

# AI & ROBOTIC LAB-3

## Order Code - STEM-ARL3

- Easy to Start
- Easy Results
- Motivates Students
- No Cost of Failure



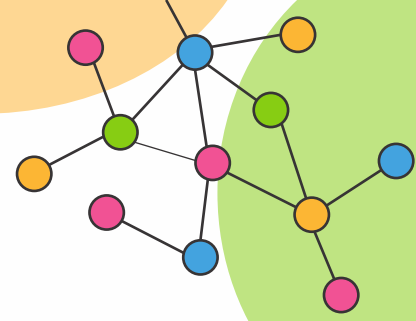
#	Item	Quantity	Note
1	AI Kit	20 Kits	
2	LMS Teacher Access	5 Licenses	
3	LMS for Students	500 Licenses per school	
4	Access to coding Application	-	
5	Access to Cloud	-	
6	Access to Android App Development Extension	-	
7	Teacher Training Program	3 days	Virtual
8	1 year virtual support	24 Virtual sessions	Through one year period

### SPECIFICATION

- Contains 63 Module & Accessories
- It contain one Programmable Block called – NetLogic (WIFI & Bluetooth both)
- Basic electronics components like Light, Buzzer, NOT Gate, High Speed Motor
- Two ON/OFF Motors with Mounted BO & Servo motor & Parts.
- 13 types of sensors, few are Light Sensor, Obstacle Sensor & Moisture Sensor, Motion, Vibration Sensor, Sound Sensor, Tilt Sensor
- Smart Switch – to control appliances
- Having Construction Kit which contains 100+ components

### SAMPLE PROJECTS

- Morse code with buzzer
- Pre-programmed path robot
- Automatic plant watering
- Cliff avoidZ
- Obstacle avoiding robot
- Salt water conductivity
- Digital Key
- Digital dimmer project .....and many more



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Component	Qty
Adapter/Charger	1
Battery Power	2
Buzzer	1
Connectivity sensor	1
Copy	1
Dimmer	1
High speed motor	1
Inverter	1
Light	1
Light Sensor	1
Limit Switch	2
Magnetic sensor	1
Mini Plastic Fan	1
Motion Sensor	1
Motor with mounted BO	2
NetLogic	1
Obstacle sensor	2
OTG Adapter	1
Pipe	1
Pulley	1
Pulse Delay	1

Component	Qty
Push Button	2
Receiver	1
Sensor Base with threshold	4
Servo Motor	2
Servo Motor part	2
Smart Switch	1
sound sensor	1
Submersible pump	1
Switch	2
Tilt sensor	1
Transmitter	1
U- Left	1
U- Right	1
USB Cable	3
Vibration Motor	1
Vibration sensor	1
Wheel	2
Small Wheel	1
Magnet	1
Wire	4

Component	Qty
AND	1
OR	1
Toggle	1
USB Rechargeable Battery	2
Plastic Building Block Set 100+ Pcs	1



### LMS FOR TEACHER'S & STUDENT'S

#### Teachers View

**[Teacher Resource] 7.Overweight Alarm**

[ 40 Minutes ] To understand the another use of obstacle sensor, by making students aware of weighing machine, and concept of overweight alarm.

Goal of the project is to understand the how can we make weight measuring instrument and use it for real world applications.

**PAGE** [20 Minutes] Understanding the concept Mark as done

[ 10 minutes ] Teacher will explain about different uses of obstacle sensor and ask questions to students about how can weighing machine be automated.

[ 7 minutes ] Students will share project ideas for Overweight alarm.

[ 3 minutes ] Teacher will explain the functionality of each module in the project.

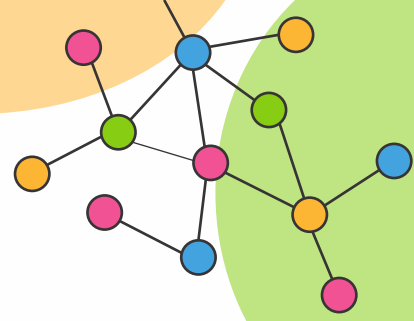
**PAGE** [20 Minutes] Understanding of working Model: Mark as done

[ 5 Minutes ] Teacher will ask questions to students about functionality of project and gradually divide the project functionality, for each part of the project. Teacher will lead students to identify parts required for the project.

[ 5 minutes ] Students will assemble the circuit of Overweight Alarm.

[ 10 minutes ] Students build the structure of project using construction blocks.

- Teaching Resources
- Session Power Point presentations
- Monitor students progress



