



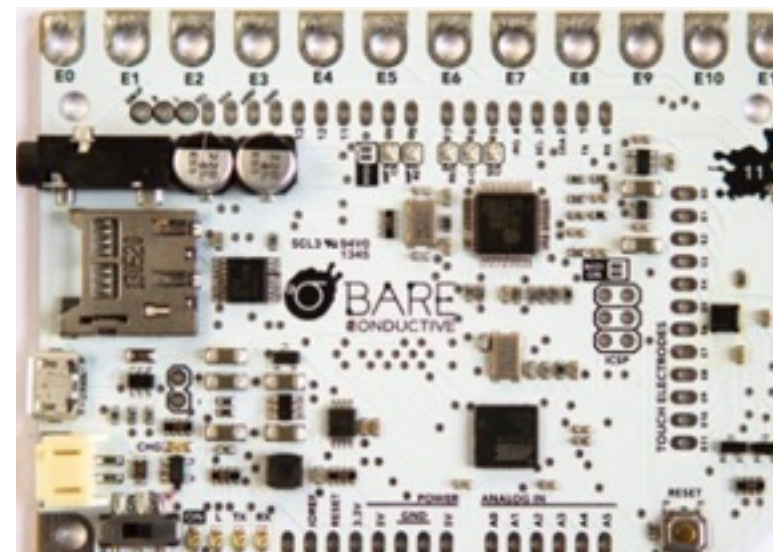
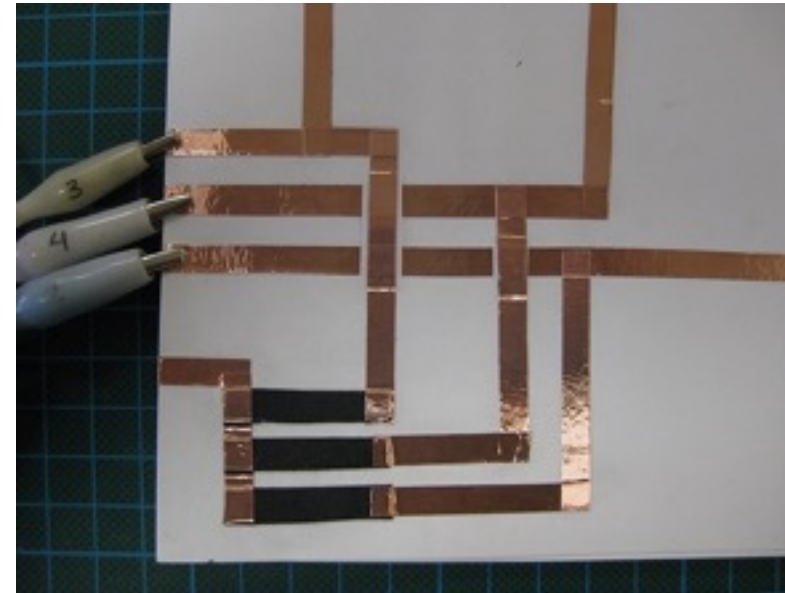
Musical Chimes

Workshop @ WomenWhoCode NYC

Who ?



