



TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES TAGUIG CAMPUS

Km. 14 East Service Road, Western Bicutan, Taguig City 1630

Phone # 823-2457 TeleFax # 823-2456/57

<http://www.tupt.edu.ph>

LABORATORY PROJECT IN ROBOTICS

Requirements in the Laboratory Project:

*Design a circuit of the prototype using TinkerCAD simulator.

*Create a program using any programming language that can run in the TinkerCAD simulator.

*Submit a Weekly Accomplishment Report in Laboratory Week Tab from week 10 to week 13.

*Submit a documentation paper with this content:

Cover Page

Title Page (APA Format, include all your names here)

I. Introduction

II. Objective (of the prototype)

III. Materials, Equipment, and Software

IV. Screenshot of:

- the designed circuit of the prototype
- the program

V. Program Results (if possible, in the serial monitor)

VI. Discussion

VII. Conclusion

*Produce and present a Video showing your program is working properly and simulating the circuit of the prototype.

Upon Submission, upload the following:

Program Files (if multiple files, compress in one zip or rar file)

Documentation (in docx and pdf)

Video/s

* Directly uploading to the **Week 14 of Laboratory Tab** and compressing in one zip or rar file is allowed. (Use your group name as the zip or rar filename)

* Uploading files separately in the **Week 14 of Laboratory Tab** is allowed if instructed by your instructor.

You can apply all the listed topics in Robotics below:

- Actuators and Drivers
- DC Motor Encoder
- Vibration Motor
- Control Components
- IR Remote
- Keypad
- Ultrasonic Distance Sensor
- Kinematics

For the Groupings: This is instructed by your instructor.