

28.4 Git overview: Homework

1. Create a public remote repository on github.com
2. Clone your repository using git CLI.
3. Using git CLI, in 'main' branch:
 1. Create 'index.html' file with any content in it and commit it
 2. Change the content of the file one or more times so that the file has a history
4. Using git CLI, in 'develop' branch create files:
 - a. README.md with the following content:

Hello, world!

- b. LICENCE.md with the following content:

copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

4. Merge 'develop' into 'main' using merge command
5. Push local changes to the remote repository

In your homework submission:

- provide the link to your public repository.
- provide console log (including your input and output)

Make sure you provide a meaningful commit message for each of your commits

1. Create a public remote repository on github.com
<https://github.com/NinaKhaytovich/Mentorpiece>

2. Clone you repository using git CLI.

I've started from creating directory on my PC, then cloned repository:

```
ninakhaytovich@Ninas-MacBook-Pro HW_Git % git clone
git@github.com:NinaKhaytovich/Mentorpiece.git

Cloning into 'Mentorpiece'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.
```

3. Using git CLI, in 'main' branch:

Here I've checked that I am in 'main' branch:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git status

On branch main

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

nothing to commit, working tree clean

3.1.Create 'index.html' file with any content in it and commit it

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % echo 'Hello, beautiful world!' >
index.html
```

Added created file to staging:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git add .
```

Committed a file with comment:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git commit -m 'Task 3.1, committing
just created file'

[main 46327c4] Task 3.1, committing just created file

1 file changed, 1 insertion(+)

create mode 100644 index.html
```

Pushed

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push

git@github.com:NinaKhaytovich/Mentorpiece.git
```

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 352 bytes | 352.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

To github.com:NinaKhaytovich/Mentorpiece.git

4b8882f..46327c4 main -> main

Here we can see a file in repository:

NinaKhaytovich / Mentorpiece

Issues Pull requests Actions Projects Wiki Security Insights Settings

Mentorpiece Public

main 1 Branch 0 Tags

Go to file t Add file <> Code

NinaKhaytovich	Task 3.1, committing just created file	46327c4 · 13 minutes ago	3 Commits
File	Create File	4 days ago	
README.md	Create README.md	1 hour ago	
<u>index.html</u>	<u>Task 3.1, committing just created file</u>	13 minutes ago	

README

#Nina Kh, Public HW

3.2.Change the content of the file one or more times so that the file has a history

Here I've changed a file:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % nano index.html
```

Added file to staging:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git add .
```

Committed a file with comment:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git commit -m 'Task 3.2. Changing the content'
```

