

EXERCÍCIOS – GIT

ORIENTAÇÕES

Siga o roteiro abaixo para execução das atividades propostas. Para enviar os exercícios você deve tirar um print da ETAPA 1, ETAPA 2 e ETAPA 3 e anexar o documento em PDF para avaliação.

Não esqueça de fazer as configurações iniciais de usuário, sempre que necessário: Nome, E-mail e Editor de Texto

ETAPA 1 – CRIAÇÃO E PREPARAÇÃO DE ARQUIVOS DO PROJETO

Nesta etapa iremos criar os arquivos do nosso projeto para verificarmos as funcionalidades do Git.

1. Crie uma pasta ExerciciosGit e inicialize um repositório Git no seu computador;
2. Adicione um arquivo nessa pasta com o nome README.md;
3. Adicione qualquer conteúdo nesse arquivo;
4. Faça um commit dessas alterações;
5. Verifique o status e veja se existem mudanças para serem "comitadas";

ETAPA 2 - ALTERAÇÃO E MANIPULAÇÃO DE ARQUIVOS NO PROJETO

Nesta etapa iremos trabalhar com alguns comandos básicos no Git, verificando o workflow básico, alterações e gestão dos arquivos do nosso projeto. Observe que faremos bastante uso dos “branches” visto que é um conceito muito importante para o ambiente de desenvolvimento em equipe, possibilitando a você, avançar um pouco mais no controle das versões do seu projeto.

6. Crie uma branch chamada "develop";
7. Altere o arquivo README.md e adicione outro arquivo na pasta;
8. Verifique o status das mudanças;
9. Faça commit dessas mudanças na branch "develop";
10. Certifique-se que seu status esteja sem mudanças para serem "comitadas";
11. Faça novamente outra alteração no arquivo README.md;
12. Faça commit dessa alteração no branch "develop";
13. Certifique-se que seu status esteja sem mudanças para serem "comitadas";
14. Agora faça um merge da branch "develop" e "master";
15. Certifique-se que as alterações da branch "develop" estão na branch "master" através dos logs;
16. Vá novamente para a branch "develop" e crie uma branch chamada "feature", esta tarefa estará finalizada;

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17. Altere uma linha no arquivo README.md e faça commit nessa nova branch;
18. Volte para a branch "develop" e crie mais uma branch, mas com o nome "feature2";
19. Altere o arquivo README.md na mesma linha da alteração feita na branch "feature";
20. Faça commit dessa alteração na branch "feature2";
21. Agora tente fazer merge das branches "feature" e "feature2" com a branch "develop";
22. Acontecerá propositalmente um conflito no arquivo README.md depois que realizar o merge da segunda branch;
23. Resolva esse conflito e verifique se ambas as alterações estão na branch "develop";
24. Por último, faça merge das branch "master" e "develop";

