

Ministerul Educatiei din Republica Moldova
Universitatea Tehnica din Moldova
FCIM

Catedra Automatică și Tehnologii Informaționale

Raport

Lucrare de laborator nr.1
MIDPS

Tema: *Version Control Systems si modul de setare a unui server*

A efectuat: st.gr TI-154

Cobîlaș V.

A verificat:

Chisinau 2017

1.Scopul lucrării: Insusirea notiunii de Version Control Systems si a modului de setare a unui server. Version Control Systems (git - bitbucket - mercurial - svn)

2.Sarcina lucrarii : Sa se studieze sistemul de control al versiunilor Git. Sa se realizeze un proiect in repozitoriul local. Proiectul sa se incarce in repozitoriul GitHub. Sa se efectueze diferite modificari.

3. Efectuarea lucrarii de laborator

3.1 Sarcinile propuse pentru efectuare lucrarii de laborator

Basic Level (nota 5 - 6) :

- initializeaza un nou repository
- configureaza-ti VCS - crearea branch-urilor (creeaza cel putin 2 branches)
- commit pe ambele branch-uri (cel putin 1 commit per branch)

Normal Level (nota 7 - 8):

- seteaza un branch to track a remote origin pe care vei putea sa faci push (ex. Github, Bitbucket or custom server)
- reseteaza un branch la commit-ul anterior salvarea temporara a schimbarilor care nu se vor face commit imediat.
- folosirea fisierului .gitignore

Advanced Level (nota 9 - 10):

- merge 2 branches
- rezolvarea conflictelor a 2 branches
- comezile git care trebuie cunoscute

3.2 Realizarea lucrarii de laborator

Basic Level (nota 5 - 6) :

- Primul pas in executarea acestei lucrari de laborator a fost crearea unui repository, apasind butonul New de pe pagina utilizatorului, tab-ul cu denumirea Repositories. Dupa setarea numelui pentru repository, s-a apasat create repository.
- Configurarea VCS. S-a crearea unui ssh key si s-a copiat in lista de key in account-ul github. Apoi s-a clonat repositoryul local.

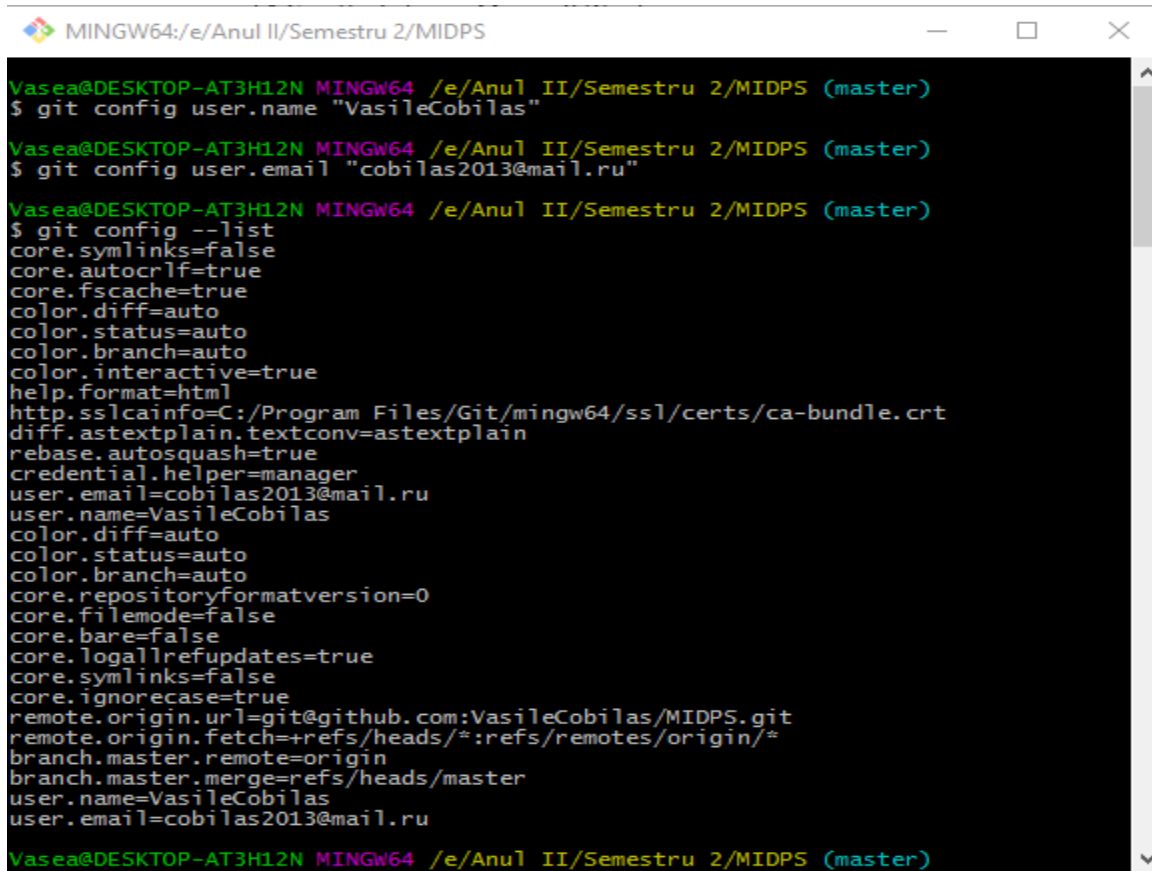
- S-a configurat config-ul la git prin intermediul comenzilor git config user.name "VasileCobilas" si git config user.email "cobilas2013@mail.ru" [Figura 1]

