**Raspberry Pi Setup 2022**

* Install Raspbian OS on Micro SD Card
  + <https://www.raspberrypi.com/software/>
* Download for windows
* Choose OS Raspberry PI OS (32-bit)Choose Storage- SDHC Card
* Write the OS onto the SD Card

Put the SD Card in the PI then power it on and let it run its start up.

Add Wifi to the PI

Open Terminal

* **sudo apt-get update && sudo apt-get upgrade -y**
  + Allow for the update to run and complete

Next we will Install Chromium

* **sudo apt-get install chromium x11-xserver-utils unclutter**
* **Sudo apt install rpi-chromium-mods**

Next Setup auto login and Networking Options

* **sudo raspi-config**
  + This command should open a window with various options.
* Select System Options
  + Select S3 Password - Change to Local Admin PW
  + Select S6 Network at Boot - wait until network connection is established to boot
  + Select S5 Boot/Auto Login
    - Select B4, auto login as pi User to the Desktop
* Select Interface Options
  + Select I2 SSH - Enable SSH

Close out of the configuration menu, and go back to the terminal

-Create and edit a kiosk.sh script for our kiosk.

* **nano /home/pi/kiosk.sh**

- This command creates the kiosk.sh file in the /home/pi directory and opens it in the

nano editor.

-The below bolded text shows what should be in the file.

**#!/bin/bash**

**xset s noblank**

**xset s off**

**xset -dpms**

**sed -i ‘s/”exited\_cleanly”:false/”exited\_cleanly”:true/’ /home/pi/.config/chromium/Default/Preferences**

**sed -i ‘s/”exit\_type”:”Crashed”/”exit\_type”:”Normal”/’ /home/pi/.config/chromium/Default/Preferences**

#(Double check bin directory for appropriate file name below, will either be *chromium* or *chromium-browser*)

#(Everything below should be on the same line except for the while loop)

**/usr/bin/chromium-browser --noerrdialogs --disable-infobars --kiosk** “bit.ly/”

(make sure the link is in yellow color, check the quotations)

**while true; do**

**sleep 10**

**done**

Next we write the Service that will run the kiosk script at launch.

* **sudo nano /lib/systemd/system/kiosk.service**

Again, this will create kiosk.service in the /lib/systemd/system directory, and open the file in the nano editor. The file should be edited to the exact bolded text below.

* **[Unit]**

**Description=Chromium Kiosk**

**Wants=graphical.target**

**After=graphical.target**

**[Service]**

**Environment=DISPLAY=:0.0**

**Environment=XAUTHORITY=/home/pi/.Xauthority**

**Type=simple**

**ExecStart=/bin/bash /home/pi/kiosk.sh**

**Restart=on-abort**

**User=pi**

**Group=pi**

**[Install]**

**WantedBy=graphical.target**

Finally, we need to add the **xset** entries from the **kiosk.sh** file to another autostart file. If we don’t, sometimes the power/screensaver settings on the Pi will allow it to sleep/hibernate. If /.config/lxsession/LXDE-pi/autostart exists.

* **sudo nano /.config/lxsession/LXDE-pi/autostart**

Otherwise, there is a different file we need to update.

* **sudo nano /etc/xdg/lxsession/LXDE-pi/autostart**

Add the following lines to the file.

* **xset s noblank**

**xset s off**

**xset -dpms**

In the Terminal, enable and start the new service.

* **sudo systemctl enable kiosk.service**
* **sudo systemctl start kiosk.service**

A chromium window should open automatically in kiosk mode. If it doesn’t, you can check the status of the service with the below command.

* **sudo systemctl status kiosk.service**

Troubleshoot any errors as needed, and reboot the device if necessary.

This is the command that you will run to make it restart every 4 hours

* Open Terminal
* **sudo crontab -e**
* Press **1** for nano if it asked
* At the end of the file Type : **\*/240 \* \* \* \*/sbin/shutdown -r now**

Final Test Reboot and ensure it starts up.

* **sudo reboot**