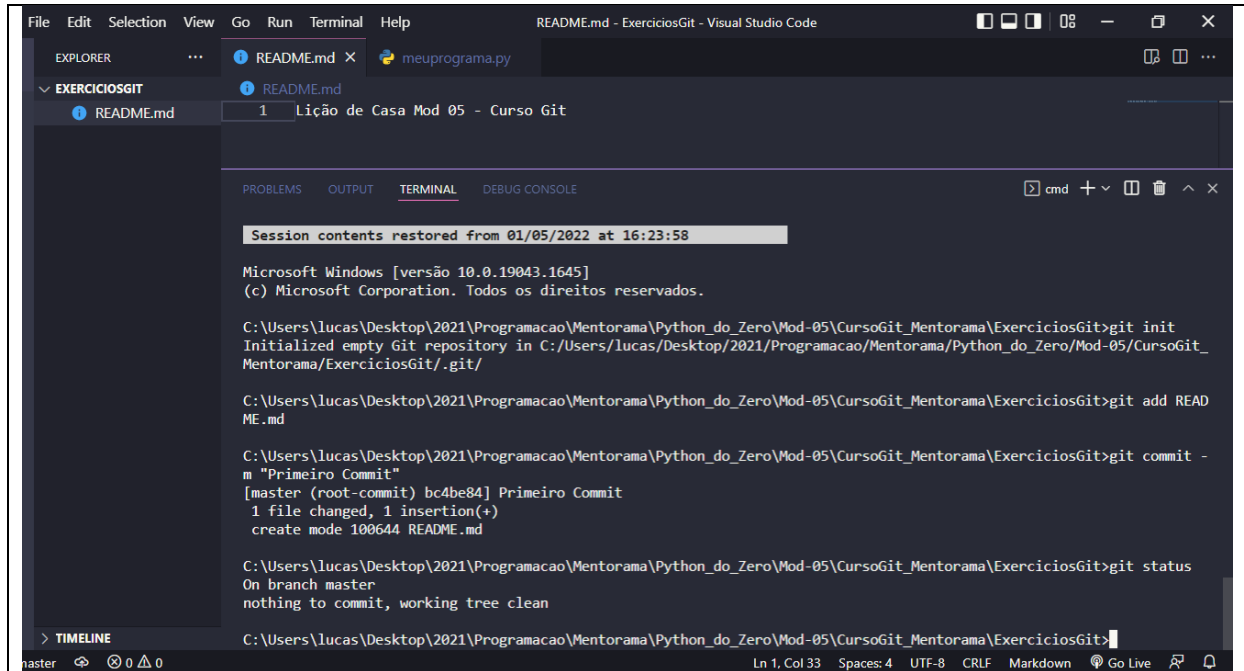
ETAPA 3 - ACESSO REMOTO

Nesta etapa, faremos a integração remota do nosso projeto, a partir do Github. Esta etapa é muito importante visto que muitos projetos de desenvolvedores têm sido disponibilizados no Github para construção de portfólio, de modo que as empresas possam conhecer um pouco do trabalho do desenvolvedor.

25. Crie um repositório no github e faça push;
26. Compartilhe o link do seu repositório
27. EXTRA: Criar um portfólio com seus principais projetos (opcional)

EXERCÍCIOS – GIT – RELATÓRIO DE ENTREGA

ETAPA 1



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
Session contents restored from 01/05/2022 at 16:23:58

Microsoft Windows [versão 10.0.19043.1645]
(c) Microsoft Corporation. Todos os direitos reservados.

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git init
Initialized empty Git repository in C:/Users/lucas/Desktop/2021/Programacao/Mentorاما/Python_do_Zero/Mod-05/CursoGit_Mentorاما/ExerciciosGit/.git/

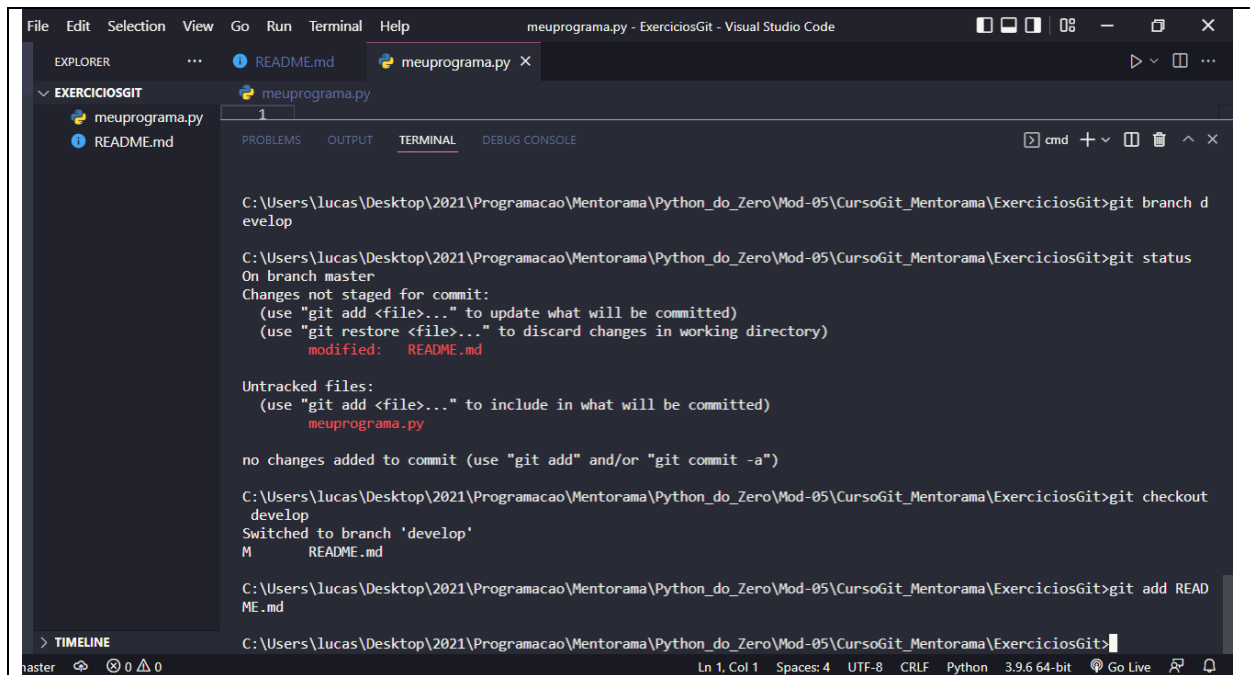
C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git add README.md

