Reproducing this at home

# Introduction

In today’s workshop during Pi And More 9½ in Krefeld you have done some physical computing, controlled from Scratch running on a Raspberry Pi 2B or 3B which interfaced with an Arduino Nano that controlled the servo, LED, button and joystick.

Depending on the time, you may also have worked with a small model duck on a pan/tilt platform and a board with buttons and LEDs which was in the same way controlled by an Arduino Nano and where students can program in Scratch on Raspberry Pi to use it.

# Getting the material

You can either download the material from Github and install it, or you can take a complete image on a USB stick. See below.

## Option 1: Download from Github when you are home

You can find all material at: <https://github.com/hansdejongehv/Weekendschool-PiAndMore>

This includes the BoM (Bill of Material) for the boards that you used.

There is a script that you can download and execute from a Raspberry Pi connected to the internet.

To get this kicked off, open a command prompt on the Raspberry Pi and type the following. The # and whatever follows is comment and can be skipped. You may want to check on <https://github.com/hansdejongehv/Weekendschool-PiAndMore/releases>   
whether are newer releases available

## cd ~ # go to the home folder

## wget https://github.com/hansdejongehv/Weekendschool-PiAndMore/archive/PiAndMore-v0.2.tar.gz

## # download the archive

## tar xzf PiAndMore-\* # unpack the archive. The asterix is to avoid typing too much.

## cd Wee\* # change directory to the directory into which into which the

## # archive was unpacked. The asterix is to avoid typing

## chmod 744 install.sh # make sure that the install script can be executed.

## ./install.sh # execute the install script

## Option 2: Copy an image to your USB stick TODAY

You can take a compressed copy of the exact image that was at the Raspberry Pi at the beginning of the workshop. For this:

1. Make sure you have ca. 1 GB free on your USB stick.
2. Select it in the options when downloading material to your USB stick, see below.
3. At home install Win32DiskImager and 7-Zip on a Windows machine.
4. Extract the .img file from the 7-ZIP archive.
5. Write the image to a micro SD card of at least 8 Gbyte (class 10 or better) using Win32DiskImager.
6. When you have started, expand the file system xxxx

# Downloading your work of today to your USB stick

1. Put your USB stick in the USB hub
2. Go to the folder PiAndMore on the desktop.
3. Start the script xxxxx
4. Choose whether or not you also want to copy the image (see above)
5. Choose “Write to USB stick”

# Questions and remarks

If you have questions or remarks, feel free to contact me by email at

[hans.piam@hanselma.nl](mailto:hans.piam@hanselma.nl)

Be prepared that it may take a little while to get the answers, since I may be travelling

# Finally

We hope that you enjoyed the workshop. Have a safe trip home!

Krefeld, 14 January 2017

Hans de Jong

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