



# IoT Bootcamp 2020

Sesiunea 3

# Agenda sesiunii de azi

17:00-17:10	Intro & anunturi
17:10-17:50	Intro Actuatori
17:50-18:00	Pauză
18:00-18:50	Implementare practică Actuatori
18:50-19:00	Q&A

# Prezentatorii sesiunii de azi



**Diana Marusic**

Project Manager  
IoT Bootcamp



**Andrei Bragarenco**

Fondatorul Clubului Ingineresc  
Micro Lab



**Maria Munteanu**

Studenta UTM,  
FAF

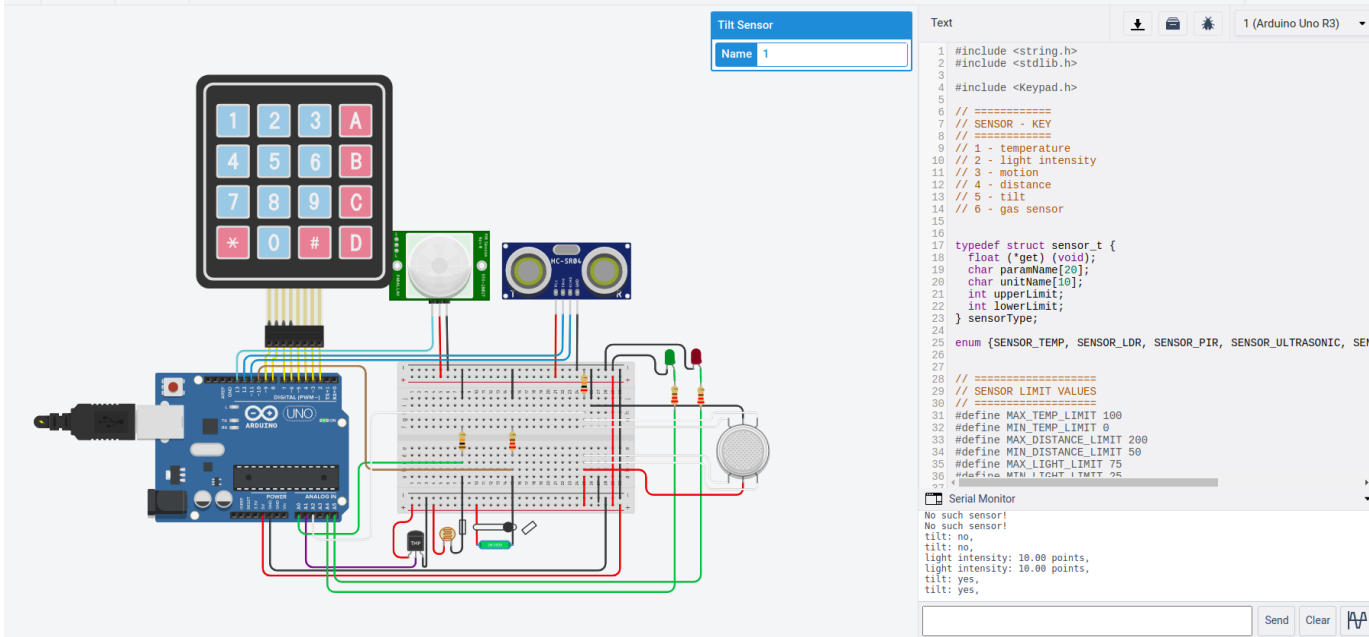
# #anunțuri

- Feedback – intro C & sesiunea de azi
- Intro to C: <https://bit.ly/2X0lotM>
- Echipe fișier discord - Vasile & contact admin canale discord
- Numele în comentariu la soluție tema pe acasă!