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git commit -m "Primeiro Commit"
[master (root-commit) bc4be84] Primeiro Commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git status
On branch master
nothing to commit, working tree clean
```

The terminal window is titled "cmd" and has a status bar at the bottom showing "Ln 1, Col 33", "Spaces: 4", "UTF-8", "CRLF", "Markdown", "Go Live", and a bell icon.

ETAPA 2



The screenshot shows the Visual Studio Code interface with the Explorer view on the left showing a project named 'EXERCICIOSGIT' containing 'meuprograma.py' and 'README.md'. The Terminal view is active, displaying the following commands and output:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git branch d
develop

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git status
On branch master
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:   README.md

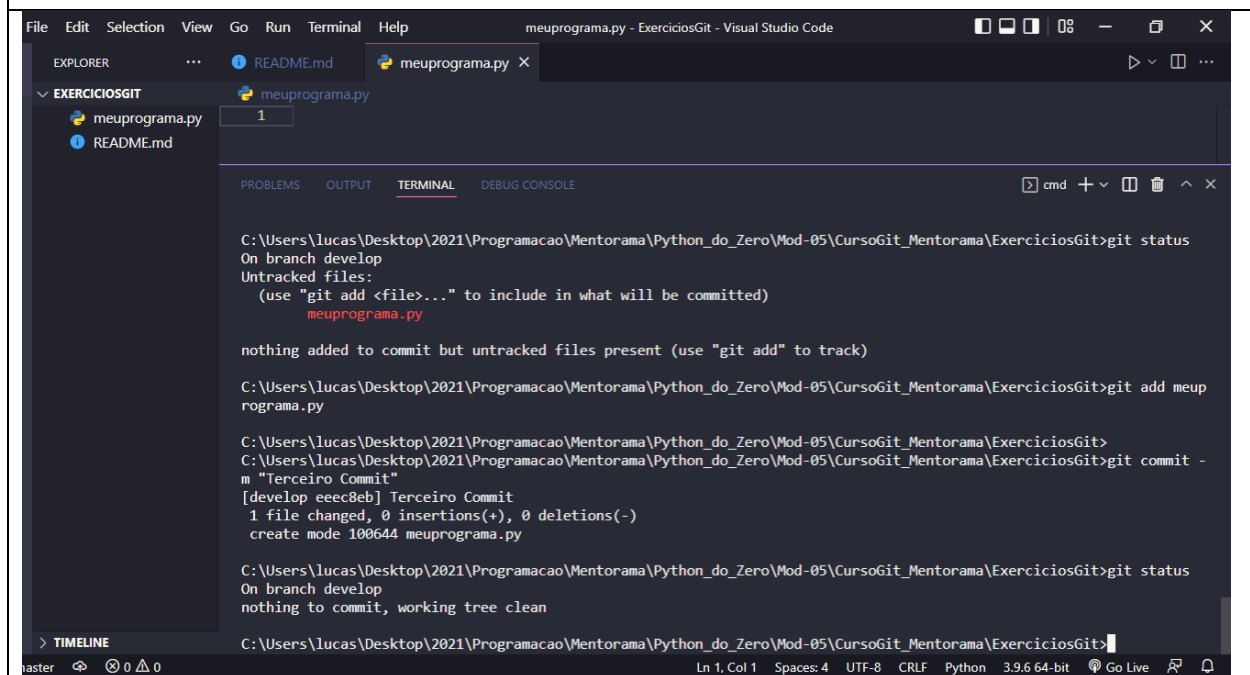
Untracked files:
  (use "git add <file>..." to include in what will be committed)
       meuprograma.py

no changes added to commit (use "git add" and/or "git commit -a")

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git checkout
develop
Switched to branch 'develop'
M       README.md

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git add READ
ME.md
```

