



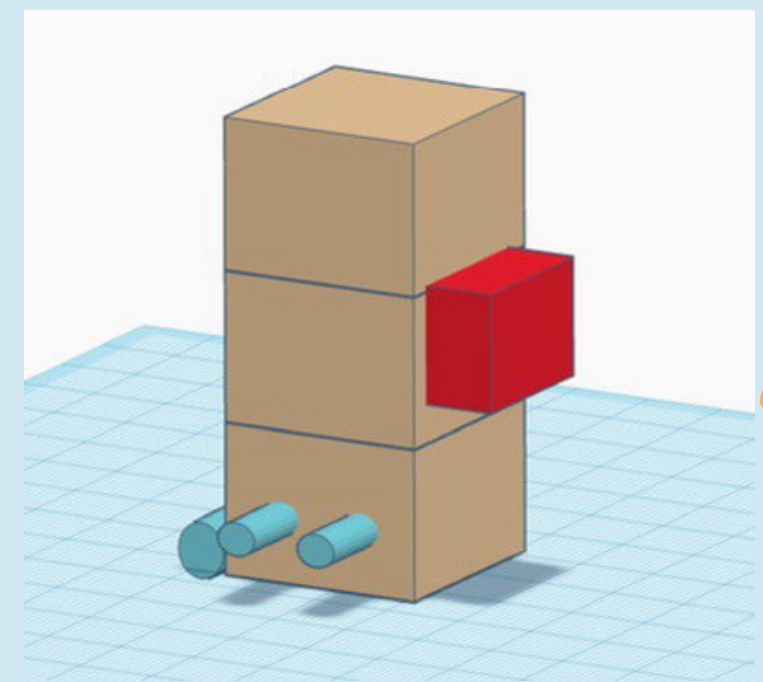
# SmartWater Filter

Developed by  
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## INTRODUCTION



Traditional Method



A water filtration system that operates without draining the pond, saving time and resources.

