## Министерство образования Республики Беларусь Учреждение образования «Белорусский государственный университет информатики и радиоэлектроники»

Факультет компьютерных систем и сетей Кафедра Информатики Дисциплина «Избранные главы информатики»

## ОТЧЕТ

к лабораторной работе №1 на тему:

## «СИСТЕМА КОНТРОЛЯ ВЕРСИЙ GIT»

БГУИР 6-05-0612-02

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```
/lad@desktop-c0vqjjp mingw64 /c/4sem
$ mkdir 353504_GORDASHUK_07
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem
$ cd 353504_GORDASHUK_07
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07
$ mkdir IGI STRWEB
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07
$ cd IGI
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi
$ mkdir LR1 LR2 LR3 LR4 LR5
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi
$ cd ..
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07
$ cd STRWEB
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/STRWEB
$ mkdir LR1 LR2 LR3 LR4
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/STRWEB
$ cd ..
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07
$ git init
Initialized empty Git repository in C:/4sem/353504_GORDASHUK_07/.git/
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07 (main)
$ cd IGI
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI (main)
$ cd LR1
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git clone https://github.com/smartiqaorg/geometric_lib
Cloning into 'geometric_lib'
remote: Enumerating objects: 35, done.
remote: Total 35 (delta 0), reused 0 (delta 0), pack-reused 35 (from 1)
Receiving objects: 100% (35/35), 4.60 KiB | 470.00 KiB/s, done.
Resolving deltas: 100% (6/6), done.
vlad@DESKTOP-C0VQJJP MINGw64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git status
On branch main
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:
                    file.txt
        new file:
        new file:
                     file3.bin
        new file:
                     file4.tzt
                     file5.txt
        new file:
        new file:
                     geometric_lib
```

```
vlad@desktop-covqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (main)
$ echo text > file.txt
Vlad@DESKTOP-COVQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git status
On branch main
No commits yet
Changes to be committed:

(use "git rm --cached <file>..." to unstage)
           new file: file.txt
new file: file2.txt
new file: file3.bin
new file: file4.tzt
new file: file5.txt
           new file:
                             geometric_lib
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)
                             file.tx
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main) $ git commit -m "First commit"
[main (root-commit) bac442e] First commit 6 files changed, 2 insertions(+) create mode 100644 IGI/LR1/file.txt create mode 100644 IGI/LR1/file2.txt create mode 100644 IGI/LR1/file3.bin
 create mode 100644 IGI/LR1/file4.tzt
 create mode 100644 IGI/LR1/file5.txt
 create mode 160000 IGI/LR1/geometric_lib
```

```
vlad@desktop-c0vqjjp MINGw64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git rm file4.tzt
rm 'IGI/LR1/file4.tzt'
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (main)
$ git rm file3.bin
rm 'IGI/LR1/file3.bin'
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (main)
$ git rm *.txt
rm 'IGI/LR1/file.txt'
rm 'IGI/LR1/file2.txt'
rm 'IGI/LR1/file5.txt'
vlad@desktop-c0vqjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (main)
$ git status
On branch main
Changes to be committed:

(use "git restore --staged <file>..." to unstage)
                     file.txt
file2.txt
        deleted:
        deleted:
        deleted:
                     file4.tzt
        deleted:
                     file5.txt
        deleted:
Vlad@DESKTOP-COVQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main) $ git commit -m "Delete files"
[main 3d8269d] Delete files
 5 files changed, 1 deletion(-)
delete mode 100644 IGI/LR1/file.txt delete mode 100644 IGI/LR1/file2.txt
 delete mode 100644 IGI/LR1/file3.bin
 delete mode 100644 IGI/LR1/file4.tzt
delete mode 100644 IGI/LR1/file5.txt
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git mv file.txt newfile.txt
vlad@desktop-c0vqjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/LR1 (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:
                     file.txt -> newfile.txt
vlad@deskTop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (main)
$ git commit -m "Rename file"
[main 9702437] Rename file
 1 file changed, 0 insertions(+), 0 deletions(-)
 rename IGI/LR1/{file.txt => newfile.txt} (100%)
```

```
/lad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main)
$ git branch
  IGI
  ILR1
  ILR2
  ILR3
  ILR4
  ILR5
 SLR1
 SLR2
 SLR3
 SLR4
 SLR5
 STRWEB
 main
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/strweb (main)
commit 3d3f81a5bfe756751b670f655d2415d68d1f0edb (HEAD -> main)
Author: Vlad <v.gordashuk@mail.ru>
       Wed Feb 26 21:50:18 2025 +0300
    Add files
commit 9702437628b4a22057cad8364b962dd96bf90fcd
Author: Vlad <v.gordashuk@mail.ru>
Date: Wed Feb 26 21:41:45 2025 +0300
    Rename file
commit 818229877dfc0d94d008a98caef6f01be9187cc6
Author: Vlad <v.gordashuk@mail.ru>
       Wed Feb 26 21:40:49 2025 +0300
    Add file
commit 3d8269d508f4ddbeb1665dae6b37dfbbceb95ff6
Author: Vlad <v.gordashuk@mail.ru>
       Wed Feb 26 21:39:50 2025 +0300
    Delete files
commit bac442e98609e85c707ebcedbaad808c14164ebc
Author: Vlad <v.gordashuk@mail.ru>
       Wed Feb 26 21:37:47 2025 +0300
   First commit
```

