

This project **uses an ultrasonic sensor (HC-SR04) and a servo motor** to measure distances and rotate the servo based on detected objects.

### ◆ **Components Used**

1. **HC-SR04 Ultrasonic Sensor**
  - Measures distance using **sound waves**.
  - Works with **trigger (Tr) and echo (Ec) pins**.
2. **Servo Motor** (SG90 or similar)
  - Rotates to **0°, 90°, and 180°** if an object is detected in range.
3. **Arduino Board**
  - Reads sensor data, processes the distance, and controls the servo.