

# Trabalho final de Dev-ops

Para elaboração do trabalho seguimos os passos abaixo:

## Criar o repositório no GitHub

Feito login na plataforma, ir na parte de repositórios, clicar em novo repositório:

**Create a new repository**

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

**Owner \*** DanielHanum / **Repository name \*** Devops-Academico  
✔ Devops-Academico is available.

Great repository names are short and memorable. Need inspiration? How about **improved-spoon?**

**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:**

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

**Add .gitignore**  
.gitignore template: **None**

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

**Choose a license**  
License: **MIT License**

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

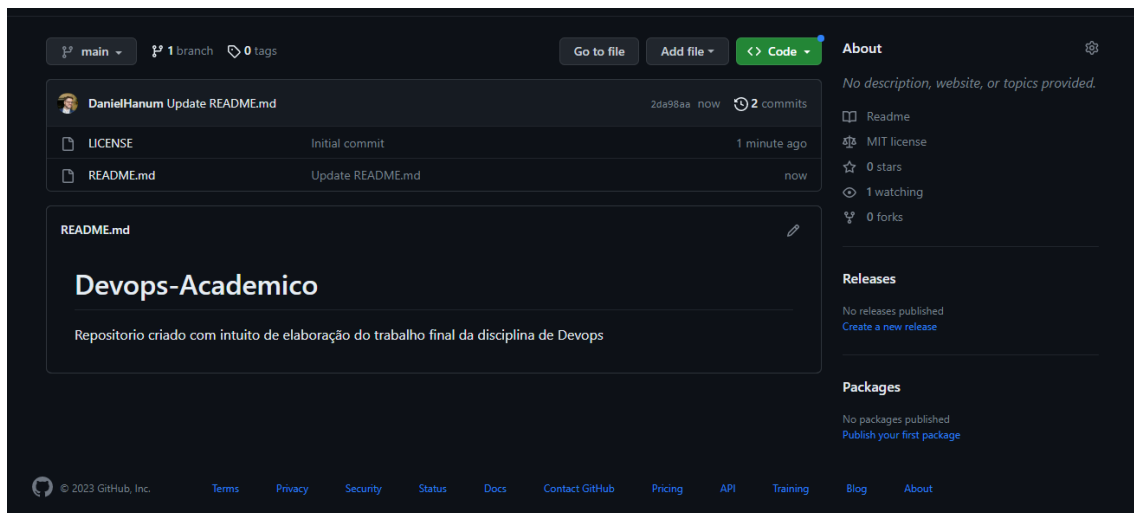
This will set `main` as the default branch. Change the default name in your [settings](#).

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

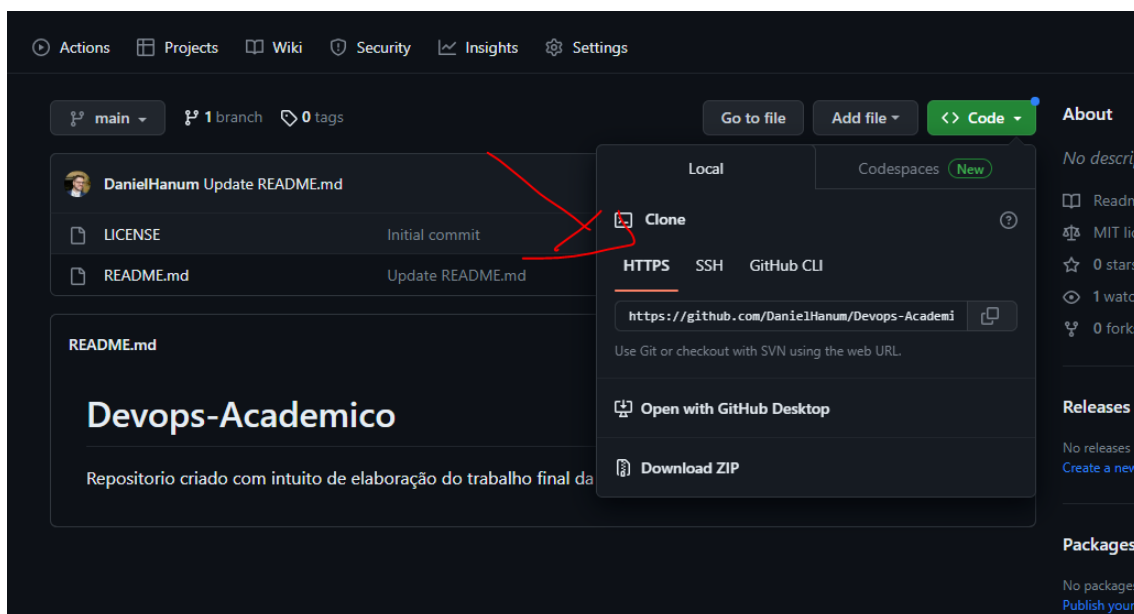
**Create repository**

Clicar em criar repositório.

