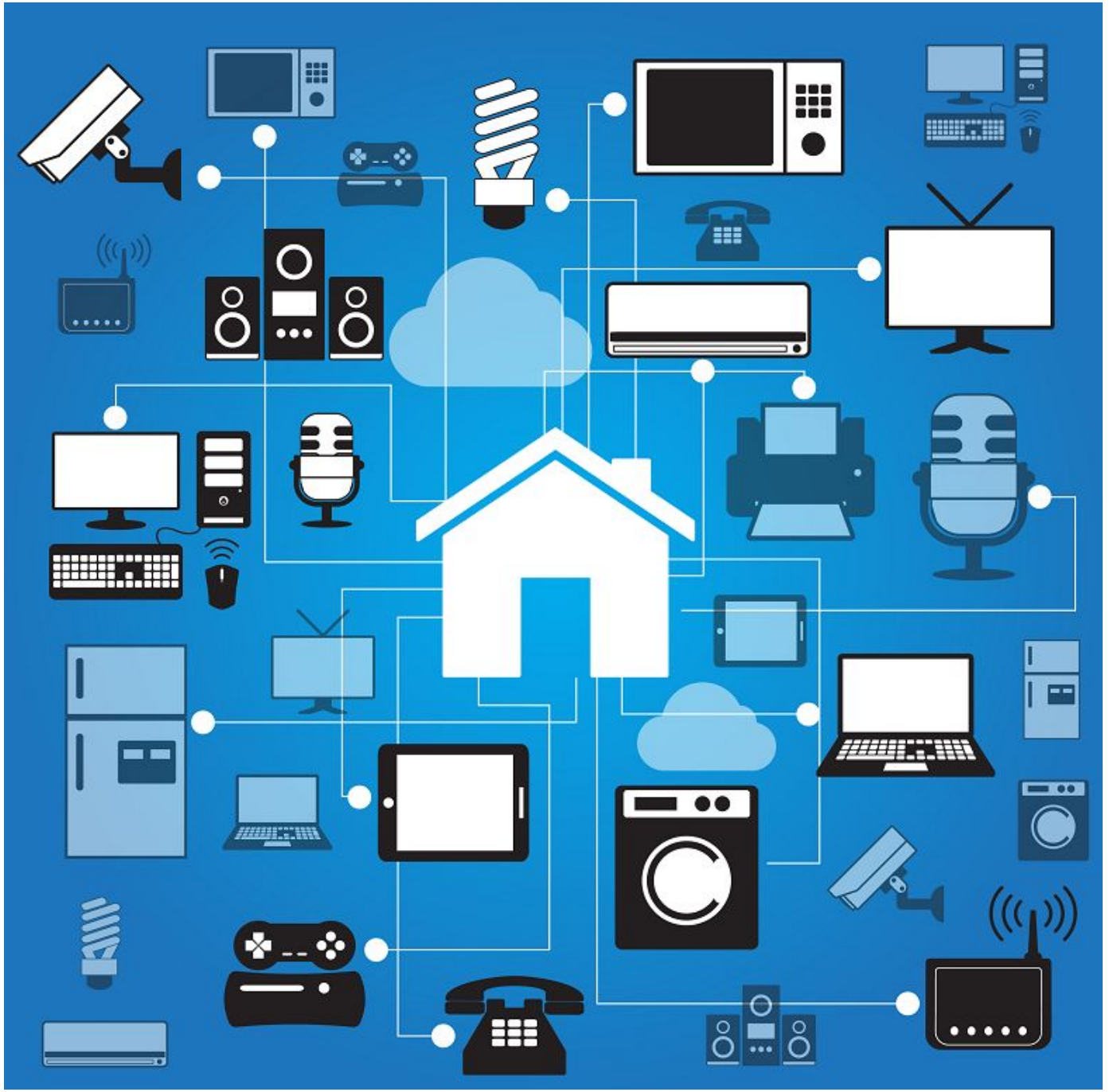
Gyan Ganga Institute of Technology and Sciences

