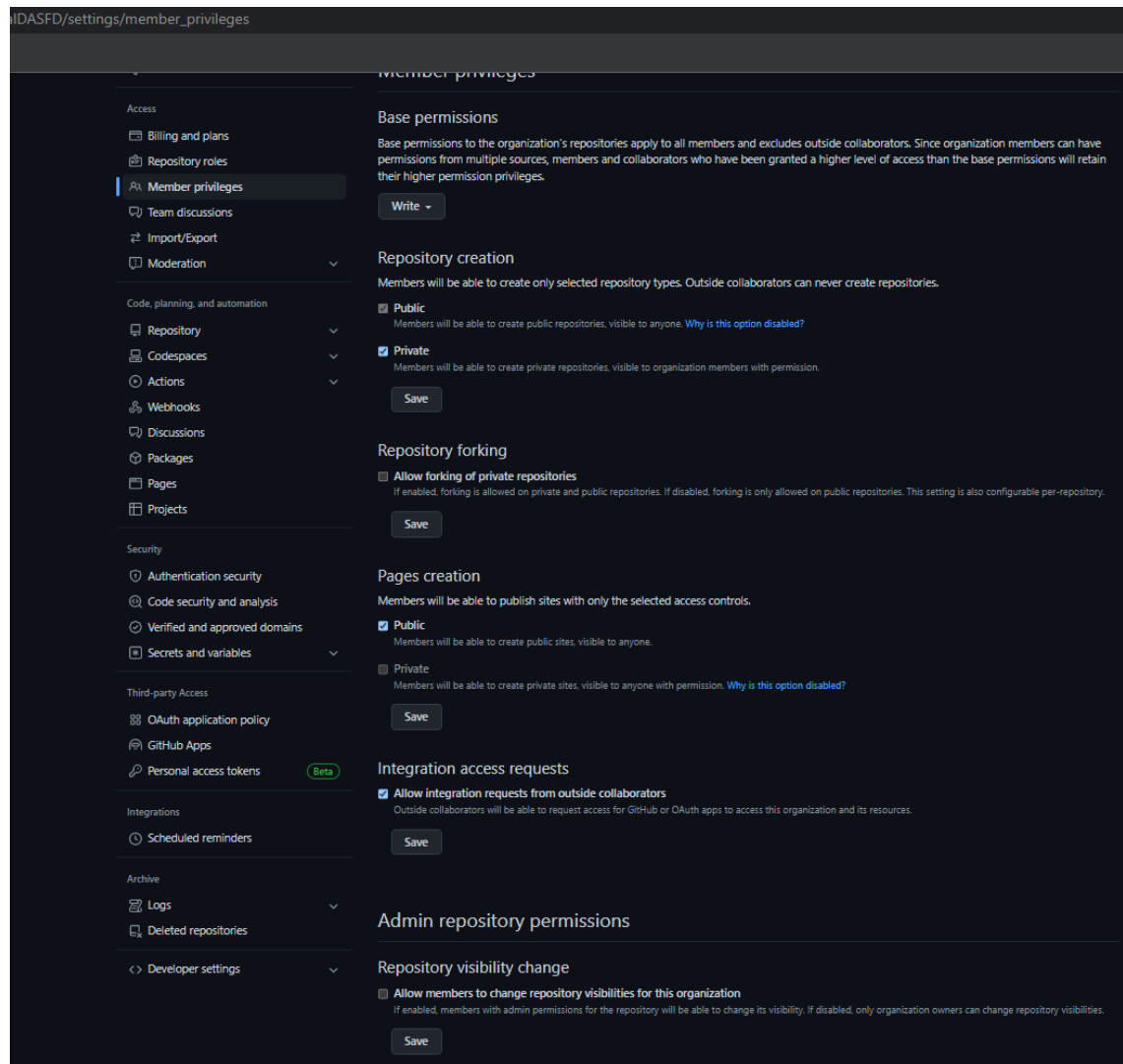
ⁱ You are creating a public repository in your personal account.