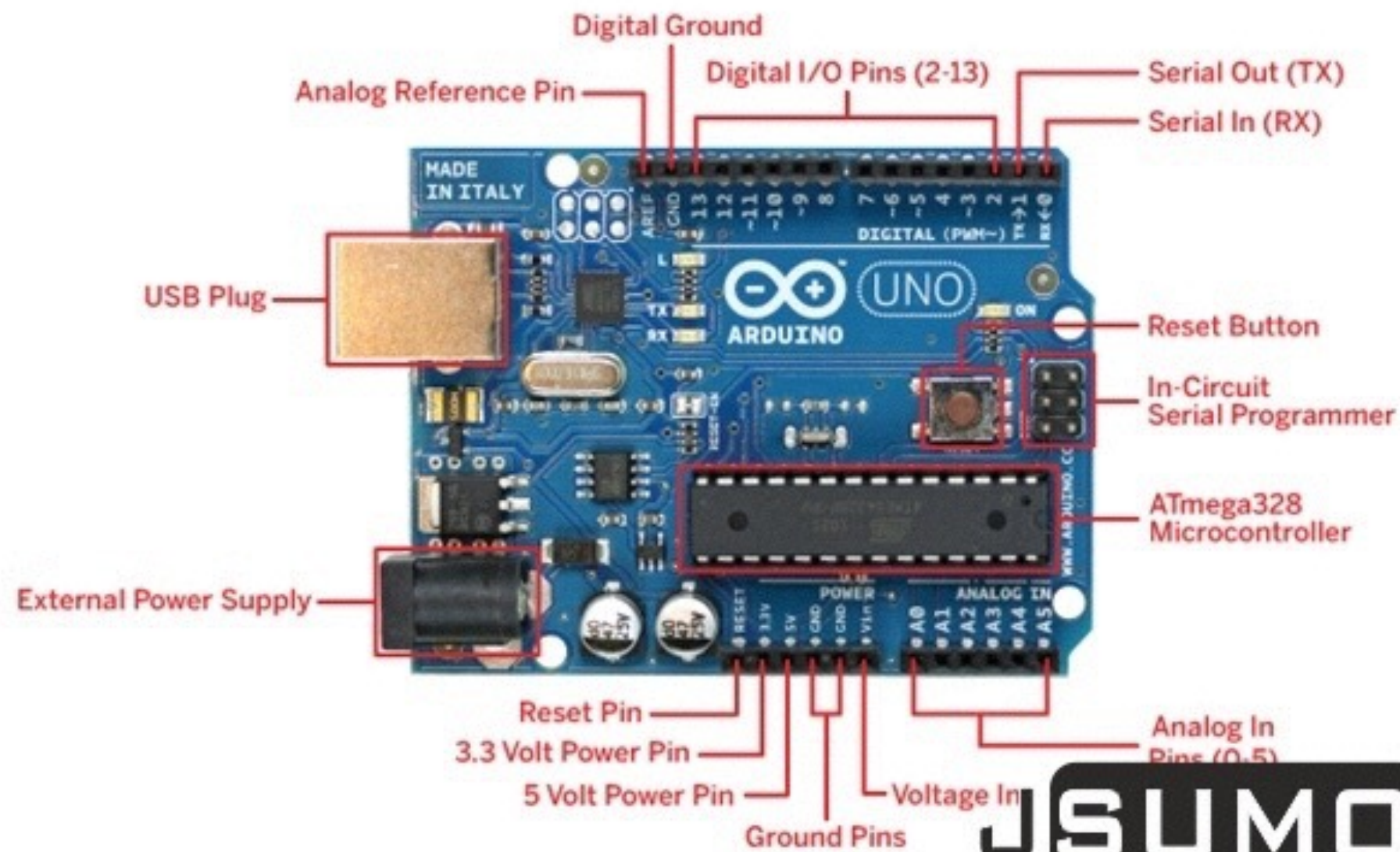
What ?



Plan

- Learn what Arduino is and do setup(15')
- Make groups and design your first chimes(60')
- How it works(15')
- Performance (15')

Arduino



JSUMO

Microcontroller

A microcontroller is a small computer on a single integrated circuit containing a processor core, memory, and programmable input/output peripherals.

Examples Input

- Conductive tape
- Conductive thread
- Anything that conducts electricity

Examples output

- Sound (buzzer)
- Light (Led)
- LCD (text)