Após feito isso é importante conferir os arquivos:



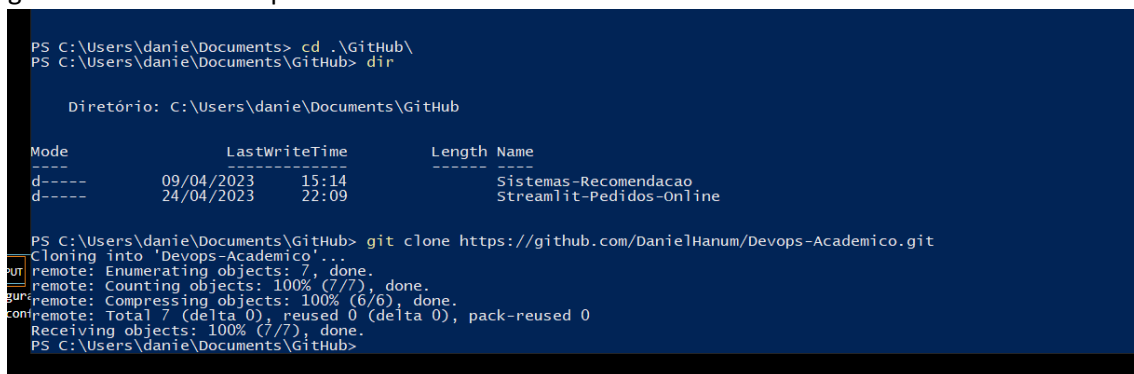
Hora de clonar o repositório para a máquina localmente.



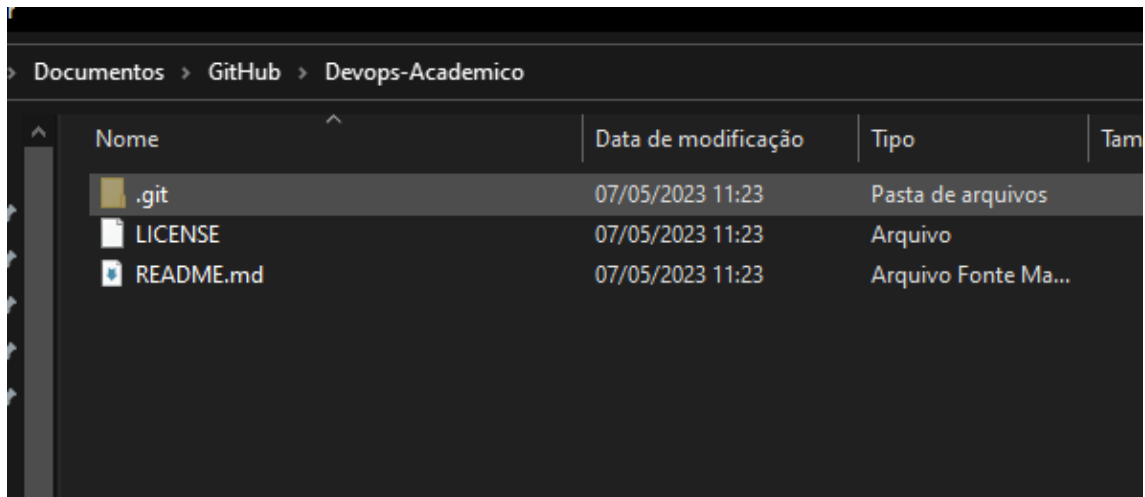
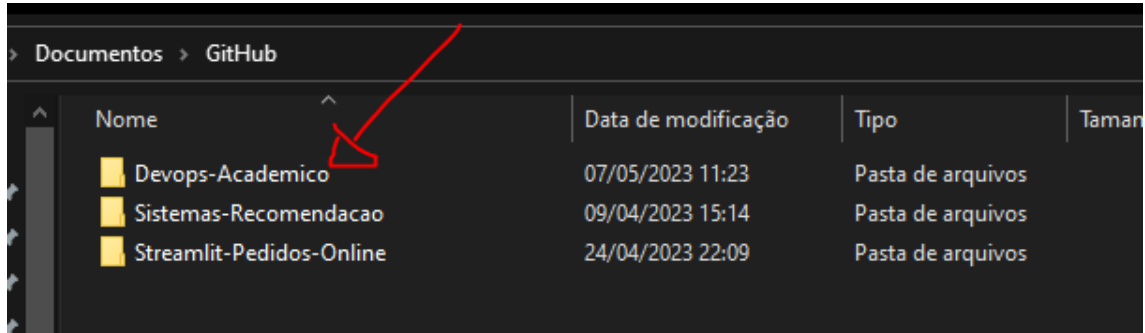
Agora no computador, após instalado o GIT e demais apps repassados em aula, vamos executar a clonagem do repositório, a clonagem será feita pelo Powershell do Windows.

