

FACULTATEA CALCULATOARE, INFORMATICA SI
MICROELECTRONICA

UNIVERSITATEA TEHNICA A MOLDOVEI

MEDII INTERACTIVE DE DEZVOLTARE A
PRODUSELOR SOFT

LUCRAREA DE LABORATOR#1

Version Control Systems si modul de setare a unui server

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Lucrarea de laborator #1

1 Scopul lucrării de laborator

Obținerea deprinderilor de utilizare a Version Control Systems și studierea modului de setare a unui server)

2 Obiective

Studiarea Version Control Systems (git - bitbucket - mercurial - svn)

3 Efectuarea lucrarii de laborator

3.1 Sarcinile propuse

- Initializarea unui nou repozitoriu
- Generarea si adaugarea cheilor SSH
- Configurarea VCS
- Crearea branch-urilor (cel putin 2)
- Cel putin 1 commit pe fiecare branch
- Setarea unui branch to track a remote origin
- Resetarea unui branch la commit-ul anterior
- Salvarea temporara a schimbarilor fara commit imediat
- Utilizarea fisierului .gitignore
- Merge la 2 branch-uri
- Rezolvarea conflictelor

3.2 Analiza lucrarii de laborator

Link la repozitoriu: <https://github.com/AlexStamatin/MIDPS>

- Initializarea unui nou repozitoriu

Aceasta sarcina poate fi indeplinita atat online utilizand site-ul github cat si utilizand comanda *git init* In cazul dat repozitoriul nou a fost creat accesand pagina personala de pe github cu ajutorul optiunii "New Repository" din compartimentul "Your repositories".

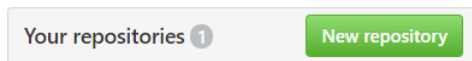
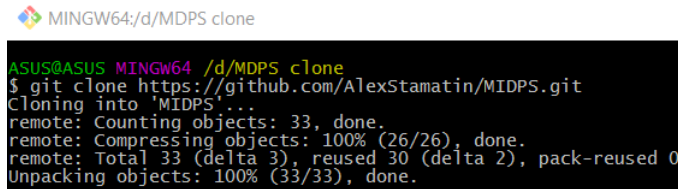


Figure 1: Crearea repozitoriului

Repozitoriul a fost clonat pe masina locala utilizand comanda *git clone*.

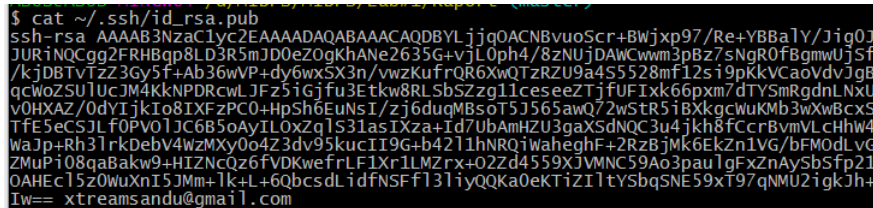


```
ASUS@ASUS MINGW64 /d/MIDPS clone
$ git clone https://github.com/AlexStamatin/MIDPS.git
Cloning into 'MIDPS'...
remote: Counting objects: 33, done.
remote: Compressing objects: 100% (26/26), done.
remote: Total 33 (delta 3), reused 30 (delta 2), pack-reused 0
Unpacking objects: 100% (33/33), done.
```

Figure 2: Clonarea pe masina locala

- Generarea si adaugarea cheilor SSH

Utilizand protocolul SSH este posibila autentificarea la servere si servicii aflate la distanta. Cu ajutorul cheilor SSH este posibila conectarea la github fara a fi necesara introducerea username-ului si parolei la fiecare vizita. Cheile SSH pot fi generate cu ajutorul comenzii *ssh-keygen*. Cheile publice existente pot fi afisate cu ajutorul comenzii *cat ~/.ssh/id_rsa.pub*