The status bar at the bottom indicates the current file is 'master' and shows 0 errors and 0 warnings.



The screenshot shows the Visual Studio Code interface with the Explorer view on the left showing a project named 'EXERCICIOSGIT' containing 'meuprograma.py' and 'README.md'. The Terminal view is active, displaying the following commands and output:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git status
On branch develop
Untracked files:
  (use "git add <file>..." to include in what will be committed)
       meuprograma.py

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

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git add meup
rograma.py

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>
C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git commit -
m "Terceiro Commit"
[develop eeec8eb] Terceiro Commit
1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 meuprograma.py

C:\Users\lucas\Desktop\2021\Programacao\Mentorاما\Python_do_Zero\Mod-05\CursoGit_Mentorاما\ExerciciosGit>git status
On branch develop
nothing to commit, working tree clean
```

The status bar at the bottom indicates the current file is 'master' and shows 0 errors and 0 warnings.

The image displays two screenshots of a Visual Studio Code terminal window, illustrating a series of Git operations. The interface shows the Explorer sidebar with a project named 'EXERCICIOSGIT' containing files 'meuprograma.py' and 'README.md'. The terminal window is titled 'README.md - ExerciciosGit - Visual Studio Code' and shows the following commands and output:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git commit -am "Quarto Commit"
[develop a5e3d7f] Quarto Commit
1 file changed, 2 insertions(+), 1 deletion(-)

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git status
On branch develop
nothing to commit, working tree clean

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout master
Switched to branch 'master'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git merge develop master
Updating bc4be84..a5e3d7f
Fast-forward
 README.md      | 3 ++-
 meuprograma.py | 0
 2 files changed, 2 insertions(+), 1 deletion(-)
 create mode 100644 meuprograma.py

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>
```

The second screenshot shows the output of the `git log` command, displaying a list of commits in reverse chronological order:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git log
commit a5e3d7fe92c4b4452b9658f68a9079c45ace0f82 (HEAD -> master, develop)
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:47:21 2022 -0300

    Quarto Commit

commit eeec8ebaea1122fc9c7d1de1e6968c2c57c2f0f8
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:41:38 2022 -0300

    Terceiro Commit

commit 73300d96baa1bb3c8e9ac405df2dd93c29e8ae87
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:38:22 2022 -0300

    Segundo Commit

commit bc4be8452766ab0ffc6f2db7029ecd8f53d32d08
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:27:35 2022 -0300

    Primeiro Commit
```

File Edit Selection View Go Run Terminal Help README.md - ExerciciosGit - Visual Studio Code

EXPLORER

- EXERCICIOSGIT
 - meuprograma.py
 - README.md

README.md

```

1 <----- HEAD (Current Change)
2
3 Alteração número 3

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout develop
Switched to branch 'develop'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git branch feature

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout feature
Switched to branch 'feature'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git commit -am "Quinto Commit"
[feature 7c711c2] Quinto Commit
1 file changed, 2 insertions(+), 1 deletion(-)

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout develop
Switched to branch 'develop'

```

> TIMELINE

Ln 8, Col 1 Spaces: 4 UTF-8 CRLF Markdown Go Live

File Edit Selection View Go Run Terminal Help README.md - ExerciciosGit - Visual Studio Code

EXPLORER

- EXERCICIOSGIT
 - meuprograma.py
 - README.md

README.md

```

1 <----- HEAD (Current Change)
2
3 Alteração número 3

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git branch feature2

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout feature2
Switched to branch 'feature2'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git commit -am "Sexto Commit"
[feature2 97bfbf0] Sexto Commit
1 file changed, 1 insertion(+), 1 deletion(-)

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git merge feature2 develop
Auto-merging README.md
CONFLICT (content): Merge conflict in README.md
Automatic merge failed; fix conflicts and then commit the result.