- Au fost create 2 branchuri ,comenzile care au fost folosite pentru crearea branchurilor: git checkout -b 'denumire branchului' si git checkout -b 'denumire branchului'. Apoi cu ajutorul comenzii git push origin 'denumirea branchului' au fost incarcate pe github.[Figura 2,3]

- Apoi s-a realizat cite un commit pentru fiecare din branchurile create folosind comenzile: git checkout 'denumirea branchului' (pentru a schimba ramificarea directorului git.) git add . (adauga fisiere la commit) git commit -m "descriere" (salveaza schimbarile in head) git push origin 'denumirea branchului' (Trimite/publica ramificare curenta). [Figura4.1 , 4.2]

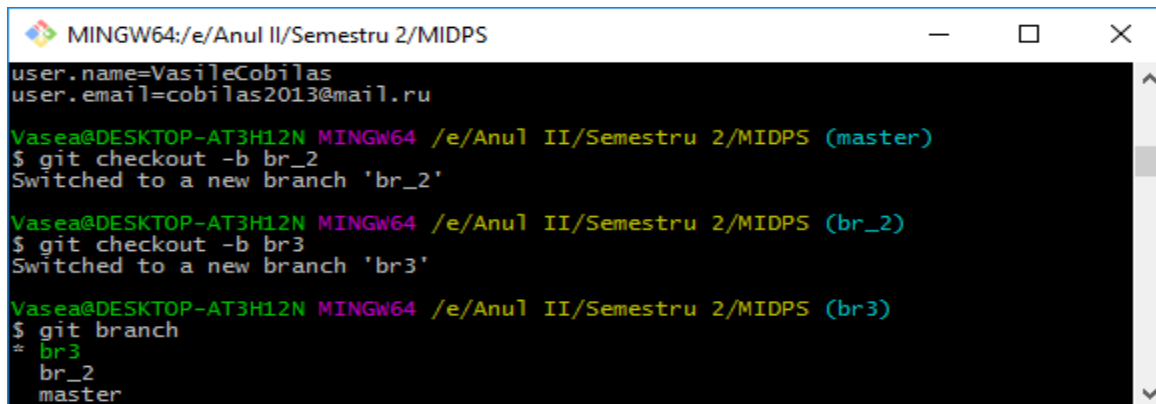
Normal Level (nota 7 - 8):

- S-a setat un branch to track pe care s-a facut push cu comenzile: git checkout --track -b new origin/master (seteaza un branch to track) git add . (adauga fisiere la commit) git commit -m "add new branch" (salveaza schimbarile in head) git push origin new (Trimite/publica ramificare curenta.)[Figura 5]



