Assignment Linux

Name:

Download this document, complete the assignment and save as a .pdf. After you complete this assignment, transfer the file to the Linux web server, make it visible and send the URL to your instructor. Email your instructor if you have any questions judy.pino@sfcc.edu.

Student Learning Objectives:
After successful completion of this exercise a student should be able to:

- Log into a UNIX/Linux based server
- Transfer a file remotely using SSH
- Perform and explain basic file permissions
- Navigate a Linux file system using basic commands
- Create a text file, add some text and make the file visible
- Use a text editor on the operating system

Resources:
UNIX tutorial http://www.ee.surrey.ac.uk/Teaching/Unix/
Putty http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html

Log into a Linux server using SSH
Reference the https://the.earth.li/~sgtatham/putty/0.63/htmldoc/
Run the following commands and explain. Remember, Linux commands are case sensitive. (50 points)

Command	Explain
cd	Sets the current directory to your home directory
cd ..	Takes you to the next highest directory
cd /	Takes you to the highest level directory
who	Returns a list of everyone signed in to the server
whoami	Returns your username
cls	Nothing, but possibly meant to clear the screen
ls	Returns a list of files in your current directory
ls -l	Returns a more detailed list of files in your current directory
mkdir	Creates a directory inside the current one of a specified name

finger	Get information on everyone currently logged in
chfn	Lets you input or update information about yourself or others
rm	Removes specified files or directories
man	Returns a manual for a given command
date	Returns the date
passwd	Sets your password
exit	Exits the shell

(5 points) Research and explain Von Neumann Architecture
A Von Neumann Architecture is a computer in which data and instructions cannot be gotten from memory at the same time because they use the same "channel."

(10 points) Research the UNIX architecture
The kernel is the part of the system that connects to the hardware, and as such must vary with the hardware. Despite the part that connects to the hardware changing, the part of the kernel that connects to the rest of the system does not. This allows the majority of the system to run on many different computers.

UNIX was originally written in assembly language, and later in C.

UNIX is good for more complex work, and LINIX is designed to be customized.

The shell allows the user to enter commands and then sends them to the kernel.

(5 points) Research computer operating systems
An operating system's purpose is to connect the user to the computer. It manages all the users' accounts and keeps track of who is allowed to access what data.

(20) Transfer two files remotely using SSH.
The SFCC wireless network may not support SSH so you may want to hard wire into the network.
You'll use pscp, FileZilla, or WinSCP to transfer files from your local C: to the Linux web server.

1. Create a directory called `images` within your public_html directory.
    a. Transfer an original image you've created in Microsoft Paint (remember copyright laws).
2. Create a directory called `hmwk` within public_html.
    a. AFTER you're completed this assignment you'll transfer this document as a PDF (.pdf) to the Linux web server. Name the document 1assgin.pdf.
3. Send the URL of the image and URL of the document to your instructor.

(10 points) Research DOS and Linux commands online

Fill the following table with its corresponding commands.

Command	Folder listing	Folder removal	Folder creation		Document delete	Document copy	Document move	Document view
DOS	dir	deltree	mkdir		del	copy	move	type
Linux	ls	rm	mkdir		rm	cp	mv	cat