

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ**

**Федеральное государственное автономное образовательное
учреждение высшего образования «СЕВЕРО-КАВКАЗСКИЙ
ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»**

Кафедра Программная инженерия

Отчет по лабораторной работе № 3

по дисциплине «Основы Программной инженерии»

Выполнил студент группы ПИЖ-Б-
О-21-1

Шарипков Иван. « 9 » сентября
2022г.

Подпись студента _____

Работа защищена «

» _____ 20__ г.

Ставрополь 2022

```
Command Prompt

C:\Users\User\University>git tag -d v2.0
Deleted tag 'v2.0' (was aeacab8)

C:\Users\User\University>git push origin --delete v2.0
To https://github.com/krutozavr1/University.git
- [deleted]          v2.0

C:\Users\User\University>git branch test

C:\Users\User\University>git checkout test
Switched to branch 'test'

C:\Users\User\University>git log --oneline
cd29a22 (HEAD -> test, origin/main, origin/HEAD, main) Merge branch 'main' of https://github.com/krutozavr1/University
6a4fecc lr2 - done
539b1de Delete forGit/.vs directory
a27669e Update .gitignore
21b2a02 new c# for gitignore
8fe42c2 changes
e83d92c Merge branch 'main' of https://github.com/krutozavr1/University
a3dae86 removed python project
f83cb07 gitignore for c# and visual studio
cd8d5cb really final commit for LR2
88f49ea Merge branch 'main' of https://github.com/krutozavr1/University
cdb08a7 FINAL commit for LR2
7cef3bd final commit for LR2
88055be added c# file
6600b0b Merge branch 'main' of https://github.com/krutozavr1/University
deb71ba final report
```

Рисунок 1 – Создание новой ветки и переключение на нее

```
Command Prompt

Switched to branch 'test'

C:\Users\User\University>git log --oneline
b4e8172 (HEAD -> test) added file for test
cd29a22 (origin/main, origin/HEAD, main) Merge branch 'main' of https://github.com/krutozavr1/University
6a4fecc lr2 - done
539b1de Delete forGit/.vs directory
a27669e Update .gitignore
21b2a02 new c# for gitignore
8fe42c2 changes
e83d92c Merge branch 'main' of https://github.com/krutozavr1/University
a3dae86 removed python project
f83cb07 gitignore for c# and visual studio
cd8d5cb really final commit for LR2
88f49ea Merge branch 'main' of https://github.com/krutozavr1/University
cdb08a7 FINAL commit for LR2
7cef3bd final commit for LR2
88055be added c# file
6600b0b Merge branch 'main' of https://github.com/krutozavr1/University
deb71ba final report
af36d6a final report
3c4f415 final changes
1618ab8 added otchet
aabd35d hello world on python
d35e5c1 created python project
139fbc7 changed README file
1f77778 Update README.md
3a1134c Initial commit

C:\Users\User\University>
```

Рисунок 2 – Новый коммит на ветке test

```
Command Prompt - git log
1f77778 Update README.md
3a1134c Initial commit

C:\Users\User\University>git checkout maon
error: pathspec 'maon' did not match any file(s) known to git

C:\Users\User\University>git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

C:\Users\User\University>git merge test
Updating cd29a22..b4e8172
Fast-forward
 for test.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 for test.txt

C:\Users\User\University>git log
commit b4e8172ad29326b60d0ebcfb828c6cae69f8450 (HEAD -> main, test)
Author: krutozavr1 <ivannsharipkov@gmail.com>
Date: Thu Oct 6 10:55:49 2022 +0300

    added file for test

commit cd29a224b8481d7eb2fd2e577f57d7e2e0c4a7ed (origin/main, origin/HEAD)
Merge: 6a4fecc 539b1de
Author: krutozavr1 <ivannsharipkov@gmail.com>
Date: Thu Oct 6 10:48:29 2022 +0300

    Merge branch 'main' of https://github.com/krutozavr1/University
```

Рисунок 3 – Слияние веток

```
Command Prompt
Microsoft Windows [Version 10.0.19043.2006]
(c) Microsoft Corporation. All rights reserved.

C:\Users\User>cd University

C:\Users\User\University>git branch -d test
Deleted branch test (was b4e8172).

C:\Users\User\University>
```

Рисунок 4 – Удаление ветки

```
Command Prompt
C:\Users\User\University>git commit -m "deleted test branch"
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

C:\Users\User\University>git branch
* main

C:\Users\User\University>git branch newTest

C:\Users\User\University>git branch
* main
  newTest

C:\Users\User\University>git branch -v
* main      b4e8172 [ahead 1] added file for test
  newTest b4e8172 added file for test

C:\Users\User\University>git branch --no-merged

C:\Users\User\University>git branch --merged
* main
  newTest

C:\Users\User\University>
```

