MY FAVORITE 3 LABS

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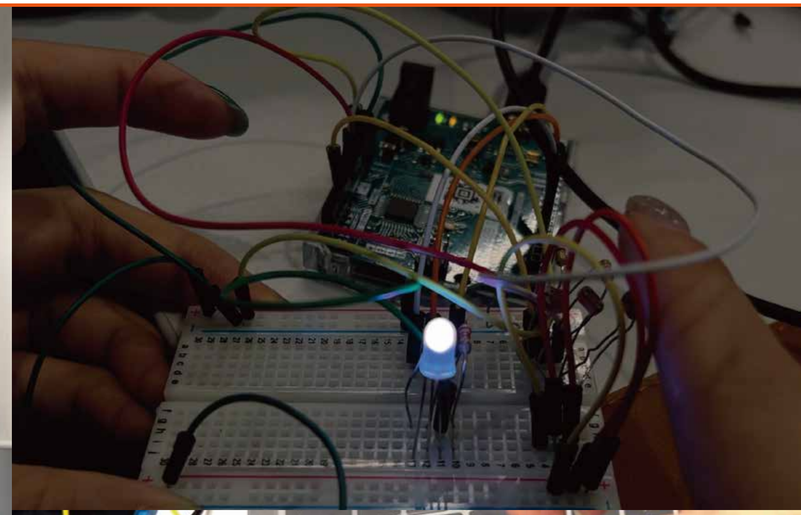
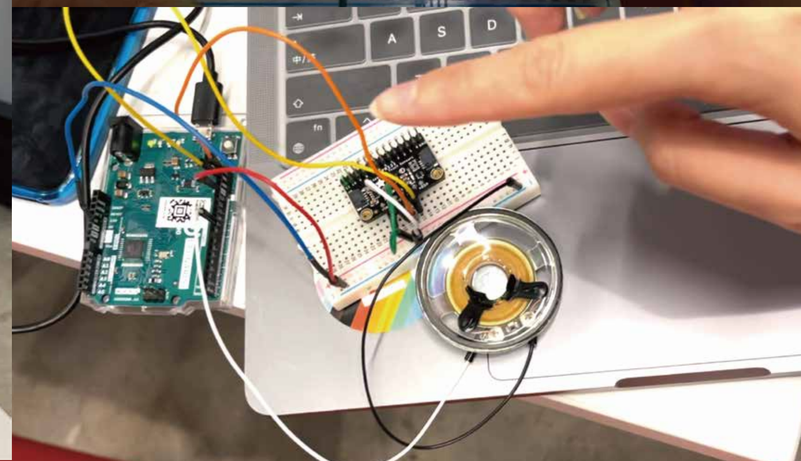
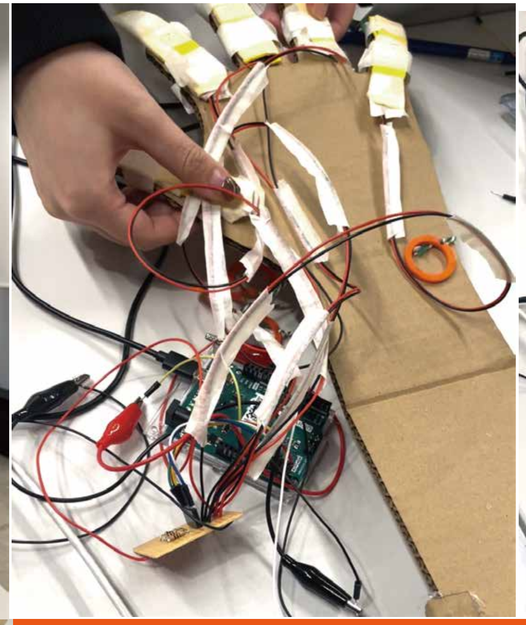
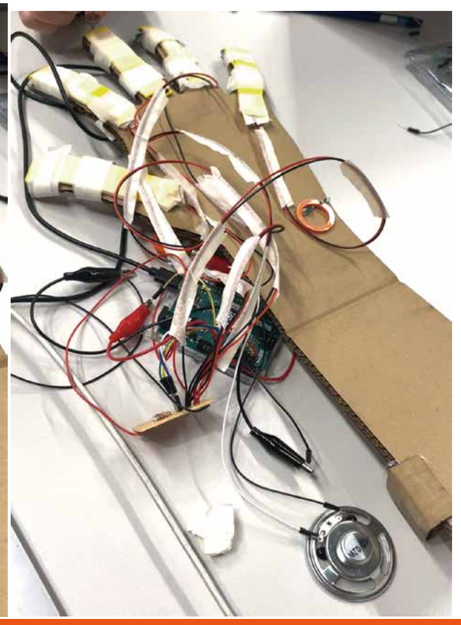
All detaills are in my Github

