In this project, we use **Tinkercad** to simulate an **HC-SR04 ultrasonic sensor** interfaced with an **Arduino** to measure distance. The sensor works by emitting ultrasonic waves and calculating the time taken for the echo to return after bouncing off an object.

Steps to Interface:

1. **Add Components in Tinkercad**
    - Drag and drop an **Arduino Uno** and **HC-SR04** sensor.
    - Connect **VCC to 5V**, **GND to GND**, **TRIG to Pin 10**, and **ECHO to Pin 9**.
2. **Upload Code to Arduino**
    - The code sends a trigger pulse, receives the echo, calculates the distance, and displays it on the Serial Monitor.
3. **Run the Simulation**
    - Click "Start Simulation" in Tinkercad to visualize distance measurements