Create repository

```
$ git flow init
No branches exist yet. Base branches must be created now.
Branch name for production releases: [master]
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/Utilizador/FranciscodiasDAS/.git/hooks]
```

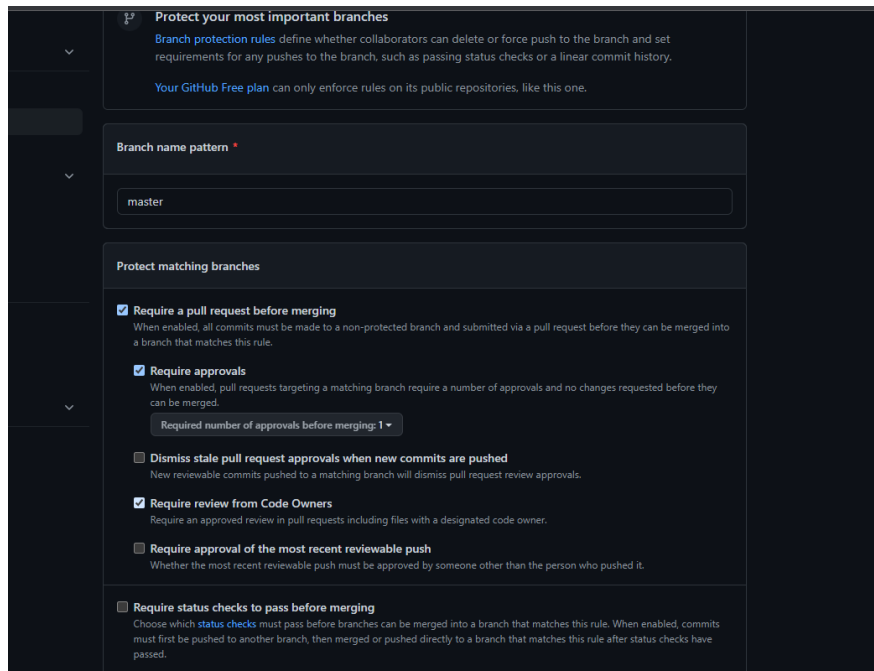
2. Criei uma organização no GitHub e coloquei as regras em ordem



Alterei a permissão para Write

Desativei a Repository Visibility Change

3. Tornei obrigatória a revisão do código antes de ser aprovado um Pull Request



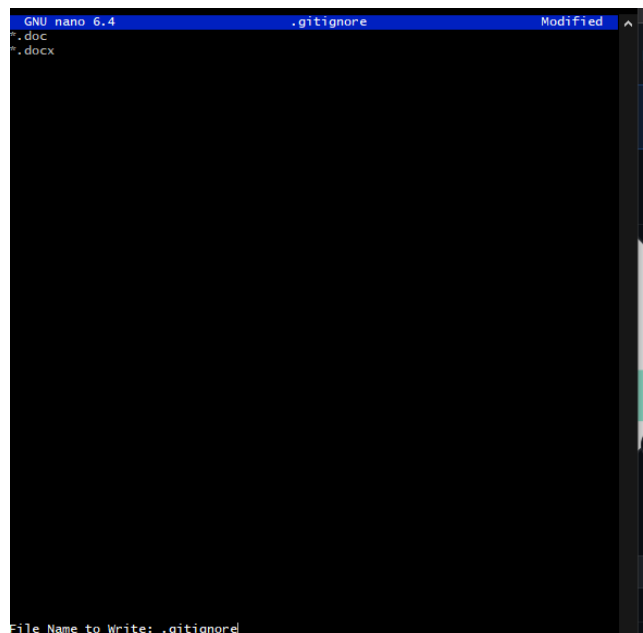
Protect your most important branches
Branch protection rules define whether collaborators can delete or force push to the branch and set requirements for any pushes to the branch, such as passing status checks or a linear commit history.
Your GitHub Free plan can only enforce rules on its public repositories, like this one.

