

Configuration & Lunch Break

1. Install COBL Scratch from
<http://www.cobl.co.kr/>.
2. Check COBL inventory
3. Sign Declaration Form

Hands-on Workshop



Aow Jia Rong

*Co-Founder,
Ezsofe*



Dr Lim Han Leong

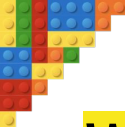
*Technical Advisor,
Scannertek*

Structure

1. What is COBL?
2. Components
3. COBL Scratch
4. Connecting to COBL

Learning Outcome

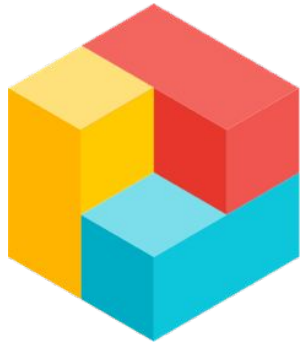
- Know what is COBL
- Able to tell what components are there and their functions
- Able to run COBL Scratch
- Able to connect COBL Board to COBL Scratch



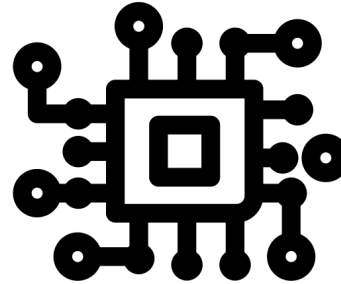
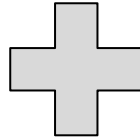
What is COBL?

Structure

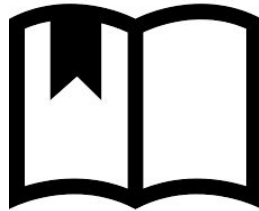
1. **What is COBL?**
2. Components
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Blocks



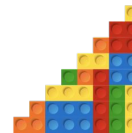
Technology

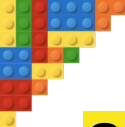


Education

Learning Outcome

- Know what is COBL
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COBL Scratch - Let's Try!

Scenario: If **ultrasonic sensor distance** is **less than 10**, set **external light** to **red color**.

Ultrasonic Sensor
Distance

External Light

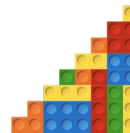
Red Color

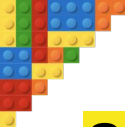
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2. Components
3. **COBL Scratch**
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Learning Outcome

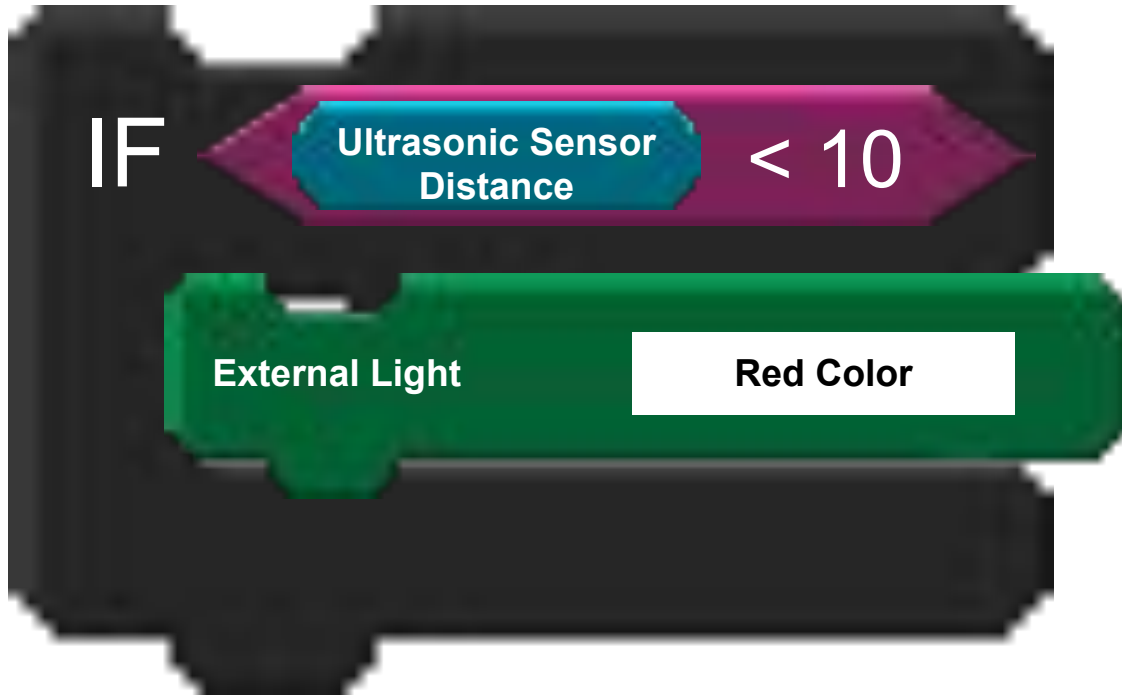
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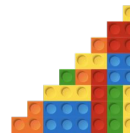


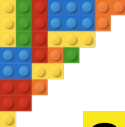
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Connecting to COBL

Connection

- 1 x USB ➤ USB Mini Cable
- Connect the USB Mini head to the COBL Main Board

Steps

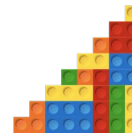
1. Connect the COBL Main board to the PC.
2. Start COBL Scratch programme
3. **You will hear 2 beeps.**
COBL will appear at the play area.

Structure

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Lets Build!

Project: Intrusion Detector

Parts



Main Board

Ultrasonic Sensor



7-Display Segment



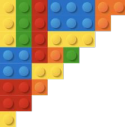
Push Button

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Project: Introduction

Phases

1. Set Melody 'Do' for Duration 1.
2. Loop Melody 'Do' for Duration 1.

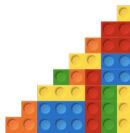


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Project: Intrusion Detector

Phases

1. Read and display the value of ultrasonic sensor.
2. If value of ultrasonic sensor is less than 10, set LED_{1,2,3} to color RED.
3. Permanent LED light up on intrusion.
4. Link up with IOT platform and send intruder notice if ultrasonic sensor is less than 10.
5. Clear detection if button is pressed.
6. Clear detection from IOT platform.
7. Let your imagination run wild!

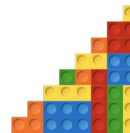
IOT Platform: <http://iot.cobl.co.kr>

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Thank you!