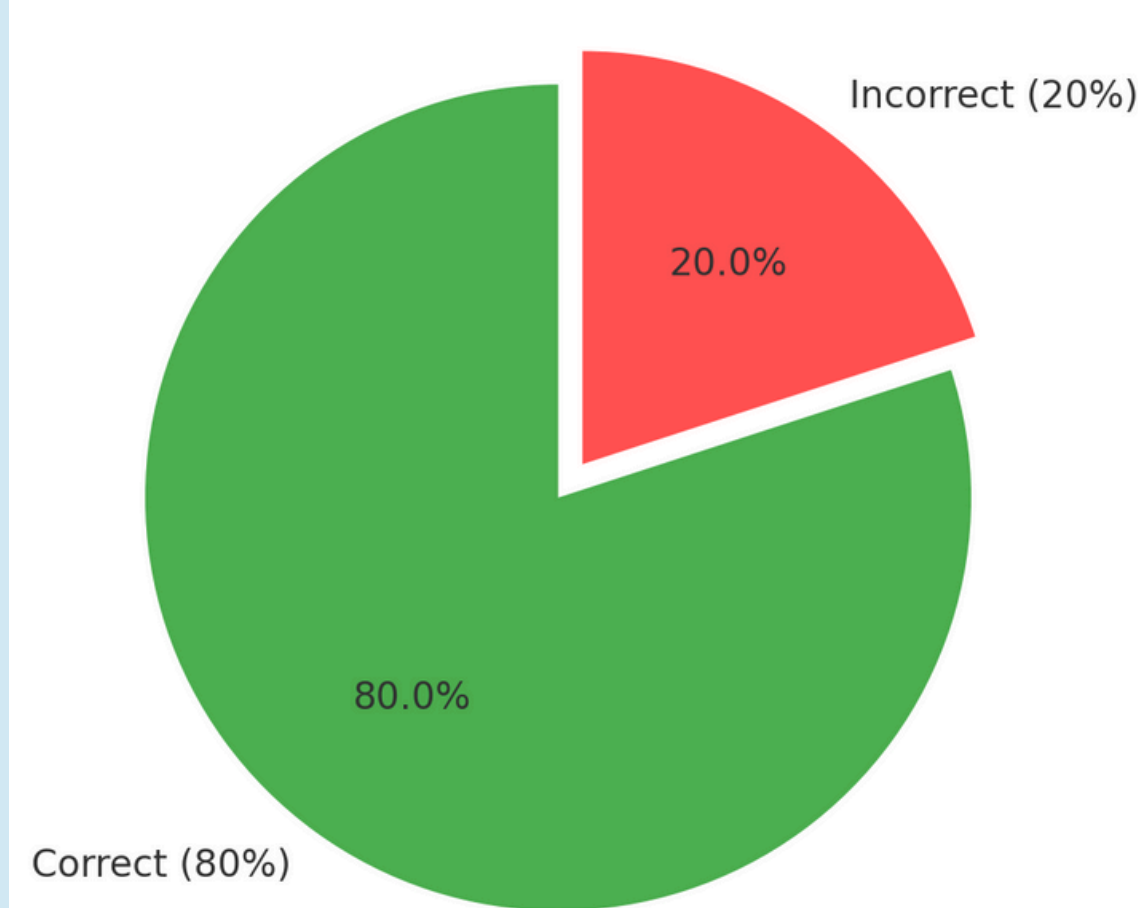


## Objectives

- To create a water filter that can display the cleanliness of the water and order to filter water through the application
- To create a function of the water filter that can notify the change of filter materials
- To study the efficiency of smart water filters

## FINDING

Water Cleanliness Monitoring Accuracy



The pie chart shows the accuracy of the instrument in measuring water cleanliness, with an accuracy of 80% from 5 test times and can be used in real time.