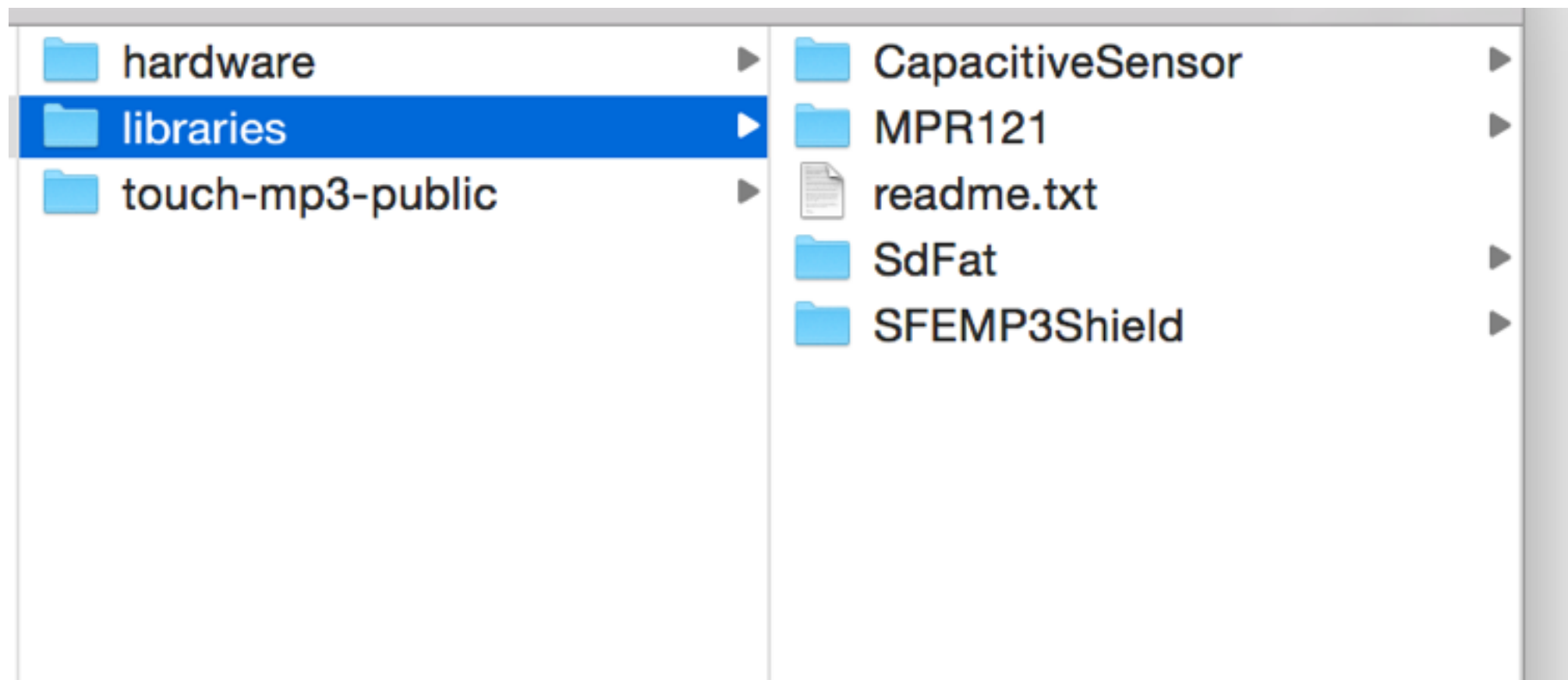
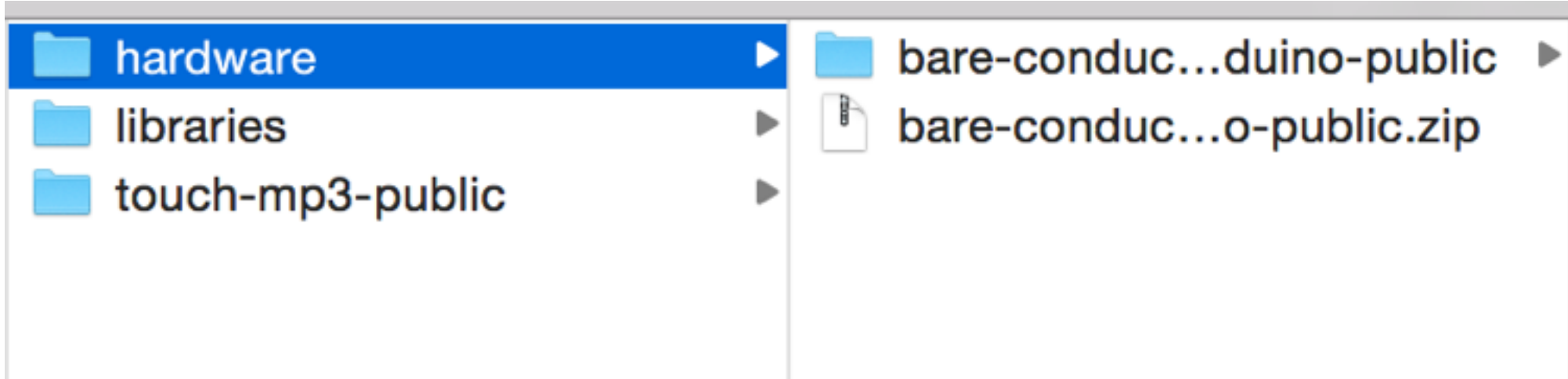
Prototype time!

