

Lab Assignment Week 02

CSC 3320 – System-level Programming

Week of January 15th, 2024

Introduction

Welcome to the first programming lab of CSC 3320! Today we will be covering the following topics:

1. Accessing Remote Systems through SSH and SFTP
2. Using Unix-Like Systems and Shell Commands

We will also be going over the lab policies and procedures.

- Attendance is mandatory.
- Labs must be completed **individually**.
- TAs are here to help you. Ask them for help!
- Lab assignments are due at midnight on the day of your lab.

Deliverables:

1. The typescript/log file from your SSH session.

If you have any questions, please do not hesitate to ask your TA.

Unix-like System & Command Line Interfaces

In today's lab, you will practice accessing the CS Snowball server using SSH. You will need to demonstrate an understanding of Unix-like systems and shell commands. You will need to log in to the snowball server via SSH and execute several shell commands that were discussed in class. You will also need to demonstrate that you understand how to download files from a remote server using SFTP.

Lab Tasks

- Log into snowball.cs.gsu.edu using SSH.
- Record your interactive terminal session using the script utility.
- Record yourself performing the following task on Snowball using shell commands and utilities.
 - 1) Create a csc3320 directory in your home directory.
 - 2) Change your current working directory to your csc3320 directory.
 - 3) Show your current working directory.
 - 4) Copy the syllabus file from within my home directory to your csc3320 directory.
 - i. Path to syllabus:
 1. /home/fhawamdeh1/csc3320/lab01/syllabus
 - 5) Show the contents of the syllabus file in your terminal.
 - 6) Compute the number of words in the syllabus.
 - 7) Rename the syllabus file to csc3320_syllabus.
 - 8) Change the file permissions of the csc3320_syllabus file to give writing permission to others.
 - 9) Look up the echo utility/command in the UNIX manual.
 - 10) Use the echo command to display 'Welcome to UNIX!' in the terminal.
- End the script recording.
 - Check to make sure the recording worked. It's okay if you see lots of special/strange characters!
- Transfer your typescript log file from Snowball to your local PC using SFTP.
 - Note: You will need to exit from the SSH session and start the SFTP client on your local computer!

Deliverables

For today's lab, you will need to submit the typescript/log file of your session on Snowball. Please name your typescript/log file as follows:

- Log/Typescript File
 - lastname_firstname_filename.txt
 - For example: hawamdeh_faris_lab01.txt