https://github.com/msc-creative-computing/p-comp-week-1-labs-RayWangRui









Video Link： https://youtu.be/a9FiQWYasag

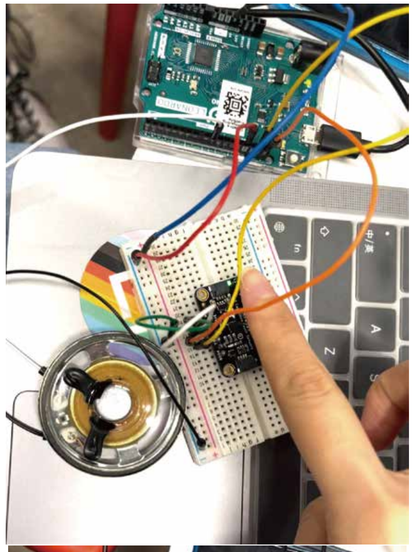
My Favorite Lab 01

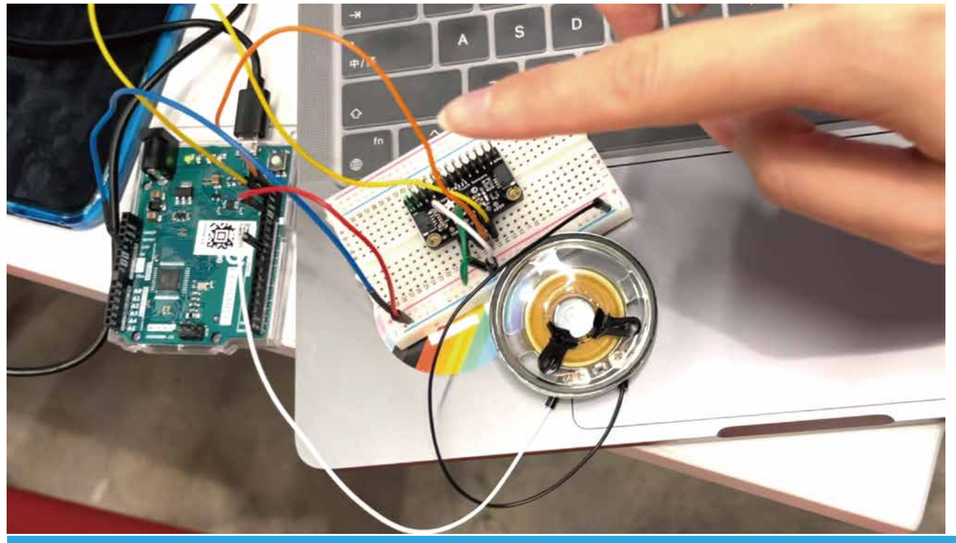
```
#define NOTE_B0  31   #define NOTE_FS6 1480
#define NOTE_C1  33   #define NOTE_G6  1568
#define NOTE_CS1 35   #define NOTE_GS6 1661
#define NOTE_D1  37   #define NOTE_A6  1760
#define NOTE_DS1 39   #define NOTE_AS6 1865
#define NOTE_E1  41   #define NOTE_B6  1976
#define NOTE_F1  44   #define NOTE_C7  2093
#define NOTE_FS1 46   #define NOTE_CS7 2217
#define NOTE_G1  49   #define NOTE_D7  2349
#define NOTE_GS1 52   #define NOTE_DS7 2489
#define NOTE_A1  55   #define NOTE_E7  2637
#define NOTE_AS1 58   #define NOTE_F7  2794
#define NOTE_B1  62   #define NOTE_FS7 2960
#define NOTE_C2  65   #define NOTE_G7  3136
#define NOTE_CS2 69   #define NOTE_GS7 3322
#define NOTE_D2  73   #define NOTE_A7  3520
#define NOTE_DS2 78   #define NOTE_AS7 3729
#define NOTE_E2  82   #define NOTE_B7  3951
#define NOTE_F2  87   #define NOTE_C8  4186
#define NOTE_FS2 93   #define NOTE_CS8 4435
#define NOTE_G2  98   #define NOTE_D8  4699
#define NOTE_GS2 104  #define NOTE_DS8 4978
```

