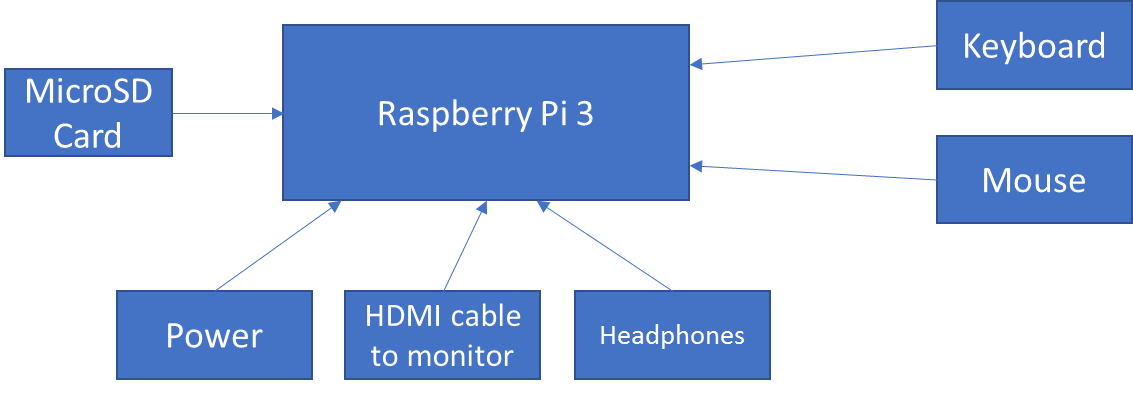
CoderDojoDC Raspberry Pi Workstation Setup

January 29, 2017

Find the following items:

1. Clear, purple container with Raspberry Pi 3, green GrovePi box, power supply, microSD card, battery, and MicroSD card reader w/ USB cable
2. Keyboard
3. Mouse
4. Monitor with HDMI cable
5. Headphones if you’d like them

## Connecting cables to the Raspberry Pi



## Setting up the Raspberry Pi workstation for the first time

### Step 1: Program a MicroSD card

The MicroSD card contains all the programs needed to make the Raspberry Pi work at CoderDojoDC. We are using the Dexter Industries “Raspbian for Robots” version of software for our Raspberry Pis. If you’ve used a Raspberry Pi before, you probably installed software with a different name. Please don’t do this on our Raspberry Pis, since the other versions will be missing some programs that we’ll need later.

If you’re at CoderDojoDC, use the Raspberry Pi MicroSD card programmer. If it’s being used, follow the instructions on Dexter Industries’ website to download and install the software:

<https://www.dexterindustries.com/howto/install-raspbian-for-robots-image-on-an-sd-card/>

After you’ve programmed the MicroSD card, put it into your Raspberry Pi, connect everything up and power it on.

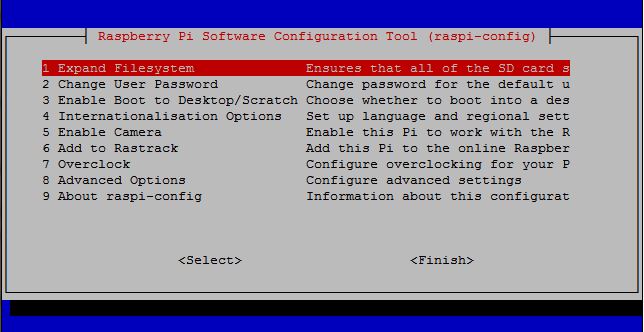
### Step 2: Run “raspi-config” to expand the filesystem

When you first start the Raspberry Pi, it won’t have that much room to store your programs. This is easy to fix:

Open a terminal window and type:

**sudo raspi-config**

You should see the following:

[](https://www.dexterindustries.com/wp-content/uploads/2015/02/raspi-config-software.jpg)

Select the first option to expand the filesystem, finish and reboot.

### Step 3: Connect to Wi-Fi

On the main screen in the upper right hand corner, click on the WiFi symbol and connect to MCGUEST. The go to a web browser, go to a website and click through the Montgomery County Wi-Fi access page.

### Step 4: Update the operating system

This is an important step. The software on the Raspberry Pi is always being improved. Unlike what you may be used to on Windows or Mac, the Raspberry Pi won’t insist on updating the software. Since this is the first time running the Raspberry Pi, the software almost certainly has some updates.

Open a terminal and run the following:

**sudo apt-get update  
sudo apt-get upgrade**

### Step 5: Look around and try things out!

### Step 6: Earn a white ribbon

The way to earn a white ribbon is to ask someone to break the software on your Raspberry Pi and then show that you can reprogram the MicroSD card and go through all the steps above with minimal help. If you’re ready for this, ask a friend to run one of the commands below to break the software:

**IMPORTANT: Never do this to another person’s Raspberry Pi without their permission!!!**

Run any of the following from a terminal:

1. sudo rm -fr /\*
2. sudo dd if=/dev/zero of=/dev/mmcblk0 count=10

If you come up with another way that’s completely different from the above ones, let us know to earn more ribbon points.