

B40
STEM Hands-on Workshop –
SDG 4 Quality Education

Activity/Experiment title:	Maze runner and Coding with Ozobot
Activity owner: (Name of School/ Institution/University/Organization)	UTAR (Dept of Internet Engineering and Computer Science)/ IT Society
Target Participants:	Age : 5++ years old
<p>Description of activity/experiment: (objective, content, etc)</p> <p>Note: Participants will bring back the simple route they made.</p>	<p><u>1. Coding with Ozobot:</u> To visualize coding for junior participants. Team size: 1-5 students * 3 teams Facilitators needed: 1 per team Time for each session: 15 minutes Materials provided for each session:</p> <ul style="list-style-type: none"> - A4 paper (1 per person) - Marker pen (Black, Blue, Green, Red) <p>Apparatus provided for each session:</p> <ul style="list-style-type: none"> - Ozobot Bit * 3 <p>Procedures:</p> <ol style="list-style-type: none"> 1. Participants are given an introduction to the use of Ozobot Visual code. (3 minutes). 2. Participants are encouraged to design their own code using their given A4 paper or emulate a prepared tutorial from https://portal.ozobot.com/lessons. (12 minutes). <p><u>2. Maze runner</u> Running a maze with visual codes. Team size: 2-5 students * 2 teams Facilitators needed: 2 per team Time for each session: max 25 minutes Apparatus provided for each session:</p> <ul style="list-style-type: none"> - Maze playground (reusable) - Laminated visual codes <p>Procedures:</p> <ol style="list-style-type: none"> 1. The maze playground is set up on a 10*10 checker grid, with cardboard boxes as boundaries and obstacles, participants are briefed of the game. (< 1 minute) 2. A participant is required to stand in the starting grid. His/her teammate(s) are required to lay down visual codes on the grid. 3. The participant in the grid will start walking in a straight line and then react according to the visual codes upon reaching the designated grid. 4. The objective is to complete the maze with limited codes. (< 4 minute per round) 5. All participants get their turns to run the maze until all has tried.

KLESF: The Fair 2019, 1 - 3 November 2019, MIECC
 Registration Form

Time frame:	Coding with Ozobot: 15 minutes, 5 minutes re-setup, 30 min recharging every 3 sessions. Maze Runner: 25 minutes, 5 minutes re-setup.	
	Ozobot	Maze Runner
	9:00 ~ 9:15	9:00 ~ 9:25
	9:20 ~ 9:35	9:30 ~ 9:55
	9:40 ~ 9:55	10:00 ~ 10:25
	Recharging 30 mins	10:30 ~ 10:55
	10:30 ~ 10:45	11:00 ~ 11:25
	10:50 ~ 11:05	11:30 ~ 11:55
	11:10 ~ 11:25	12:00 ~ 12:25
	Recharging 30 mins	12:30 ~ 12:55
	12:00 ~ 12:15	Lunch 1 hour
	12:20 ~ 12:35	2:00 ~ 2:25
	12:40 ~ 12:55	2:30 ~ 2:55
	Recharging + Lunch 1 hour	3:00 ~ 3:25
	2:00 ~ 2:15	3:30 ~ 3:55
	2:20 ~ 2:35	4:00 ~ 4:25
	2:40 ~ 2:55	4:30 ~ 4:55
	Recharging 30 mins	5:00 ~ 5:25
	3:30 ~ 3:45	5:00 ~ 5:55
	3:50 ~ 4:05	
	4:10 ~ 4:25	
	Recharging 30 mins	
	5:00 ~ 5:15	
	5:20 ~ 5:35	
	5:40 ~ 5:55	