Home Automation using Arduino

Mentor- Professor Udit Narayan Bera



Presented By

Raunak Jain

Tanmay Agrawal

Priyanshi Agrawal

Rupali Choudhary

Shakaina Naranje

Sudhanshu Shekhar

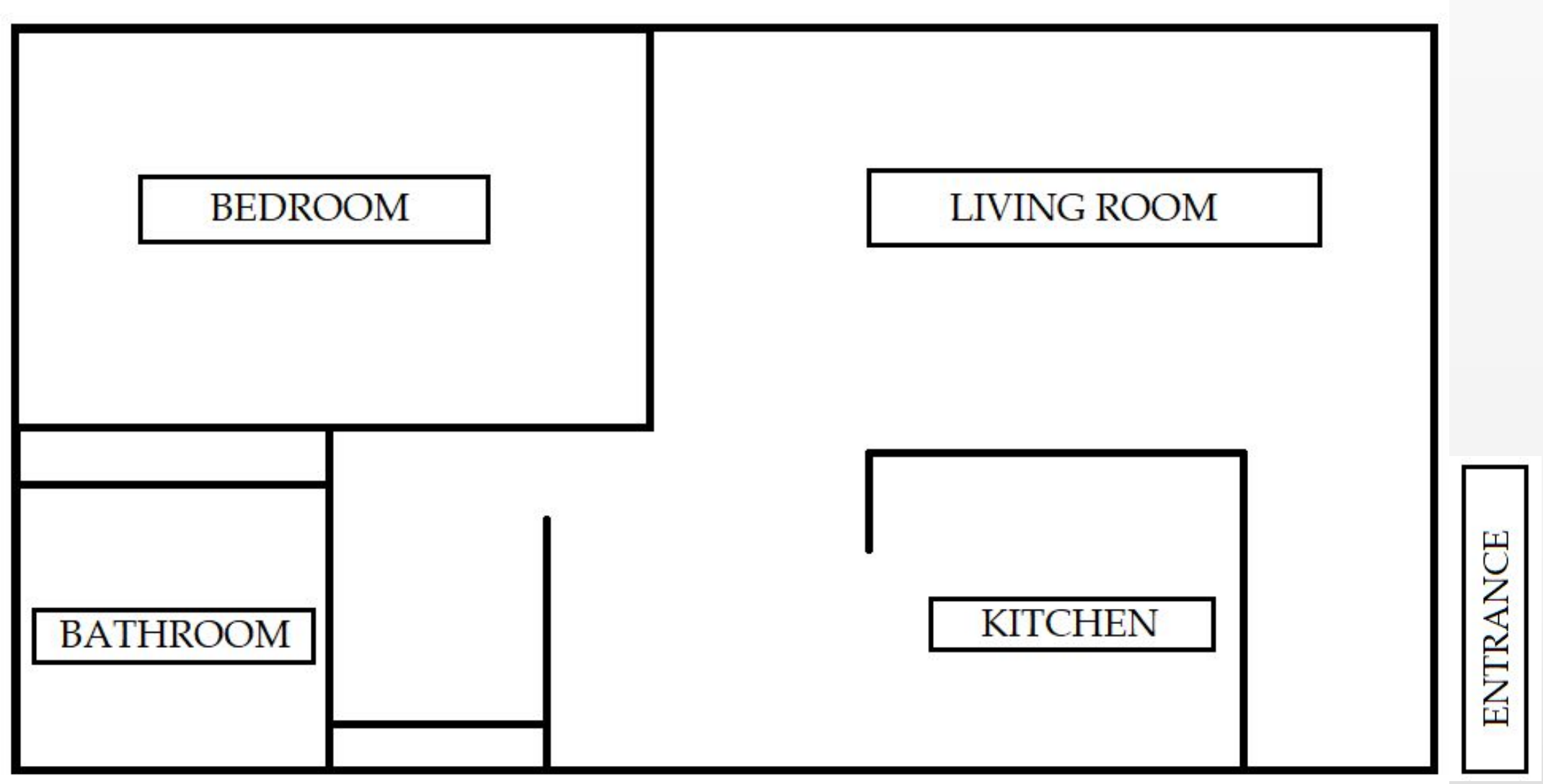
Shubhi Khare

HOME AUTOMATION USING ARDUINO

APPLICATIONS

- Secure Gate
- Bluetooth Control Lights
- Fire Control
- Temperature Display [using LCD]
- Automatic Light Control
- Rain Sensor
- Gas Leakage Detection

