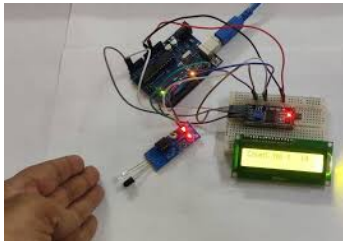
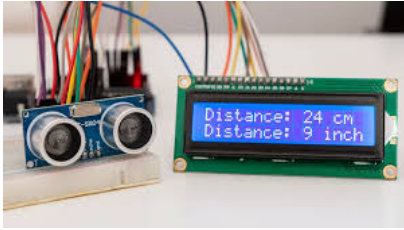
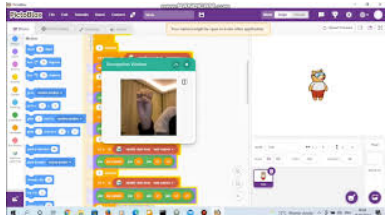


Semester 2 /Level 2

37-40 classes or 1 Academic Year: 9-10 months (excluding holidays)

Module Number/ Topic	Visual Cue	Description	No. of Classes (37 total)
10 Introduction to IR Sensor		Learners will learn about IR sensors, their use in everyday appliances and how to calibrate and code them.	1
11 Smart Counter		Learners will design a counter that changes according to the input given by two IR Sensors.	3
Class Test 1 (Modules 10 & 11)			1
12 Hand Gesture Car		Learners will develop a robot that follows human gestures using IR sensors.	4
13 Line Follower Car		Learners will build a smart line follower robot to follow a black or a white line.	5
Unit Test 1 (Modules 10 to 13)			1

14 Introduction to Ultrasonic Sensor		Learners will learn about ultrasonic sensors and how to measure the distance of an obstacle using them.	1
15 Smart Dustbin		Learners will develop a smart dustbin that senses if somebody stands in front and opens autonomously.	3
Class Test 2 (Modules 14 & 15)			1
16 Height Measuring Device		Learners will develop a device that automatically detects the height of a person standing underneath it.	4
Unit Test 2 (Modules 14 to 16)			1
17 Introduction to Machine Learning Environment		Learners will learn the use of Machine Learning to train algorithms.	1

18 Hand Pose Classifier		Learners will leverage the power of Artificial Intelligence to detect different hand postures.	3
Class Test 3 (Modules 17 & 18)			1
19 Object Classifier		Learners will use ML to train their computers to identify and detect unique objects.	3
Unit Test 3 (Modules 17 to 19)			1
Revision & Practice			2
End Semester Exam (Modules 1 to 9)			1

- Class Test : 3 (15-20 marks, practical not compulsory)
- Unit Test: 3 (20-30 marks practical required)
- End Sem: 1 (50 marks practical required)

SGPA	Grade
9.00-10.00	Ex
8.00-8.99	A
7.00- 7.99	B
6.00-6.99	C
5.00-5.99	D
<5	F