



**MAPUA UNIVESRSITY**  
SCHOOL OF ELECTRICAL, ELECTRONICS,  
AND COMPUTER ENGINEERING



# **ELECTRONICS DESIGN PROGRESS REPORT 1**

ECE120/E02/1Q2021

**SUBMITTED BY:**  
APOLONI, JUDE MICHAEL  
ROSEUS, ALDOUS VERNON

SEPTEMBER 05, 2021

Engr. Glenn V. Magwili  
ADVISER

9/4/2021

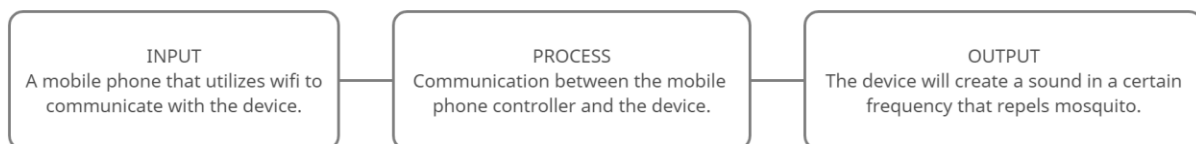
## Week 3 Progress Report:

### The group have

#### Initial design

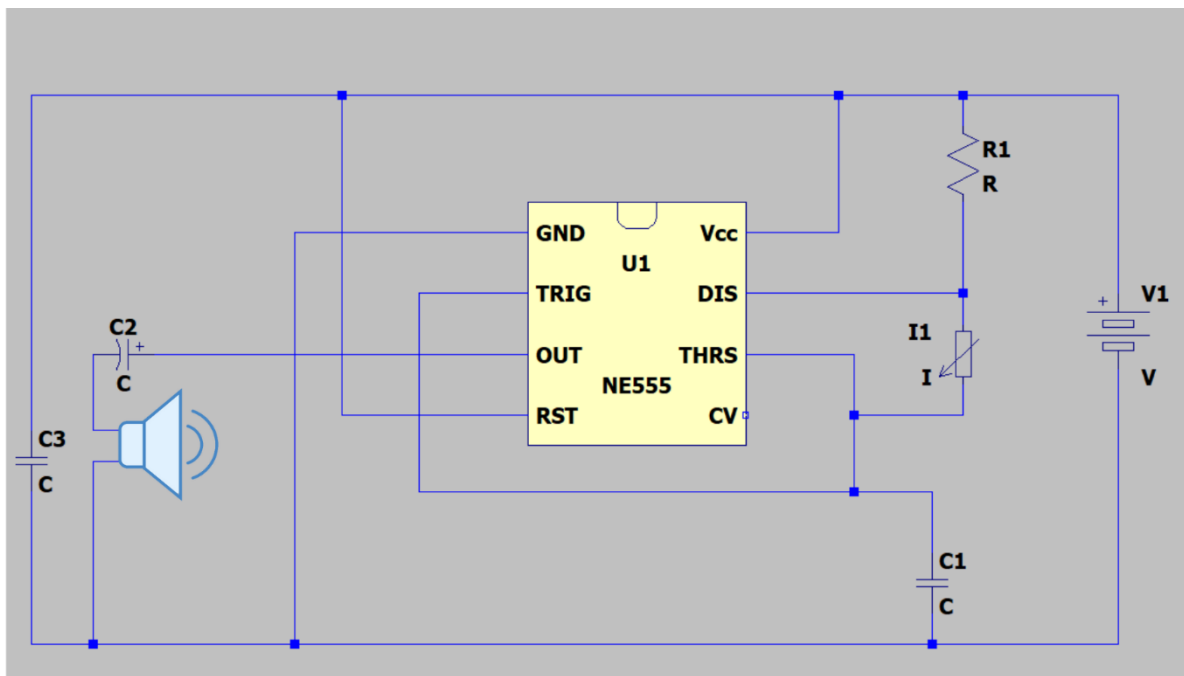
The group has conceptualized the topic assigned to them and consulted their adviser with regards to their idea. The adviser presented some instructions and suggestions for the project and instructed them to create a Gantt Chart which shows the amount of work to be done in a certain period of time. The group also created the initial design which is composed of the block diagram, schematic diagram and the prototype visualization. Further information about the initial design is presented below.

