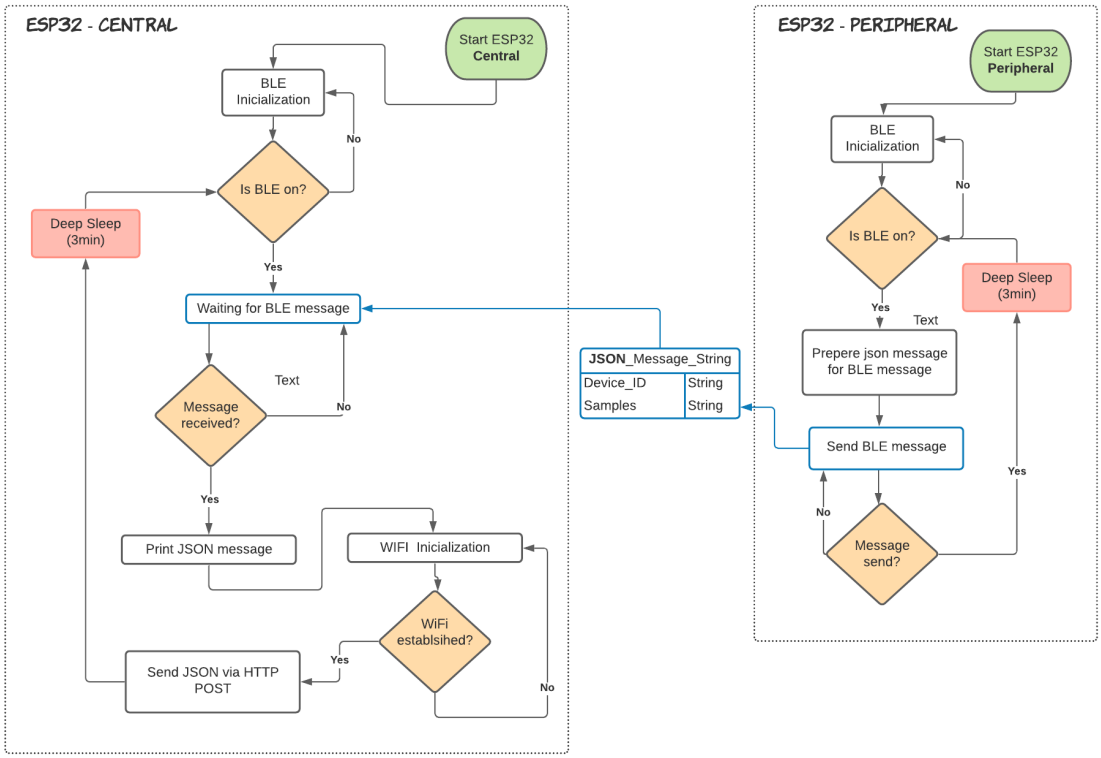
18.08.2021, Lodz

BLE on EPS32 project for Sebastian Górecki



- Operating devices principle: ***Peripheral ESP32 send data to cloud via BLE and ESP32 Central***
- Communication between two ESP32: Bluetooth Low Energy (**BLE**)
- Communication to cloud: WiFi – HTTP / MQTT
- **Code made in C**, based on **ESP-IDF**
- BLE and WiFi handling code made in separate files .c and .h *(preferred: functions run by task in main.c – need knowledge in FreeRTOS)*
- Example of string:

  {"samples": "-2137.00,0.00,23.77,49.67,10.00,0.00,0.00,20.00",
  "securityCode": "F88CE0F8-BD9A-41EB-B88F-FFA08FAE22DE",
  "location": "0,0",
  "deviceId": "1270FEF2-08D5-49E8-8B2B-42E1B4F22188"}.

  Description: samples is data with sensors read, location is location of devices, rest to measurement authorisation (data will be provided from my devices, you can use this data to test).

For discussion: *How to make authorisation via BLE - only our ESP should have ability to connect ESP32 Central. Which protocol do you prefer: MQTT or HTTP?*