

Getting Started

Instructor: *Andy Abreu*

Grade Distribution

- Homework 20%
- Projects 10%
- Quizzes 20%
- Submit all homework, questions, or concerns to the following email address: andy.abreu.qc@gmail.com
- Lab website: <http://venus.cs.qc.edu/~aabreu/cs211/>
- Everything will be on the website

Homework Submission Rules

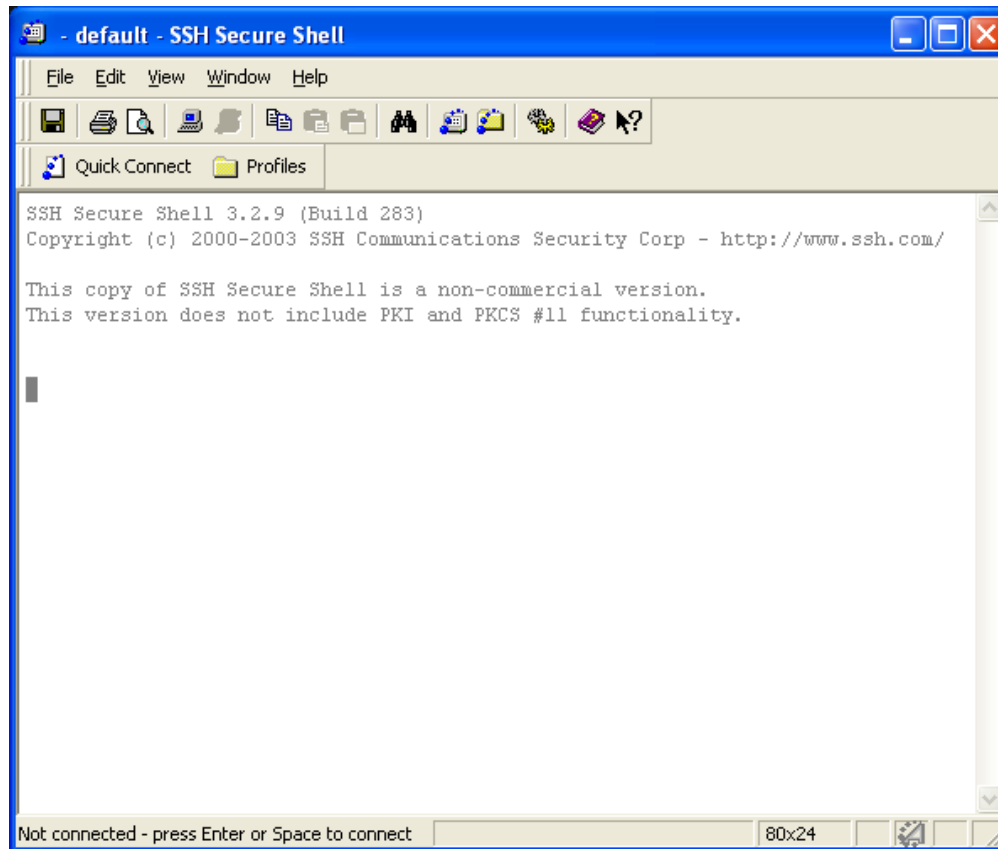
- Subject Headline: LastName_FirstName_CS211_HW#
- All HW should be submitted in an organized and well-formatted way along with reasonable font-size
 - Comment at beginning of file with Name, Class, and HW or Project #
 - Indented properly
 - Commented – mainly where code needs explanation
- Must submit as attachment, e.g. (.cpp, .h)
- All HWs must be sent to andy.abreu.qc@gmail.com

Log on to the machine

- Username:
 - First 2 letters of last name followed by
 - First 2 letters of first name followed by
 - Last 4 digits of CUNYFirst ID
 - (e.g.) aban5678
- Password:
 - 8 digits of CUNYFirst ID
 - (e.g.) 12345678

SSH

- In this course, we will connect to a server called venus using the SSH client.



Download Sites

For window users:

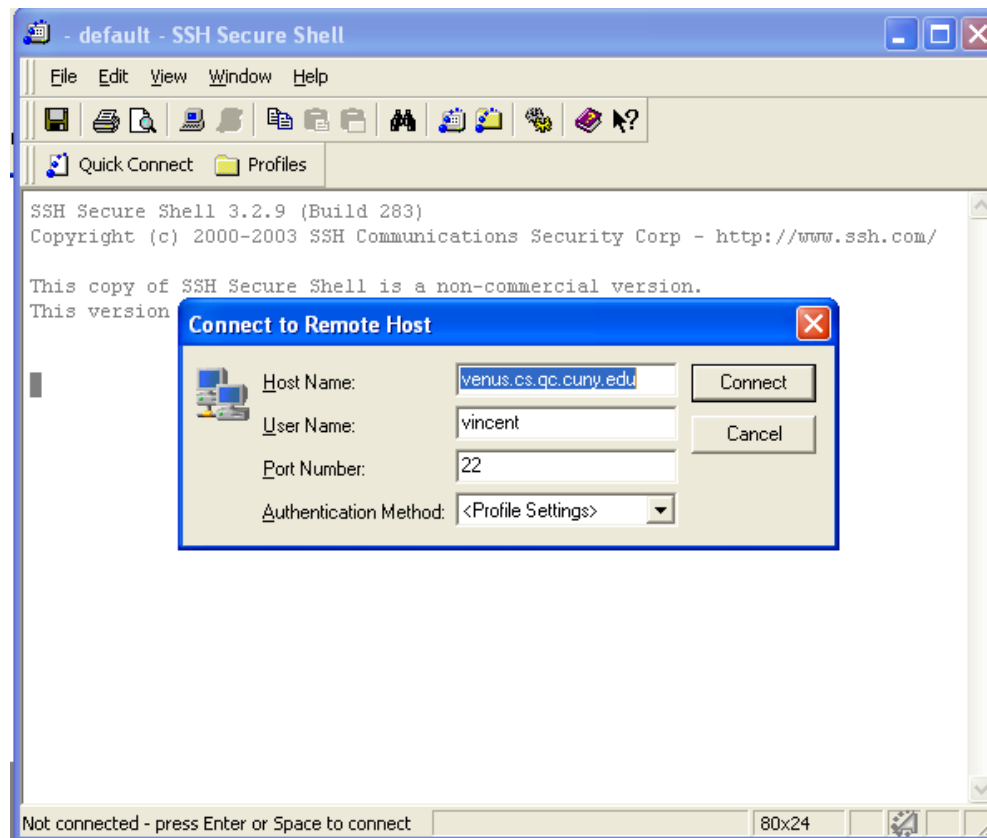
- <https://shareware.unc.edu/>
- <http://www.ohlone.edu/org/webcenter/sftptutorial/windows/sftp-downloadinstall.html>

For mac users:

- Use the Terminal Program and command
ssh your_login@venus.cs.qc.cuny.edu
- To login, [your_login](#) should be your username

Login

- Click Quick Connect
- This should show up



Login info

- Hostname: venus.cs.qc.cuny.edu
- Username:
 - First 2 letters of last name followed by
 - First 2 letters of first name followed by
 - Last 4 digits of CUNYFirst ID
 - (e.g.) aban5678
- Password:
 - 8 digits of CUNYFirst ID
 - (e.g.) 12345678

Linux

- Once you are connected, you will be in the Linux world. One of the reasons why the school uses Linux is because of
 - security → minimum services mean fewer vulnerability
- In order to survive, you will have to know some basic Linux commands. Like all OS, it has a file system to organize and manage files.
- Directory Management
 - Create directory
 - `mkdir <name_of_directory>`
 - (e.g.) `mkdir cs111`
 - Delete directory
 - `rmdir <name_of_directory>`
 - (e.g.) `rmdir cs111`
 - Change directory
 - `cd <name_of_directory>`
 - (e.g.) `cd cs111`

Directory Management (cont.)

- Go up one directory
 - `cd ..`
- View current working directory
 - `pwd`
- Jump back to home
 - `cd`

File Management

- Listing of your files and directories
 - Simple list
 - ls
 - Detailed list
 - ls -l
- Copying file
 - cp <old_filename> <new_filename>
 - cp one.txt one_copy.txt
 - cp one.txt ../
- Moving file (Useful technique to replace old file with new file)
 - mv <old_filename> <new_filename>
 - mv one.txt two.txt
 - mv one.txt cs111/one.txt
- Deleting file
 - rm <filename>
 - rm one.txt

Programs

- Editor:
 - vi, pico, emacs
- Compiler:
 - g++

Microsoft's Visual C++

- Supports many debug techniques (checkpoints, error detection)
- Faster to debug
- More detailed error message
- Format code (Edit -> Format Selection)

Steps to Get Going with Visual C++

Options

1. Visual C++ 2010 Express –
 - <http://www.visualstudio.com/en-us/downloads?fwLinkID=323467#d-2010-express>
2. Visual Studio Professional –
 - <https://www.dreamspark.com/Student/Software-Catalog.aspx>

Create a Program

1. Launch MS Visual Studio
2. File -> New -> Project
3. Visual C++
4. Win32 Console Application
5. Enter a project name in Name: textbox, then click **OK** button
6. Next button
7. Check **Empty Project** checkbox, then click **Finish** button
8. In solution Explorer window right-click Source Files folder and click Add -> New Item...
9. Select C++ File (.cpp)
10. Enter a file name in Name: textbox, usually the Class name, then click **Add** button

Hint: Ctrl – F5 to compile code and leave window open

Homework (No submission is necessary)

– for g++

1. Download SSH and install it on your home machine.
2. Try logging in to venus at home.
3. Execute a Hello World program

Homework (No submission is necessary)

– for MS Visual C++

1. Download Visual C++ and install it on your home machine
2. Follow instructions on above slide to create a program
3. Execute an Hello World program on Visual C++
4. Still make sure you can log on to Venus

Review:

From assigned Text Book – Chapters 1 – 3

Refer to Week 1 – 9 from CS111 lab site