FABLAB FINAL PROJECTS
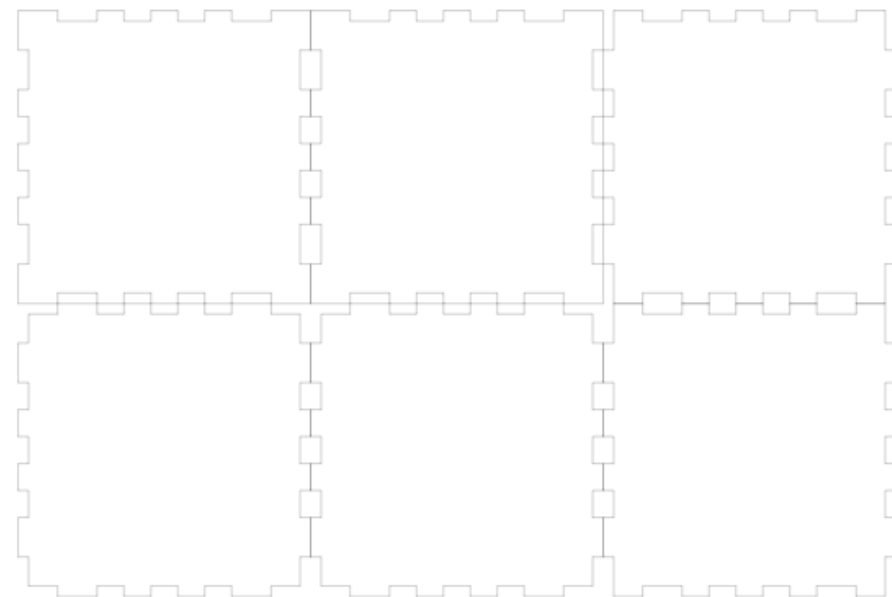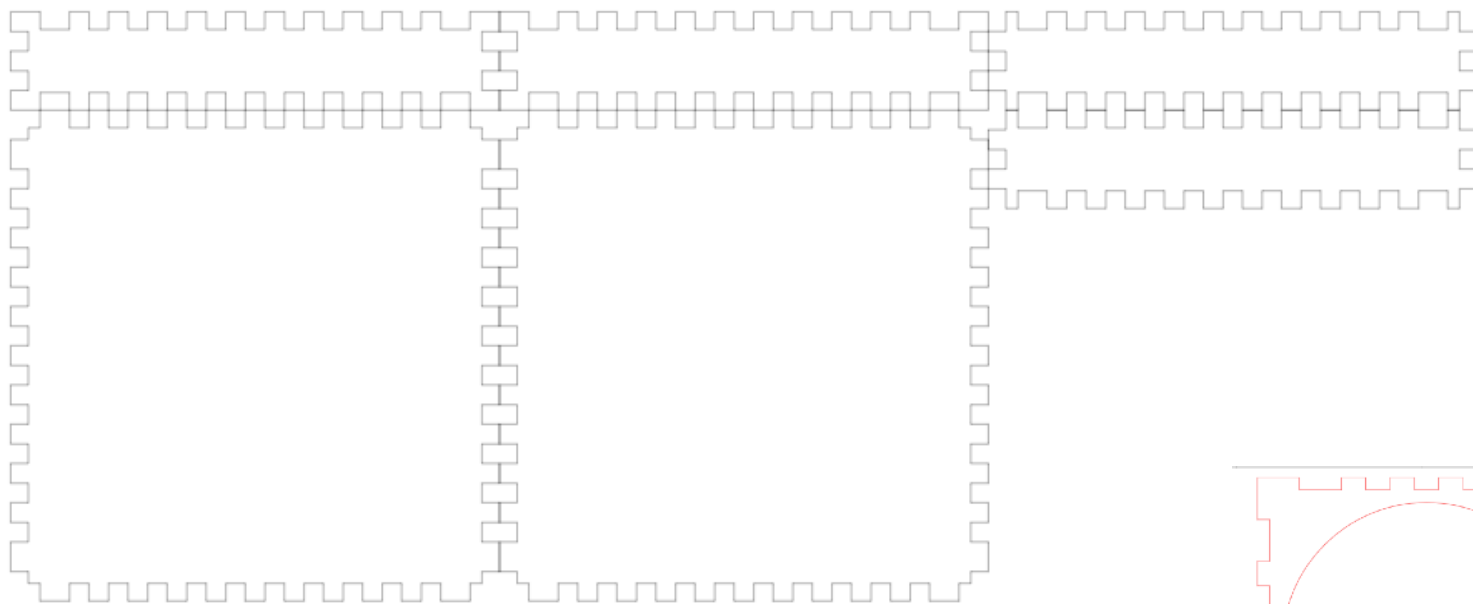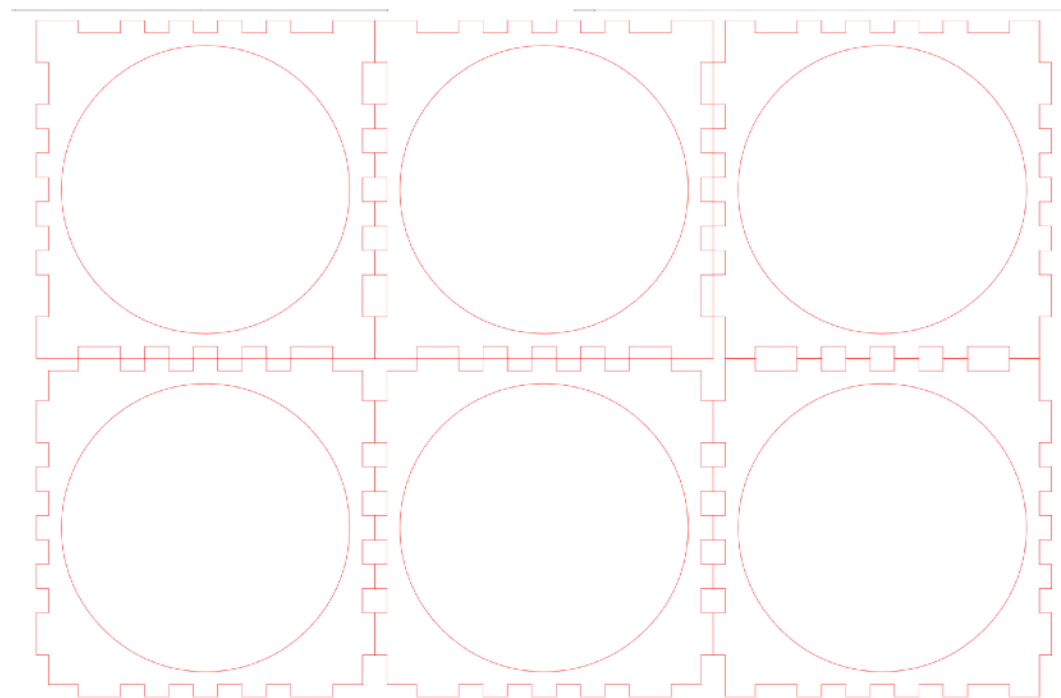
G2-B Stephen. Shen