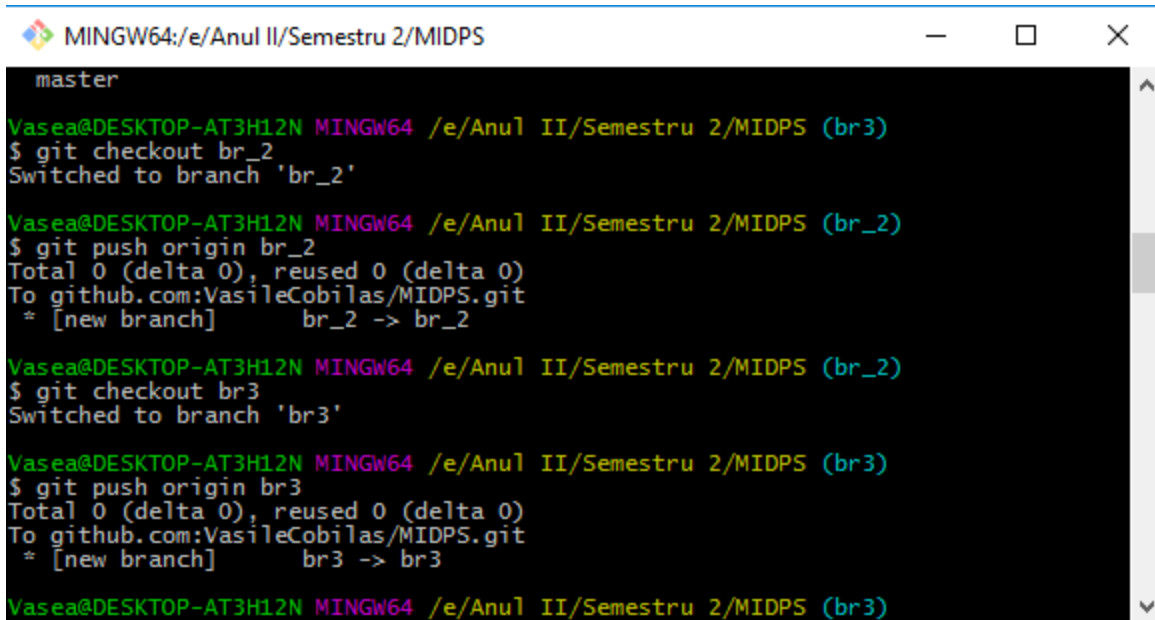
```
MINGW64:/e/Anul II/Semestru 2/MIDPS
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (master)
$ git config user.name "VasileCobilas"
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (master)
$ git config user.email "cobilas2013@mail.ru"
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (master)
$ git config --list
core.symlinks=false
core.autocrlf=true
core.fscache=true
color.diff=auto
color.status=auto
color.branch=auto
color.interactive=true
help.format=html
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
diff.astextplain.textconv=astextplain
rebase.autosquash=true
credential.helper=manager
user.email=cobilas2013@mail.ru
user.name=VasileCobilas
color.diff=auto
color.status=auto
color.branch=auto
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true
remote.origin.url=git@github.com:VasileCobilas/MIDPS.git
remote.origin.fetch=+refs/heads/*:refs/remotes/origin/*
branch.master.remote=origin
branch.master.merge=refs/heads/master
user.name=VasileCobilas
user.email=cobilas2013@mail.ru
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (master)
```

Figura 1. Configurare



```
MINGW64:/e/Anul II/Semestru 2/MIDPS
user.name=VasileCobilas
user.email=cobilas2013@mail.ru
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (master)
$ git checkout -b br_2
Switched to a new branch 'br_2'
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git checkout -b br3
Switched to a new branch 'br3'
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git branch
* br3
  br_2
  master
```

