

## Sprint-2

Date	18.11.2022
TeamID	PNT2022TMID50079
ProjectName	IOT Based safety gadget for child safety monitoring and notification

### Diagram.json:

```
{
  "version": 1,
  "author": "Uri Shaked",
  "editor": "wokwi",
  "parts": [
    { "type": "wokwi-arduino-mega", "id": "mega", "top": -1.43, "left": -48.12,
    "attrs": {} },
    { "type": "chip-gps-fake", "id": "chip1", "top": -75.78, "left": 196.8,
    "attrs": {} }
  ],
  "connections": [
    [ "chip1:GND", "mega:GND.2", "black", [ "v0", "h49.81", "v259.2", "h-124.8" ] ],
    [ "chip1:VCC", "mega:5V", "red", [ "h59.41", "v278.4", "h-134.4" ] ],
    [ "mega:19", "chip1:TX", "yellow", [ "v-45.97", "h-78.38", "v-19.2" ] ],
    [ "mega:18", "chip1:RX", "orange", [ "v-36.37", "h-77.98", "v-38.4" ] ]
  ]
}
```

### GPS-FAKECHIP.H:

```
#include<stdio.h>
#include<stdlib.h>

#include"wokwi-api.h"

DEFINE_PIN(RX);
DEFINE_PIN(TX);
DEFINE_PIN(VCC);
DEFINE_PIN(GND);

#define LEN(arr) ((int)(sizeof(arr) / sizeof(arr)[0]))
#define SECOND 1000000/* micros */
```

```

const char gps_tx_data[][80] = { // GPRMC & GPGGA (Hypothetical Data)
"$GPGGA,172914.049,2327.985,S,05150.410,W,1,12,1.0,0.0,M,0.0,M,,*60\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172914.049,A,2327.985,S,05150.410,W,009.7,025.9,060622,000.0,W*74\r\n",
"$GPGGA,172915.049,2327.982,S,05150.409,W,1,12,1.0,0.0,M,0.0,M,,*6E\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172915.049,A,2327.982,S,05150.409,W,009.7,025.9,060622,000.0,W*7A\r\n",
"$GPGGA,172916.049,2327.980,S,05150.408,W,1,12,1.0,0.0,M,0.0,M,,*6E\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172916.049,A,2327.980,S,05150.408,W,009.7,025.9,060622,000.0,W*7A\r\n",
"$GPGGA,172917.049,2327.977,S,05150.406,W,1,12,1.0,0.0,M,0.0,M,,*69\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172917.049,A,2327.977,S,05150.406,W,009.7,025.9,060622,000.0,W*7D\r\n",
"$GPGGA,172918.049,2327.975,S,05150.405,W,1,12,1.0,0.0,M,0.0,M,,*67\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172918.049,A,2327.975,S,05150.405,W,009.7,025.9,060622,000.0,W*73\r\n",
"$GPGGA,172919.049,2327.973,S,05150.404,W,1,12,1.0,0.0,M,0.0,M,,*61\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172919.049,A,2327.973,S,05150.404,W,009.7,025.9,060622,000.0,W*75\r\n",
"$GPGGA,172920.049,2327.970,S,05150.403,W,1,12,1.0,0.0,M,0.0,M,,*6F\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172920.049,A,2327.970,S,05150.403,W,009.7,025.9,060622,000.0,W*7B\r\n",
"$GPGGA,172921.049,2327.968,S,05150.402,W,1,12,1.0,0.0,M,0.0,M,,*66\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172921.049,A,2327.968,S,05150.402,W,009.7,025.9,060622,000.0,W*72\r\n",
"$GPGGA,172922.049,2327.965,S,05150.401,W,1,12,1.0,0.0,M,0.0,M,,*6B\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172922.049,A,2327.965,S,05150.401,W,009.7,025.9,060622,000.0,W*7F\r\n",
"$GPGGA,172923.049,2327.963,S,05150.399,W,1,12,1.0,0.0,M,0.0,M,,*6A\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172923.049,A,2327.963,S,05150.399,W,009.7,025.9,060622,000.0,W*7E\r\n",
"$GPGGA,172924.049,2327.960,S,05150.398,W,1,12,1.0,0.0,M,0.0,M,,*6F\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172924.049,A,2327.960,S,05150.398,W,009.7,294.1,060622,000.0,W*7B\r\n",
"$GPGGA,172925.049,2327.959,S,05150.401,W,1,12,1.0,0.0,M,0.0,M,,*63\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172925.049,A,2327.959,S,05150.401,W,009.7,294.1,060622,000.0,W*77\r\n",
"$GPGGA,172926.049,2327.958,S,05150.403,W,1,12,1.0,0.0,M,0.0,M,,*63\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172926.049,A,2327.958,S,05150.403,W,009.7,294.1,060622,000.0,W*77\r\n",
"$GPGGA,172927.049,2327.957,S,05150.406,W,1,12,1.0,0.0,M,0.0,M,,*68\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172927.049,A,2327.957,S,05150.406,W,009.7,205.5,060622,000.0,W*70\r\n",
"$GPGGA,172928.049,2327.959,S,05150.407,W,1,12,1.0,0.0,M,0.0,M,,*68\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",

