MICROCONTROLLER DESIGNS

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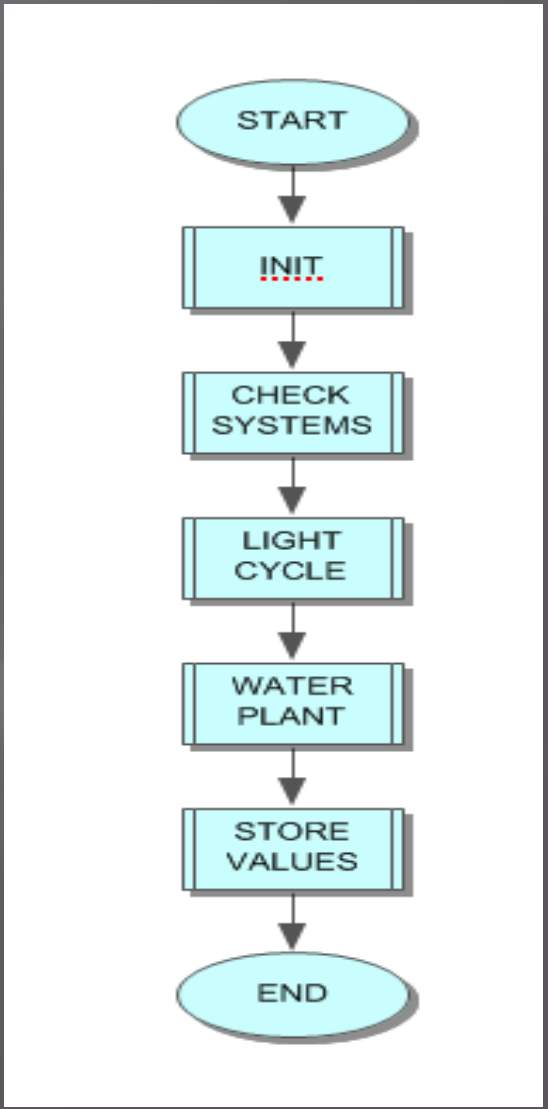
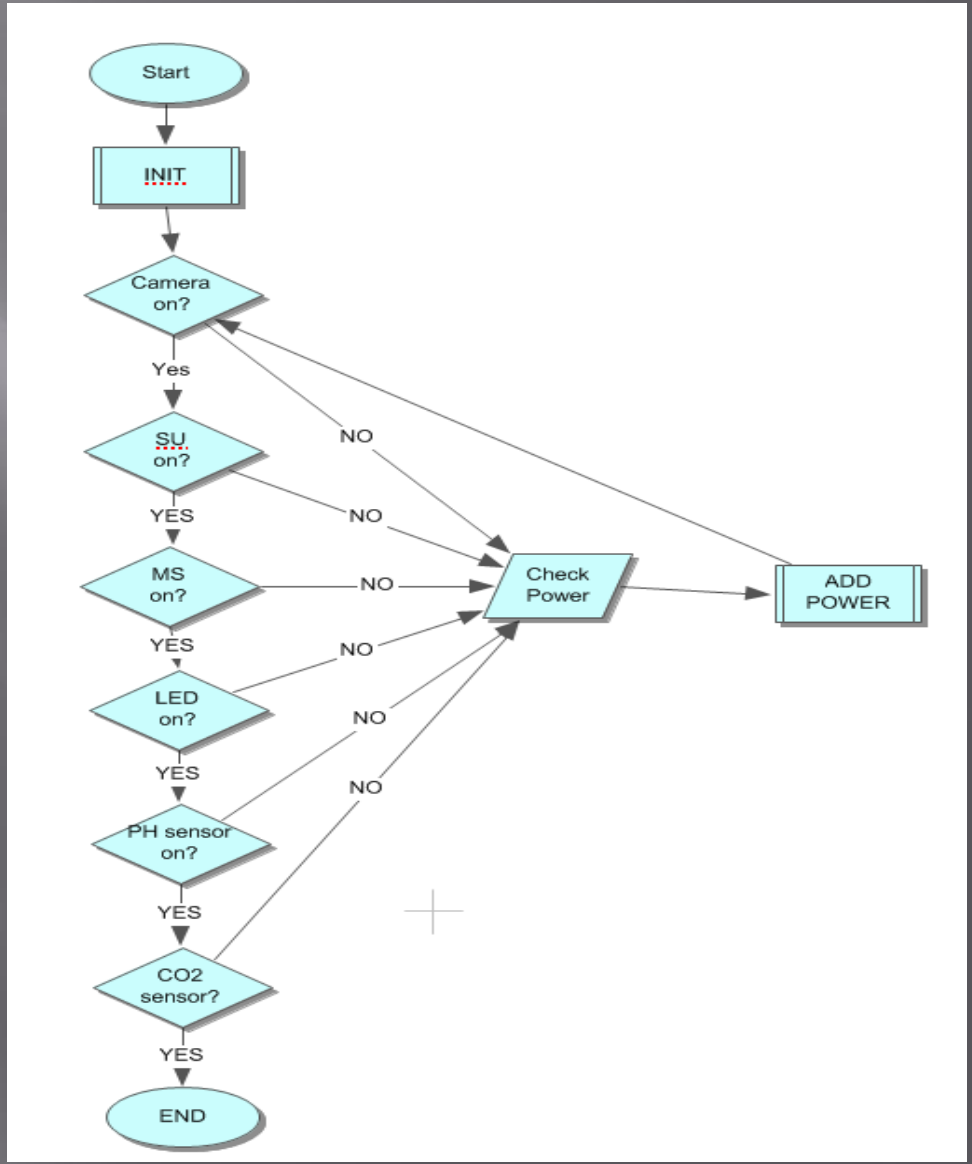
Main

