**Group 5 - Internet of Thing** 

# Smart Cultivation Watering — System —

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### Concept

Using modern IOT devices to effectively manage and monitor plant irrigation in a cultivation environment

#### **Actuators**

- 1. Water valve
- 2. Pump
- 3. LCD Display
- 4. LED
- 5. Relay
- 6. Camera from mobile app (optional)

#### Goals

Create a healthier cultivation and planting environment

## **Programming Lang.**

Python 3.10 using Thonny IDE

#### Sensors

- 1. Soil moisture sensor
- 2. Temperature sensor
- 3. Humidity sensor
- 4. Rain sensor
- 5. Camera sensor (optional)

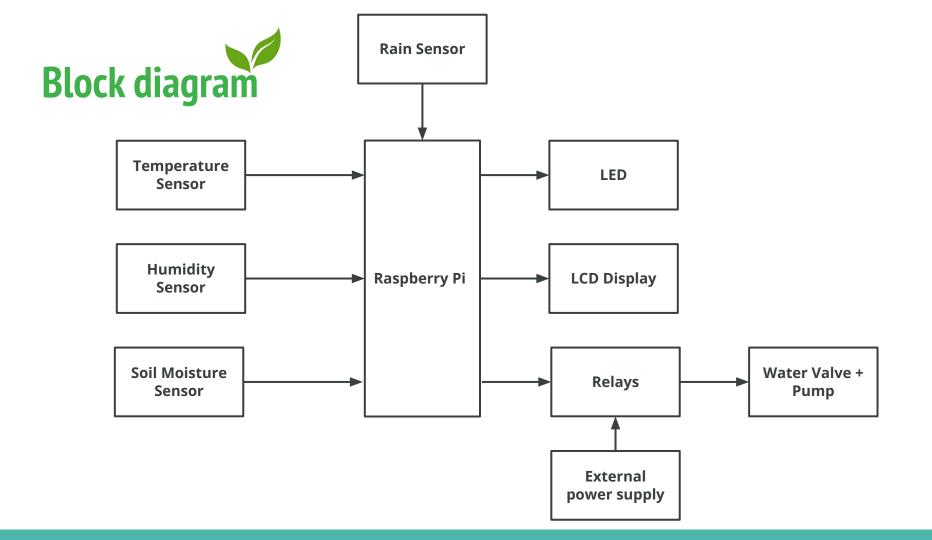
#### **Database**

Firebase



- Smart-scale farmers and hobbyists
- Urban gardeners



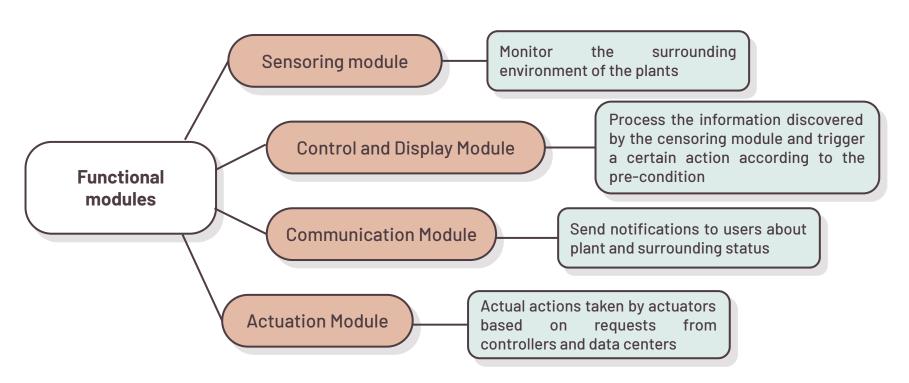


# **Example pictures**





## **Functional Modules**







- 1. If humidity and temperature sensors combined into a single device, are they consider two sensors?
- 2. Proposed project OK tak? Comment abit la lengzai