```
/lad@DESKTOP-COVQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (ILR1)
$ touch file.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git add file.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git status
On branch ILR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
       new file: file.txt
Vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (ILR1)
$ git restore --staged file.txt
Vlad@deskTop-c0vQjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git status
On branch ILR1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file.txt
nothing added to commit but untracked files present (use "git add" to track)
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ echo t > file.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git status
On branch ILR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
                    file.txt
        new file:
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:
                    file.txt
Vlad@desktop-c0vqjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git restore file.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (ilr1)
$ git status
On branch ILR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)

new file: file.txt
```

```
lad@DESKTOP-COVQJJP MINGW64 /c/4sem/remote/353504_GORDASHUK_07 (main)
$ git add file.txt
vlad@DESKTOP-C0VQJJP MINGW64 /c/4sem/remote/353504_GORDASHUK_07 (main)
$ git commit -m "First"
[main (root-commit) e1761d8] First
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/remote/353504_gordashuk_07 (main)
$ git push -u origin main
info: please complete authentication in your browser...
Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Writing objects: 100% (3/3), 205 bytes | 102.00 KiB/s, done.

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

To https://github.com/vlad2990/353504_GORDASHUK_07.git
 * [new branch]
                         main -> main
branch 'main' set up to track 'origin/main'.
vlad@deskTop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07 (main)
$ git branch -r
   origin/IGI
  origin/ILR1
origin/ILR2
origin/ILR3
  origin/ILR4
origin/ILR5
origin/SLR1
origin/SLR2
   origin/SLR3
   origin/SLR4 origin/STRWEB
   origin/main
   target/IGI
   target/ILR1
Vlad@DESKTOP-COVQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (main) $ git remote add origin https://github.com/vlad2990/353504_GORDASHUK_07.git
vlad@deskTop-c0vQjjp MINGW64 /c/4sem/353504_gordAsHUK_07/IgI/LR1 (main)
$ git remote -v
origin https://github.com/vlad2990/353504_GORDASHUK_07.git (fetch)
origin https://github.com/Vlad2990/353504_GORDASHUK_07.git (push)
vlad@deskTop-c0vqjjp MINGW64 /c/4sem/353504_gordashuk_07/IgI/Lr1 (main)
$ git remote rename origin origin2
vlad@deskTop-c0vqjjp MINGW64 /c/4sem/353504_gordashuk_07/IgI/Lr1 (main)
$ git remote -v
origin2 https://github.com/vlad2990/353504_GORDASHUK_07.git (fetch)
origin2 https://github.com/Vlad2990/353504_GORDASHUK_07.git (push)
```

```
/lad@desktop-c0vqjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add1)
$ git status
On branch add1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
         new file: file1.txt
         new file:
                       file2.txt
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
                       file1.txt
         deleted:
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add1)
$ git rm file1.txt
rm 'IGI/LR1/file1.txt'
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add1)
$ git status
On branch add1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
                      file2.txt
         new file:
Vlad@DESKTOP-COVQJJP MINGW64 /c/4sem/353504_GORDASHUK_07/IGI/LR1 (add1) $ git commit -m "Add and remove" [add1 3b9b2dc] Add and remove
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 IGI/LR1/file2.txt
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add1)
$ git push -u origin2 add1
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 376 bytes | 376.00 KiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote: Create a pull request for 'add1' on GitHub by visiting:
               https://github.com/Vlad2990/353504_GORDASHUK_07/pull/new/add1
remote:
remote:
To https://github.com/vlad2990/353504_GORDASHUK_07.git
                        add1 -> add1
 * [new branch]
branch 'add1' set up to track 'origin2/add1'.
```

```
vlad@deskTop-c0vgjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add2)
$ git status
On branch add2
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
                   file1.txt
       new file:
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add2)
$ git push -u origin add2
fatal: 'origin' does not appear to be a git repository
fatal: Could not read from remote repository.
Please make sure you have the correct access rights
and the repository exists.
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add2)
$ git push -u origin2 add2
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Create a pull request for 'add2' on GitHub by visiting:
             https://github.com/Vlad2990/353504_GORDASHUK_07/pull/new/add2
remote:
remote:
To https://github.com/vlad2990/353504_GORDASHUK_07.git
                     add2 -> add2
* [new branch]
branch 'add2' set up to track 'origin2/add2'.
Vlad@desktop-c0vqjjp Mingw64 /c/4sem/353504_gordashuk_07/igi/lr1 (add2)
$ git push origin --delete add2
fatal: 'origin' does not appear to be a git repository
fatal: Could not read from remote repository.
Please make sure you have the correct access rights
and the repository exists.
vlad@desktop-c0vqjjp mingw64 /c/4sem/353504_gordashuk_07/igi/LR1 (add2)
$ git push origin2 --delete add2
To https://github.com/vlad2990/353504_GORDASHUK_07.git
- [deleted]
```