Facultatea Calculatoare Informatica și Microelectronica

Universitatea Tehnică a Moldovei

Catedra: Automatica și Tehnologii Informaționale

RAPORT

Lucrare de laborator Nr.2
la *"Medii Interactive de Dezvoltare a Produselor Soft"*

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

A efectuat:
St. gr. TI-142
Cemîrtan Iulian

A verificat:
lect. universitar
Cojocaru Sv.
Cojan Irina.

Chișinău 2016

Obiectivele lucrării:

1) Înțelegerea și folosirea CLI (basic level)
2) Administrarea *remote* a mașinilor linux, folosind SSH (*remote code editing*)
3) Version Control Systems (git || mercurial || svn)
4) Compilarea codului C/C++/Java/Python prin intermediul CLI, folosind compilatoarele gcc/g++/javac/python

Sarcina:

- *Normal Level* (nota 7 || 8):
    - initializeaza un nou repositoriu
    - configureaza-ti VCS
    - crearea branch-urilor (creeaza cel putin 2 branches)
    - commit pe ambele branch-uri (cel putin 1 commit per branch)

Îndeplinirea sarcinii:

Initializez un nou repozitoriu

```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group
$ git init
Initialized empty Git repository in D:/REPOSITORIES/LAB6Group/.git/
```

Configurez VCS

```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group (master)
$ git remote add TeamWorkRepo git@github.com:julianPractice/LAB6Group.git
```

Adresa repezitorului cu codul sursă al proiectului:
https://github.com/juliancemTI-142/Iulian-Cemirtan

Adaug LAB 4 pe Github


```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/Iulian-Cemirtan (master)
$ git add LAB4/
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/Content/bootstrap.min.css.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/Models/bootstrap_1.css.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/fonts/glyphicons-halflings-regular.svg.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/bootstrap.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/bootstrap.min.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/jquery-1.10.2.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/jquery-1.10.2.min.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/jquery.validate.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/jquery.validate.min.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/jquery.validate.unobtrusive.min.js.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in LAB4/MIDPS WEB SITE CRUD/TransportationProject/Forward
ingProject.WebUI/scripts/modernizr-2.6.2.js.
The file will have its original line endings in your working directory.

iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/Iulian-Cemirtan (master)
$
```
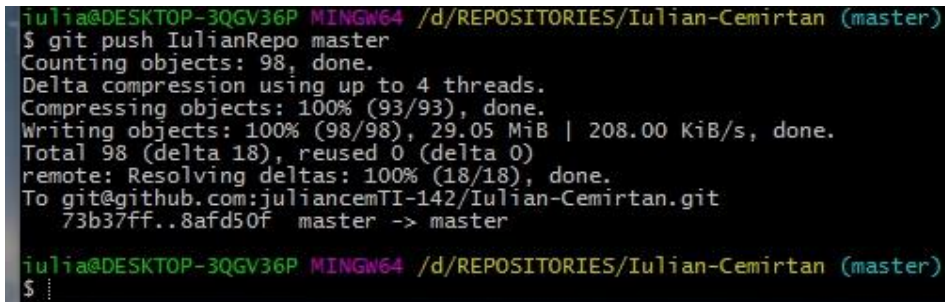
Efectuez un commit pe master al LAB 4


```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/Iulian-Cemirtan (master)
$ git commit -m 'Labul 4'
[master 8afd50f] Labul 4
 Committer: Iulian Cemîrtan <Iulian Cemîrtan>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author
```

Pun pe GitHub LAB4


```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/Iulian-Cemirtan (master)
$ git push IulianRepo master
Counting objects: 98, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (93/93), done.
Writing objects: 100% (98/98), 29.05 MiB | 208.00 KiB/s, done.
Total 98 (delta 18), reused 0 (delta 0)
remote: Resolving deltas: 100% (18/18), done.
To git@github.com:juliancemTI-142/Iulian-Cemirtan.git
   73b37ff..8afd50f  master -> master

iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/Iulian-Cemirtan (master)
$
```

Exemplu de efectuare a unui MERGE (LAB6)

```
iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group (master)
$ git branch
* master

iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group (master)
$ git fetch TeamWorkRepoSlavic
remote: Counting objects: 50, done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 50 (delta 18), reused 48 (delta 16), pack-reused 0
Unpacking objects: 100% (50/50), done.
From github.com:juliancemTI-142/LAB6GroupWork
 * [new branch]      Veaceslav  -> TeamWorkRepoSlavic/Veaceslav
   745c1c0..7abf618  master     -> TeamWorkRepoSlavic/master

iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group (master)
$ git branch
* master

iulia@DESKTOP-3QGV36P MINGW64 /d/REPOSITORIES/LAB6Group (master)
$ git merge TeamWorkRepoSlavic/Veaceslav
Updating 745c1c0..4ac9ce0
```

Concluzie

În lucrarea dată, am fost familiarizat cu Sistemul de Control al Versiunilor Git (Git SVN) și cu platforma de stocare a codurilor sursă ale proiectelor − GitHub.

Pe parcursul îndeplinirii sarcinilor laboratorului, am efectuat inițializarea tacking-ului proiectului (*initialization of tracking changes made to the project*), am studiat cum se adaugă fișierele la *staging area*, am analizat principiile de funcționare a instrucțiunilor *git diff*, *git commit*, *git log*, *git show HEAD*, *git reset*.

De asemenea, am studiat și am utilizat instrucțiunile *git clone, git fetch, git pull, git push, git branch, git checkout* și *git merge*.

Bibliografie

„Pro Git" Second Edition by Scott Chacon and Ben Straub