```
[main de90e0d] Task 3.2. Changing the content
```

1 file changed, 1 insertion(+)

Pushed:

ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push

git@github.com:NinaKhaytovich/Mentorpiece.git

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

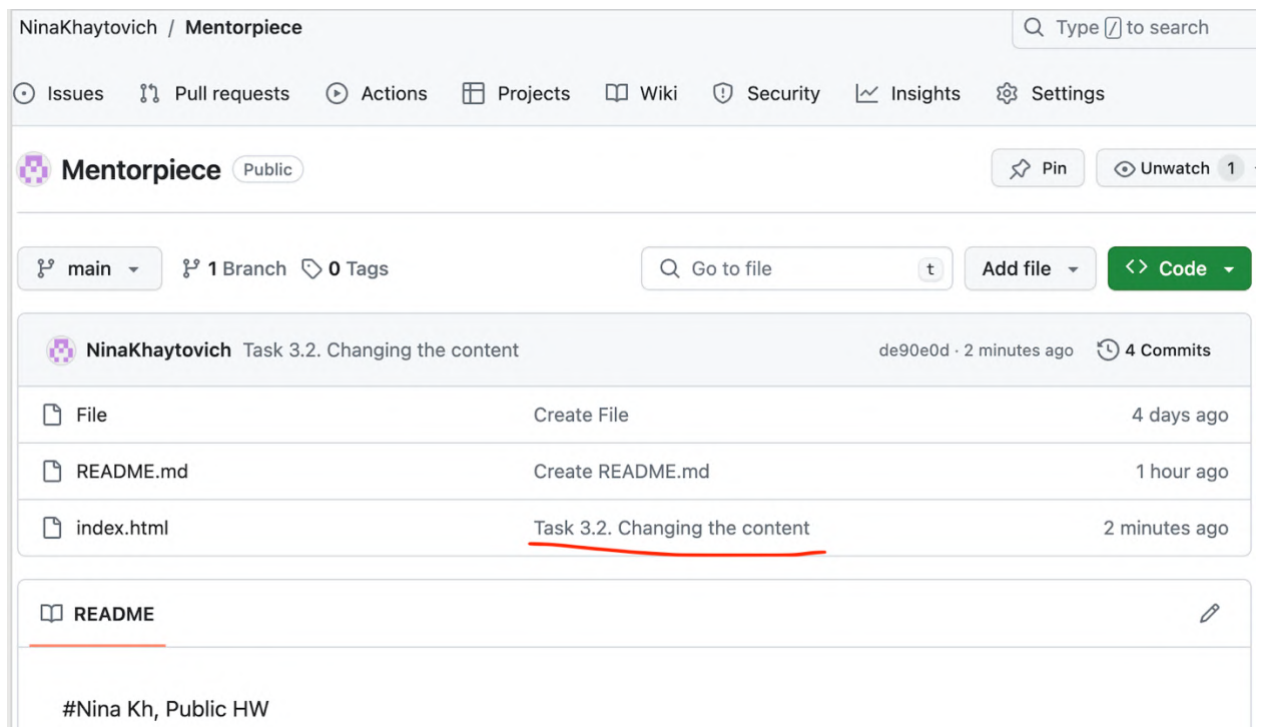
Writing objects: 100% (3/3), 320 bytes | 320.00 KiB/s, done.

Total 3 (delta 1), reused 0 (delta 0), pack-reused 0

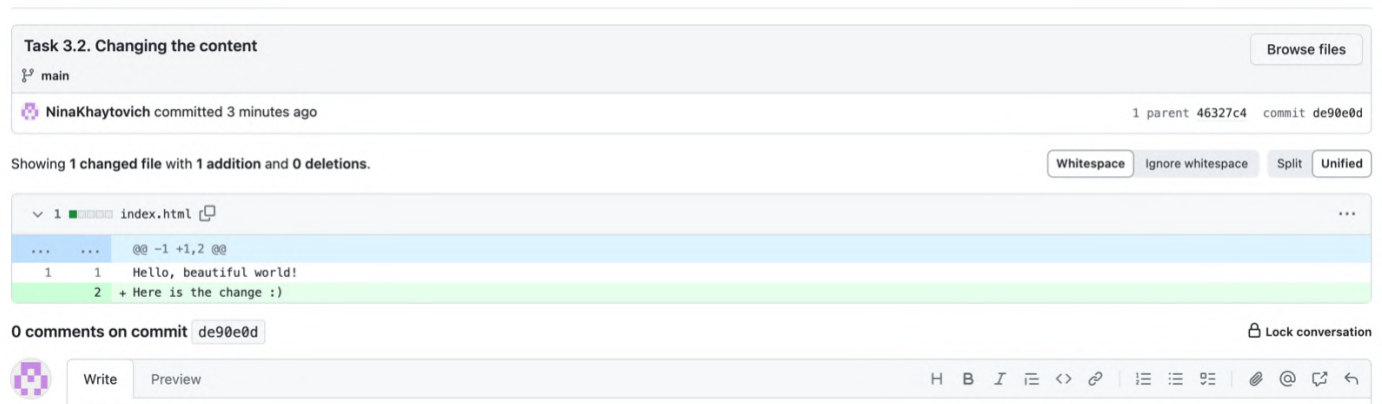
remote: Resolving deltas: 100% (1/1), completed with 1 local object.

To github.com:NinaKhaytovich/Mentorpiece.git

46327c4..de90e0d main -> main



Commit



4. Using git CLI, in 'develop' branch create files:

Here I've created and switched on branch 'develop'

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git branch develop
```

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git status
```

On branch main

Your branch is ahead of 'origin/main' by 2 commits.

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

nothing to commit, working tree clean

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git checkout develop
```

Switched to branch 'develop'

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git status
```

On branch develop

nothing to commit, working tree clean

a. README.md with the following content:

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % echo 'Hello, world!' > README.md
```

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git add README.md
```

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git commit -m 'Task 4.a'
```

```
[develop d9a2b28] Task 4.a
```

1 file changed, 1 insertion(+), 1 deletion(-)

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push
```

```
git@github.com:NinaKhaytovich/Mentorpiece.git
```

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), 323 bytes | 323.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

remote: Create a pull request for 'develop' on GitHub by visiting:

remote: <https://github.com/NinaKhaytovich/Mentorpiece/pull/new/develop>

remote:

To github.com:NinaKhaytovich/Mentorpiece.git

* [new branch] develop -> develop

b. LICENCE.md with the following content:

copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

echo 'copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.'

> LICENCE.md

ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git add LICENCE.md

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git commit -m 'Task 4.b'
[develop 1fa39c7] Task 4.b
1 file changed, 19 insertions(+)
create mode 100644 LICENCE.md
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push
git@github.com:NinaKhaytovich/Mentorpiece.git
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 958 bytes | 958.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:NinaKhaytovich/Mentorpiece.git
d9a2b28..1fa39c7 develop -> develop
```

5. Merge 'develop' into 'main' using merge command

Here I switched from branch 'develop' to 'main':

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git branch
* develop
main
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git branch
develop
* main

ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git merge -m 'Task 5 - merge develop into
main' develop
Updating de90e0d..1fa39c7
Fast-forward (no commit created; -m option ignored)
LICENCE.md | 19 +++++
README.md | 2 +-
2 files changed, 20 insertions(+), 1 deletion(-)
```

create mode 100644 LICENCE.md

6. Push local changes to the remote repository

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push
```

```
git@github.com:NinaKhaytovich/Mentorpiece.git
```

```
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
```

```
To github.com:NinaKhaytovich/Mentorpiece.git
```

```
de90e0d..1fa39c7 main -> main
```

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git merge develop
```

```
Already up to date.
```

```
ninakhaytovich@Ninas-MacBook-Pro Mentorpiece % git push
```

```
git@github.com:NinaKhaytovich/Mentorpiece.git
```

```
Everything up-to-date
```