

# Raspberry Pi au CERN

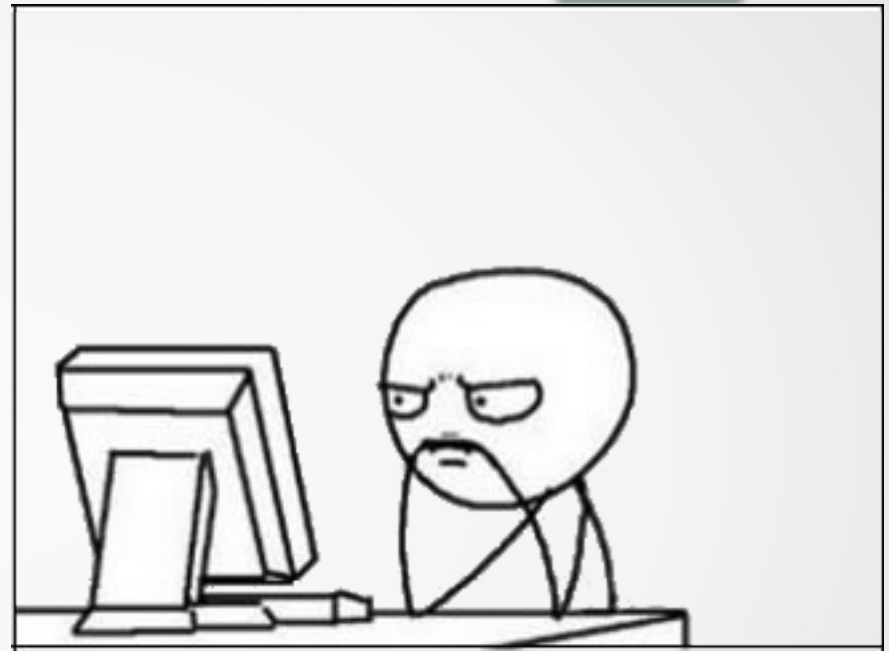
## Google Coder

A simple way to make web stuff  
on Raspberry Pi

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CERN

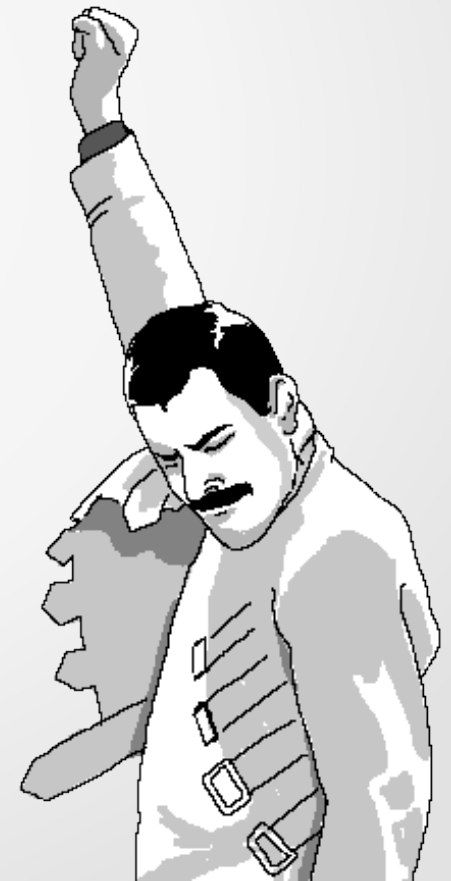
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# Why learn to code the web?

