



UST-MECHATRONICS AND ROBOTICS CIRCLE



GEAR UP. TRANSFORM. REVOLVE.

NOVEMBER, 2017

Dear Sir/Madam:

The **UST-Mechatronics and Robotics Circle (UST-MRC)** would like to invite you to be part of our **Community Development project** entitled **“iRobot – Introduction to Robotics Seminar and Workshop.”**

As we continue to promote **innovation through technology** particularly, in the **field of robotics**, **“iRobot”** is created with the goal of expanding the knowledge of **K-12 students and teachers on STEM Strand** in the field of robotics. It would aid the participants in becoming more proficient on the said career field.

The **UST-MRC** will conduct a **series of seminars and workshops** on basic robotics consisting of **15 student-teacher participants**. After the community development project, the participants will be given the opportunity to further improve their skills as the **Gizduino kits** will be **donated** on our partner community.

In order to achieve our goals, we would like to ask for your assistance in providing **15 Gizduino Starter Kits** that will be bought through **e-GIZMO** with the price of Php 1,299.00 each.

We would like to thank you in advance for your generosity. Please don't hesitate to contact us directly at **09175347709** or **noelcorales13@gmail.com** in order to expound more on the project to you.

We are looking forward to collaborate with you in creating a successful Community Development project.

Yours in true Thomasian Leadership,

Noel Christian A. Corales
Vice President for Community Development,
UST-MRC

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ASST. PROF. ARMANDO BARRETO

Noted by:

Shannen Andrea C. Pecho
President, UST-MRC

Engr. Kanny Krizzy D. Serrano, M.Sc. ECE
Adviser, UST-MRC



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Gold/Co-Presenter (Products/Cash Amounting to Php 5,000)	Silver (Products/Cash Amounting to Php3,000)	Bronze (Products/Cash Amounting to Php1,000)
Printed Collaterals		
Top billing of company/individual's name and logo/name on all publicity materials for all events	Billing of company/individual's logo/name on all publicity materials for all events	Billing of company/individual's logo/name on all publicity materials for all events
On-site Exposure		
Company flyers to be given in the event (if any)	Company flyers to be given in the event (if any)	
Acknowledgment of at least 5 times as co-presenter during the event	Acknowledgement of at least 3 times as major sponsor in the event	Acknowledgement of at least 2 times as minor sponsor in the event
Media Exposure		
Max. of 2 mins. audio-visual presentation to be shown during break (if there is an available company avp)		
Social Media Exposure		
Company/Individual's name to be included in all social media publicity related on the event	Company/Individual's name to be included in all social media publicity related on the event	Company/Individual's name to be included in all social media publicity related on the event



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Project Proposal

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I. Project Title

“iRobot – Introduction to Robotics”

II. Project Proponent

The University of Santo Tomas - Mechatronics and Robotics Circle (UST-MRC) will be the project proponent of iRobot.

III. Project Rationale**

Consistent with its drive to help the partner community with their needs, the volunteers will be able to understand the impact of engineering solutions. They will be motivated to apply specialized knowledge and provide solutions to the actual problem of the community.

(Student outcomes D1, D2, P1, K2, K3, K5, P2, P3, P4, P5, T2)

IV. Project Objectives

General Objective:

The UST-MRC aims to train SHS students in the field of basic programming and robotics with the goal of expanding their knowledge on their chosen strand. This training would be beneficial to the students in terms of their future lessons and future careers. The scope of this series of trainings would be the use of a programming language applied through robotics.

Specific Objectives:

- To train them in the use of basic programming techniques in robotics
- To familiarize them in using different equipment associated with robotics
- To be able to apply their basic knowledge in doing their own robotic application

V. Project Description

iRobot is a community development project of the University of Santo Tomas – Mechatronics and Robotics Circle that aims to introduce basic programming to Senior High School students (STEM strand) and Senior High School Teachers, leading then to



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have a thorough exposure in the field of electronics and robotics. The said training would help Senior High School students to become more adept in the field of robotics essential on their career path and aid Senior High School teachers into creating more possible courses for the students to take.

VI. Project Duration

The project will be held January 5,6 and 7 2018, March 4 and 11 2018, and April 15 2018 from 8:00 AM to 2:00 PM at Kaunlaran High School.

