

01. Source Control – Димитар Попов, 211160

o Create a new GitHub repository and clone it locally.

За овој дел од задачата користев Git Bash и command prompt. Иницијализирав ново репо преку командна линија(Git Bash) и го направив првиот git commit за да можам да го креирам репото. Потоа инсталирав GitHub CLI на мојата локална машина и преку командна линија го креирав репото.

Откако го креирав репото преку командна линија(мислев дека така треба) прочитав дека барањето вели да се креира репо на GitHub и да се клонира локално, во овој случај нема клонирање на репото затоа што го креирав преку команда линија наместо на GitHub.

```
Dimi@DESKTOP-0CI49E7 MINGW64 ~  
$ cd cicc-lab  
  
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicc-lab  
$ git init -b main  
Initialized empty Git repository in C:/Users/Dimi/cicc-lab/.git/  
  
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicc-lab (main)  
$ git add file.txt  
  
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicc-lab (main)  
$ git status  
On branch main  
  
No commits yet  
  
Changes to be committed:  
  (use "git rm --cached <file>..." to unstage)  
    new file:   file.txt  
  
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicc-lab (main)  
$ git commit -m "Initial commit"  
[main (root-commit) 79375ab] Initial commit  
1 file changed, 1 insertion(+)  
create mode 100644 file.txt
```

```
C:\Users\Dimi\cicc-lab>gh auth login  
? Where do you use GitHub? GitHub.com  
? What is your preferred protocol for Git operations on this host? SSH  
? Upload your SSH public key to your GitHub account? Skip  
? How would you like to authenticate GitHub CLI? Login with a web browser  
  
! First copy your one-time code: 80A0-CC17  
Press Enter to open https://github.com/login/device in your browser...  
✓ Authentication complete.  
- gh config set -h github.com git_protocol ssh  
✓ Configured git protocol  
✓ Logged in as popovd209
```

```
C:\Users\Dimi\cicd-lab>gh repo create
? What would you like to do? Push an existing local repository to GitHub
? Path to local repository (.)

? Path to local repository .
? Repository name cicd-lab
? Repository owner popovd209
? Description The lab exercise for the CI/CD class.

? Description The lab exercise for the CI/CD class.
? Visibility Public
✓ Created repository popovd209/cicd-lab on GitHub
? Add a remote? Yes
? What should the new remote be called? origin
? Would you like to push commits from the current branch to "origin"? Yes
The authenticity of host 'github.com (140.82.121.4)' can't be established.) y
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added 'github.com' (ED25519) to the list of known hosts.
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 224 bytes | 224.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
 * [new branch]      HEAD -> main
branch 'main' set up to track 'origin/main'.
✓ Pushed commits to git@github.com:popovd209/cicd-lab.git
```

o Work locally to add new content, stage the files, make a commit, and push the changes to GitHub.

За овој дел од задачата користев Git Bash. Направив нов commit кој содржи додавање на нов фајл(фајлот кој моментално го читате). Искористив `git remote -v` чисто за проверка дали асоцираното репо е соодветно. И на крај направив git push на последниот commit.

```
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicd-lab (main)
$ git add lab1.docx

Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicd-lab (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   lab1.docx
```

```
Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicd-lab (main)
$ git commit -m "Added file with task steps"
[main 2a55d45] Added file with task steps
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 lab1.docx

Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicd-lab (main)
$ git remote -v
origin  git@github.com:popovd209/cicd-lab.git (fetch)
origin  git@github.com:popovd209/cicd-lab.git (push)

Dimi@DESKTOP-0CI49E7 MINGW64 ~/cicd-lab (main)
$ git push
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
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), 11.02 KiB | 1.38 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
 79375ab..2a55d45  main -> main
```

o Create develop, test and production branches.

