Hardware Required:

- Raspberry Pi (3 or later)
- HDMI Cable
- Monitor
- Keyboard and Mouse
- USB Microphone
- Speakers
- MicroSD Card with Noobs installed

Original Build based on steps found here:

https://developer.amazon.com/en-US/docs/alexa/alexa-voice-service/set-up-raspberry-pi.html

Notes not included in the setup guide from Amazon

- Update your Pi before doing any setup from Amazon
  - There is a known bug that was patched in 2018 that will cause crashes and (in our case) potential memory corruption if you attempt to set up the SDK without patching the Pi.
  - In case of memory corruption, a guide for reformatting the SD card can be found here: https://www.raspberrypi.org/documentation/installation/noobs.md
- Increase SWAP space on the Pi
  - RAM is extremely limited on the Pi. When you try to build the SDK you will likely experience freezes and crashes when it runs out of memory (specifically when building the Bluetooth and UI Manager components).
  - In order to get around the RAM limitations, increase SWAP size. To increase SWAP size following these instructions:
    1. Change configuration in the file */etc/dphys-swapfile*

       ```
       sudo nano /etc/dphys-swapfile
       ```

    2. The default value in Raspbian is **CONF_SWAPSIZE=100**
    3. Change this to **CONF_SWAPSIZE=1024**
    4. Stop and start the swapfile service

       ```
       sudo /etc/init.d/dphys-swapfile stop
       sudo /etc/init.d/dphys-swapfile start
       ```

    5. You can verify the amount of memory using the following:

       ```
       free -m
       ```

- To enable the custom Auto-Garcon skill, go to the Alexa Developer Console. Open the Auto-Garcon skill and go to the Test tab. From here sleeved the "Skill testing is enabled in:" and select Development. The skill will now be enabled on the Pi.