Рисунок 5 – Команда git branch

```
Command Prompt
C:\Users\User\University>git add .

C:\Users\User\University>git commit -m "pushing changes from another branch"
[branchForPush 02e71a2] pushing changes from another branch
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 for test.txt

C:\Users\User\University>git push
fatal: The current branch branchForPush has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin branchForPush

C:\Users\User\University>git push origin branchForPush
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 243 bytes | 243.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'branchForPush' on GitHub by visiting:
remote:   https://github.com/krutozavr1/University/pull/new/branchForPush
remote:
To https://github.com/krutozavr1/University.git
 * [new branch]      branchForPush -> branchForPush

C:\Users\User\University>
```

Рисунок 6 – Отправка новой ветки на удаленный репозиторий

```
Command Prompt
C:\Users\User\University>git pull
From https://github.com/krutozavr1/University
 * [new branch]      remote-branch -> origin/remote-branch
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=<remote>/<branch> branchForPush

C:\Users\User\University>git pull origin main
From https://github.com/krutozavr1/University
 * branch            main          -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 "\320\276\321\202\321\207\320\265\321\2021.docx" | Bin 0 -> 223906 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 "\320\276\321\202\321\207\320\265\321\2021.docx"

C:\Users\User\University>git checkout -track origin/remote-branch
error: did you mean `--track` (with two dashes)?

C:\Users\User\University>git checkout --track origin/remote-branch
Switched to a new branch 'remote-branch'
Branch 'remote-branch' set up to track remote branch 'remote-branch' from 'origin'.

C:\Users\User\University>
```

Рисунок 7 – Отслеживание удаленной ветки

```
Command Prompt

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=<remote>/<branch> branchForPush

C:\Users\User\University>git pull origin main
From https://github.com/krutozavr1/University
 * branch            main          -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 "\320\276\321\202\321\207\320\265\321\2021.docx" | Bin 0 -> 223906 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 "\320\276\321\202\321\207\320\265\321\2021.docx"

C:\Users\User\University>git checkout -track origin/remote-branch
error: did you mean `--track` (with two dashes)?

C:\Users\User\University>git checkout --track origin/remote-branch
Switched to a new branch 'remote-branch'
Branch 'remote-branch' set up to track remote branch 'remote-branch' from 'origin'.

C:\Users\User\University>git branch -vv
  branchForPush 39677c3 Merge branch 'main' of https://github.com/krutozavr1/University into branchForPush
    main         b4e8172 [origin/main: behind 2] added file for test
   newTest      b4e8172 added file for test
 * remote-branch 3474eaa [origin/remote-branch] for fetch too

C:\Users\User\University>
```

Рисунок 8 – Настройки веток слежения

```
Select Command Prompt
* branch      main      -> FETCH_HEAD
Merge made by the 'recursive' strategy.
"\320\276\321\202\321\207\320\265\321\2021.docx" | Bin 0 -> 223906 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 "\320\276\321\202\321\207\320\265\321\2021.docx"

C:\Users\User\University>git checkout -track origin/remote-branch
error: did you mean `--track` (with two dashes)?

C:\Users\User\University>git checkout --track origin/remote-branch
Switched to a new branch 'remote-branch'
Branch 'remote-branch' set up to track remote branch 'remote-branch' from 'origin'.

C:\Users\User\University>git branch -vv
  branchForPush 39677c3 Merge branch 'main' of https://github.com/krutozavr1/University into branchForPush
  main          b4e8172 [origin/main: behind 2] added file for test
  newTest       b4e8172 added file for test
* remote-branch 3474eaa [origin/remote-branch] for fetch too

C:\Users\User\University>git push origin --delete branchForPush
To https://github.com/krutozavr1/University.git
- [deleted]          branchForPush

C:\Users\User\University>
```

Рисунок 9 – Удаление ветки на удаленном сервере

```
Select Command Prompt
1f77778 Update README.md
3a1134c Initial commit

C:\Users\User\University>git checkout maon
error: pathspec 'maon' did not match any file(s) known to git

C:\Users\User\University>git checkout main
Switched to branch 'main'
Your branch is behind 'origin/main' by 2 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)

C:\Users\User\University>git rebase remote-branch
Successfully rebased and updated refs/heads/main.

C:\Users\User\University>git log --oneline
52366a8 (HEAD -> main, remote-branch) trying rebase
3474eaa (origin/remote-branch, origin/main, origin/HEAD) for fetch too
a96e351 item for fetch
b4e8172 (newTest) added file for test
cd29a22 Merge branch 'main' of https://github.com/krutozavr1/University
6a4fecc lr2 - done
539b1de Delete forGit/.vs directory
a27669e Update .gitignore
21b2a02 new c# for gitignore
8fe42c2 changes
e83d92c Merge branch 'main' of https://github.com/krutozavr1/University
a3dae86 removed python project
f83cb07 gitignore for c# and visual studio
cd8d5cb really final commit for LR2
88f49ea Merge branch 'main' of https://github.com/krutozavr1/University
```

Рисунок 10 – git rebase main to remote-branch