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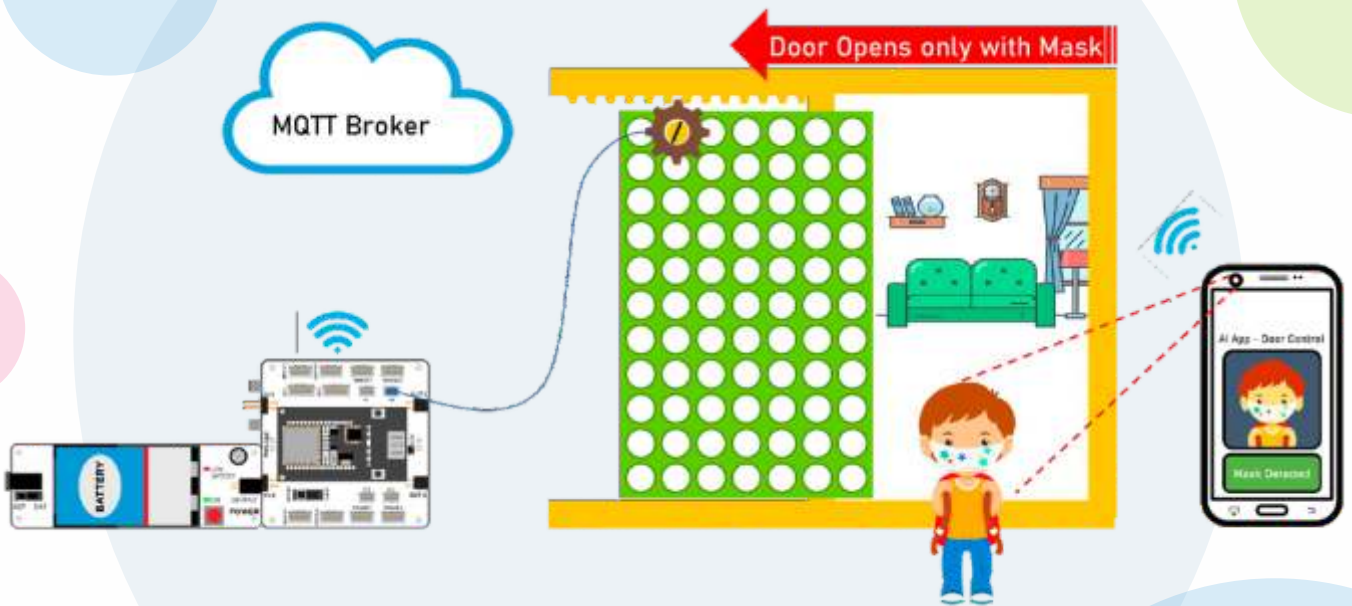
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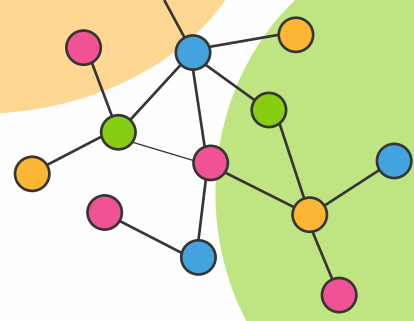
### Student View



- Learning Resources – Videos & Documents
- Quizzes
- Scholarship

### MAKE YOUR OWN AI APP WITH MIT APP INVENTOR

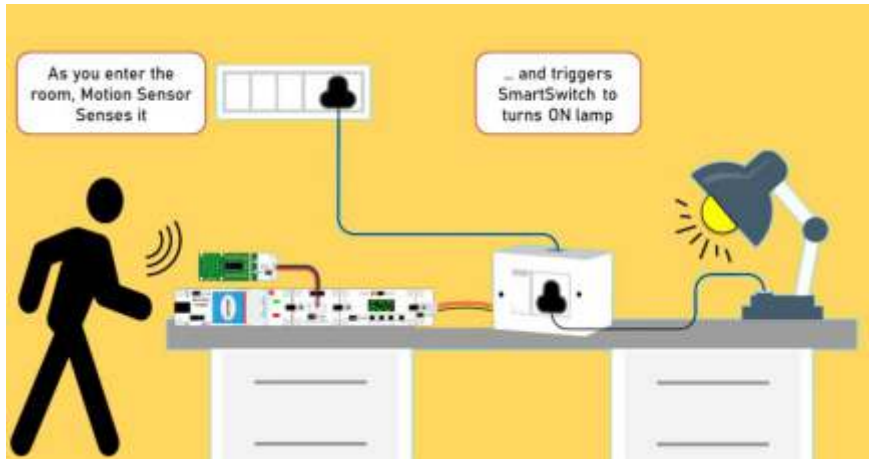




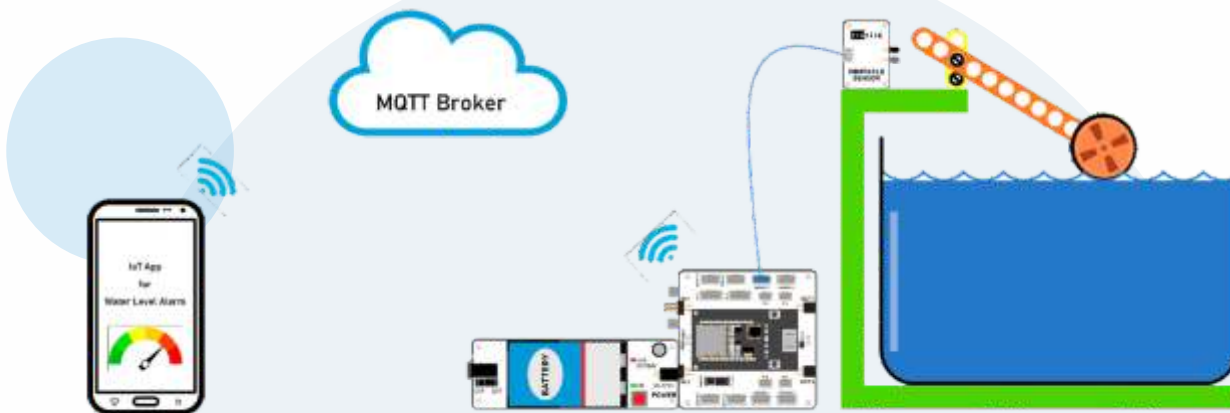
# AI & ROBOTIC LAB-3

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### AUTOMATE WITH SMART SWITCH



### MAKE YOUR OWN IOT APP WITH MIT APP INVENTOR



#### We train school teachers on:

- How to use kit
- How to make use of LMS
- How to effectively teach in the classroom
- How to mentor students