- The main method of the microcontroller will water the plants, store the values, and take the pictures.



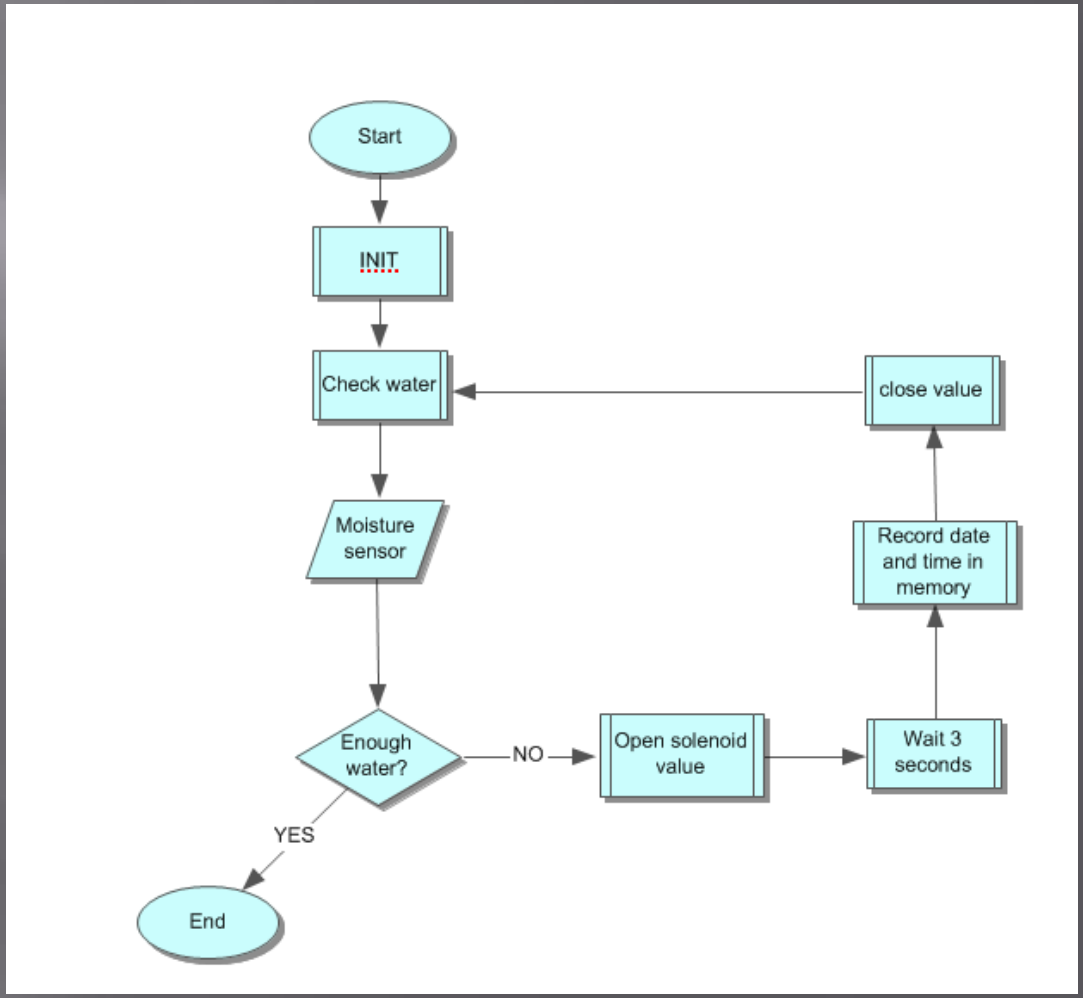
Systems Check

- The system checks all sensors to make sure that sufficient power is reaching all of the sensor that we need.