Branch name pattern *
master

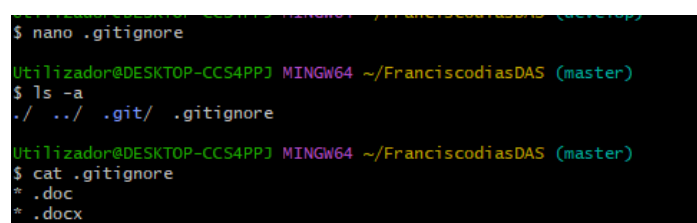
Protect matching branches

- ☒ **Require a pull request before merging**
When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.
- ☒ **Require approvals**
When enabled, pull requests targeting a matching branch require a number of approvals and no changes requested before they can be merged.
Required number of approvals before merging: 1
- ☐ **Dismiss stale pull request approvals when new commits are pushed**
New reviewable commits pushed to a matching branch will dismiss pull request review approvals.
- ☒ **Require review from Code Owners**
Require an approved review in pull requests including files with a designated code owner.
- ☐ **Require approval of the most recent reviewable push**
Whether the most recent reviewable push must be approved by someone other than the person who pushed it.
- ☐ **Require status checks to pass before merging**
Choose which status checks must pass before branches can be merged into a branch that matches this rule. When enabled, commits must first be pushed to another branch, then merged or pushed directly to a branch that matches this rule after status checks have passed.

4. Adicionar um ficheiro .Gitignore para ignorar ficheiros .doc e .docx



```
GNU nano 6.4 .gitignore Modified
*.doc
*.docx
```



```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ nano .gitignore

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ ls -a
./ ../ .git/ .gitignore

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ cat .gitignore
*.doc
*.docx
```

5. Controlar as versões do relatório a entregar usando o repositório, sendo que é necessário que existam pelo menos:

a) 1 carregamento inicial do ficheiro no branch develop

Comandos para fazer push para o repositório:

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore

nothing added to commit but untracked files present (use "git add" to track)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git add .
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time Git touches it

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git commit -m "Configuração do gitignore"
[master 86a228d] Configuração do gitignore
1 file changed, 2 insertions(+)
create mode 100644 .gitignore

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git push origin develop
Everything up-to-date

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Writing objects: 100% (3/3), 274 bytes | 274.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/fms111/FranciscodiasDAS.git
257baef..86a228d master -> master
```

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/TrabalhofinalDAS (develop)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/TrabalhofinalDAS (develop)
$ git commit -m "Primeiro carregamento"
[develop 0fbd95a] Primeiro carregamento
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Doc1.pdf

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/TrabalhofinalDAS (develop)
$ git push origin develop
```

Print do Pull Request

The screenshot shows a GitHub Pull Request interface. At the top, a green banner indicates that the 'develop' branch has recent pushes less than a minute ago, with a 'Compare & pull request' button. Below this, the repository is identified as 'fms111 Configuração do gitignore'. The interface shows the 'master' branch selected, with 2 branches and 0 tags. A commit by 'fms111' is displayed, titled 'Configuração do gitignore', with a commit hash of '86a228d' and a timestamp of '7 minutes ago'. The commit message is 'Configuração do gitignore'. The file '.gitignore' is listed as the only change, with a timestamp of '7 minutes ago'.

Criação do pull request

The screenshot shows the GitHub 'Create pull request' page. At the top, it indicates the base branch is 'master' and the compare branch is 'develop', with a green checkmark stating 'Able to merge. These branches can be automatically merged.' The main title of the pull request is 'primeiro carregamento'. Below the title, there are tabs for 'Write' and 'Preview'. The 'Write' tab is active, showing a large text area for a description with the placeholder 'Leave a comment'. Below the text area is a section for attaching files. On the right side, there are several configuration options: 'Reviewers' (set to 'No reviews—at least 1 approving review is required.'), 'Assignees' (set to 'No one—assign yourself'), 'Labels' (set to 'None yet'), 'Projects' (set to 'None yet'), 'Milestone' (set to 'No milestone'), and 'Development' (with a note to 'Use Closing keywords in the description to'). A green 'Create pull request' button is located at the bottom right of the main content area.