BASIC LAYOUT



AUTOMATIC CONTROL LIGHTS

- 1.Arduino UNO
- 2.Alphanumeric LCD, 16*2
- 4.Ultrasonic Sensor, HC – SR04 (Generic)
- 5.Solderless Breadboard Full Size
- 6.Female Jumper Wires
- 7.Male Jumper Wires
- 8.LED light Bulb

FIRE CONTROL

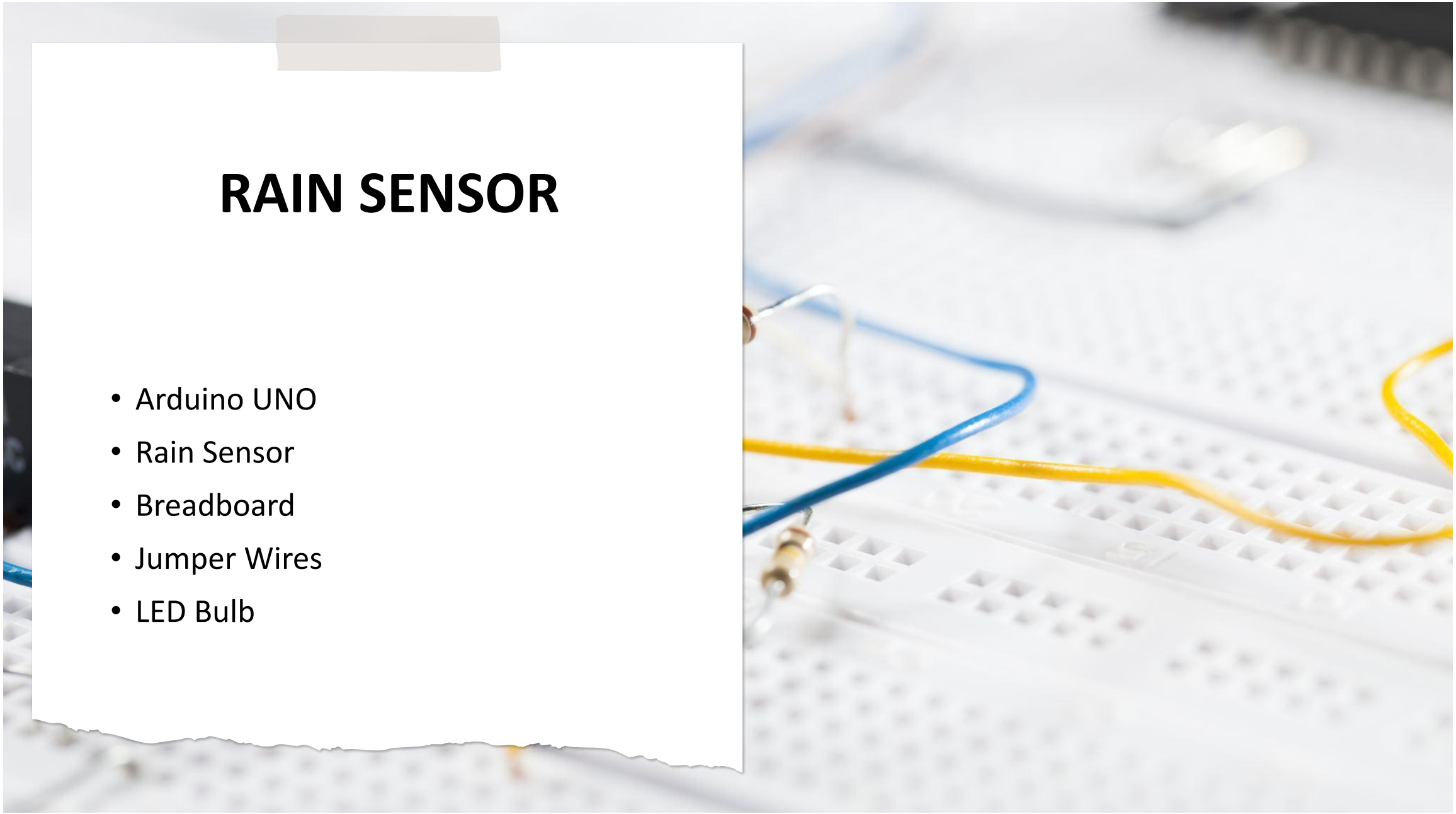
- Arduino
- Fire Sensor
- Jumper Wires
- LED
- Buzzer

