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Prof. Chuang

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CISC 3140

Lab 6

Task 1: Decentralized VCS practice with Git in the terminal

*See Lab6-session.log*

|  |
| --- |
|  |
|  | 685 mk dir Repo1  686 mkdir RepoMeta |
|  | 687 ls |
|  | 688 cd Repo1 |
|  | 689 touch HelloWorld.java |
|  | 690 ls |
|  | 691 nano HelloWorld.java |
|  | 692 javac HelloWorld.java |
|  | 693 sudo apt install defailt.jdk |
|  | 694 sudo apt install default.jdk |
|  | 695 sudo apt install default-jdk |
|  | 696 javac HelloWorld.java |
|  | 697 nano HelloWorld.java |
|  | 698 javac HelloWorld.java |
|  | 699 nano HelloWorld.java |
|  | 700 javac HelloWorld.java |
|  | 701 git init |
|  | 702 git add . |
|  | 703 git commit -m "HelloWorld.java - output is HelloWorld" |
|  | 704 git remote add origin https://github.com/muhammadarif2113/CISC-3140.git |
|  | 705 git push origin main |
|  | 706 git push origin |
|  | 707 git push origin master |
|  | 708 cat HelloWorld.java |
|  | 709 touch HelloWorld.java |
|  | 710 ls |
|  | 711 nano HelloWorld.java |
|  | 712 cat HelloWorld.java |
|  | 713 git status |
|  | 714 git commit -m "HelloWorld.java has been updated with todays date" |
|  | 715 git add HellowWorld.java |
|  | 716 git add HelloWorld.java |
|  | 717 git commit -m "HelloWorld.java has been updated with todays date" |
|  | 718 git status |
|  | 719 git push origin master |
|  | 720 git checkout main |
|  | 721 cd /Desktop/Design&Implementation |
|  | 722 cd Desktop/Design&Implementation |
|  | 723 cd |
|  | 724 cd Desktop |
|  | 725 cd Design\&Implementation/ |
|  | 726 cd CISC-3140 |
|  | 727 cd |
|  | 728 cd Desktop |
|  | 729 cd Design\&Implementation/ |
|  | 730 cd RepoMeta |
|  | 731 history > session.log |
|  | 732 ls |
|  | 733 nano session.log |
|  | 734 rm session.log |
|  | 735 ls |
|  | 736 history 52 > session.log |

Task 2: Centralized VCS practice with SVN in the terminal

*See Lab6-session2.log*

784 sudo apt-get install svn

785 sudo apt-get install subversion

786 cd -

787 svnadmin help create

788 svnadmin create /home/moe/Desktop/Design&Implementation

789 svnadmin create /home/moe/Desktop/Design&Implementation/Repo1

790 ls

791 mkdir Repo2

792 ls

793 cd Repo2

794 sudo mkdir -p Repo2/Repo2

795 ls

796 sudo svnserve -d -r /svn/Repo2

797 sudo svnserve -d -r /Repo2/Repo2

798 sudo svnserve -d -r /Repo2

799 cd -

800 mkdir hello\_world

801 cd hello\_world

802 vi hello.py

803 touch hello.py

804 nano hello.py

805 python hello.py

806 python3 hello.py

807 sudo mkdir -p /svn/repos

808 sudo svnadmin create /svn/repos/Repo2

809 sudo svn svnserve -d -r /svn/repos

810 sudo svnserve -d -r /svn/repos

811 cd -

812 ifconfig

813 sudo apt install net-tools

814 ifconfig

816 sudo nano /svn/repos/Repo2/conf/svnserve.conf

817 sudo nano /svn/repos/Repo2/conf/passwd

819 ifconfig

821 ip addr show

824 curl ifconfig.me

826 ssh

827 sudo apt-get install openssh-client

828 ssh

829 ssh localhost

830 sudo apt-get install openssh-server ii.

831 sudo service ssh status

832 ssh host\_ip\_address

833 ssh your\_username@host\_ip\_address

834 ssh moe@host\_ip\_address

835 ssh

836 sudo systemctl start ssh

837 history

838 cd Desktop

839 LS

840 ls

841 cd Design&Implementation

842 cd 'Design&Implementation'

843 ls

844 cd hello\_world

845 ls

846 cd

847 sudo mkdir -p /svn/repos

848 sudo svnadmin create /svn/repos/hello1

849 sudo svnserve -d -r /svn/repos

850 ls

851 sudo aptitude install subversion

852 sudo addgroup svn

853 sudo gpasswd -a "$USER" svn

854 sudo mkdir -p /svn/repository

855 sudo chgrp -R svn /svn/repository

856 sudo chmod -R 770 /svn/repository

857 svnadmin create /svn/repository/my\_project

858 cd svn

859 cd /svn/

860 ls

861 cd repository

862 cd repos

863 ls

864 cd

865 nano /svn/repository

866 nano /svn/repository/Repo2/conf/passwd

867 nano /svn/repos/Repo2/conf/passwd

868 nano /svn/repos/Repo2/conf/svnserve.conf

869 vi /svn/repos/Repo2/conf/svnserve.conf

870 vi /svn/repository/my\_project/conf/passwd

871 svnserve -d -r /svn/repos

872 svnserve -d -r /svn/repository

873 cd /etc/init.d/

874 sudo echo "svnserve -d -r /svn/repository/my\_project" > svnserve

875 sudo echo "svnserve -d -r /svn/repo/Repo2" > svnserve

876 cd

877 cd /svn

878 ls

879 cd repos

880 ls

881 cd Repo2

882 ls

883 sudo chgrp -R svn /svn/repository

884 sudo chgrp -R svn /svn/repos

885 sudo chmod -R 770 /svn/repos

886 svnadmin create /svn/repos/my\_project

887 svnadmin create /svn/repos/Repo22

Task 3

I completed task 1 by first creating a local directory and a simple program. Then, I connected to my GitHub and used some git commands to add the file to my GitHub repository’s branch, commit the changes, and then push it to the branch. Then, I altered my simple program to include today’s date and then used the same commands to add the file, commit it, and push to save the change to the GitHub branch.

Although using git to accomplish task 1 was fairly easy, subversion was a different story. I was able to create a subversion repository and include a simple program but I had trouble with pushing my subversion repository to my GitHub. Even after doing much research and tutorials, I had permission denied and accessibility problems that circumscribed me from completing task 2.

The only strength that I noticed with using SVN was that, if I got it to work right, I would have been able to check out branches of my SVN repo. GitHub, I believe, only allows for the whole repository to be checked out. As a result of this, I believe that SVN is advantageous when it comes to working with large projects. Other than this, git is better because there are less commands involved in order to set up your repo. For SVN for example, I had to use SSH to connect to your remote server but did not need to for git.