Smart Beehive Monitoring System
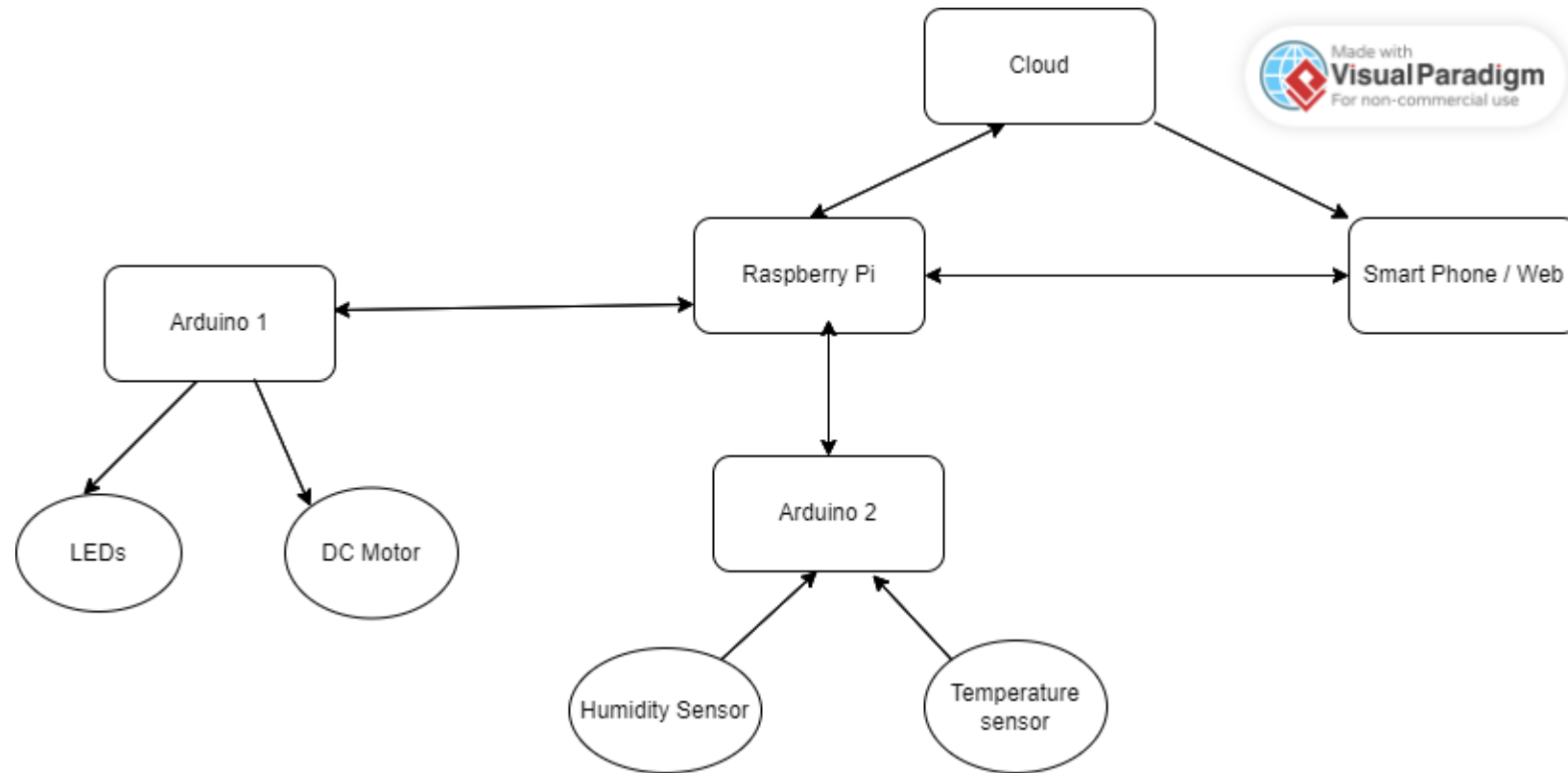
By:
- Jasmeet Matta
- Jaouaher Belgacem