Prototype time

- Let's make teams
- We show you demo of musical chimes
- Play & exploration time
- You design your own musical chimes

Setup

- www.bareconductive.com/make/setting-up-arduino-with-your-touch-board/
- 1. Documents/Arduino/ make a hardware folder
- 2. Copy libraries inside Libraries folder
- 3. Download Touch mp3 example



Touch_MP3

Compiler_Errors.h

```
for (int i=0; i < 12; i++){ // Check which electrodes were pressed
    if(MPR121.isNewTouch(i)){

        //pin i was just touched
        Serial.print("pin ");
        Serial.print(i);
        Serial.println(" was just touched");
        digitalWrite(LED_BUILTIN, HIGH);

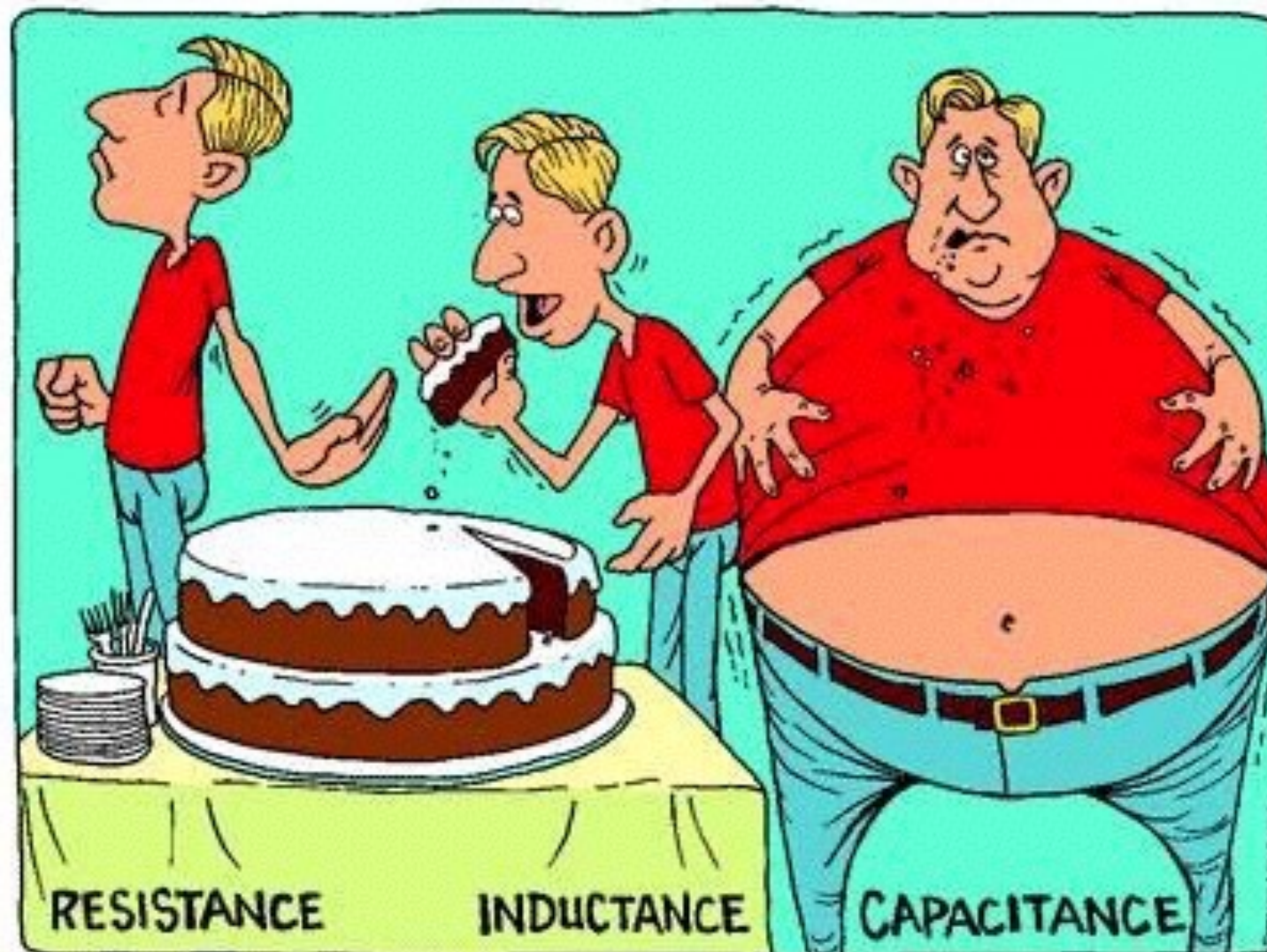
        if(i<=lastPin && i>=firstPin){
            if(MPR121.isNewTouch(i)){
```

Done uploading.

Sketch uses 22,150 bytes (16%) of program storage space. Maximum is 131,072 bytes.

Global variables use 1,410 bytes (55%) of dynamic memory, leaving 1,150 bytes for local variables. Maximum is 2,560 bytes.

How it works ?



How it works ?

- Software <http://bit.ly/1eBMZYz>



Performance time!