Directions for setting up raspberry pi out of the box to work with GoPro and nomorebuttshots.com. These directions assume you need to connect a laptop to the raspberry pi. If you have a separate display, keyboard, and mouse this process will be simpler.

1. Plug GoPro into wall and turn on GoPro App. Turn gopro to picture taking mode.
2. Image Raspbian operating system on micro SD card.
   1. Download Raspbian here: <https://www.raspberrypi.org/downloads/raspbian/>
   2. Follow installation instructions here: <https://www.raspberrypi.org/documentation/installation/installing-images/README.md>
3. Plug SD card into RPi, plug RPi into wall, and connect RPi to laptop with Ethernet cable
4. Download putty ssh program here: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>
5. Follow directions here to assign an IP address to the Ethernet connection and connect to it using putty: <http://diyhacking.com/connect-raspberry-pi-to-laptop-display/> . If you prefer a GUI display for the RPI, follow these directions to install the VNC program:

<http://www.instructables.com/id/Direct-Network-Connection-between-Windows-PC-and-R/>

1. Insert two wifi usb adapters that are known to be compatible with RPi (a list can be found here: <http://elinux.org/RPi_USB_Wi-Fi_Adapters>)
2. Setup wifi connection on the RPi as follows:

In command line enter “sudo nano /etc/network/interfaces”

Modify text to read:

auto lo  
  
iface lo inet loopback  
iface eth0 inet dhcp  
  
allow-hotplug wlan0  
iface wlan0 inet dhcp  
wpa-ssid "Network-0"  
wpa-psk "Password-0"  
  
allow-hotplug wlan1  
iface wlan1 inet dhcp  
wpa-ssid "Network-1"  
wpa-psk "Password-1"

(Use the appropriate ssid names and passwords). Save changes and exit. Now reload the network interfaces by entering “sudo service networking reload” This will disconnect the laptop remote connection to the RPi.

1. Reconnect to the RPi using Putty and enter the command “iwconfig”. You should see wlan0 and wlan1 each associated with a different wifi network. If not, see the troubleshooting section at the end of this document.
2. Set up an SSH connection to the RPi to access code remotely over the internet.
   1. Create an account at weaved.com
   2. Install weaved on the RPi following these directions: <https://www.weaved.com/installing-weaved-raspberry-pi-raspbian-os/>
3. Exit putty and remove Ethernet cable.
4. Login at weaved.com.
5. Click on the device to connect to (ie RaspberryPi-BKB-SSH). New window gives a host name and port number to enter into putty to connect to the RPi.
6. Enter username: pi, password: raspberry in command window and connection established.
7. Install xmlrpc on RPi by entering command “sudo apt-get update” then “sudo pip install python-wordpress-xmlrpc” Documentation here: <http://python-wordpress-xmlrpc.readthedocs.org/en/latest/overview.html#installation>
8. Save code PostPictures11.py on the RPi. In the same directory, create subdirectories titled “Pictures” and “OldPictures”. The python script transfers pictures from the GoPro to the Pictures directory on the RPi, then once loaded to the website pictures are moved from “Pictures” to the “OldPictures” directory on the RPi.
9. Navigate to directory with PostPictures11.py and run command “python PostPictures11.py &”. This check the GoPro every minute for new pictures and load pictures to the website. The “&” at the end ensures the code keeps running when the weaved ssh connection is terminated.
10. To kill script use ctrl+c or “sudo kill 3424” where the number is a number associated with the script. To find this number type “ps aux|grep /home/pi/PostPictures11.py” (or whatever directory you’ve saved it in). The first number in the output is the one to use.
11. To shutdown, enter “sudo shutdown”. Then wait for all lights to turn off except the red LED. Now it is safe to unplug the RPi.

Trouble Shooting

1. Laptop does not assign IP address to Ethernet port connecting to RPi.
   1. Turn off windows firewall
   2. SD card could be corrupted and needs to be formatted and reinstalled. Corruption could be from improperly shutting down.
   3. Don’t use “sudo reboot.” For some reason it never boots after running this command.
2. Wif network recognized but not connecting
   1. Enter command “sudo ifdown --force wlan0” then “sudo ifup --force wlan0” (or same command with wlan1).
3. GoPro wifi doesn’t turn on
   1. Turn GoPro completely off. Then push small wifi button. After blue light flashes, then push mode button and turn on gopro app.