Review / Aprovação do Pull Request

The screenshot shows the GitHub pull request review page. At the top, it indicates that 'fms111' wants to merge 1 commit into 'master' from 'develop'. Below this, there are tabs for 'Conversation' (0), 'Commits' (1), 'Checks' (0), and 'Files changed' (1). The 'Conversation' tab is active, showing a comment from 'fms111' with the text 'No description provided.' Below the comment, there is a section for 'Add more commits by pushing to the develop branch on fms111/FranciscodiasDAS.' This section contains three items: 'Review required' (At least 1 approving review is required by reviewers with write access. Learn more.), 'Merging is blocked' (Merging can be performed automatically with 1 approving review.), and a checkbox for 'Merge without waiting for requirements to be met (bypass branch protections)' which is checked. Below these items is a 'Merge pull request' button. At the bottom, there is a 'Write' tab and a 'Preview' tab. The 'Write' tab is active, showing a large text area for a comment with the placeholder 'Leave a comment'. Below the text area is a section for attaching files. At the bottom right, there are buttons for 'Close pull request' and 'Comment'.

b) 5 alterações no próprio branch develop com os devidos comentários

-- Criação e alteração da feature1das --

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git flow feature start feature1das
Switched to a new branch 'feature/feature1das'

Summary of actions:
- A new branch 'feature/feature1das' was created, based on 'develop'
- You are now on branch 'feature/feature1das'

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

    git flow feature finish feature1das

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature1das)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature1das)
$ git commit -m "relatoriov1"
[feature/feature1das 4d39de4] relatoriov1
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature1das)
$ git flow feature finish feature1das
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
Updating f9adea0..4d39de4
Fast-forward
 Doc1.pdf | Bin 25662 -> 409984 bytes
 1 file changed, 0 insertions(+), 0 deletions(-)
Deleted branch feature/feature1das (was 4d39de4).

Summary of actions:
- The feature branch 'feature/feature1das' was merged into 'develop'
- Feature branch 'feature/feature1das' has been locally deleted
- You are now on branch 'develop'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git push origin develop
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 370.14 KiB | 16.82 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/fms111/FranciscodiasDAS.git
 f9adea0..4d39de4 develop -> develop
```

-- Criação e alteração da feature2das --

```

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git flow feature start feature2das
Switched to a new branch 'feature/feature2das'

Summary of actions:
- A new branch 'feature/feature2das' was created, based on 'develop'
- You are now on branch 'feature/feature2das'

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

    git flow feature finish feature2das

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature2das)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature2das)
$ git commit -m "relatorio2"
[feature/feature2das ab495c4] relatorio2
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature2das)
$ git flow feature finish feature2das
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
Updating 4d39de4..ab495c4
Fast-forward
 Doc1.pdf | Bin 409984 -> 444099 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
Deleted branch feature/feature2das (was ab495c4).

Summary of actions:
- The feature branch 'feature/feature2das' was merged into 'develop'
- Feature branch 'feature/feature2das' has been locally deleted
- You are now on branch 'develop'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git push origin develop
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 34.66 KiB | 3.47 MiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/fms111/FranciscodiasDAS.git
4d39de4..ab495c4 develop -> develop

```

-- Criação e alteração da feature3das --

```

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git flow feature start feature3das
Switched to a new branch 'feature/feature3das'
M Doc1.pdf

Summary of actions:
- A new branch 'feature/feature3das' was created, based on 'develop'
- You are now on branch 'feature/feature3das'

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

    git flow feature finish feature3das

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature3das)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature3das)
$ git commit -m "relatorio3"
[feature/feature3das cbdc951] relatorio3
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature3das)
$ git flow feature finish feature3das
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
Updating ab495c4..cbdc951
Fast-forward
 Doc1.pdf | Bin 444099 -> 477333 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
Deleted branch feature/feature3das (was cbdc951).

