Raspberry Pi Instructions – 5/3/2019

********Initial setup prior to being able to run SSH********

Download Raspbian OS:
https://www.raspberrypi.org/downloads/raspbian/

- Raspbian Stretch Lite, Version April 2019
- Kernel: 4.14

Flashing the SD card:
Using balencaEtcher version 1.4.9

https://www.balena.io/etcher/

- Select the zip file -> select the SD card -> Flash the SD card

Raspi Config Settings:

Network
- **sudo raspi-config**
- **Select "Network Options" -> enter your wireless SSID and password.**

SSH (still in raspi-config interface)
- Select "Interfacing Options"
- Enable SSH (Option 2)

Timezone
- Select "Localisation Options"
- Set the timezone

********You can now continue the setup from SSH (Make sure you have your device IP)********

Install Node.js v10.15.4 and NPM 6.4.1:
- **sudo apt-get install curl software-properties-common**
- **curl -sL https://deb.nodesource.com/setup_10.x | sudo bash -**
- **sudo apt-get install -y nodejs**

Installing the files and dependencies:

- Using whatever FTP client you prefer, connect to the Pi and copy the pi-client folder to /home/pi
- Using SSH, navigate to /pi-client/iw_parse-master -> add execute to iw_parse.py. (**chmod +x iw_parse.py**)
- In the pi-client folder (package.json should be in the root) run "**npm install**" -- This command uses the package.json file to install all dependencies.

Running the script:

- First, edit wifi-client.js. The "**ioClient = io.connect("http://192.168.1.10:3001/pi**");" line should be changed to include your server's IP
- To start the script, run "**sudo node wifi-client.js**"

Package.json includes all dependencies and their versions.

Images of the SD card can be created with Win32 Disk Imager:

https://sourceforge.net/projects/win32diskimager/files/latest/download

You can then install the image using Etcher.