Primeiramente acessamos o diretório raiz depois executamos o comando

git clone "caminho http"



após feito isso, é possível averiguar que a clonagem foi realizada com sucesso:



Para verificar a última alteração basta dar um git log para verificar

```
git log
d----- 07/05/2023    11:23    Devops-Academico
d----- 09/04/2023    15:14    Sistemas-Recomendacao
d----- 24/04/2023    22:09    Streamlit-Pedidos-Online

PS C:\Users\danie\Documents\GitHub> cd .\Devops-Academico\
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git log
commit 2da98aaeb59626e49e2ebf05021de53509dcaad (HEAD -> main, origin/main, origin/HEAD)
Author: Daniel Hanum <104311256+DanielHanum@users.noreply.github.com>
Date:   Sun May 7 11:18:18 2023 -0300

    Update README.md

commit c6a01bc7ae310a4286a8adc7233ae80d32cc54a4
Author: Daniel Hanum <104311256+DanielHanum@users.noreply.github.com>
Date:   Sun May 7 11:17:21 2023 -0300

    Initial commit
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Após feito isso, criamos uma parte inicial do trabalho adicionamos com o nome de main.py conforme print abaixo:

```
nothing to commit, working tree clean
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch main
Your branch is up to date with 'origin/main'.

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

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Para adicioná-lo criamos o código git add main.py

```
nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git add .\main.py
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   main.py

PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Concluído isso, na nossa próxima atualização no git já constará esse novo arquivo a ser trabalhado.

Após feito isso, é hora de dar o git commit para subir o arquivo para o github

```
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git commit -m "add main.py file"
[main 809b8a8] add main.py file
1 file changed, 53 insertions(+)
create mode 100644 main.py
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

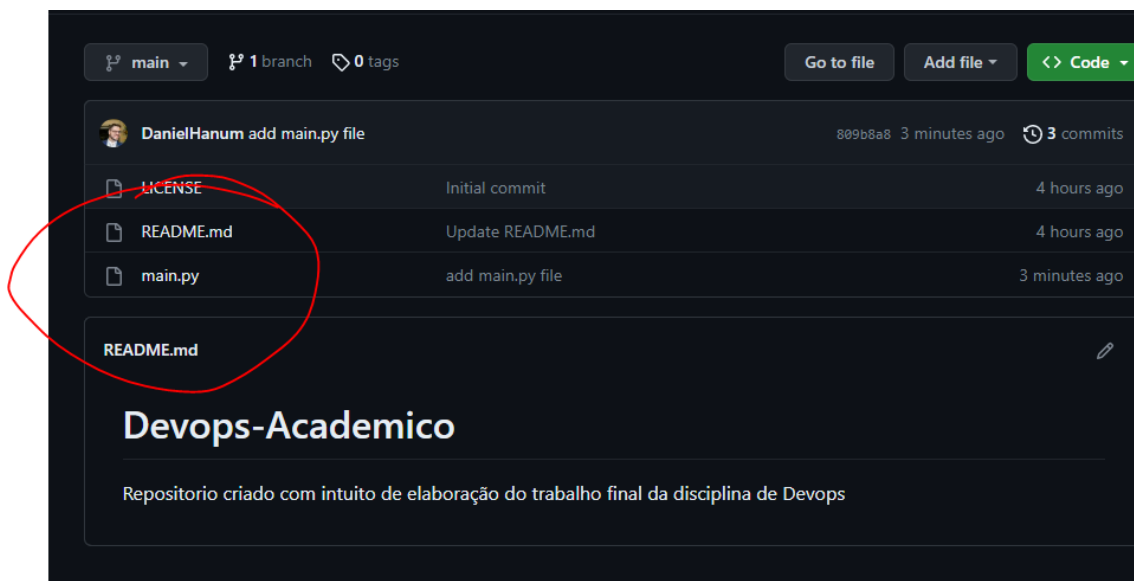
A parte do -m é para criar uma mensagem a ser acrescentar no commit

Após feito isso é feito o git push para subirmos o arquivo no github

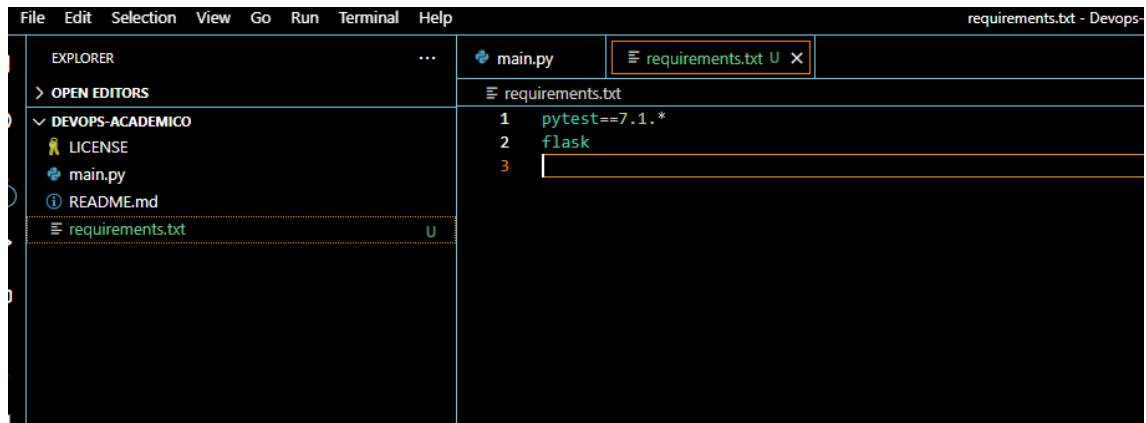
```
(use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git push
info: please complete authentication in your browser...
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 968 bytes | 484.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/DanielHanum/Devops-Academico.git
   2da98aa..809b8a8  main -> main
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Executado e conferido direto no github



Agora Criei o arquivo de requierements, nele iremos armazenar quais bibliotecas serão necessárias para execução do programa.



Conforme explicado durante aula, basta ter um arquivo com o nome das bibliotecas e qual a versão quando necessária.

Após feito isso, daremos um gitstatus no powershell para verificar qual status está:

```
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch main
Your branch is up to date with 'origin/main'.