Designs for the Protect Case

3D Design Diagram for Mickey Helmet

Arduino Program

sketch_jun03a

```cpp
const int row[8]={1,2,3,4,5,6,7,8};
const int col[8]={9,10,11,12,13,A3,A4,A5};
int pixels [8][8];
int x = 5;
int y = 5;
void setup() {
  // put your setup code here, to run once:
    for (int thisPin = 0; thisPin < 8; thisPin++){
      pinMode(col[thisPin],OUTPUT);
      pinMode(row[thisPin],OUTPUT);
      digitalWrite(col[thisPin],HIGH);
    }
    for (int x = 0; x < 8; x++){
      for (int y = 0; y < 8; y++){
        pixels[x][y] = HIGH;
      }
    }
}
void loop(){
  // put your main code here, to run repeatedly:
  readSensors();
  refreshScreen();
  delay(1);
}
int random(int num);
void readSensors(){
  pixels[x][y] = HIGH;
  //x=7-map(analogRead(A0),0,1023,0,7);
  //y =map (analogRead(A1),0,1023,0,7);

  x= random(0,8);
  y= random(0,8);
// x=7;
 //y=7;
  pixels[x][y] = LOW;
}
void refreshScreen(){

  digitalWrite(1,LOW);
    digitalWrite(2,LOW);
    digitalWrite(3,LOW);
```