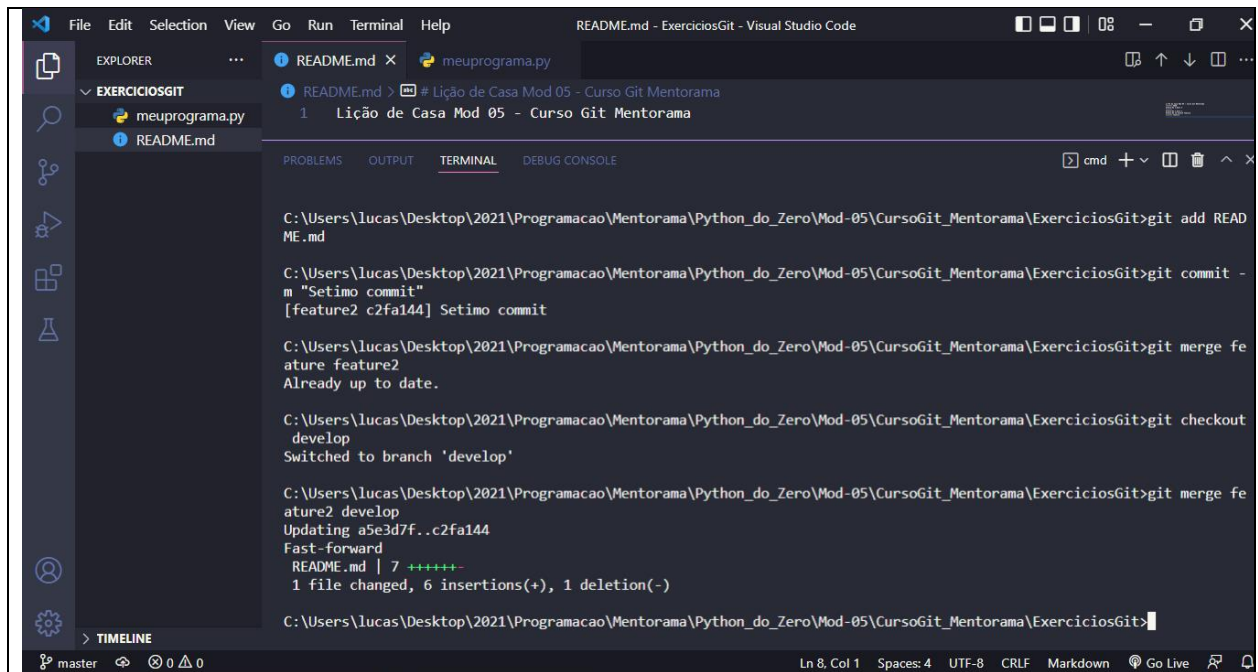
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git diff feature2 feature
diff --git a/README.md b/README.md
index dcf1f5..b5813fa 100644
--- a/README.md
+++ b/README.md
@@ -1,2 +1,3 @@
 Lição de Casa Mod 05 - Curso Git Mentorama
-Alteração número 3
\ No newline at end of file
+Alteração número 2
+Alteração na branch feature
\ No newline at end of file

```

TIMELINE

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>

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Visual Studio Code interface showing the Explorer, Search, and Run and Debug panels. The Explorer panel shows the file structure of the 'EXERCICIOSGIT' project, including 'meuprograma.py' and 'README.md'. The Search panel shows the search results for 'README.md'. The Run and Debug panel shows the terminal output of the following commands:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git add README.md

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git commit -m "Setimo commit"
[feature2 c2fa144] Setimo commit

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git merge feature2
Already up to date.

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout develop
Switched to branch 'develop'

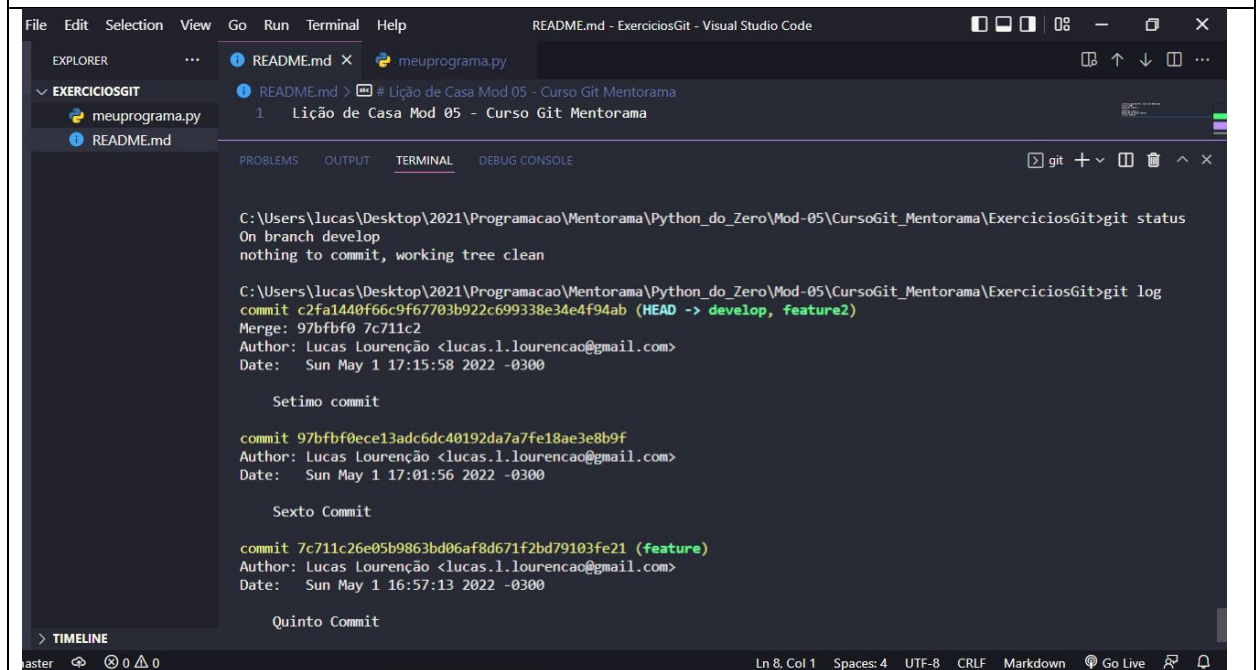
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git merge feature2 develop
Updating a5e3d7f..c2fa144
Fast-forward
 README.md | 7 ++++++
 1 file changed, 6 insertions(+), 1 deletion(-)

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>
```