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

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Foi identificado que falta dar um add, após um commit edepois um push com os requierements, faremos o processo na sequência:

```
nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'
hint: Turn this message off by running
hint: "git config advice.addEmptyPaths false"
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git add .\requirements.txt
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git commit
Aborting commit due to empty commit message.
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git commit -m "adicionado requeriments"
[main 2e2270a] adicionado requeriments
1 file changed, 2 insertions(+)
create mode 100644 requirements.txt
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 322 bytes | 161.00 KiB/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/DanielHanum/Devops-Academico.git
809b8a8..2e2270a main -> main
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Tudo correto no github:



Agora o próximo passo a ser feito é a criação de um modelo de controles de versões, para isso utilizaremos as branches, criando a V.1.0.0, sendo adicionadas na sequência a V.1.0.1, para exemplificar:

```
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git checkout -b V.1.0.0
Switched to a new branch 'V.1.0.0'
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch V.1.0.0
nothing to commit, working tree clean
PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```

Após feito isso, iremos fazer uma simples alteração para exemplificar como ficará na V.1.0.0.

Alterado texto do botão de deletar, ficando assim :

## ANTES

```
0 <html lang= en >
1 <head>
2   <meta charset="UTF-8">
3   <meta name="viewport" content="width=device-width, initial-scale=1.0">
4   <title>Lista de Tarefas</title>
5 </head>
6 <body>
7   <h1>Lista de Tarefas</h1>
8   <form action="/add" method="post">
9     <input type="text" name="task" placeholder="Digite uma nova tarefa" required>
10    <input type="submit" value="Adicionar">
11  </form>
12  <ul>
13    {% for task in tasks %}
14      <li>
15        {{ task }}
16        <a href="{{ url_for('delete_task', task_id=loop.index0) }}">X</a>
17      </li>
18    {% endfor %}
19  </ul>
20 </body>
21 </html>
22 ...
23
24 @app.route('/')
25 def index():
```

# Lista de Tarefas

- teste X

## DEPOIS

```
<form action="/add" method="post">
  <input type="text" name="task" placeholder="Digite uma nova tarefa" required>
  <input type="submit" value="Adicionar">
</form>
<ul>
  {% for task in tasks %}
    <li>
      {{ task }}
      <a href="{{ url_for('delete_task', task_id=loop.index0) }}">DELETAR TAREFA</a>
    </li>
  {% endfor %}
</ul>
</body>
</html>
...
```