# Misterul lui +-a de la Intro to C

Operator name	Syntax
Basic assignment	<code>a = b</code>
Addition	<code>a + b</code>
Subtraction	<code>a - b</code>
Unary plus (integer promotion)	<code>+a</code>
Unary minus (additive inverse)	<code>-a</code>

# Denis Smocvin



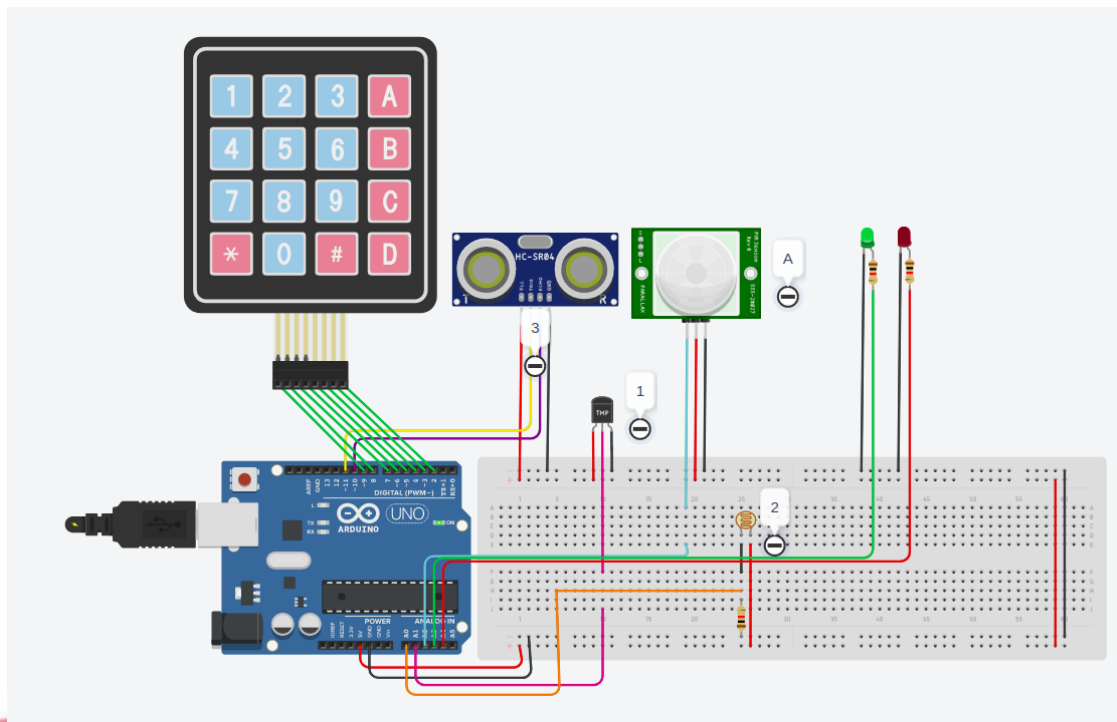
The screenshot displays the Arduino IDE interface for an Arduino Uno R3. The main workspace shows a breadboard circuit with an Arduino Uno R3, a 4x4 keypad, a tilt sensor, and a gas sensor. The code editor on the right contains the following code:

```
1 #include <string.h>
2 #include <stdlib.h>
3
4 #include <Keypad.h>
5
6 // =====
7 // SENSOR - KEY
8 // =====
9 // 1 - temperature
10 // 2 - light intensity
11 // 3 - motion
12 // 4 - distance
13 // 5 - tilt
14 // 6 - gas sensor
15
16
17 typedef struct sensor_t {
18     float (*get) (void);
19     char paramName[20];
20     char unitName[16];
21     int upperLimit;
22     int lowerLimit;
23 } sensorType;
24
25 enum {SENSOR_TEMP, SENSOR_LDR, SENSOR_PIR, SENSOR_ULTRASONIC, SEN
26
27 // =====
28 // SENSOR LIMIT VALUES
29 // =====
30
31 #define MAX_TEMP_LIMIT 100
32 #define MIN_TEMP_LIMIT 0
33 #define MAX_DISTANCE_LIMIT 200
34 #define MIN_DISTANCE_LIMIT 50
35 #define MAX_LIGHT_LIMIT 75
36 #define MIN_LIGHT_LIMIT 0
37
```

