UNIVERSTY OF RWANDA

COLLEGE OF SCIENCE AND TECHNOLOGY



African Centre of Excellence in Internet of Things (ACEIoT)

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Master’s Program in WISNet

**Thesis title: IOT BASED GATE TO PUBLIC PLACE FOR EASY PEOPLE TRUCKING AND LIMIT THE SPREAD OF COVID-19**

**Prepared by: Supervised by:**

MIREMBE Jean d’Amour Dr. Enan NYESHEJA

Registration Number: 220014205 Dr. MASABO Emmanuel

Done at Kigali, 9th August, 2021

**Detailed budget of list of equipment needed for the project implementation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S/No** | **Item** | **Unit** | **Quantity** | **Unity price (USD)** | **Total Price (USD)** | **Source of prices (references)** |
| 1 | GY-906 MLX90614ESF Infrared Temperature Sensor Module | pcs | 1 | 20 | 20 | Faranux |
| 2 | Infrared IR Proximity Sensor Module | pcs | 1 | 25 | 25 | Faranux |
| 3 | HC-SR04 Ultrasonic Module Distance Measuring Sensor | pcs | 1 | 20 | 20 | Faranux |
| 4 | Micro Load Cell (0-100g) - CZL639HD sensor | pcs | 1 | 20 | 20 | Faranux |
| 5 | Mifare 13.56Mhz RC522 RFID Card Reader Module | pcs | 1 | 20 | 20 | Faranux |
| 6 | RFID Cards | pcs | 3 | 2 | 6 | Faranux |
| 7 | Servo motor | pcs | 2 | 10 | 20 | Faranux |
| 8 | LCD display , LCD 20\*4, Operating voltage 5V, 5\*8 dots, consumption/Segment: 30 mA Common Anode or Cathode, big size | pcs | 1 | 15 | 15 | Faranux |
| 9 | GSM SIM900 Module BRD411, | pcs | 1 | 30 | 30 | Amazing Hardware |
| 10 | Buzzer, input voltage range: 5VDC- 12VDC white color | pcs | 1 | 2 | 2 | Faranux |
| 11 | Bread board | pcs | 1 | 7 | 7 | Faranux |
| 12 | Rasberrypi and its accessories: Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz | pcs | 1 | 50 | 50 | Faranux |
| 13 | Jumper wires, male and male | pcs | 100 | 0.10 | 10 | Faranux |
| 14 | 9V Battery Holder with ON/OFF Switch COM41 | pcs | 1 | 5 | 5 | Alibaba |
| 15 | 9V battery chager (capable to charger 9V Rechargeable Battery-450mah SUP43) | pcs | 1 | 25 | 25 | Alibaba |
| 16 | 9V Rechargeable Battery-450mah SUP43. | pcs | 1 | 15 | 15 | Amazing Hardware |
| 17 | Transportation | N/A | N/A | N/A | 50 | N/A |
| 18 | Publication of the thesis |  |  |  | 200 | N/A |
|  | | **TOTAL: 540 US Dollars** | | | | |

**Prepared by: Approved by:**

**MIREMBE Jean d’Amour** MAIN SUPERVISOR: Dr. Enan NYESHEJA

Registration Number: 220014205 DATE:

SIGNATURE :

**** CO-SUPERVISOR: Dr. MASABO Emmanuel

DATE: 11/8/2021

SIGNATURE : 