Во овој дел креирав 3 гранки, ја проверив состојбата со локални и remote гранки и потоа ги push-нав гранките.

```
C:\Users\Dimi\cicd-lab>git branch develop

C:\Users\Dimi\cicd-lab>git branch test

C:\Users\Dimi\cicd-lab>git branch production

C:\Users\Dimi\cicd-lab>git branch -a
  develop
* main
  production
  test
remotes/origin/main

C:\Users\Dimi\cicd-lab>git branch -r
origin/main

C:\Users\Dimi\cicd-lab>git push -u origin develop
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
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/popovd209/cicd-lab/pull/new/develop
remote:
To github.com:popovd209/cicd-lab.git
 * [new branch]      develop -> develop
branch 'develop' set up to track 'origin/develop'.

C:\Users\Dimi\cicd-lab>git push -u origin test
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'test' on GitHub by visiting:
remote:   https://github.com/popovd209/cicd-lab/pull/new/test
remote:
To github.com:popovd209/cicd-lab.git
 * [new branch]      test -> test
branch 'test' set up to track 'origin/test'.

C:\Users\Dimi\cicd-lab>git push -u origin production
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'production' on GitHub by visiting:
remote:   https://github.com/popovd209/cicd-lab/pull/new/production
remote:
To github.com:popovd209/cicd-lab.git
 * [new branch]      production -> production
branch 'production' set up to track 'origin/production'.
```

o Make several changes and commit to the develop branch, then merge it into the other two branches. Push the changes to GitHub.

```
C:\Users\Dimi\cicd-lab>git checkout develop
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
```

```
C:\Users\Dimi\cicd-lab>git add file.txt
```

```
C:\Users\Dimi\cicd-lab>git commit -m "Made some more changes"
[develop 6894bbd] Made some more changes
1 file changed, 3 insertions(+), 1 deletion(-)
```

```
C:\Users\Dimi\cicd-lab>git push
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 347 bytes | 347.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
2a55d45..6894bbd develop -> develop
```

```
C:\Users\Dimi\cicd-lab>git checkout test
M      lab1.docx
Switched to branch 'test'
Your branch is up to date with 'origin/test'.
```

```
C:\Users\Dimi\cicd-lab>git merge develop
Updating 2a55d45..6894bbd
Fast-forward
 file.txt | 4 +++-
1 file changed, 3 insertions(+), 1 deletion(-)
```

```
C:\Users\Dimi\cicd-lab>git push
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
2a55d45..6894bbd test -> test
```

```


C:\Users\Dimi\cicd-lab>git checkout production
M       lab1.docx
Switched to branch 'production'
Your branch is up to date with 'origin/production'.


C:\Users\Dimi\cicd-lab>git merge develop
Updating 2a55d45..6894bbd
Fast-forward
 file.txt | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)


C:\Users\Dimi\cicd-lab>git push
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
 2a55d45..6894bbd  production -> production


```




Во овој момент, main гранката изгледа вака:






cicd-lab
Public
Pin
Unwatch 1


develop had recent pushes 9 minutes ago
 Compare & pull request


test had recent pushes 3 minutes ago
 Compare & pull request


production had recent pushes 2 minutes ago
 Compare & pull request

 main
 4 Branches
 0 Tags
Go to file
Add file
Code

 MCA\dip	Added file with task steps	2a55d45 · 1 hour ago	 2 Commits
 file.txt	Initial commit		1 hour ago
 lab1.docx	Added file with task steps		1 hour ago


o When you're done with the branch, merge it to main. Then, commit and push to GitHub.


```
C:\Users\Dimi\cicd-lab>git checkout main
M       lab1.docx
Switched to branch 'main'
Your branch is up to date with 'origin/main'.


C:\Users\Dimi\cicd-lab>git merge develop
Updating 2a55d45..6894bbd
Fast-forward
 file.txt | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)


C:\Users\Dimi\cicd-lab>git push
Enter passphrase for key '/c/Users/Dimi/.ssh/id_ed25519':
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:popovd209/cicd-lab.git
 2a55d45..6894bbd  main -> main
```


Откако ја merge-нав develop гранката во main, main гранката е сега up to date.

