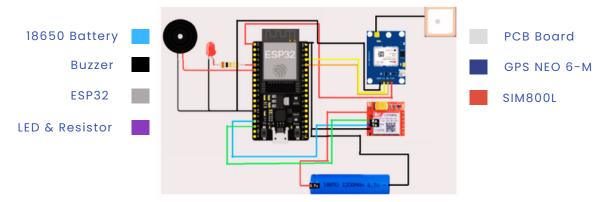
Digilab : Praktikum IoT

Final Project

TRACKGUARD: USER GUIDE



I. Key Definition

ESP32 : As the main brain of the system
LED : Giving signal to ESP32 (Connected)

Buzzer : Giving auditory signal to ESP32 (Connected)
Resistor : Limit electrical current and prevent damages
SIM800L Module : Connecting & enabling ESP32 via a SIM card
GPS NEO 6-M : ESP32 as monitor and read-real-time data

Battery : Providing power

PCB : Arranging & connecting between devices

II. Components

ESP32 : Main system, Connect to 18650 Battery
LED : Connect to Resistor towards PIN34
Buzzer : Connect the Buzzer to PIN35 & GND

SIM800L Module : Connect to ESP32 GND

GPS NEO 6-M : Connect the RX/TX to ESP32 PIN20&18

Battery : Connect the battery to SIM800L VCC Pin

III. Setup Instruction

- 1.Insert the SIM card into the designated slot.
- 2.Insert battery to the designated slot
- 3. Wait for the LED indicator to show a stable connection.
- 4.Include your Access Token on Thingsboard
- 5. All Done!

IV. Operation Guide

- 1. TrackGuard will start monitoring and transmitting location data.
- 2. Monitor real-time data through the ThingsBoard platform.

V. Caution and Safety

- 1.Keep TrackGuard away from water and extreme temperatures
- 2.Respect privacy laws and obtain consent when monitoring individuals.
- 3.Use TrackGuard responsibly, and adhere to local regulations regarding tracking devices.

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