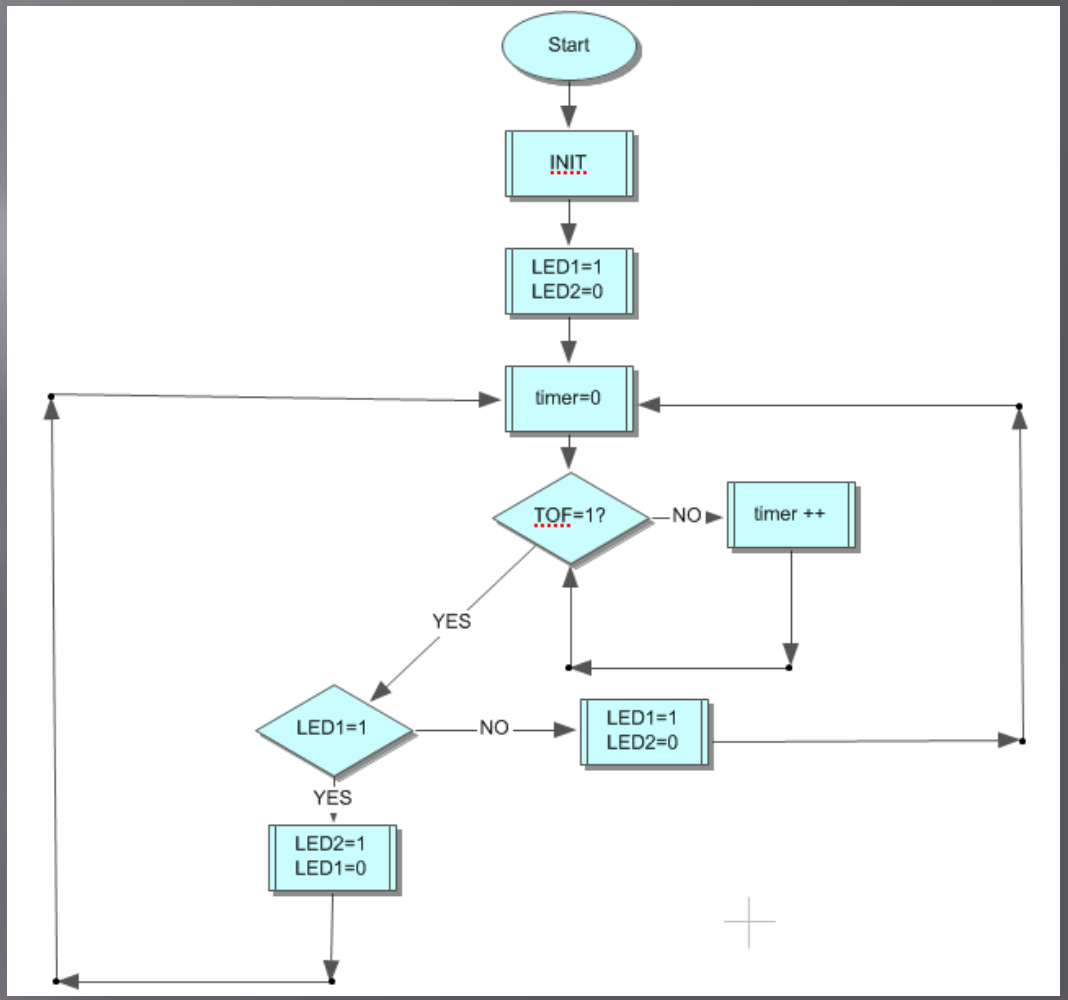
Water Plant

- This system checks the water level and if needed opens the solenoid value for a set amount of time.
- The microcontroller then records the date and time.
- After it records and it closes that value and then checks the water level again.



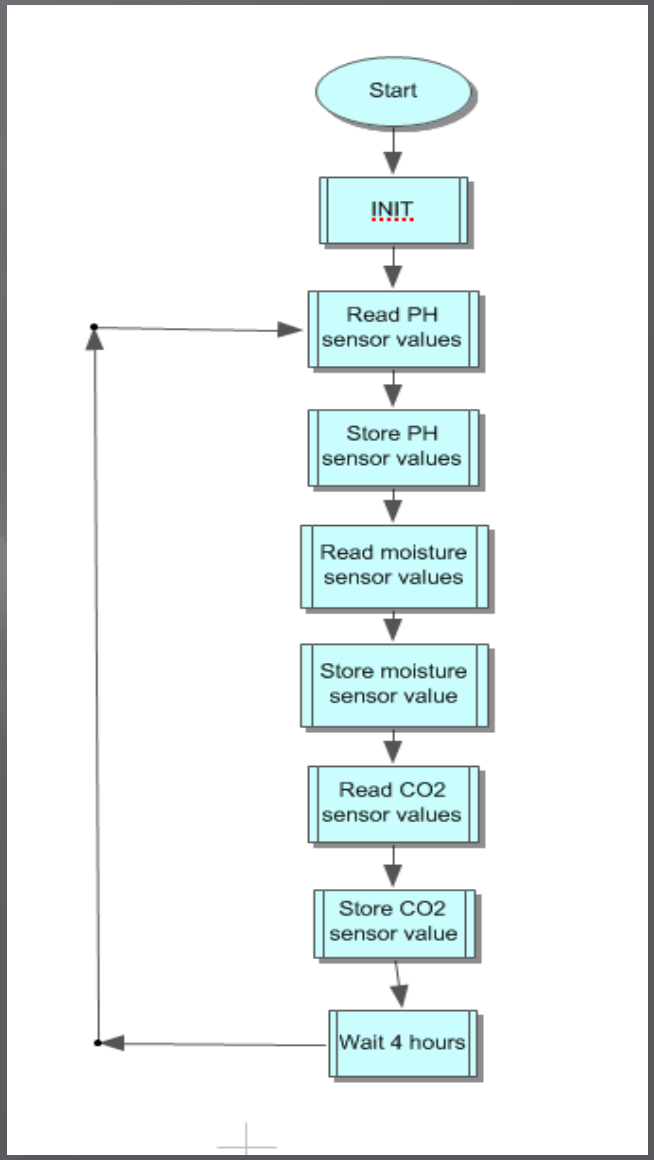
Light Cycle

- LED1=Red
- LED2=Blue
- The light cycle program starts with the red on and the blue off.
- The timer turns over every 12 hours.
- When the timer equals 1 the microcontroller checks the Red LED. If red LED is off then it is turned on and the blue LED is turned off.
- If the red LED is on the it is turned off and the blue LED is turned on.



Store Data

- This system reads all of the sensor values and then stores them.
- The program then resets after 4 hours.



Take Picture

- This system tells the camera to take a picture, store it and then wait 4 hours to repeat.