GEO TRACER

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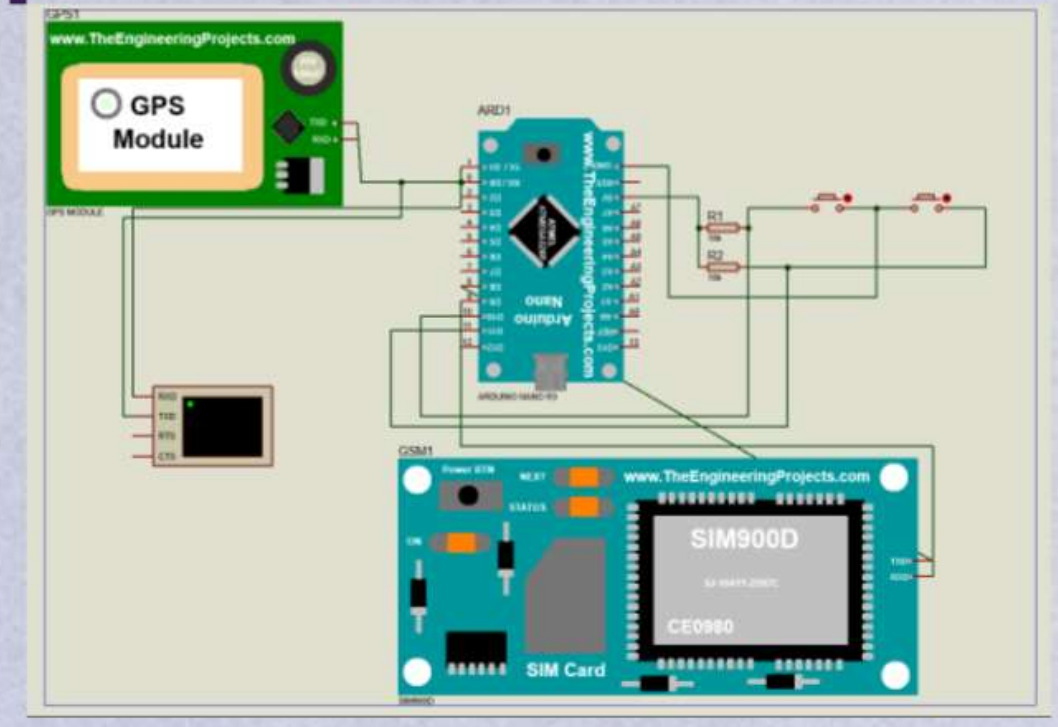
Geo Tracer

1-Initial Design
2-Challenges faced
3-Hardware Interconnections
4-Software & codes

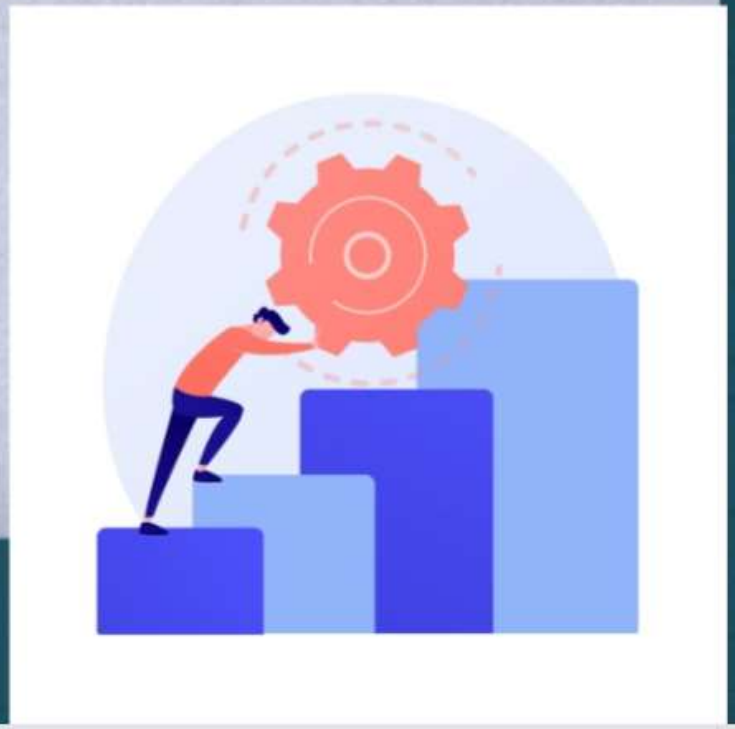
Initial Design

- Sim Module
- GPS tracker
- Arduino NANO
- Battery
- Buzzer
- LCD display



CHALLENGES FACED

- No availability of Hardware components.
- Sim Module was not PTA approved.
- LORA WAN frequency problems.
- Arduino NANO to Node MCU
- User interface connectivity problems.
- Data reading and writing issues.



