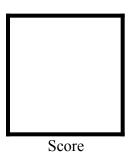


PAMANTASAN NG LUNGSOD NG MAYNILA

(University of the City of Manila) Intramuros, Manila

Microprocessor Lab

Laboratory Activity No. 1 **Familiarization with TinkerCAD**



Submitted by:

Sumang, John Angelo C. Saturday 1:00pm-4:00pm/ BSCpE 0412.1-2

Date Submitted **16-09-2023**

Submitted to:

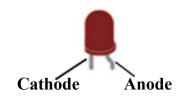
Engr. Maria Rizette H. Sayo

1. Exercise

- a. A process in Tinkercad where we can develop electronic circuits that can be quickly updated, modified and tested is called **prototyping process**.
- b. In Tinkercad, **the Start/Stop Simulation** tests the working of the circuits and the components.
- c. The device used to assemble and connect the various components is known as **Breadboard**.
- d. In an electronic circuit with LED, the positive end of the circuit should be connected to **Anode** and negative end should be connected to **Cathode** of the LED.
- e. A **Resistor** is used to restrict the flow of current to electrical components

2. Label the following:

a. Anode and Cathode in a LED



b. Different parts of breadboard

Ground Bus

DIP Support

Terminal Strips

Power Bus

- c. List the electronic components used in a circuit assembly
- Resistor
- LED
- Pushbutton
- Potentiometer
- Capacitor
- Slideswitch
- 9V Battery
- Coin cell 3V Battery
- 1.5V Battery
- Breadboard Small
- Micro:bit
- Arduino Uno R3
- Vibration Motor

- DC Motor
- Hobby Gearmotor
- Micro Servo
- NPN Transistor
- LED RGB
- Diode
- Photoresistor
- Soil Moisture Sensor
- Ultrasonic Distance Sensor
- PIR Sensor
- Piezo
- Temperature Sensor (TMP36)
- Multimeter

Ground Bus