Reproducing this at home

Introduction

In today's workshop during Pi And More 10 1/2 in Stuttgart you have done some physical computing, controlled from Scratch running on a Raspberry Pi 3B which interfaced with an Arduino Nano that controlled the servo, LEDs, buttons, a joystick and a buzzer. You may not have done all of it, or only a part.

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.

You will most likely have used Scratch 2, but it can also be done using Scratch 1.4, and then as well on a Raspberry Pi 2B.

Getting the material

You can download the material from Github and install it.

What you have created in this workshop you can copy to a USB stick if you brought one.

Download from Github when you are home

You can find all material at: https://github.com/hansdejongehv/scratchClient-Tutorials

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

1. Go to www.github.com.
2. Click *Explore* on the top of the window
3. Search for scratchClient-Tutorial.
4. Go to the correct page.
5. Click the *Releases* link.
6. Select the latest release.
7. Look at the release notes to see how you have to install.
8. Open a command prompt the Raspberry Pi.
9. Copy the series of commands into terminal window
10. Reboot to make the icons visible.

Note: It is the intent that a final release will be available by the morning of **Wednesday 7 March 2018.** Until then there is only a pre-release available.

Downloading your work of today to your USB stick
1. Put your USB stick in the USB hub.
2. Copy the material you edited. All of that should be on the desktop.
3. Feel free to further copy any file you want.

Questions, suggestions and remarks
If you have questions or remarks, feel free to contact us by email at

hans.piam@hanselma.nl

In case you have specific questions about scratchClient then you can directly contact

heppg@web.de

You can also pose your Scratch / scratchClient related questions on the forum of Raspberry Pi

https://www.raspberrypi.org/forums/viewforum.php?f=77

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

Of course we love to hear from you whether you liked it or not and if you have suggestions for improvement in case we would run this workshop in future.

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

Stuttgart, 24 February 2018

Hans de Jong
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