## FRAMEWORK

Design the structure and create water entry and exit channels

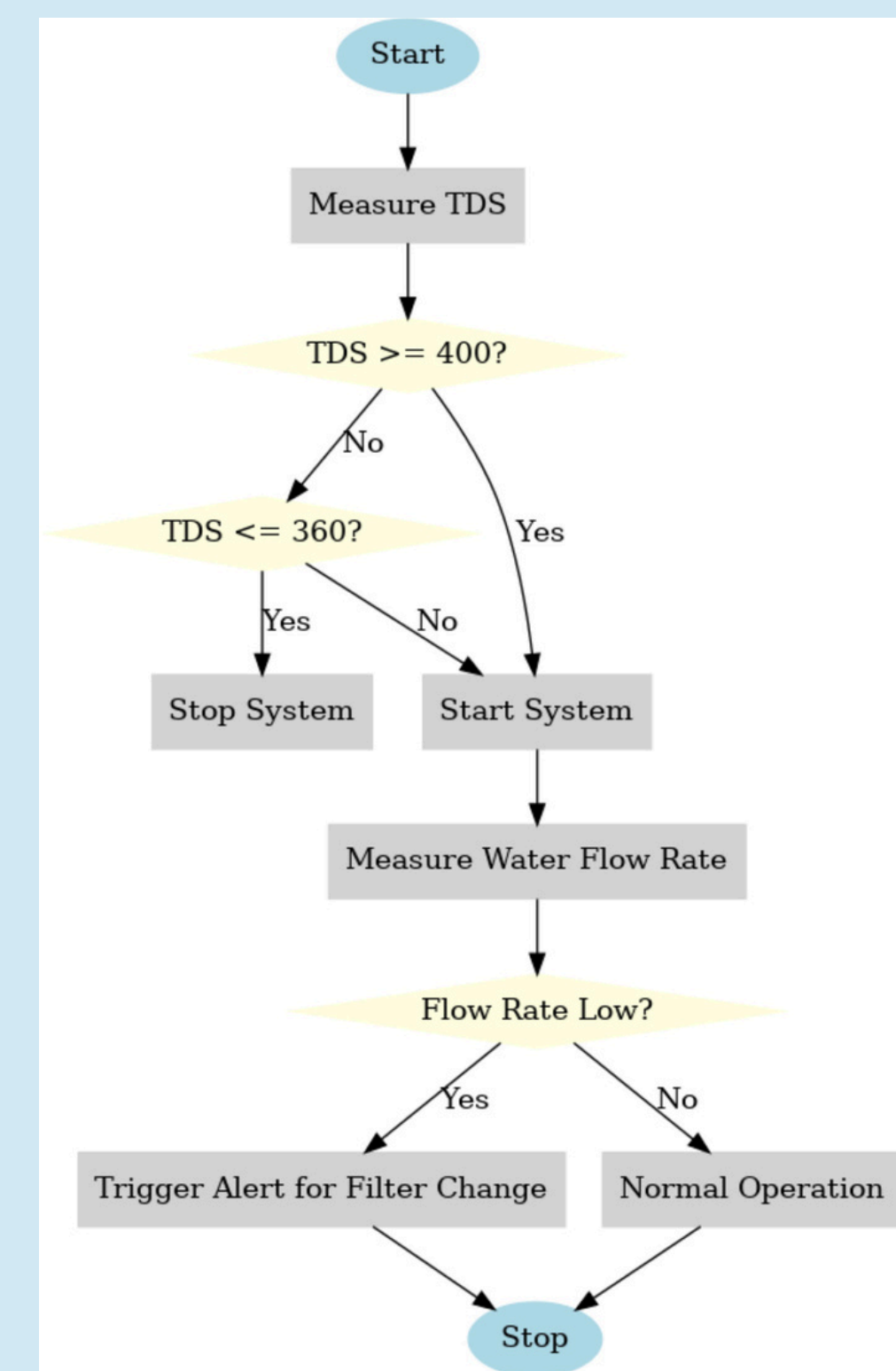
Programming

Check and fix the workpiece and program

Create a circuit

Test the performance of workpieces and programs

Discussion of experimental results

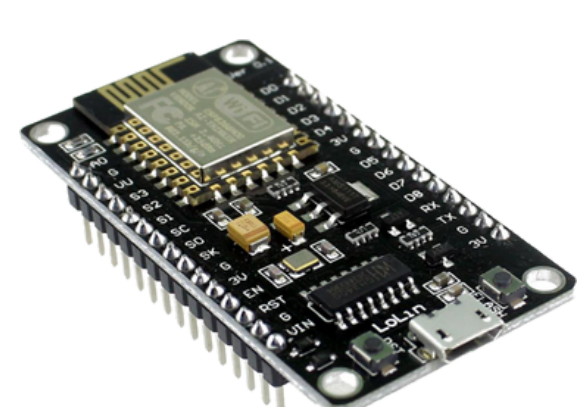


Flowchart

## Conclusion

- Achieve the goal of reducing pollution and contamination in fish ponds
- Save time, reduce the frequency of water changes
- Increase convenience with a system to check water cleanliness at all times via mobile phone
- TDS sensor has an accuracy of 80% (4 out of 5 times)

## Devices



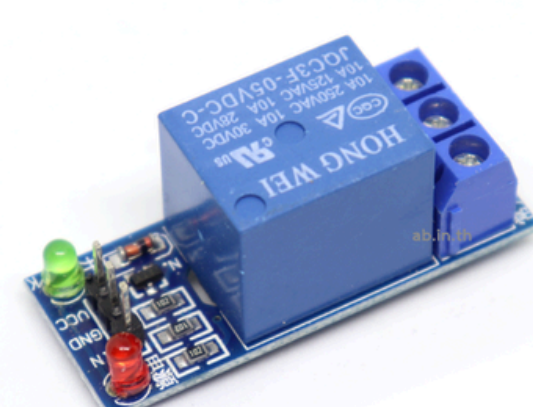
Esp8266



TDS Sensor



Water Flow Sensor



Relay