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**Summary**


This week, the introduction part and related work part of the paper are written. The methodology is Structuralizated. The back-end team developed API. The front-end team fixed the map API. Network team finding ESP32 device code to register the device in senet.


**What IIEEE completed this week:**

- Kubernetes team
  - Solving some issues in a distributed load testing cluster.
    - issues about connecting with servers.
- Back-end team
  - Developing API
    - Front-end request API to respond top 1 sensor.
- Front-end team
  - Testing Mapbox in http server.
    - Containerizing test file by Docker and push docker hub.
    - Confirming it worked well in http.
  - Changing Map API from Google to Mapbox.
    - Adding Markers and Popup in map.
    - Connecting to backend API with zip code which is selected by a user.
- Network team
  - Finding ESP32 Device EUI number.
  - Trying to register ESP32 Device in senet.
- Paper
  - The drafts of the introduction and methodology have been written.

**Things to do by next week**

- Front-end team
  - Connecting Graph API
- Network team
  - Figuring out how to get device EUI / app EUI / app key EUI to register the device in the Senet portal [2].
  - Modifying the code to send data using LoRa properly.

**Problems or challenges:**

- Front-end team
    - Struggling to set state in Map Component
        - As React setState function is asynchronous, it is hard to update immediately.
        - The draft of the methodology will be written in English.
            - The draft of the methodology will be written in English.

**References**

[1] “Maps and location for developers.” mapbox. https://www.mapbox.com/ (accessed July. 18, 2022).

[2] “ESP32 + LoRa” Preparation & Config Parameters.” Heltec Automation Docs. https://heltec-automation-docs.readthedocs.io/en/latest/esp32/lorawan/config_parameter.html#configure-parameters (accessed July. 19, 2022).