

Ultrasonic_Module

Module Responsibility

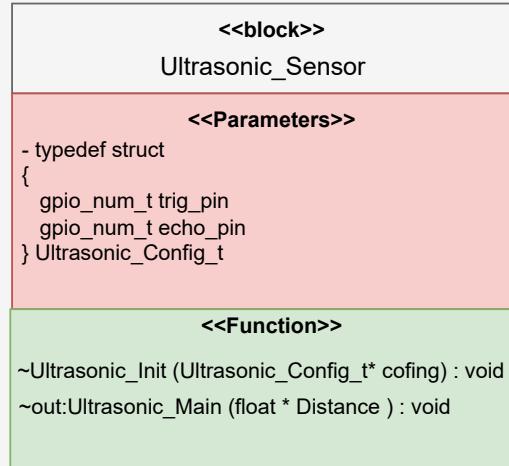
Module Responsibility :

- Generate a trigger pulse on the **TRIG** pin.
- Configure the ECHO pin as an **interrupt source**.
- Detect **rising and falling edges** of the ECHO signal using GPIO interrupts
- Measure the echo pulse duration.
- Convert the measured time into a distance value (in **cm** or **m**).

Output :

- Provide the distance to the App
- Distance Range:
 - Minimum: 2 cm
 - Maximum: 400 cm

Module Design



Module Flowchart