The terminal output shows the execution of the following commands:

- `git add README.md`
- `git commit -m "Setimo commit"`
- `git merge feature2`
- `git checkout develop`
- `git merge feature2 develop`

The output of the last command shows a fast-forward merge of the `feature2` branch into the `develop` branch, updating the `README.md` file with 6 insertions and 1 deletion.



Visual Studio Code interface showing the Explorer, Search, and Run and Debug panels. The Explorer panel shows the file structure of the 'EXERCICIOSGIT' project, including 'meuprograma.py' and 'README.md'. The Search panel shows the search results for 'README.md'. The Run and Debug panel shows the terminal output of the following commands:

```
C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git status
On branch develop
nothing to commit, working tree clean

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git log
commit c2fa1440f66c9f67703b922c699338e34e4f94ab (HEAD -> develop, feature2)
Merge: 97bfbf0 7c711c2
Author: Lucas Lourenção <lucas.l.lourencacao@gmail.com>
Date: Sun May 1 17:15:58 2022 -0300

    Setimo commit

commit 97bfbf0ece13adc6dc40192da7a7fe18ae3e8b9f
Author: Lucas Lourenção <lucas.l.lourencacao@gmail.com>
Date: Sun May 1 17:01:56 2022 -0300

    Sexto Commit

commit 7c711c26e05b9863bd06af8d671f2bd79103fe21 (feature)
Author: Lucas Lourenção <lucas.l.lourencacao@gmail.com>
Date: Sun May 1 16:57:13 2022 -0300

    Quinto Commit
```