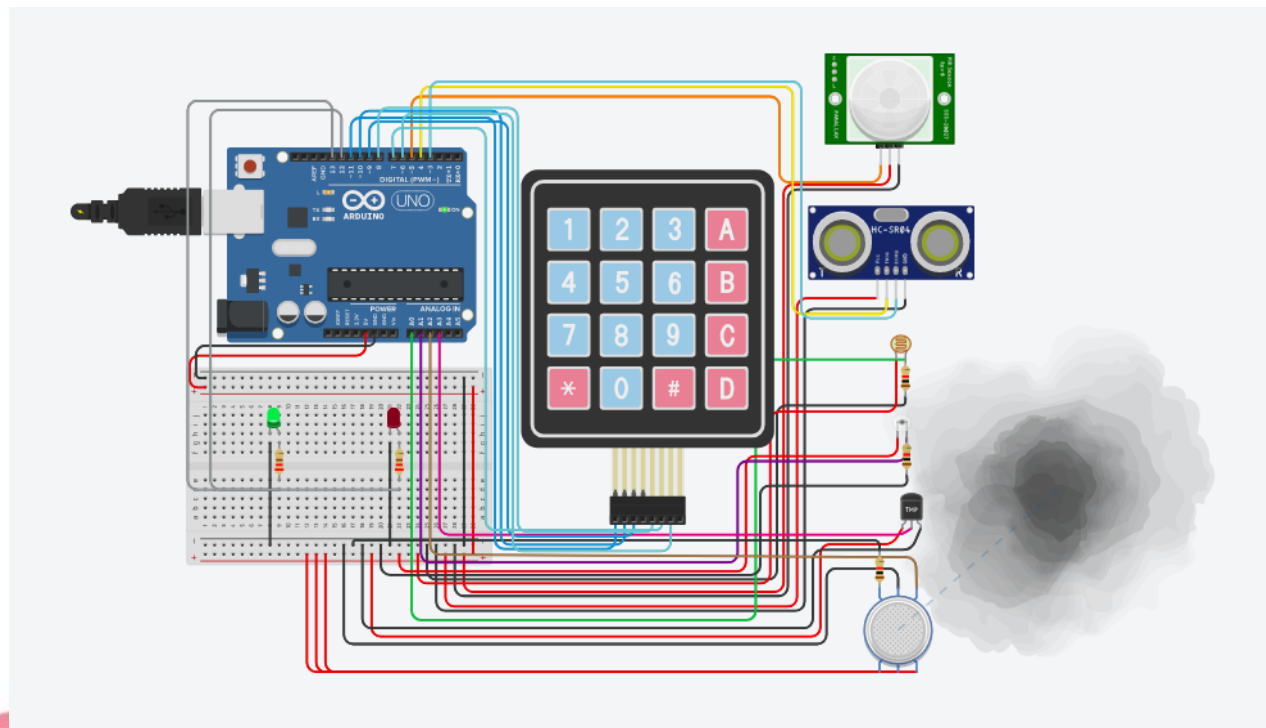
The Serial Monitor at the bottom shows the following output:

```
No such sensor!
No such sensor!
tilt: no,
tilt: no,
light intensity: 10.00 points,
light intensity: 10.00 points,
tilt: yes,
tilt: yes,
```

# Vladislav Plămădeală



# Sorin Beșleaga





# Punctaje +\_+

## Incercari +-a

- **Svetlana Faina** +2 puncte
- **Gheorghe Mocanu** +2 puncte

## Teme pentru acasa

- **Denis Smocvin** +10p + bonus 1p
- **Plămădeala Vladislav** +10p + bonus 1p
- **Sorin Beșleaga** +10p + bonus 1p

# Introducere Actuatori

Bragarenco Andrei

Pauză  
Ne vedem la **18:15**

# Implementare practică

Maria Munteanu

Formular de feedback

Sesiunea de azi: <https://bit.ly/3gIL7V3>

Intro to C: <https://bit.ly/2X0lotM>

# Mulțumim pentru atenție!