sketch_jun03a

```cpp
    digitalWrite(4,LOW);
    digitalWrite(5,LOW);
     digitalWrite(6,LOW);
      digitalWrite(7,LOW);
       digitalWrite(8,LOW);
       digitalWrite(col[0],HIGH);
       digitalWrite(col[1],HIGH);
       digitalWrite(col[2],HIGH);
       digitalWrite(col[3],HIGH);
       digitalWrite(col[4],HIGH);
       digitalWrite(col[5],HIGH);
       digitalWrite(col[6],HIGH);
       digitalWrite(col[7],HIGH);
digitalWrite(row[x],HIGH);
digitalWrite(col[y],LOW);


/*

for(int thisRow=0;thisRow<8;thisRow++){
  digitalWrite(row[thisRow],HIGH);}

for(int thisCol=0;thisCol<8;thisCol++){
 // int thisPixel=pixels[thisRow][thisCol];
   digitalWrite(col[thisCol],thisPixel);
    //delay(1000);

  if(thisPixel==LOW){

   digitalWrite(col[thisCol],HIGH);
    // delay(1000);

  }
}
  //delay(1000);

  digitalWrite(row[thisRow],LOW);
    //delay(1000);

}
*/
}
```
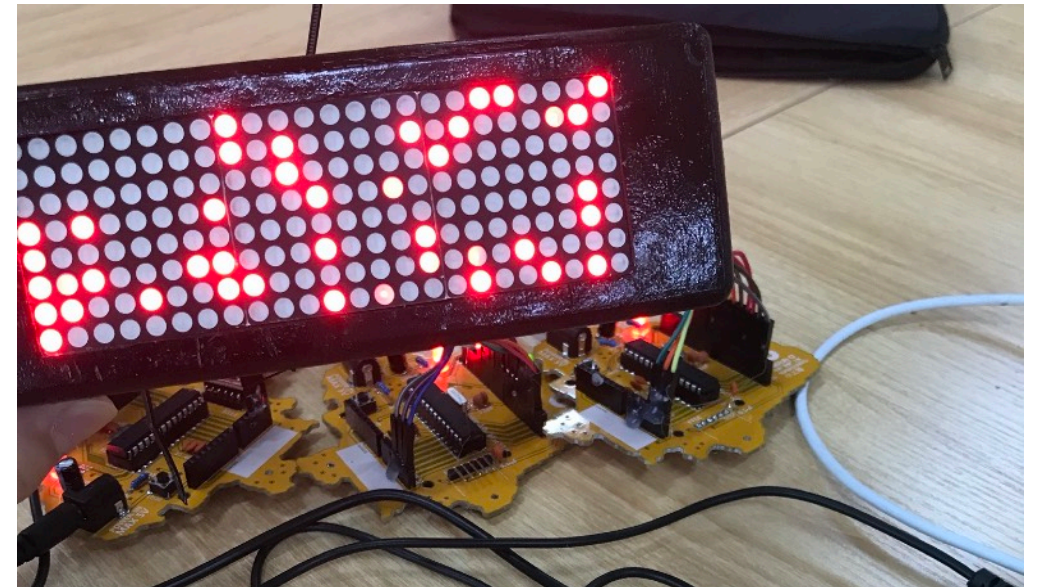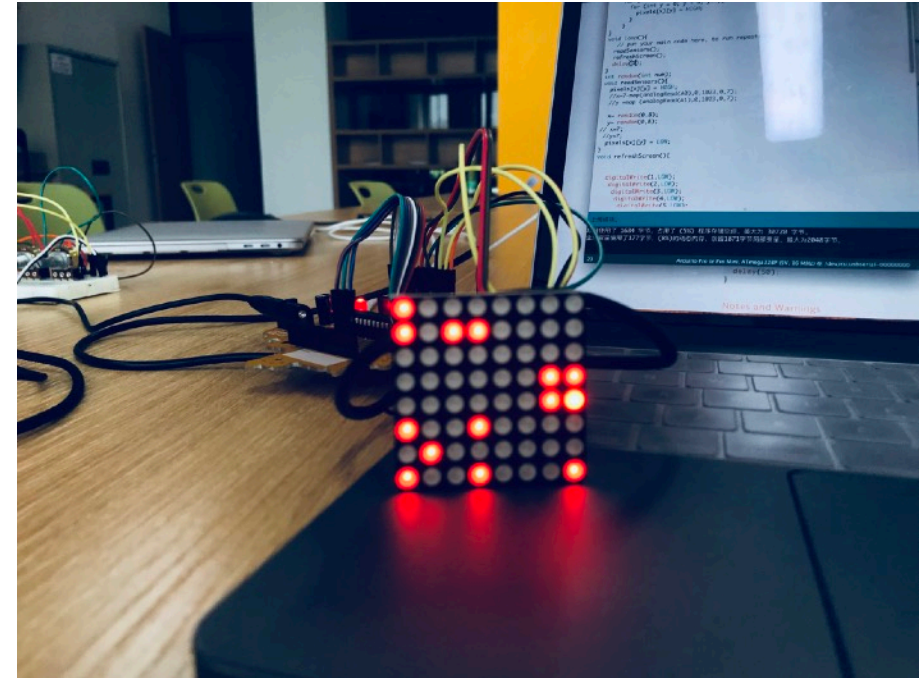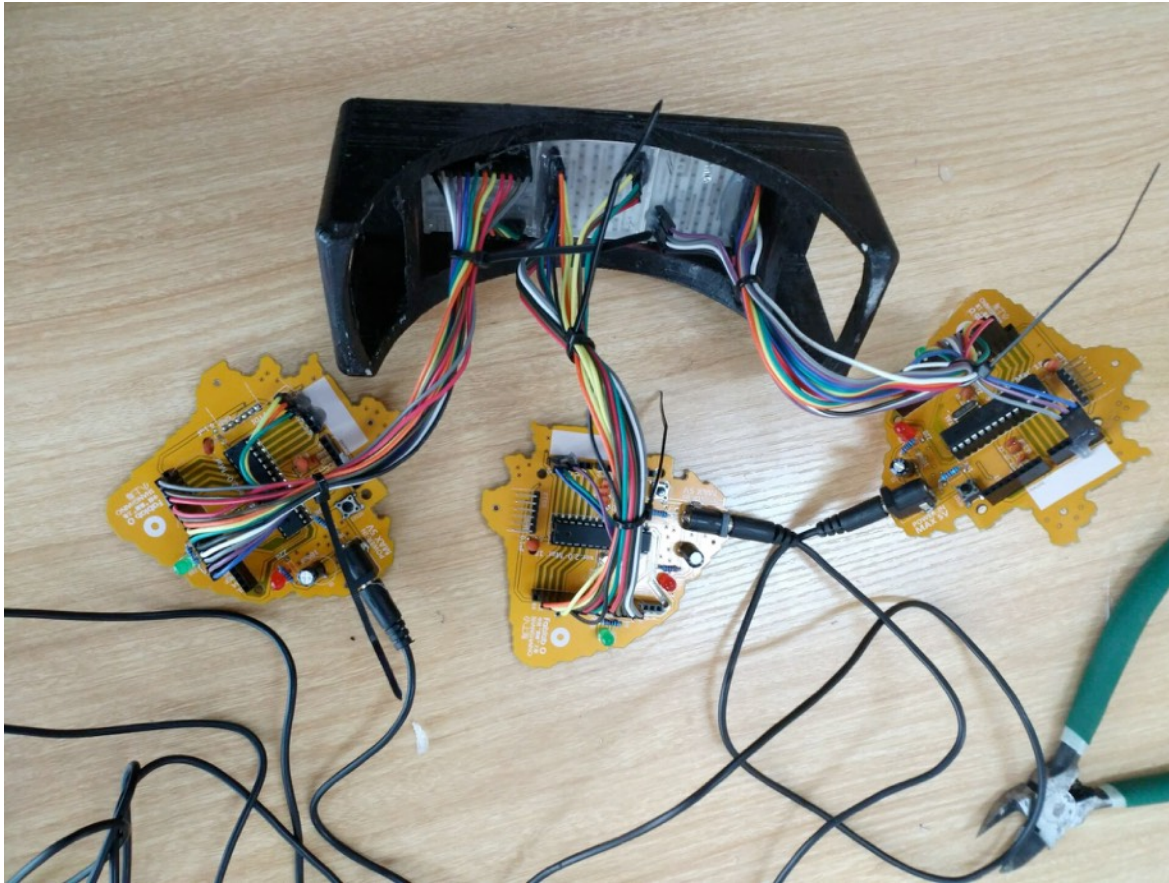
上传成功。
项目使用了 1684 字节，占用了（5%）程序存储空间。最大为 30720 字节。
全局变量使用了177字节，（8%)的动态内存，余留1871字节局部变量。最大为2048字节。
21   Arduino Pro or Pro Mini, ATmega328P (5V, 16 MHz) 在 /dev/cu.usbserial-00000000

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The complete Circuit

The Final Product