Summary of actions:
- The feature branch 'feature/feature3das' was merged into 'develop'
- Feature branch 'feature/feature3das' has been locally deleted
- You are now on branch 'develop'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git push origin develop
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 36.42 KiB | 3.31 MiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/fms111/FranciscodiasDAS.git
ab495c4..cbdc951 develop -> develop

```

-- Criação e alteração da feature4das --

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git flow feature start feature4das
Switched to a new branch 'feature/feature4das'

Summary of actions:
- A new branch 'feature/feature4das' was created, based on 'develop'
- You are now on branch 'feature/feature4das'

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

    git flow feature finish feature4das

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature4das)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature4das)
$ git commit -m "relatorio4"
[feature/feature4das 2417e23] relatorio4
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature4das)
$ git flow feature finish feature4das
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
Updating 3e918a7..2417e23
Fast-forward
 Doc1.pdf | Bin 477333 -> 512619 bytes
 1 file changed, 0 insertions(+), 0 deletions(-)
Deleted branch feature/feature4das (was 2417e23).

Summary of actions:
- The feature branch 'feature/feature4das' was merged into 'develop'
- Feature branch 'feature/feature4das' has been locally deleted
- You are now on branch 'develop'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git push origin develop
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 37.32 KiB | 4.66 MiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/fms111/FranciscodiasDAS.git
 3e918a7..2417e23  develop -> develop
```

alteração da

-- Criação e
feature5das--

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git flow feature start feature5das
Switched to a new branch 'feature/feature5das'

Summary of actions:
- A new branch 'feature/feature5das' was created, based on 'develop'
- You are now on branch 'feature/feature5das'

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

    git flow feature finish feature5das

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature5das)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature5das)
$ git commit -m "relatorio5"
[feature/feature5das d6bec03] relatorio5
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (feature/feature5das)
$ git flow feature finish feature5das
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
Updating 2417e23..d6bec03
Fast-forward
 Doc1.pdf | Bin 512619 -> 546396 bytes
 1 file changed, 0 insertions(+), 0 deletions(-)
Deleted branch feature/feature5das (was d6bec03).

Summary of actions:
- The feature branch 'feature/feature5das' was merged into 'develop'
- Feature branch 'feature/feature5das' has been locally deleted
- You are now on branch 'develop'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (develop)
$ git push origin develop
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 36.05 KiB | 4.00 MiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/fms111/FranciscodiasDAS.git
 2417e23..d6bec03  develop -> develop
```


-- Criação da release para a branch master --

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git flow release start releasedas
Switched to a new branch 'release/releasedas'

Summary of actions:
- A new branch 'release/releasedas' was created, based on 'develop'
- You are now on branch 'release/releasedas'

Follow-up actions:
- Bump the version number now!
- Start committing last-minute fixes in preparing your release
- When done, run:

    git flow release finish 'releasedas'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (release/releasedas)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (release/releasedas)
$ git commit -m "releasedas"
[release/releasedas 4dbe7f2] releasedas
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (release/releasedas)
$ git flow release finish releasedas
Branches 'master' and 'origin/master' have diverged.
Fatal: And branch 'master' may be fast-forwarded.

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (release/releasedas)
$ git push origin master
Enumerating objects: 5, done.
Compressing objects: 100% (5/5), done.
Writing objects to disk: 100% (5/5), done.
Total 5 (delta 5), reused 0 (delta 0), pushed 5 to remote.
```

-- Criação da hotfix --

```
Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master)
$ git flow hotfix start hotfixdas master
Switched to a new branch 'hotfix/hotfixdas'

Summary of actions:
- A new branch 'hotfix/hotfixdas' was created, based on 'master'
- You are now on branch 'hotfix/hotfixdas'

Follow-up actions:
- Start committing your hot fixes
- Bump the version number now!
- When done, run:

    git flow hotfix finish 'hotfixdas'

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (hotfix/hotfixdas)
$ git add .

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (hotfix/hotfixdas)
$ git commit -m "hotfixdasrel"
[hotfix/hotfixdas 1cb7f94] hotfixdasrel
1 file changed, 0 insertions(+), 0 deletions(-)

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (hotfix/hotfixdas)
$ git flow hotfix finish hotfixdas
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
hint: Waiting for your editor to close the file... error: There was a problem with the editor 'vi'.
Not committing merge; use 'git commit' to complete the merge.
Fatal: There were merge conflicts.

Utilizador@DESKTOP-CCS4PPJ MINGW64 ~/FranciscodiasDAS (master|MERGING)
$ git push origin master
Enumerating objects: 5, done.
Compressing objects: 100% (5/5), done.
Writing objects to disk: 100% (5/5), done.
Total 5 (delta 5), reused 0 (delta 0), pushed 5 to remote.
Everything up-to-date
```