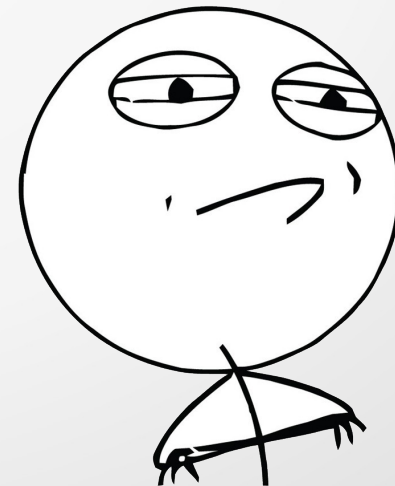
- Unlocks the power to create anything you can think of
- Gives a better understanding of the web
- Improves problem solving skills
- Promotes computational thinking
- It's fun! :-)



# How start learning?

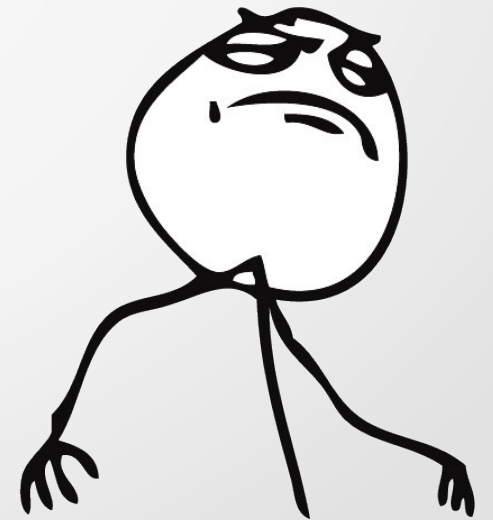
- Find learning resources
- Set up a “workbench”
- Practice – Practice – Practice

**CHALLENGE ACCEPTED**



# Google Coder

- Started at the end of June 2013
- Free & open source
- Born in Google Creative Labs
- Turns the Raspberry Pi to a simple, tiny, personal web server and web-based development environment
- Very easy and cheap to deploy.
- Has just what you need to build things, using HTML, CSS and JavaScript



# Coder Requirements

Raspberry Pi Model B



Power Supply



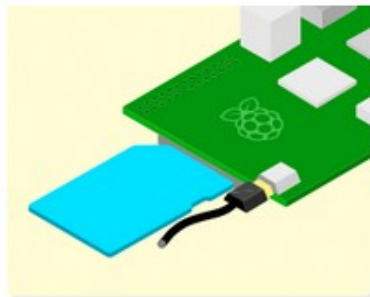
4Gb (or larger) SD card



WiFi module (optional)



# Coder setup



1. Download the image from the website: <http://goo.gl/coder>
2. Copy it to the SD card
3. Make sure your Raspberry is connected to your network.
4. Connect to “coder.local” address from your browser.

# Main page

The image shows the main interface of the CODER app. At the top, there is a dark grey header with the word "CODER" on the left and a gear icon on the right. Below the header is a grid of app templates. The first template in the top-left corner is a green box containing a text input field labeled "Name your app", a color palette with 24 colored squares, and two buttons labeled "Create" and "Cancel" with an upward arrow icon. The remaining templates are solid-colored boxes with text: "Digital Clock" (light blue), "Music Boxes" (teal), "Pop-Up Penguins" (light blue), "Modern Mondrian" (red), "Night & Day" (dark grey), "Comic Complete" (grey), "Test 123" (green), "Hello Coder" (purple), "Eyeball" (orange), and "Space Rocks!" (blue).

CODER

Name your app

Color palette: 24 colored squares

Create Cancel ↑

Digital Clock

Music Boxes

Pop-Up Penguins

Modern Mondrian

Night & Day

Comic Complete

Test 123




Hello Coder

Eyeball

Space Rocks!