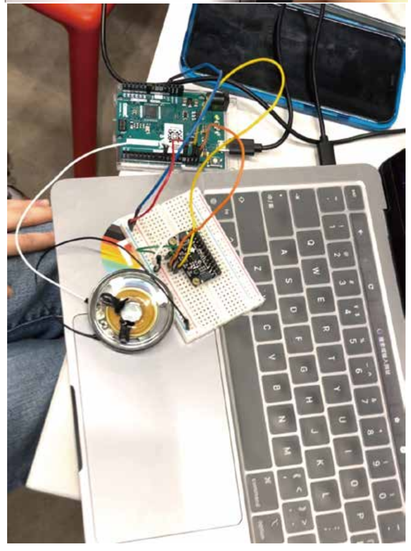
```
void sound2()
{
  int notes[] = {NOTE_D3,  NOTE_A3, NOTE_B3, NOTE_C4, NOTE_D4, NOTE_
  int track [] = {7,8,7,5,7,8,4,3,0,8,3,4,7,5,5,7,8,7,5,7,5,4,3,0,8,
  int durations[] = {8,4,8,4,4,2,2,4,12,8,4,8,4,12,12,8,4,8,4,4,2,2,
  int size = sizeof(track) / sizeof(track[0]);
  for(int i=0; i<=size; i++)
    {tone(9,track[notes[i]], durations[i]*50);}
}

void sound3()
{
  int notes[] = {NOTE_G3,  NOTE_AS3, NOTE_B3, NOTE_C4, NOTE_D4, NOTE_
  int track [] = {7,8,7,5,7,8,4,3,0,8,3,4,7,5,5,7,8,7,5,7,5,4,3,0,8,
  int durations[] = {8,4,8,4,4,2,2,4,12,8,4,8,4,12,12,8,4,8,4,4,2,2,
  int size = sizeof(track) / sizeof(track[0]);
  for(int i=0; i<=size; i++)
    {tone(9,track[notes[i]], durations[i]*50);}
}
```

PART OF THE CODE

The bending of each finger can control different sound effects.
For more details, see the video link in the upper right corner.
More relevant codes and details are in GitHub.

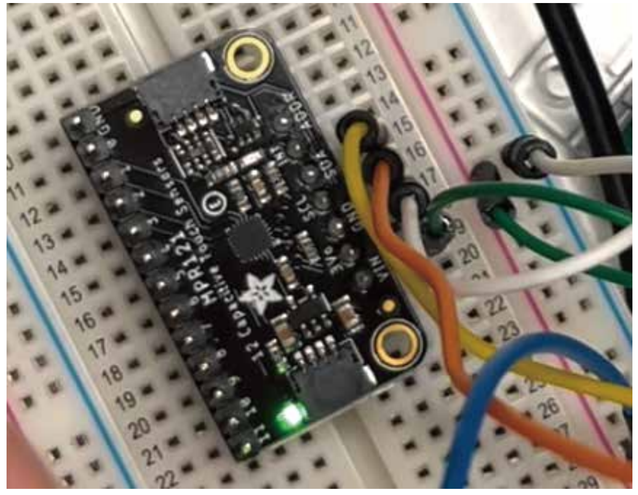


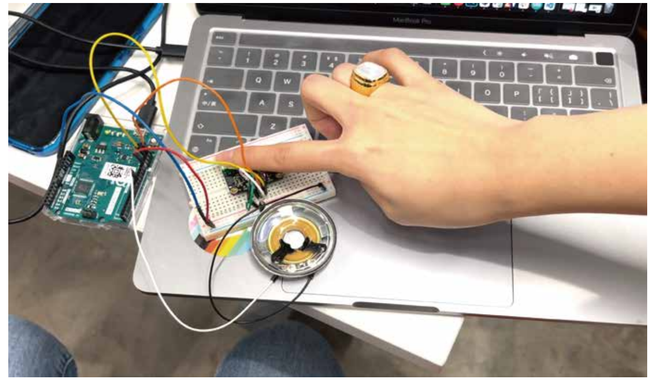




My Favorite Lab 02

Video Link: https://youtu.be/_cR7jA2VZZg
https://youtu.be/2FvI_m6wFZc
https://youtu.be/-i12poc3WRE