# Lista de Tarefas

- teste DELETAR TAREFA



Após isso, daremos um git status para verificar se realmente a alteração consta na Branch V.1.0.0 e depois se estiver tudo certo daremos um git commit e git push

```
modified:   main.py

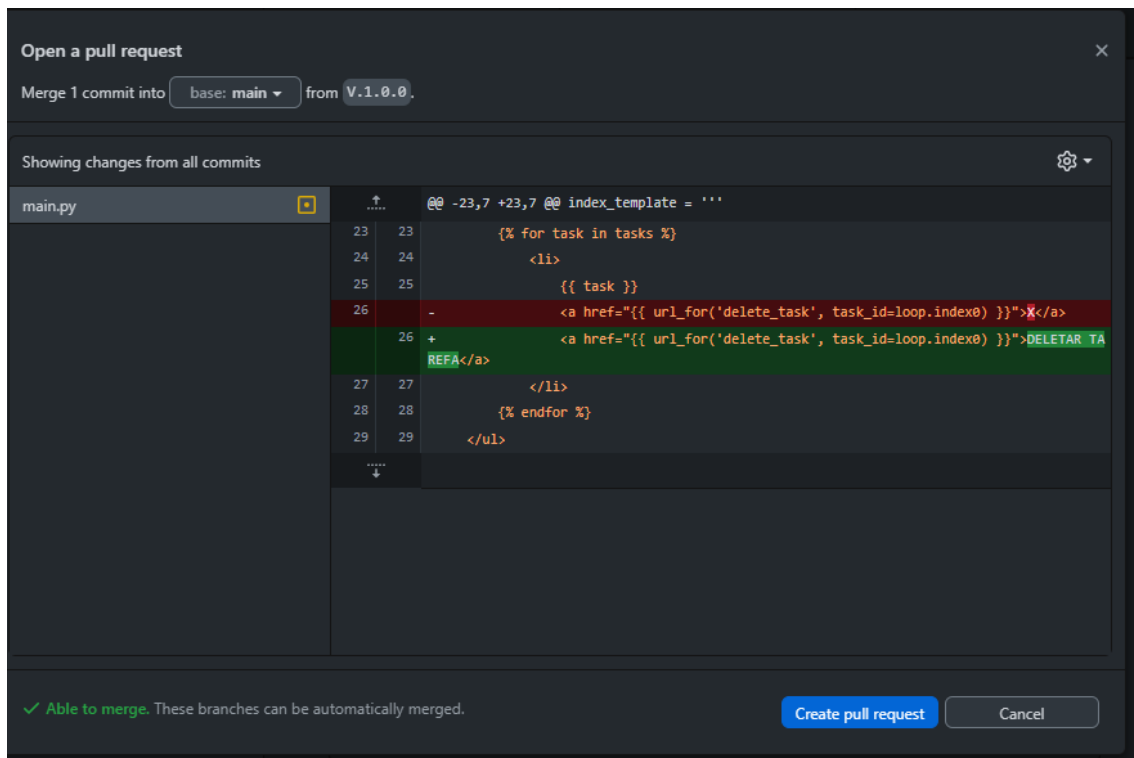
no changes added to commit (use "git add" and/or "git commit -a")
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git status
On branch V.1.0.0
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   main.py

no changes added to commit (use "git add" and/or "git commit -a")
PS C:\Users\danie\Documents\GitHub\Devops-Academico>

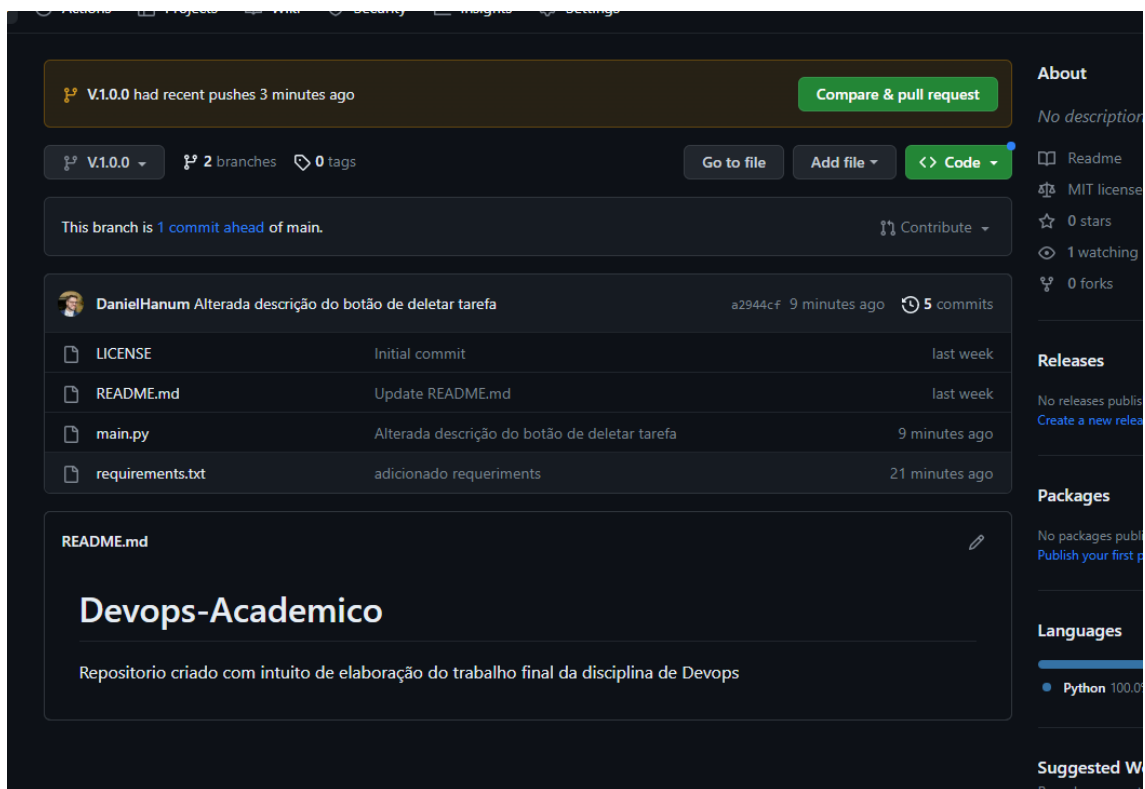
no changes added to commit (use "git add" and/or "git commit -a")
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git add .\main.py
PS C:\Users\danie\Documents\GitHub\Devops-Academico> git commit -m "Alterada descrição do botão de deletar tarefa"
[V.1.0.0 a2944cf] Alterada descrição do botão de deletar tarefa
1 file changed, 1 insertion(+), 1 deletion(-)
```

Para elucidar o que está acontecendo iremos utilizar o app git hub desktop e nele mostrará perfeitamente qual a alteração :





Após feito isso no site do github mostrará as alterações :



Alterada descrição do botão de deletar tarefa

Write

Preview

H B I

alterado botão de deletar tarefa

Attach files by dragging & dropping, selecting or pasting them.

Create pull request

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

Reviews

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](#)

1 commit

1 file changed

1 contributor

Commits on May 14, 2023

Alterada descrição do botão de deletar tarefa

DanielHanum committed 9 minutes ago

a294acf

Showing 1 changed file with 1 addition and 1 deletion.

