

Parking Software Flow:

Project work:

1. Built lorawan module require for parking project
2. Sensor values
3. Parking algorithm

Steps:

1. Firstly added all required libraries i.e. qmc5883l,lorawan, mbed.h, loraevents to project.
2. Set buffer to hold parking info packets, some operators for parking logic, interrupt for selecting threshold values and magnetometer sensor I2C protocol implementation.
3. Function calls for eventqueue,eventhandler.
4. In main() function loop initialize magnetometer and read chip id to see reliable communication with lora module.
5. Initialize the lora stack and event handler, and send a connection request to the server from the module. And initialize queue to start operating our parking goals
6. Once connection has been made access goes to the event handler, event handle request send message command to module.
7. Now we have to prepare a message to send over the network server.
 - a. Prepare sensor data (XYZ values)
 - b. Write parking algorithm based on threshold values
 - c. Write all info in buffer
 - d. Send buffer data over network server
8. Once message sent control will go to event handler to handle next event i.e repeat all steps again
9. Meanwhile if any downlink data received take action and repeat all steps