Raspberry Pi 101

Instructor: Brian Vesperman

http://www.brianvesperman.com/2015/02/18/raspberry-pi-class/

Activity Overview:

1. Downloading and Installing the OS Image on a SD card.
2. Run the software update, localizing the time zone and keyboard.
3. Booting the pi, logging in, entering the GUI setting up networking/wifi.
4. GUI basics.
5. Make a Bash script. (The linux version of a windows batch file)
6. Make a Python script. (Python is an interpreted language)
7. Make a C++ program. (A compiled application)
8. Understating high level IO (USB, HDMI, Video, Audio) and low level IO (GPIO, serial communication pins, wire an LED in and turning it on)
9. Where to find and install other libraries/applications

Relevant Links:

http://www.raspberrypi.org/downloads (Raspbian Raw Image)
http://elinux.org/RPi_Easy_SD_Card_Setup
http://sourceforge.net/projects/win32diskimager (Windows SD Card Setup App)
http://alltheware.wordpress.com/2012/12/11/easiest-way-sd-card-setup/ (Mac SD Card Set-up App)
http://elinux.org/RPi_raspi-config
http://www.youtube.com/watch?v=7gT1ud_U6v4 (YouTube on hello word programs)
http://elinux.org/RPi_VerifiedPeripherals
http://elinux.org/Rpi_Low-level_peripherals
http://elinux.org/RPi_Beginners

Remote Login

Enable SSH on pi
figure out ip address of pi
ssh -X [ip address] -l pi

WiFi

SSID: s67-guest
For PSK(password):WelcomeToSector67

Basic linux Commands

ls = dir
cd / = cd\
sudo = run as admin (superuser do)
nano = edit
chattr = attrib
cp = copy
rm = del
sudo reboot
bash file = batch file

Raspberry Pi Details

username:pi
password: raspberry

Do updates:
sudo apt-get update
sudo apt-get upgrade
sudo raspi-config

load GUI: startx