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**Project: SMART WATER**

1. **Objective**

Buid a system to manage and monitor periodic inspection data of water purifiers.

Use AI to calculate to replace water filter core.

1. **System design**
   1. **Devices**

Use esp32 as a station to receive data imported from the test database. In addition, esp32 must also display water quality parameters after being measured by staff and uploaded to the web server.

* 1. **Software**

Node-Red: Data processing and management.

InfluxDB: Real-time data storage.

Ubuntu: Node-Red server, MQTT to receive data from ESP32, save data to database for analysis.

1. **AI and Big Data**

AI will receive periodic data and by drawing a calculation chart, AI will calculate the water quality parameters that will decrease through each test period and from there will predict when the water purifier needs to change the filter core.

Big Data enables systems to scale (capable of storing data across millions of devices), making it easier for companies and consumers to manage devices.