

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

Smart Water Bottle Project

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Background

- Smart water bottles are not new
- Use combination of accelerometer and weight sensors to detect when water is drunk and how much.
- Only useable with their own bottles

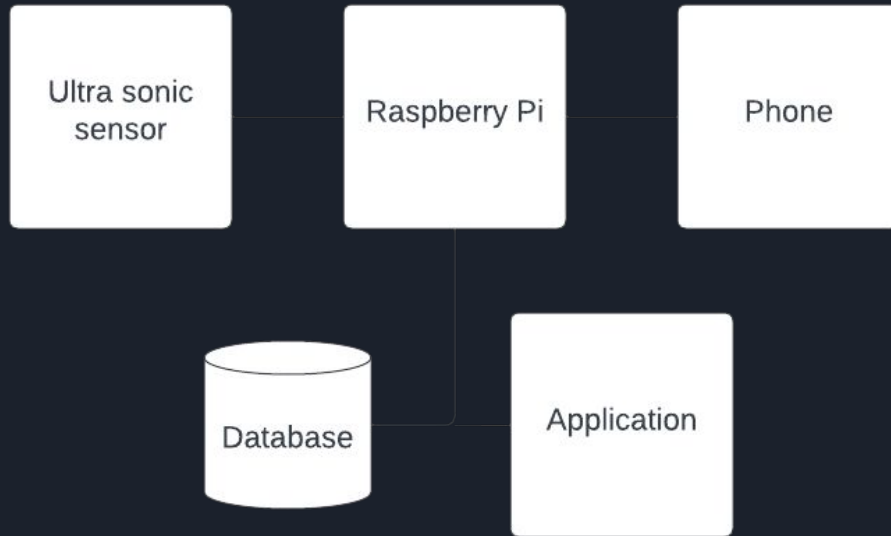


Goals

- Flexible system applicable to existing water bottle
- Automatic measurement of water when you drink it
- Notifications to phone for drink reminders
- Water.io

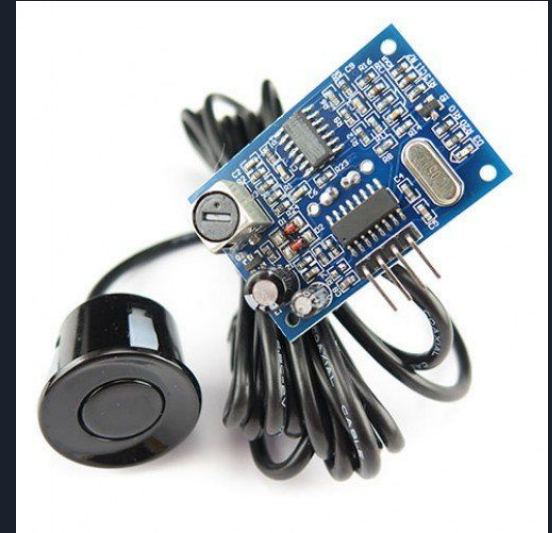
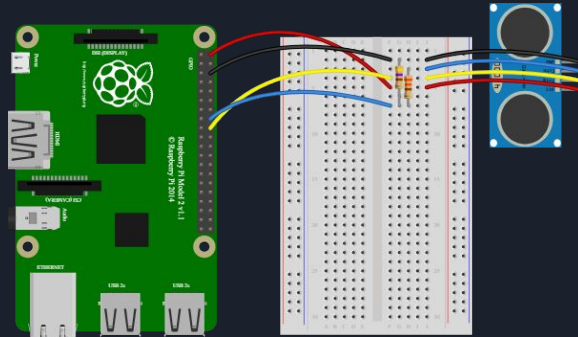


Architecture



Hardware

- Raspberry Pi 4
- JSN-SR04T waterproof ultrasonic sensor





Software



- Python 3
 - Ultrasonic_test.py - Testing of ultrasonic sensor
 - Manual_measurement.py- Manual Measurement of water dranken
 - Notification_test.py - Testing of notifications to phone
 - Auto_measurement.py - Automatically measure water dranken and send reminders to drink
- IFTTT

Web app mockup