 **cicd-lab** PublicPinUnwatch 1

 main



 4 Branches


 0 Tags

Q Go to file 


Add file

<> Code


 **MCA\dip** Made some more changes 6894bbd · 11 minutes ago  3 Commits


 file.txt

Made some more changes11 minutes ago

 lab1.docx

Added file with task steps1 hour ago

 README



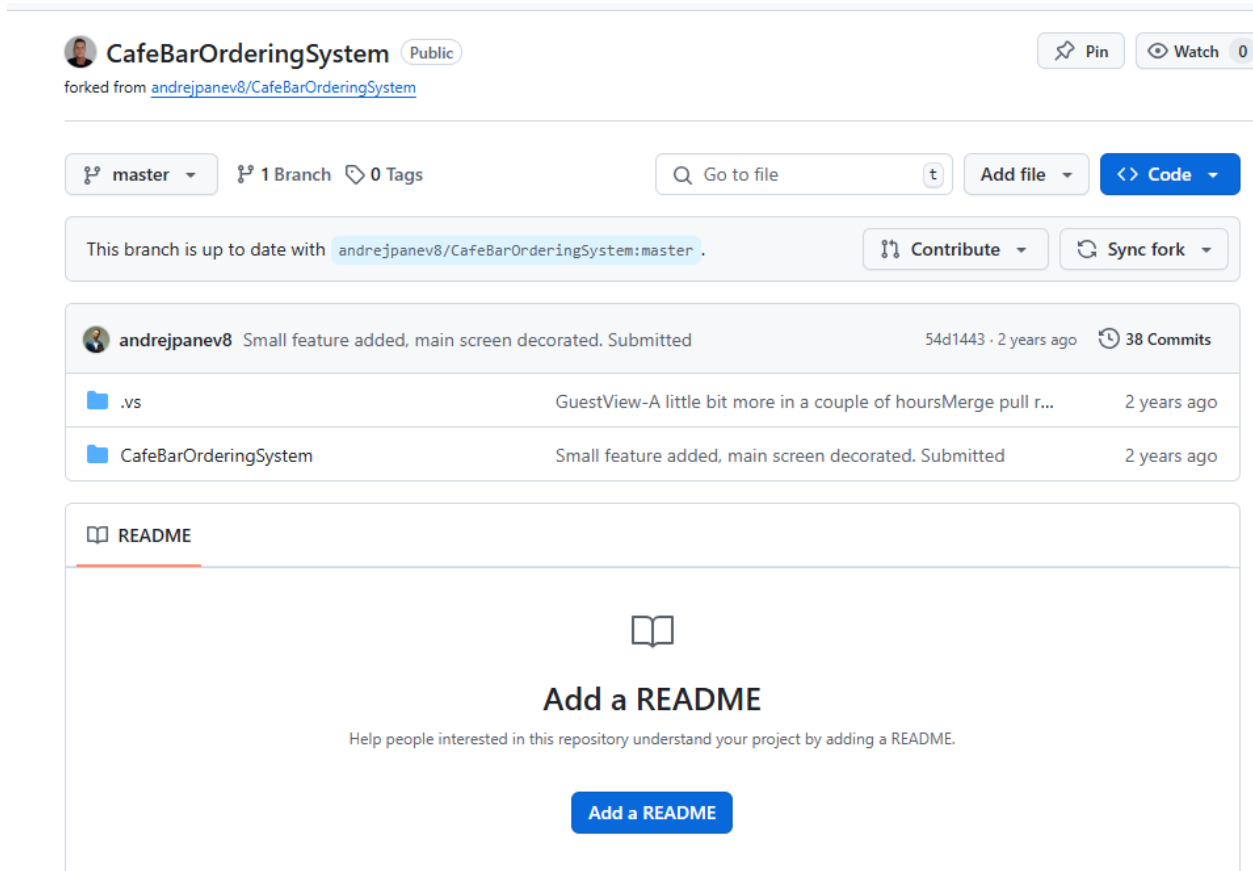
Add a README

Help people interested in this repository understand your project by adding a README.

Add a README

Part 2: Contributing to another Git repository on GitHub

- o Fork a colleague's GitHub repository.



- o Create a new branch for a new feature.