#### Block diagram



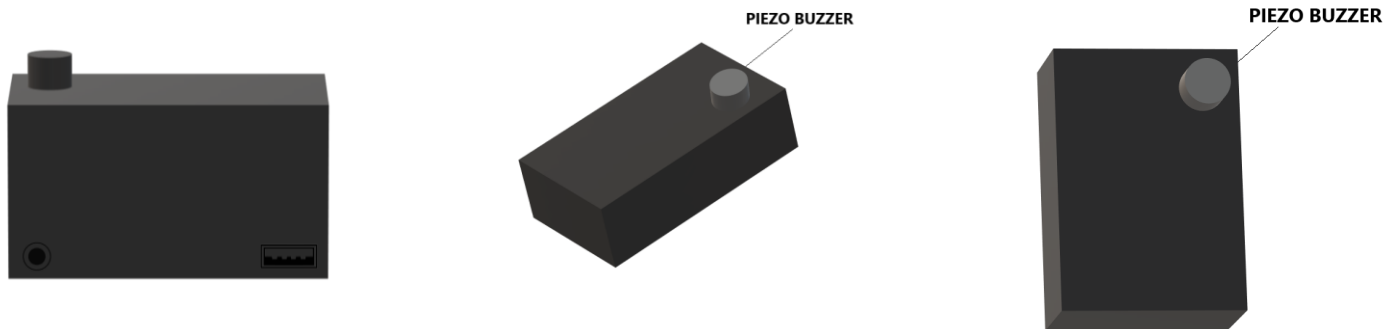
The figure above is the block diagram for our assigned topic in this course. We used the IPO model approach in systems analysis and software engineering for describing the structure of an information processing program or other process.

#### Schematic diagram



The Schematic Diagram above is only for the PCB circuit we will be using different components like IC 555, resistors, capacitors, wires, and buzzer. This circuit doesn't include the circuit diagram for the Wi-Fi module and Arduino. For future reference, the construction of the circuit may be subject to change.

### **Prototype visualization**



The figures above show the prototype visualization of our prototype in different views. It consists of a box enclosure, the Piezo Buzzer buzzer which is a simple device that produces basic beeps and tones and two ports for USB and Power Supply.

### **Component Listing**

- Arduino UNO
- Module ESP8266
- Piezo Buzzer
- Jumper Wires
- ESP8266
- PCB
- 3.3V Power Supply
- Breadboard
- Case

## GANTT CHART

| Wifi Controlled Mosquito Repeller                               |        |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 | WEEK 9 |
| 1. INITIAL DESIGN   |        |        |        |        |        |        |        |        |        |
| 2. COMPONENT LISTING  |        |        |        |        |        |        |        |        |        |
| 3. CODE DEVELOPMENT<br>(Progress Report 1)                      |        |        |        |        |        |        |        |        |        |
| 4. INPUT/OUTPUT CALIBRATION                                     |        |        |        |        |        |        |        |        |        |
| 5. TESTING (CONTROLLED AND UNCONTROLLED)<br>(Progress Report 2) |        |        |        |        |        |        |        |        |        |
| 6. DOCUMENTATION  |        |        |        |        |        |        |        |        |        |
| 7. VIDEO DEMONSTRATION<br>(*Progress Report 3)                  |        |        |        |        |        |        |        |        |        |
| 8. DOCUMENTATION<br>(*Final Progress Report)                    |        |        |        |        |        |        |        |        |        |

Approved by:

Engr. Glenn V. Magwili  
Adviser