Figura 2. Crearea a doua branch-uri



A terminal window titled 'MINGW64:/e/Anul II/Semestru 2/MIDPS' showing a series of Git commands. The user starts on the 'master' branch, checks out 'br_2', pushes it to the origin, checks out 'br3', and pushes it to the origin. The terminal output shows the branch creation and push details.

```
master
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git checkout br_2
Switched to branch 'br_2'

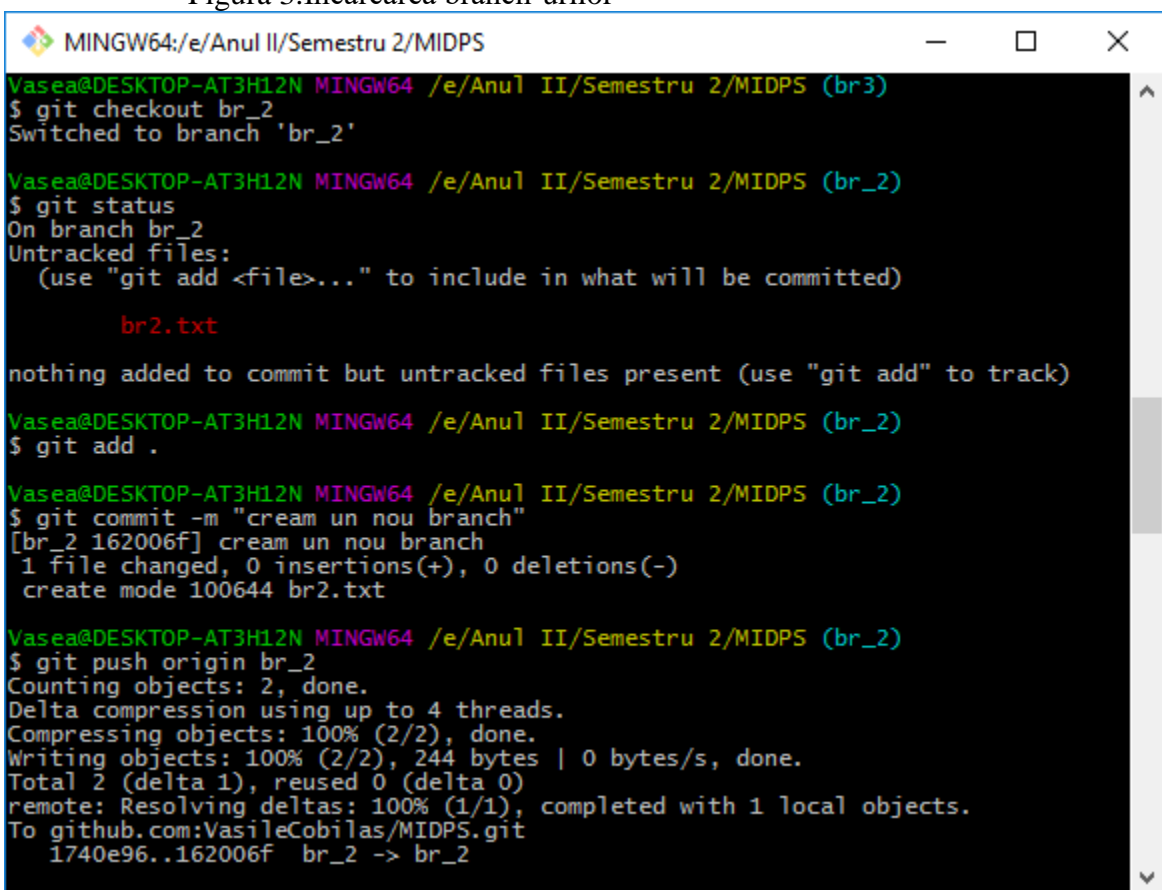
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git push origin br_2
Total 0 (delta 0), reused 0 (delta 0)
To github.com:VasileCobilas/MIDPS.git
* [new branch]      br_2 -> br_2

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git checkout br3
Switched to branch 'br3'

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git push origin br3
Total 0 (delta 0), reused 0 (delta 0)
To github.com:VasileCobilas/MIDPS.git
* [new branch]      br3 -> br3

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
```

Figura 3. Încărcarea branch-urilor



A terminal window titled 'MINGW64:/e/Anul II/Semestru 2/MIDPS' showing the process of creating a commit on the 'br_2' branch. The user checks out 'br_2', checks the status, adds a file 'br2.txt', commits it with the message 'cream un nou branch', and pushes it to the origin. The terminal output shows the file being added, the commit being created, and the push being successful.

```
MINGW64:/e/Anul II/Semestru 2/MIDPS
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git checkout br_2
Switched to branch 'br_2'

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git status
On branch br_2
Untracked files:
  (use "git add <file>..." to include in what will be committed)

        br2.txt

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

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git add .

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git commit -m "cream un nou branch"
[br_2 162006f] cream un nou branch
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 br2.txt

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git push origin br_2
Counting objects: 2, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 244 bytes | 0 bytes/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local objects.
To github.com:VasileCobilas/MIDPS.git
1740e96..162006f br_2 -> br_2
```

Figura 4.1 Comit pe br_2

```
MINGW64:/e/Anul II/Semestru 2/MIDPS
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br_2)
$ git checkout br3
Switched to branch 'br3'

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git status
On branch br3
Untracked files:
  (use "git add <file>..." to include in what will be committed)

        br3.txt

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

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git add .

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git commit -m "comit pe al 3 branch"
[br3 86c2310] comit pe al 3 branch
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 br3.txt

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git push origin br3
Counting objects: 2, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 246 bytes | 0 bytes/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local objects.
To github.com:VasileCobilas/MIDPS.git
    1740e96..86c2310 br3 -> br3
```

Figura 4.2 Commit pe br3

```
MINGW64:/e/Anul II/Semestru 2/MIDPS
Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (br3)
$ git checkout --track -b new origin/master
Branch new set up to track remote branch master from origin.
Switched to a new branch 'new'

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (new)
$ git add .

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (new)
$ git commit -m "adaugam un branch nou"
On branch new
Your branch is up-to-date with 'origin/master'.
nothing to commit, working tree clean

Vasea@DESKTOP-AT3H12N MINGW64 /e/Anul II/Semestru 2/MIDPS (new)
$ git push origin new
Total 0 (delta 0), reused 0 (delta 0)
To github.com:VasileCobilas/MIDPS.git
 * [new branch]      new -> new
```

Figura 5. Setam un branch to track