Прва команда: git clone <https://github.com/popovd209/CafeBarOrderingSystem>

```
C:\Users\Dimi\cicd>cd CafeBarOrderingSystem
C:\Users\Dimi\cicd\CafeBarOrderingSystem>git branch feature
```

- o Make changes, commit and push the changes to your GitHub repo.

```
C:\Users\Dimi\cicd\CafeBarOrderingSystem>cd CafeBarOrderingSystem
C:\Users\Dimi\cicd\CafeBarOrderingSystem\CafeBarOrderingSystem>git add .
```



```
C:\Users\Dimi\cicd\CafeBarOrderingSystem>git add .gitignore
```

```
C:\Users\Dimi\cicd\CafeBarOrderingSystem>git status
```

```
On branch feature
```

```
Changes to be committed:
```

```
(use "git restore --staged <file>..." to unstage)
```

```
new file:   .gitignore
modified:   CafeBarOrderingSystem/.vs/CafeBarOrderingSystem/v17/.suo
new file:   CafeBarOrderingSystem/.vs/CafeBarOrderingSystem/v17/DocumentLayout.json
modified:   CafeBarOrderingSystem/AddProductForm.cs
modified:   CafeBarOrderingSystem/EarningsForm.cs
modified:   CafeBarOrderingSystem/FinishedOrders.cs
modified:   CafeBarOrderingSystem/GuestViewMainForm.cs
modified:   CafeBarOrderingSystem/MainForm.cs
modified:   CafeBarOrderingSystem/Make order.cs
modified:   CafeBarOrderingSystem/Order.cs
modified:   CafeBarOrderingSystem/Product.cs
modified:   CafeBarOrderingSystem/ProductRow.cs
modified:   CafeBarOrderingSystem/ProductsView.cs
modified:   CafeBarOrderingSystem/Program.cs
modified:   CafeBarOrderingSystem/Properties/AssemblyInfo.cs
modified:   CafeBarOrderingSystem/StaffViewMainForm.cs
modified:   CafeBarOrderingSystem/View Order.cs
```

```
C:\Users\Dimi\cicd\CafeBarOrderingSystem>git commit -m "Ran Analyze and Code Cleanup on whole solution"
```

```
[feature 0a529c0] Ran Analyze and Code Cleanup on whole solution
```

```
17 files changed, 90 insertions(+), 96 deletions(-)
```

```
create mode 100644 .gitignore
```

```
create mode 100644 CafeBarOrderingSystem/.vs/CafeBarOrderingSystem/v17/DocumentLayout.json
```

```
C:\Users\Dimi\cicd\CafeBarOrderingSystem>git push --set-upstream origin feature
```

```
Enumerating objects: 44, done.
```

```
Counting objects: 100% (44/44), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (23/23), done.
```

```
Writing objects: 100% (24/24), 7.18 KiB | 2.39 MiB/s, done.
```

```
Total 24 (delta 17), reused 0 (delta 0), pack-reused 0 (from 0)
```

```
remote: Resolving deltas: 100% (17/17), completed with 17 local objects.
```

```
remote:
```

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

```
remote:   https://github.com/popovd209/CafeBarOrderingSystem/pull/new/feature
```

```
remote:
```

```
To https://github.com/popovd209/CafeBarOrderingSystem
```

```
* [new branch]      feature -> feature
```

```
branch 'feature' set up to track 'origin/feature'.
```

- o When you're done, make a Pull Request with the new feature, via GitHub's website.

The screenshot shows a GitHub Pull Request (PR) page for the repository 'andrejpane8 / CafeBarOrderingSystem'. The PR title is 'Ran Analyze and Code Cleanup on whole solution #3'. The PR is currently open, with a status bar indicating 'popovd209 wants to merge 1 commit into andrejpane8:master from popovd209:feature'. The PR has 1 commit, 0 checks, and 17 files changed. A comment from 'popovd209' is visible, stating 'No description provided.' Below the comment, a green box indicates 'No conflicts with base branch' and 'Changes can be cleanly merged.' The PR is currently in the 'Open' state, and the 'Close pull request' button is visible. The right sidebar shows various metadata fields like Reviewers, Assignees, Labels, Projects, Milestone, Development, and Notifications.

- o Ask your colleague to merge the Pull Request and close the issue.

The screenshot shows the same GitHub Pull Request page, but now the PR has been merged. The status bar indicates 'andrejpane8 merged 1 commit into andrejpane8:master from popovd209:feature now'. The PR is now in the 'Merged' state, and the 'Close pull request' button has been replaced by a 'Delete branch' button. The right sidebar shows the same metadata fields as before, but the 'Development' section now includes a message: 'Successfully merging this pull request may close these issues.' The 'Close pull request' button is no longer visible.