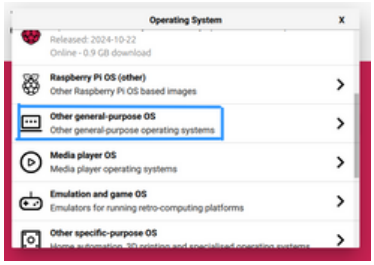
Setting Up Raspberry Pi's OS

1) Installing Raspberry Pi imager:

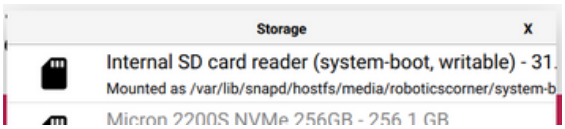
- You can use the following link to download the Raspberry Pi imager version that matches your laptop: https://www.raspberrypi.com/software/
- if on MacOS or windows open the downloaded file and follow the instructions for installing it.

2) Installing the required image on the SD card:

- Take out the SD card from the Raspberry Pi and insert it into the laptop directly or through a USB adopter.
- Open Raspberry Pi imager
- From "Choose device" Button select the type of your Raspberry Pi
- From "Operating system" choose general purpose OS.
- Choose **Ubuntu server 22.04** (32/64 based on your Raspberry Pi).



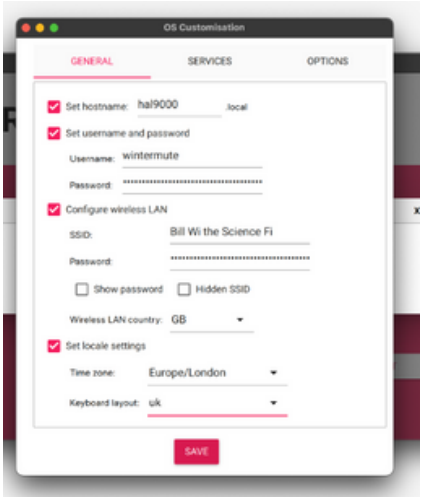
- From "Choose storage" make sure that Excluded system drivers is checked as it excludes any storage related to your laptop, ssd or hard drive and so, then select your SD card, it should look something like this:



- then Click "Next".
- It will ask you if you want to erase everything on the SD card, make sure you selected the right storage to be erased then click "yes"
- it will ask you if you want to customize the settings, click "Edit settings"

THIS PART IS IMPORTANT:

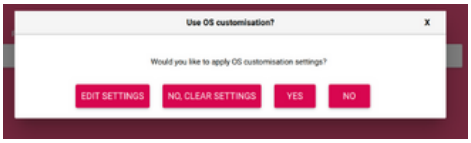
- in the general tap you need to set everything up something like this:
- set the hostname to your name or how you want to call it.
- set the usual username and password to login with later and make sure you write that password down.
- The wireless LAN is your wifi name "SSID" and password make sure those are correct too.
- The location should Automatically be Egypt but check on that as well "Cairo/Egypt" .



- in the next tap services select Enable ssh and use password authentication

- the last step is to make sure those are selected in the options tab

- then click “save”, you will be back to this menu, click “yes”.



- that’s it now wait for the imager to set up everything on the SD card and when it’s finished, insert the SD card back into the Raspberry Pi.

3) Make sure everything is working well:

- Connect the Raspberry Pi to a display and a keyboard then connect it to power supply.
- After it boots it will ask you for your login username then your password.
- We need to install certain packages to make sure everything is working.
- Start by running this command to check for updates to packges: “sudo apt update”, after it finish follow it by “sudo apt upgrade”.
- Shut down the Raspberry Pi “sudo shutdown now” then unplug it from power cable and plug it back it to restart it.
- install the following packages:
- sudo apt install raspi-config openssh-server htop iotop iftop sysstat net-tools wireless-tools wpasupplicant
- you can check that the date is okay by running the following command “date” it will directly print the current date and time it’s really important to check that.