MOTIVATION
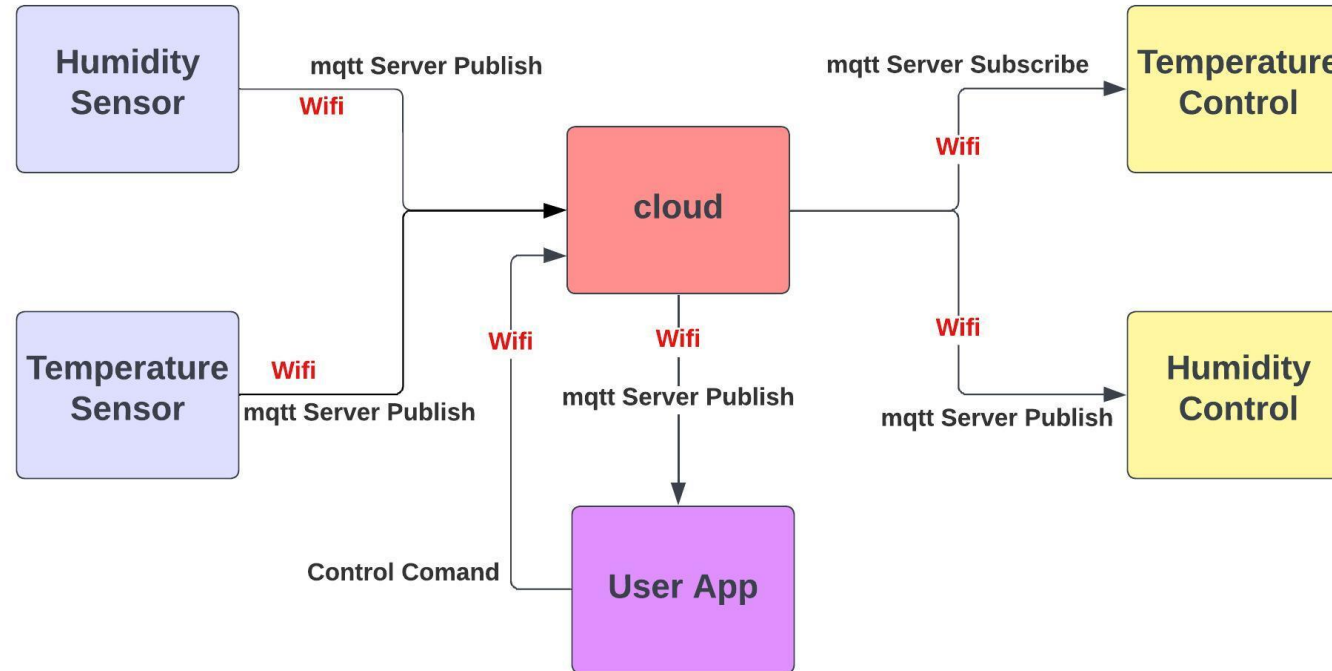
System's Concept

- **Block Diagram**

System's Concept

- **Block Diagram**

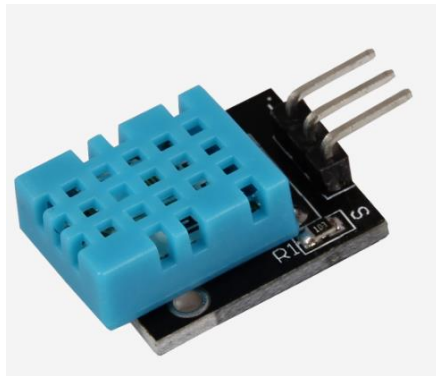# Used Hardware and Software

- **Hardware :**

  - ➢ 1 x RGB LED Actuator
  - ➢ 1 X Humidity/Temperature Sensor
  - ➢ 1 x DC Motor
  - ➢ 1 X Raspberry Pi
  - ➢ 2 X Microcontrollers: Arduino Uno Wifi R2
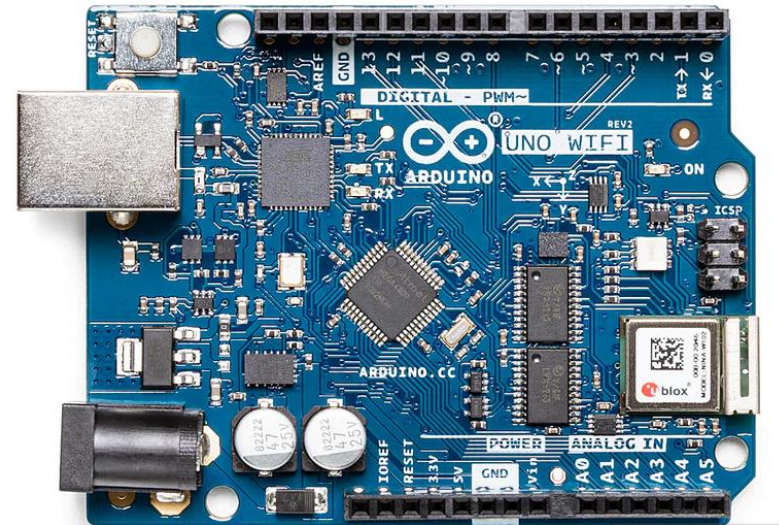 - ➢ 1 X SmartPhone

- **Software :**

  - ➢ Raspberry Pi: Central station
  - ➢ Arduino IDE
  - ➢ Mqtt mobile application
  - ➢ Cloud
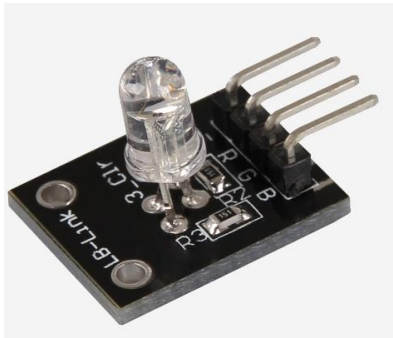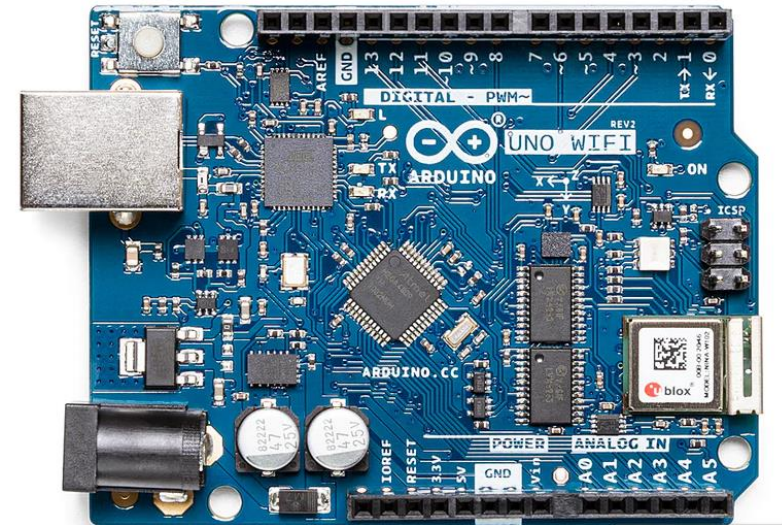
Parts of system

- **Publisher (sensor unit)**

+

Parts of system

- **Subscriber (Actuators unit)**

+

REAL Time Testing of the System

Thank you