The terminal output shows the execution of the following commands:

- `git status`
- `git log`

The output of the `git log` command shows the commit history, including the merge of the `feature2` branch into the `develop` branch, and the commits for the `Setimo commit`, `Sexto Commit`, and `Quinto Commit`.

The image consists of two screenshots of the Visual Studio Code editor interface, showing the process of managing Git branches and commits.

Top Screenshot: The editor shows the 'README.md' file in the 'EXERCICIOSGIT' workspace. The 'TERMINAL' panel displays the following output:

```
commit c2fa1440f66c9f67703b922c699338e34e4f94ab (HEAD -> develop, feature2)
Merge: 97bfbf0 7c711c2
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 17:15:58 2022 -0300

Setimo commit

commit 97bfbf0ece13adc6dc40192da7a7fe18ae3e8b9f
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 17:01:56 2022 -0300

Sexto Commit

commit 7c711c26e05b9863bd06af8d671f2bd79103fe21 (feature)
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:57:13 2022 -0300

Quinto Commit

commit a5e3d7fe92c4b4452b9658f68a9079c45ace0f82 (master, f)
Author: Lucas Lourenção <lucas.l.lourencao@gmail.com>
Date: Sun May 1 16:47:21 2022 -0300

Quarto Commit
```

Bottom Screenshot: The editor shows the same workspace. The 'TERMINAL' panel displays the following output:

```
Microsoft Windows [versão 10.0.19043.1645]
(c) Microsoft Corporation. Todos os direitos reservados.

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git checkout
master
Switched to branch 'master'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama\ExerciciosGit>git merge ma
ster develop
Updating a5e3d7f..c2fa144
Fast-forward
 README.md | 7 ++++++
 1 file changed, 6 insertions(+), 1 deletion(-)
```

ETAPA 3

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The image displays a development workflow across two interfaces: a local IDE (Visual Studio Code) and a remote web browser (GitHub repository page).

Visual Studio Code (Local IDE):

- Explorer:** Shows the project structure with folders `EXERCICIOSGIT` and `meuprograma.py`, and a file `README.md`.
- Terminal:** Displays the execution of Git commands:

```
Microsoft Windows [versão 10.0.19043.1645]
(c) Microsoft Corporation. Todos os direitos reservados

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama>git checkout master
Switched to branch 'master'

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama>git merge develop
Updating a5e3d7f..c2fa144
Fast-forward
 README.md | 7 +++++
 1 file changed, 6 insertions(+), 1 deletion(-)

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama>git remote add origin https://github.com/Lucas-Lourencao/CursoGit_Mentorama.git

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama>git branch -M master

C:\Users\lucas\Desktop\2021\Programacao\Mentorama\Python_do_Zero\Mod-05\CursoGit_Mentorama>git push -u origin master
```
- GitHub Sign-in Dialog:** A modal window titled "Connect to GitHub" with a "Sign in" button and a "Personal Access Token" input field.

GitHub Repository Page (Web Browser):

- Repository:** `github.com/Lucas-Lourencao/CursoGit_Mentorama`
- Branches:** `master` (1 branch), 0 tags.
- Commits:** Lucas-Lourencao Setimo commit (c2fa144, 41 minutes ago, 7 commits).
- Files:** `README.md` (Setimo commit, 41 minutes ago), `meuprograma.py` (Terceiro Commit, 1 hour ago).
- README.md Content:**

```
Lição de Casa Mod 05 - Curso Git Mentorama <<<<<<
HEAD Alteração número 3

Alteração número 2 Alteração na branch feature
| | | | | feature
```
- Right Sidebar:** About (No description, website, or topics provided), Releases (No releases published), Packages (No packages published).