Light Switch: Project procedure (step by step)

Network settings:

To have a static IP of your Raspberry Pi, you have two options: add DHCP - reservation in your routers configuration page or change your Pi's interface settings, and choose a static IP (warning: this can cause IP conflicts).

Static IP:

File: `/etc/network/interfaces`

Put this content in it (change address to whatever IP you want)

```
auto lo

iface lo inet loopback

iface eth0 inet static
address 192.168.0.100 # IP-address of the computer
netmask 255.255.255.0
network 192.168.1.0
broadcast 192.168.1.255
gateway 192.168.1.254

allow-hotplug wlan0
iface wlan0 inet manual
wpa-roam /etc/wpa_supplicant/wpa_supplicant.conf
iface default inet dhcp
```

Wifi dongle (DHCP):

```
auto lo

iface lo inet loopback
iface eth0 inet dhcp

allow-hotplug wlan0
auto wlan0

iface wlan0 inet dhcp
        wpa-ssid "Network name/SSID"
        wpa-psk "Passphrase"
```

Installation:

To get the Raspberry Pi, and the software used in Light Switch to work properly, follow this procedure, installing required packages.

```
sudo apt-get update
sudo apt-get install git-core
sudo apt-get install build-essential
sudo apt-get install python-dev
sudo apt-get install python-pip
git clone git://git.drogon.net/wiringPi
cd wiringPi
./build
gpio -v
gpio readall
cd ..
sudo pip install wiringpi2

sudo apt-get install apache2 libapache2-mod-php5 php5 vsftpd
```

Make theese changes to the file: `/etc/vsftpd.conf so the user can access via ftp.`

```
anonymous_enable=NO
local_enable=YES
write_enable=YES
```

Cron job:

```
sudo crontab -e
```

add this line in after typing the command above:

```
* * * * * /opt/lightswitch/settings/settings-parser.py
```

Copy files:

```
cd /opt
sudo mkdir lightswitch
sudo chown pi:pi  lightswitch
cd lightswitch
wget http://storbukas.no/lightswitch.tar.gz
tar -zxvf lightswitch.tar.gz
rm -rf lightswitch.tar.gz
```

Adding script to init.d:

```
cd /opt/lightswitch
sudo cp special-files/lightswitch-startup /etc/init.d/
sudo chmod +x /etc/init.d/lightswitch-startup
sudo update-rc.d lightswitch-startup defaults
```

Finally, type: `sudo reboot`