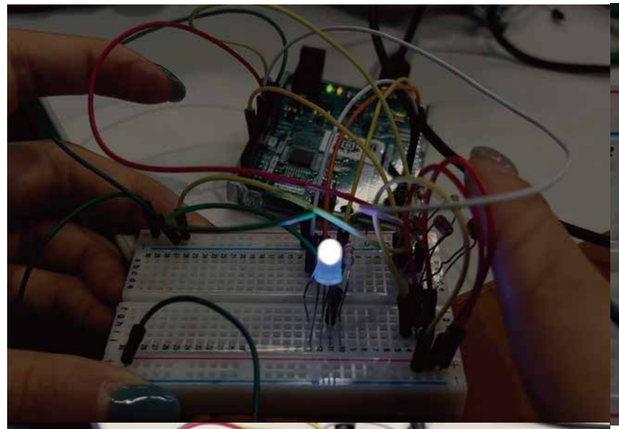


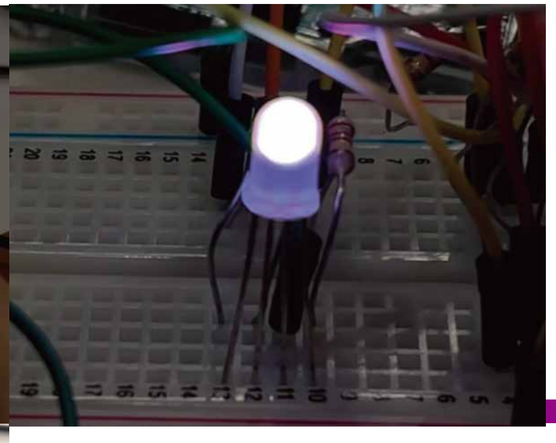
```
void setup() {
  Serial.begin(9600);

  while (!Serial) { // needed to keep leonardo/micro from starting
    delay(10);
  }

  Serial.println("Adafruit MPR121 Capacitive Touch sensor test");

  // Default address is 0x5A, if tied to 3.3V its 0x5B
  // If tied to SDA its 0x5C and if SCL then 0x5D
  if (!cap.begin(0x5A)) {
    Serial.println("MPR121 not found, check wiring?");
    while (1);
  }
  Serial.println("MPR121 found!");
}

void loop() {
  // Get the currently touched pads
  currtouched = cap.touched();
```

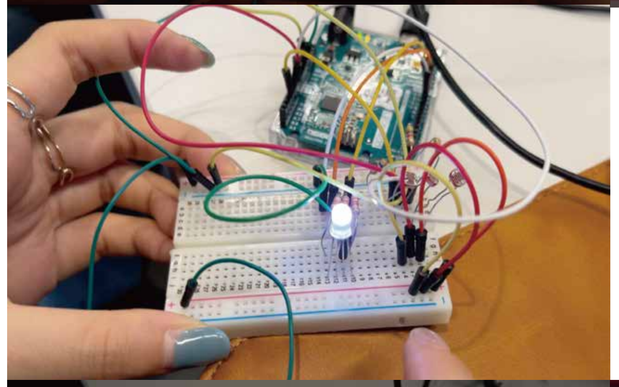
PART OF THE CODE

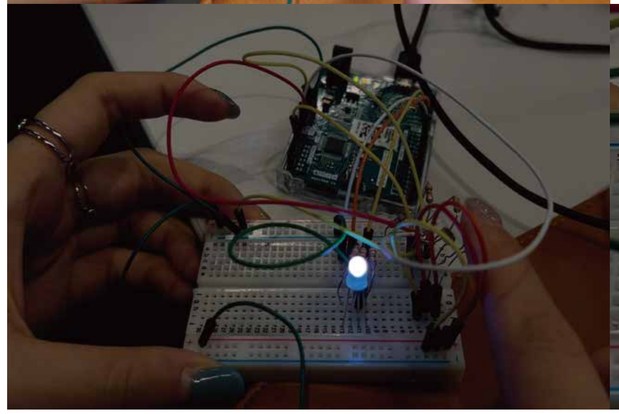
The touch of fingers will producedifferent music, such as playing the piano.

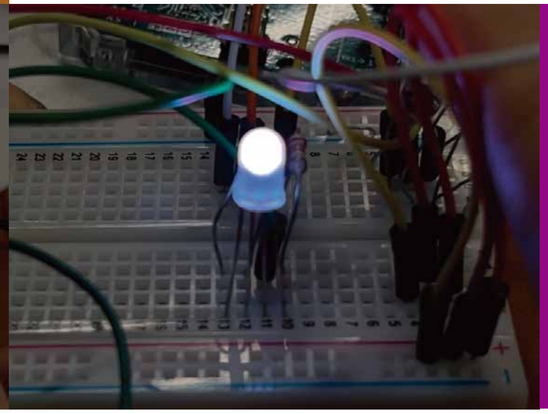
For more details, see the 3 video links in the upper right corner.
More relevant codes and details are in GitHub.











Video Link： https://youtu.be/2BXo02PmFNE

Photosensitive Resistance Lab

My Favorite Lab 03

The color of LED lamp changes with the change of photosensitive resistance. The effect can be controlled by hand or changing ambient light.
For more details, see the video link in the upper right corner.
More relevant codes and details are in GitHub.