TEMPERATURE DISPLAY USING LCD

- Arduino UNO
- LCD Screen
- LM35 Temperature sensor
- Jumper wires
- Resistor

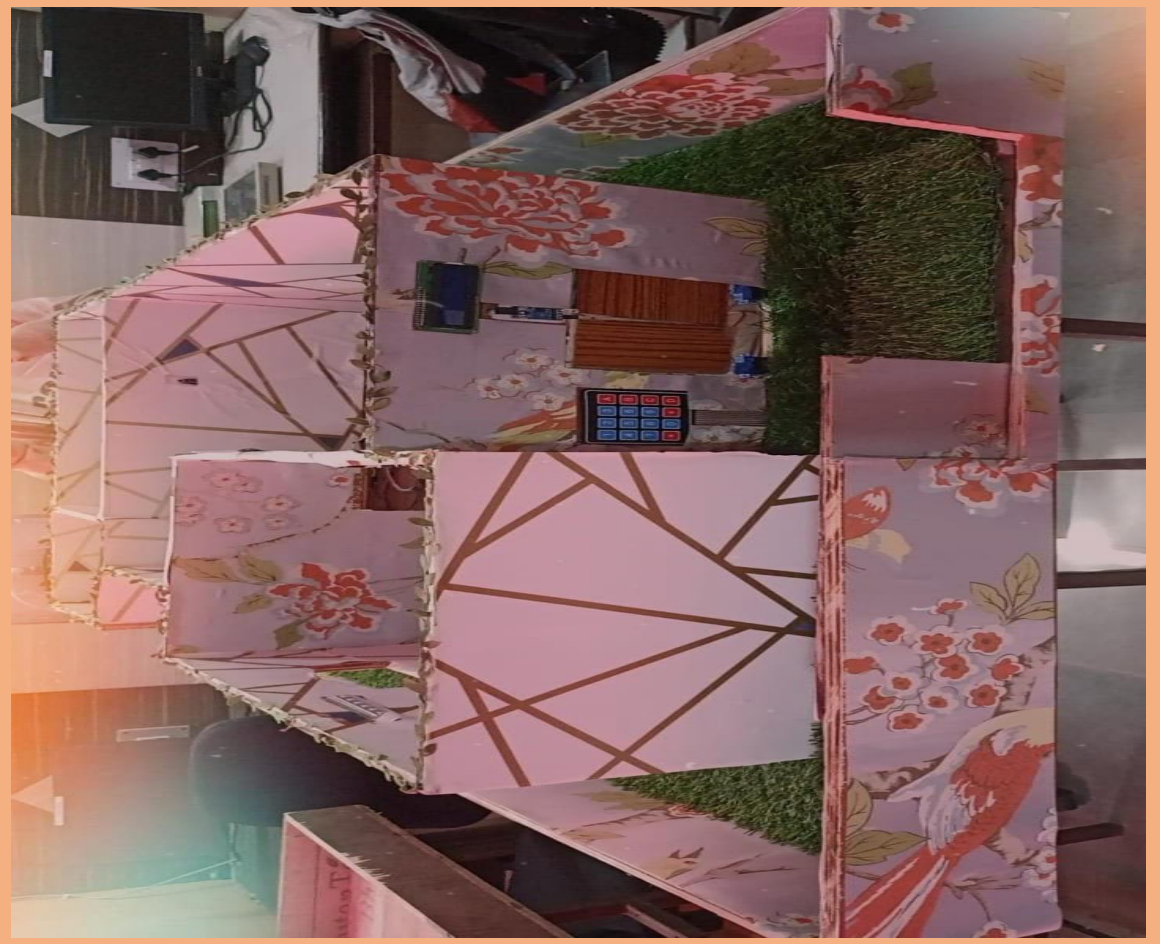
RAIN SENSOR

- Arduino UNO
- Rain Sensor
- Breadboard
- Jumper Wires
- LED Bulb



INITIAL OUTPUT

FINAL OUTPUT



COST

- Flame = 150 INR
- Gas = 250 INR
- PIR = 500 INR
- BUZZER = 500 INR
- Ultra sonic = 150 INR
- Keypad = 400 INR
- Servo motor = 15000 INR
- NodeMCU = 500-1000 INR
- Relay = 500 INR
- Plus Arduino Mega = 2000 INR
- Wires = 2000 INR
- Extra expenses = 2500 INR

Total = 25000 INR

Thank you