Split Unified

main.py

@@ -23,7 +23,7 @@

23 23

{% for task in tasks %}

24 24

<li>

25 25

{{ task }}

26 -

<a href="{{ url\_for('delete\_task', task\_id=loop.index0) }}">X</a>

26 +

<a href="{{ url\_for('delete\_task', task\_id=loop.index0) }}">DELETAR TAREFA</a>

27 27

</li>

28 28

{% endfor %}

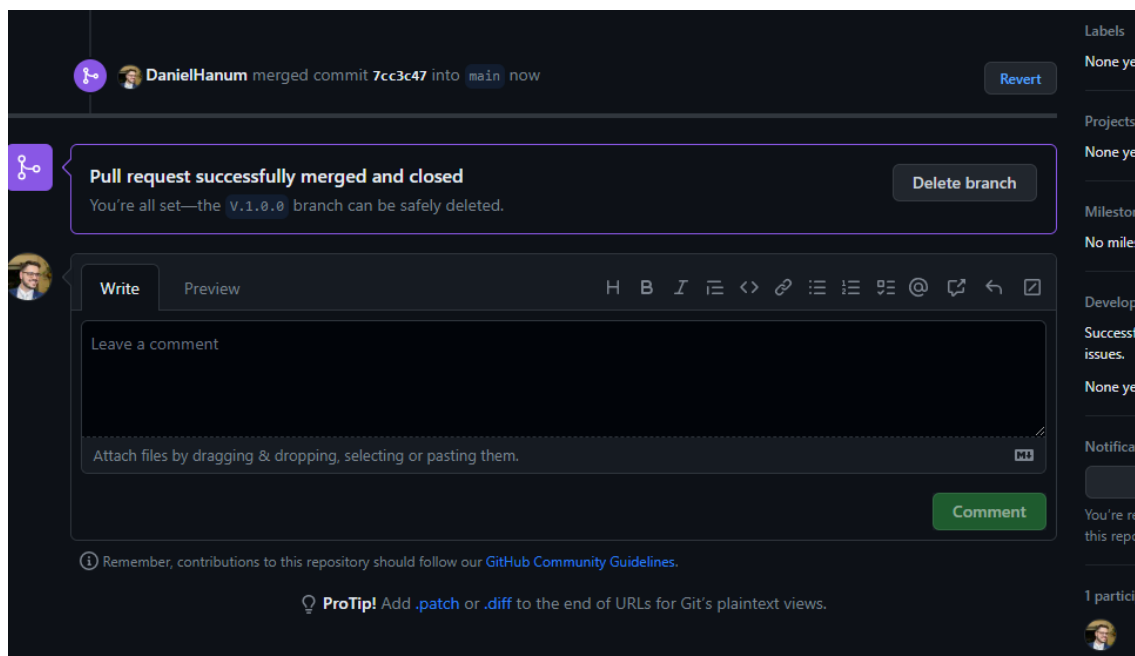
29 29

</ul>

Após criada a pull request avaliamos a parte de fazer o “merge” ou seja, transformar o “main” afim de receber as informações do V.1.0.0