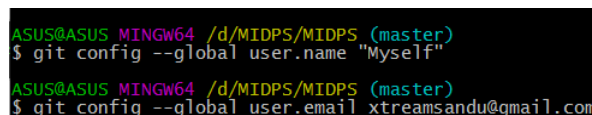


```
$ cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDAQDBYLjjgOACNBvuoScr+BWjxp97/Re+YBBaLY/Jig0J
JURiNQCgg2FRHBqp8LD3R5mJD0eZ0gKhAne2635G+vJL0ph4/8zNUjDAwCwmm3pBz7sNgR0fBgmmUjSf
/kjDBTVtZ23Gy5f+Ab36wVP+dy6wx5X3n/vwzKufRQR6XwQTZRZU9a4S5528mf12s19pKkVCaoVdvJgB
qcWoZSU1UcJM4KkNPDRCwLJFz5iGjfu3Etkw8RLSbSZzg11ceseeZTjFUFIXk66pxm7dTYSmRgdnLNxU
v0HXAZ/0dyIjkIo8IXFzPC0+HpSh6EuNsI/zj6duqMBsoT5J565awQ72wStR5iBXkgcwuKMb3wXwBcxS
TfE5eCSJLf0PV01JC6B5oAyILOxZq1S31asIXza+Id7UbAmHZU3gaXSdNQC3u4jkh8fCcrBvmVLcHhw4
waJp+Rh3lrkDebV4wzMXy0o4Z3dv95kucII9G+b4211hNRQiwaheghF+2RzBjmk6EkZn1VG/bFModLvG
ZMuPi08qaBakw9+HIZNcQz6fVDKwefrLF1Xr1LMZrx+02Zd4559XJVMNC59Ao3paulgFxFzNaySbSfp21
OAHEc15z0WuxnI5JMm+1k+L+6QbcsdLidfNSFF13liYQQKa0eKtiZi1tYSbqSNE59xT97qNMU2igkjh+
Iw== xtreamsandu@gmail.com
```

Figure 3: Cheia publica SSH

- Configurarea VCS

Configurarile git de baza pot fi modificate cu ajutorul comenzii *git config --global user.name jnamej* si *git config --global user.email jemailj*



```
ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git config --global user.name "Myself"
ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git config --global user.email xtreamsandu@gmail.com
```

Figure 4: Configurarea unor parametri

Fisiere noi spre indexare pot fi adaugate cu ajutorul comenzii *git add*. Pentru a inregistra toate schimbarile in comparatie cu fisierele de pe git se utilizeaza comanda *git commit -m "Commit comment"*. Pentru a incarca fisierele indexate pe git utilizam comanda *git push*

```

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git add Hey.txt

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git commit -m "First few chapters"
[master c93018a] First few chapters
2 files changed, 1 insertion(+)
create mode 100644 Hey.txt
create mode 100644 Lab#1/Raport/Lab_template.pdf

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git push
Counting objects: 6, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 63.47 KiB | 0 bytes/s, done.
Total 6 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/AlexStamatin/MIDPS.git
e5e4e6b..c93018a master -> master

```

Figure 5: Adaugarea fisierelor la repozitoriu

- Crearea branch-urilor

Pentru a crea un branch este necesara utilizarea comenzii *git branch jnamej*. Comanda *git branch* ne afiseaza branch-urile. Pentru a crea un branch nou si a face switch la el se utilizeaza comanda *git branch -b jnamej*.

```

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git branch NBranch1

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git branch NBranch2

ASUS@ASUS MINGW64 /d/MIDPS/MIDPS (master)
$ git branch
NBranch1
NBranch2
* master

```

Figure 6: Crearea branch-urilor

- Crearea commit-urilor de pe fiecare branch

Concluzie

Aici trebuie sa fie concluzia ta.

References

- [1] Aldebran Robotics, *official page*, www.aldebaran.com/en
- [2] Timo Ojala, *Multiresolution gray-scale and rotation invariant texture classification with local binary patterns*, 2002
- [3] Biometric, www.biometricupdate.com/201501/history-of-biometrics