Date: DAY 1 (January 5, 2018) Venue: Kaunlaran High School

Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-9:30 NN	Installation of necessary programming softwares, Assembly of Participants, Introduction (brief description and expectations from the project) and Distribution of Kits	MRC volunteers/ MRC staff, Executive Board, and Executive Associates
9:30 AM-10:00 AM	Lecture on Basic Programing (Part 1)	Executive Board, and Executive Associates
10:30 AM- 11:00 AM	Snacks	MRC Volunteers
11:00 AM- 12:00 NN	Lecture on Basic Programing (Part 1 -continuation)	Angelo Samson Javier
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers
1:00 PM – 2:00 PM	Lecture on Basic Programing (Part 2)	Angelo Samson Javier
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver



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Date: DAY 2 (January 6, 2018) Venue: Kaunlaran High School

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Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-10:00 AM	Lecture on Basic Programming (Part 3)	Angelo Samson Javier
10:00 AM-10:30 AM	Snacks	MRC volunteers
10:30 AM- 11:00 AM	Activity on Basic Programming	Faculty Volunteer, MRC volunteers/ MRC staff, Executive Board, and Executive Associates
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers
1:00 PM – 2:00 PM	Robotic Workshop (Part 1)	Angelo Samson Javier
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver

Date: DAY 3 (January 7, 2018) Venue: Kaunlaran High School

Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-10:00 AM	Robotic Workshop (Part 2)	Angelo Samson Javier
10:00 AM-10:30 AM	Snacks	MRC volunteers
10:30 AM- 11:00 AM	Activity on Robotics	Faculty Volunteer, MRC volunteers/ MRC staff, Executive Board, and Executive Associates
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers



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1:00 PM – 2:00 PM	Robotic Workshop (Part 3)	Angelo Samson Javier
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver

Date: DAY 4 (March 4, 2018) Venue: Kaunlaran High School

Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-10:00 AM	Activity on Robotics	Engr. Kanny Krizzy Serrano
10:00 AM-10:30 AM	Snacks	MRC volunteers
10:30 AM- 11:00 AM	Activity on Robotics	Faculty Volunteer, MRC volunteers/ MRC staff, Executive Board, and Executive Associates
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers
1:00 PM – 2:00 PM	Robotic Workshop (Part 3)	Engr. Kanny Krizzy Serrano
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver

Date: DAY 5 (March 11, 2018) Venue: Kaunlaran High School

Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-10:00 AM	Activity on Robotics	Engr. Kanny Krizzy Serrano



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10:00 AM-10:30 AM	Snacks	MRC volunteers
10:30 AM- 11:00 AM	Activity on Robotics	Faculty Volunteer, MRC volunteers/ MRC staff, Executive Board, and Executive Associates
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers
1:00 PM – 2:00 PM	Robotics Activity	Engr. Kanny Krizzy Serrano
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver

Date: DAY 6 (April 15, 2018) Venue: Kaunlaran High School

Time	Activity Description	Person/Group Responsible
6:30 AM-7:00 AM	Assembly and Departure from UST of the volunteers from MRC.	MRC staff, Executive Board, and Executive Associates
7:00 AM-8:00 AM	Travel from UST to Kaunlaran High School	UST Driver
8:00 AM-8:15AM	Arrival at Kaunlaran High School	UST Driver / MRC volunteers, Executive Board, and Executive Associates
8:15 AM-10:00 AM	Robotics Application Activity	Engr. Kanny Krizzy Serrano
10:00 AM-10:30 AM	Snacks	MRC volunteers
10:30 AM- 11:00 AM	Robotics Application Activity	Faculty Volunteer, MRC volunteers/ MRC staff, Executive Board, and Executive Associates
12:00 NN-1:00 PM	Lunch Break	MRC Volunteers
1:00 PM – 2:00 PM	Robotics Application Presentation	Partner Community
2:00 PM – 3:00 PM	Travel from Kaunlaran High School to UST	UST Driver

VII. Target Beneficiaries

The teachers of the Kaunlaran High School together with the students are expected to benefit from this project.

IX. Monitoring and Evaluation



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There are two points whether this community developmental project was a success: First point is that the students must be able to write their own code and download it to a robotic equipment. Second is that the students would be able to apply it through different scenarios and real life applications. If these points were to be achieved, then the community developmental project was fruitful for the students/participants involved. After the said project, the UST-MRC will give the Gizduino kits to the partner community, in order for them to continuously learn and be more proficient in the construction of robots independently.

The activity will be monitored by the UST-MRC Community Development Team and Executive Board together with the Organization Adviser to ensure the event program execution. Evaluation forms will be distributed to the participants after the activity.

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