Clicamos em Merge e está feita a primeira atualização



Agora na main consta a alteração

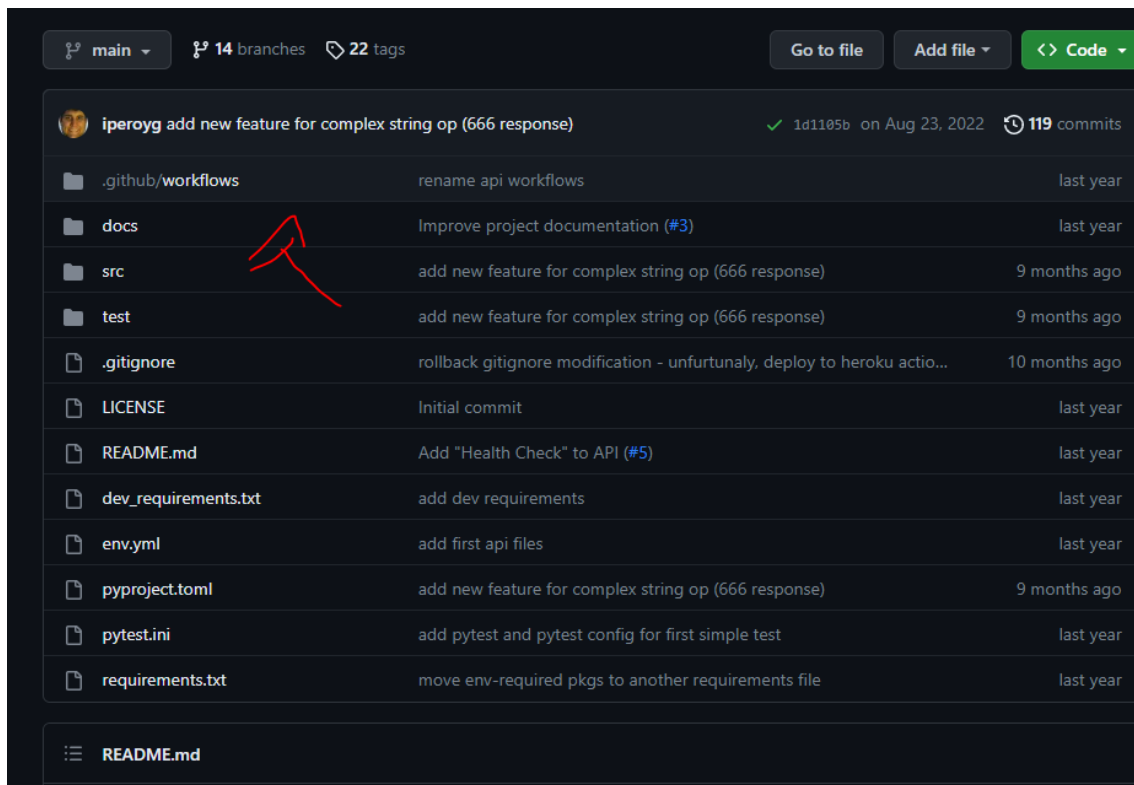
```

1  from flask import Flask, render_template_string, request, redirect, url_for
2
3  app = Flask(__name__)
4
5  # Lista de tarefas armazenadas em memória
6  tasks = []
7
8  index_template = '''
9  <!DOCTYPE html>
10 <html lang="en">
11 <head>
12 <meta charset="UTF-8">
13 <meta name="viewport" content="width=device-width, initial-scale=1.0">
14 <title>Lista de Tarefas</title>
15 </head>
16 <body>
17 <h1>Lista de Tarefas</h1>
18 <form action="/add" method="post">
19 <input type="text" name="task" placeholder="Digite uma nova tarefa" required>
20 <input type="submit" value="Adicionar">
21 </form>
22 <ul>
23     {% for task in tasks %}
24     <li>
25         {{ task }}
26         <a href="{{ url_for('delete_task', task_id=loop.index0) }}">DELETAR TAREFA</a>
27     </li>
28     {% endfor %}
29 </ul>
30 </body>
31 </html>
32 '''
33
34 @app.route('/')
35 def index():
36     return render_template_string(index_template, tasks=tasks)
37
38 @app.route('/add', methods=['POST'])
39 def add_task():

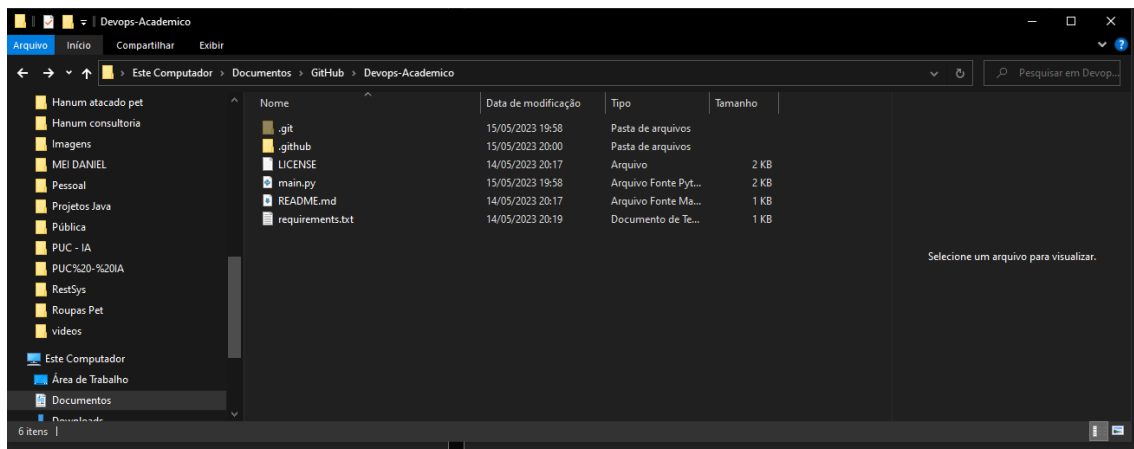
```

Após feito isso, iremos baixar via repositório github a pasta workflow para automatizar versões e padrões.

Conforme print abaixo :



Download, após feito isso, adicionado a pasta do github:



Após feito isso, é necessário executar os procedimentos para anexação da pasta no Github, primeiro o `git add` + `git commit` + `git push`. Agora para controle de versão iremos utilizar a Branch nova V1.0.1, para isso antes de dar os demais comandos anteriores iremos realizar o `git checkout`, conforme print abaixo:

```
Windows PowerShell
Your branch is up to date with 'origin/main'.

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

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\danie\Documents\github\Devops-Academico> git checkout -b V1.0.1
Switched to a new branch 'V1.0.1'
PS C:\Users\danie\Documents\github\Devops-Academico> git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .' ?
hint: Turn this message off by running
hint: "git config advice.addEmptyPaths false"
PS C:\Users\danie\Documents\github\Devops-Academico> git add .
warning: in the working copy of '.github/workflows/1_0-package-ci.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/1_1-package-code-check.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/2_0-package-prerelease.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/2_0-package-release.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/2_1-package-publish-on-pypi.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/2_2-package-publish-on-testpypi.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/3_0-api-ci.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/3_0-package-to-api.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/3_1-api-code-check.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '.github/workflows/3_2-api-deploy.yml', LF will be replaced by CRLF the next time Git touches it
PS C:\Users\danie\Documents\github\Devops-Academico> git commit -m "anexando pasta workflow"
[V1.0.1 fde12b5] anexando pasta workflow
10 files changed, 311 insertions(+)
create mode 100644 .github/workflows/1_0-package-ci.yml
create mode 100644 .github/workflows/1_1-package-code-check.yml
create mode 100644 .github/workflows/2_0-package-prerelease.yml
create mode 100644 .github/workflows/2_0-package-release.yml
create mode 100644 .github/workflows/2_1-package-publish-on-pypi.yml
create mode 100644 .github/workflows/2_2-package-publish-on-testpypi.yml
create mode 100644 .github/workflows/3_0-api-ci.yml
create mode 100644 .github/workflows/3_0-package-to-api.yml
create mode 100644 .github/workflows/3_1-api-code-check.yml
create mode 100644 .github/workflows/3_2-api-deploy.yml
PS C:\Users\danie\Documents\github\Devops-Academico> git push
fatal: The current branch V1.0.1 has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin V1.0.1

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.

PS C:\Users\danie\Documents\github\Devops-Academico> git push --set-upstream origin V1.0.1
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 4 threads
Compressing objects: 100% (13/13), done.
Writing objects: 100% (14/14), 3.86 KiB | 659.00 KiB/s, done.
Total 14 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
remote:
remote: Create a pull request for 'V1.0.1' on GitHub by visiting:
remote:   https://github.com/DanielHanum/Devops-Academico/pull/new/V1.0.1
remote:
To https://github.com/DanielHanum/Devops-Academico.git
 * [new branch]      V1.0.1 -> V1.0.1
branch 'V1.0.1' set up to track 'origin/V1.0.1'.
PS C:\Users\danie\Documents\github\Devops-Academico>
```

```
.classes-3.2.3 keyring-23.13.1 markdown-it-py-2.2.0 mccabe-0.7.0 mdurl-0.1.2 more-itertools-9.1.0 packaging-23.1
.1.1 pkginfo-1.9.6 pluggy-1.0.0 pycodestyle-2.10.0 pyflakes-3.0.1 pygments-2.15.1 pyproject hooks-1.0.0 pytest-7
in32-ctypes-0.2.0 readme-renderer-37.3 requests-2.30.0 requests-toolbelt-1.0.0 rfc3986-2.0.0 rich-13.3.5 six-1.1
i-2.0.1 twine-4.0.2 urllib3-2.0.2 webencodings-0.5.1 zipp-3.15.0

done
#
# To activate this environment, use
#
#     $ conda activate devops_academico
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> pytest
===== test session starts =====
platform win32 -- Python 3.9.16, pytest-7.3.1, pluggy-1.0.0
rootdir: C:\Users\danie\Documents\GitHub\Devops-Academico
collected 0 items

===== no tests ran in 0.05s =====
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --select=E9,F63,F7,F82
source --statistics
0
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --exit-zero --max-compl
--max-line-length=127 --statistics
.\main.py:34:1: E302 expected 2 blank lines, found 1
.\main.py:38:1: E302 expected 2 blank lines, found 1
.\main.py:45:1: E302 expected 2 blank lines, found 1
.\main.py:51:1: E305 expected 2 blank lines after class or function definition, found 1
.\main.py:53:1: W391 blank line at end of file
.\test\test_main.py:3:20: W292 no newline at end of file
3      E302 expected 2 blank lines, found 1
1      E305 expected 2 blank lines after class or function definition, found 1
1      W292 no newline at end of file
```

```
Anaconda Powershell Prompt
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --select=E9,F63,F7,F82 --show-s
source --statistics
0
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --exit-zero --max-complexity=10
--max-line-length=127 --statistics
.\main.py:34:1: E302 expected 2 blank lines, found 1
.\main.py:38:1: E302 expected 2 blank lines, found 1
.\main.py:45:1: E302 expected 2 blank lines, found 1
.\main.py:51:1: E305 expected 2 blank lines after class or function definition, found 1
.\main.py:53:1: W391 blank line at end of file
.\test\test_main.py:3:20: W292 no newline at end of file
3      E302 expected 2 blank lines, found 1
1      E305 expected 2 blank lines after class or function definition, found 1
1      W292 no newline at end of file
1      W391 blank line at end of file
6
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --exit-zero --max-complexity=10
--max-line-length=127 --statistics
.\main.py:34:1: E302 expected 2 blank lines, found 1
.\main.py:38:1: E302 expected 2 blank lines, found 1
.\main.py:45:1: E302 expected 2 blank lines, found 1
.\main.py:51:1: E305 expected 2 blank lines after class or function definition, found 1
.\main.py:53:1: W391 blank line at end of file
3      E302 expected 2 blank lines, found 1
1      E305 expected 2 blank lines after class or function definition, found 1
1      W391 blank line at end of file
5
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --exit-zero --max-complexity=10
--max-line-length=127 --statistics
.\main.py:35:1: E302 expected 2 blank lines, found 1
1      E302 expected 2 blank lines, found 1
1
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico> flake8 . --count --exit-zero --max-complexity=10
--max-line-length=127 --statistics
0
(devops_academico) PS C:\Users\danie\Documents\GitHub\Devops-Academico>
```