# Edit Page

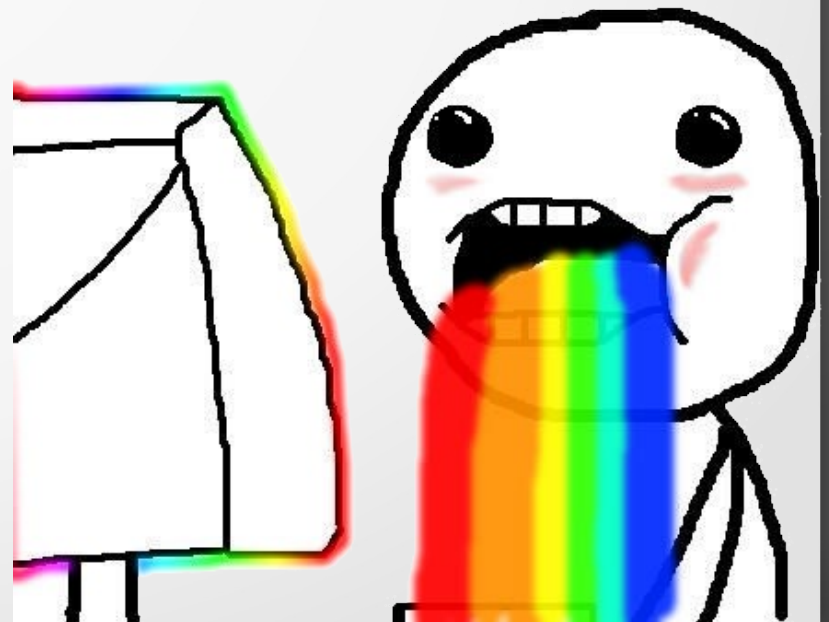
```
CODER Hello Coder HTML CSS JS NODE   
1 <!DOCTYPE html>
2 <html>
3 <head></head>
26 <body class="">
27   <canvas id="animation"></canvas>
28 <div class="pagecontent">
29   <h1>Awesome!</h1>
30   <p>This is my first sentence!</p>
31   <p>And yes I continue writing! :-D </p>
32   <p>It's at the top right.</p>
33 </div>
34 </body>
35 </html>
36
37
38 <!--
39
40 Hello Coder!
41
42 If this is your first time here, you're now looking at the
43 inside of a program. In here, in the source code, is where
44 you can make anything you can imagine.
45
46 Every app that you install on Coder has different code behind
47 it. You can use that code to learn how the app's author made
48 it. You can change the code to make the app work a little
49 differently. You can even copy the code and use it in your
50 own programs.
51
52 PREVIEW WINDOW
53 To see what your program looks like while you are coding,
54
```

**Awesome!**

This is my first sentence!  
And yes I continue writing! :-D  
It's at the top right.

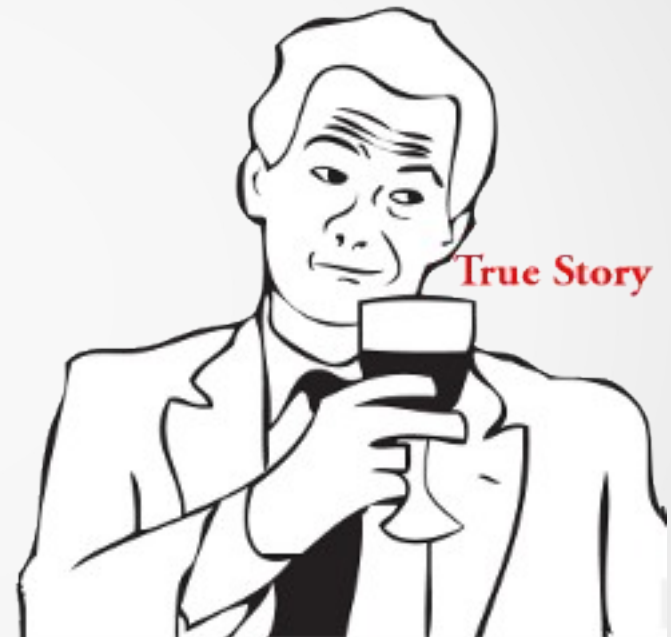
# Coder Projects

- Educational projects that can be done with Coder
- Guide you step by step to the end result
- Teaching new skills about things such as Colors, Images, Fonts, Lists, Measurements, Placement, etc...
- Various degrees of difficulty
- Only a few (~10) but increasing



# More Resources

- [www.codecademy.com](http://www.codecademy.com)
- <http://code.org/>
- [www.khanacademy.org](http://www.khanacademy.org)
- ...



Questions?



Thank you