Hardware Interconnections

- Battery -->inputs step-down converter(regulate voltage)
- Battery-->switch
- Outputs of step down converter-->power of NodeMCU & GPS Module
- Ground of GPS Module-->negative output of step down converter
- Rx-TX of GPS Module-->D2 & D1
- ThingSpeak & JAVA Script

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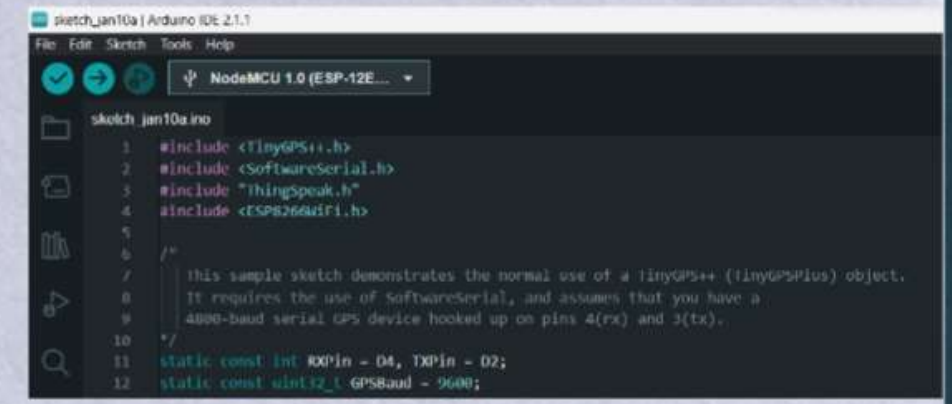
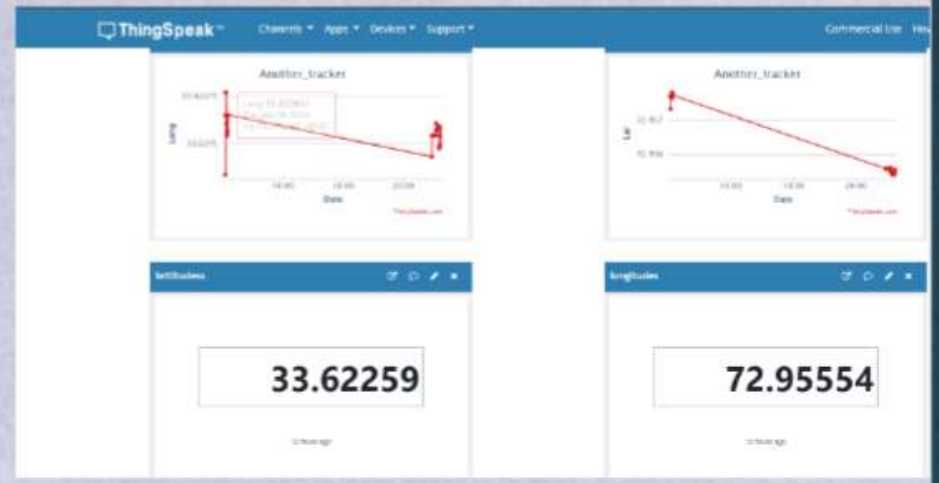
SOFTWARE

- Arduino IDE with following Libraries:
  - Tiny GPS++
  - ThingSpeak Header
  - ESP8266WiFi.h
- ThingSpeak IoT Cloud
- Visual Studio Code for Web





Hanging Around At Visitor Center? Well, WE Have Eye On You :)

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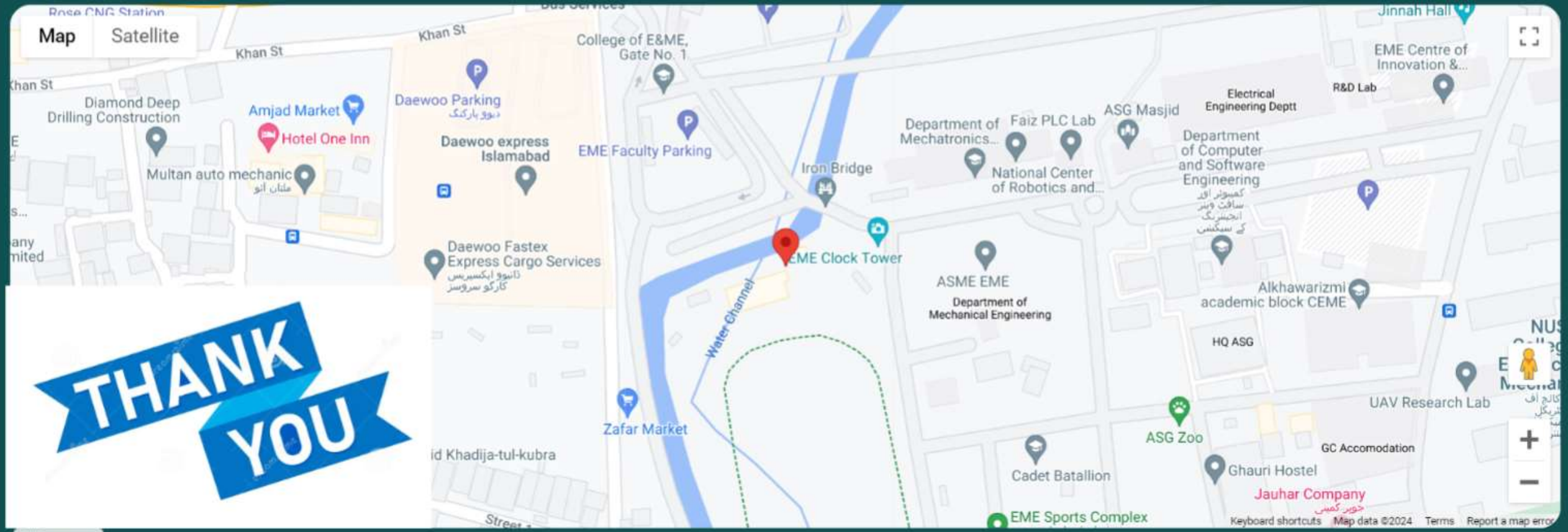

Prezi