

Smart Beehive Monitoring System

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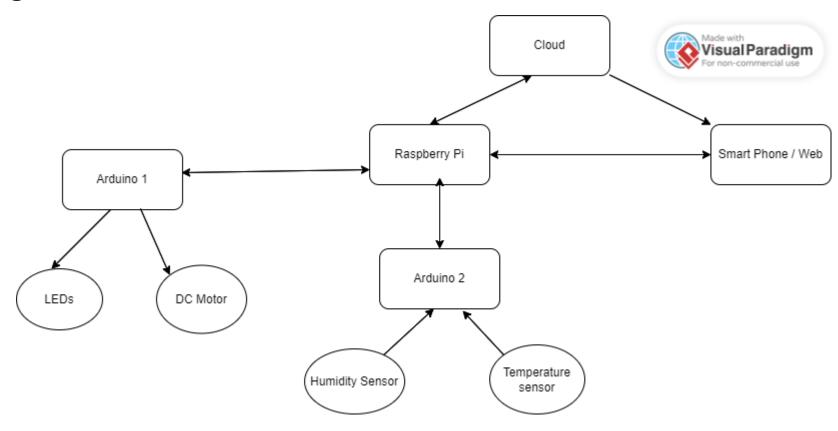


MOTIVATION

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

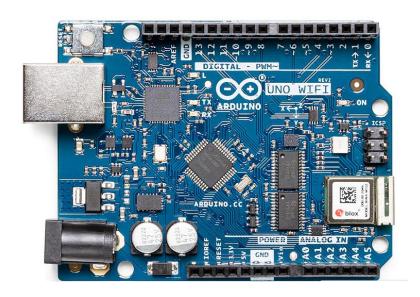
Parts of system



Publisher (sensor unit)







Parts of system

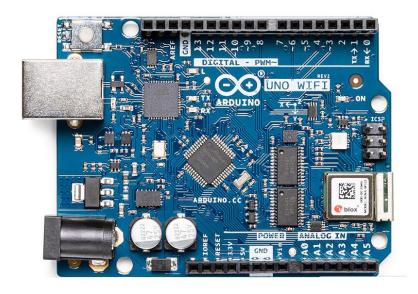


Subscriber (Actuators unit)









Implemetation



• Snipts of Arduino Code



REAL Testing of the System



Thank you

Implementation Results



Recorded Video