```

```

"$GPRMC,172928.049,A,2327.959,S,05150.407,W,009.7,205.5,060622,000.0,W*70\r\n",
"$GPGGA,172929.049,2327.962,S,05150.408,W,1,12,1.0,0.0,M,0.0,M,,*6E\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172929.049,A,2327.962,S,05150.408,W,009.7,205.5,060622,000.0,W*76\r\n",
"$GPGGA,172930.049,2327.964,S,05150.410,W,1,12,1.0,0.0,M,0.0,M,,*69\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172930.049,A,2327.964,S,05150.410,W,009.7,205.5,060622,000.0,W*71\r\n",
"$GPGGA,172931.049,2327.967,S,05150.411,W,1,12,1.0,0.0,M,0.0,M,,*6A\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172931.049,A,2327.967,S,05150.411,W,009.7,205.5,060622,000.0,W*72\r\n",
"$GPGGA,172932.049,2327.969,S,05150.412,W,1,12,1.0,0.0,M,0.0,M,,*64\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172932.049,A,2327.969,S,05150.412,W,009.7,205.5,060622,000.0,W*7C\r\n",
"$GPGGA,172933.049,2327.971,S,05150.413,W,1,12,1.0,0.0,M,0.0,M,,*6D\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172933.049,A,2327.971,S,05150.413,W,009.7,205.5,060622,000.0,W*75\r\n",
"$GPGGA,172934.049,2327.974,S,05150.414,W,1,12,1.0,0.0,M,0.0,M,,*68\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172934.049,A,2327.974,S,05150.414,W,009.7,205.5,060622,000.0,W*70\r\n",
"$GPGGA,172935.049,2327.976,S,05150.415,W,1,12,1.0,0.0,M,0.0,M,,*6A\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172935.049,A,2327.976,S,05150.415,W,009.7,205.5,060622,000.0,W*72\r\n",
"$GPGGA,172936.049,2327.979,S,05150.417,W,1,12,1.0,0.0,M,0.0,M,,*64\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172936.049,A,2327.979,S,05150.417,W,009.7,205.5,060622,000.0,W*7C\r\n",
"$GPGGA,172937.049,2327.981,S,05150.418,W,1,12,1.0,0.0,M,0.0,M,,*6D\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172937.049,A,2327.981,S,05150.418,W,009.7,117.1,060622,000.0,W*71\r\n",
"$GPGGA,172938.049,2327.983,S,05150.415,W,1,12,1.0,0.0,M,0.0,M,,*6D\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172938.049,A,2327.983,S,05150.415,W,009.7,117.1,060622,000.0,W*71\r\n",
"$GPGGA,172939.049,2327.984,S,05150.413,W,1,12,1.0,0.0,M,0.0,M,,*6D\r\n",
"$GPGSA,A,3,01,02,03,04,05,06,07,08,09,10,11,12,1.0,1.0,1.0*30\r\n",
"$GPRMC,172939.049,A,2327.984,S,05150.413,W,009.7,117.1,060622,000.0,W*71\r\n",
};

```

```

typedef struct {
    uart_dev_t uart0;
    uint32_t gps_tx_index;
    uint32_t tx_timer;
} chip_state_t;

```

```

static void on_uart_rx_data(void *ctx, uint8_t byte);
static void on_uart_write_done(void *ctx);

```

```

voidEXPORT(chip_timer_event)(chip_state_t *chip, uint32_t timer_id) {
    if (timer_id == chip->tx_timer) {
        constchar *message = gps_tx_data[chip->gps_tx_index++];
        uart_write(chip->uart0, message, strlen(message));
        if (chip->gps_tx_index>= LEN(gps_tx_data)) {
            chip->gps_tx_index = 0;
        }
    }
}

```

```

void* chip_init(void) {
    setvbuf(stdout, NULL, _IOLBF, 1024);

    chip_state_t *chip = malloc(sizeof(chip_state_t));
    chip->gps_tx_index = 0;

    chip->tx_timer = timer_init();
    timer_start(chip->tx_timer, SECOND, true);

    constuart_config_tuart_config = {
        .tx = pin_init("TX", INPUT_PULLUP),
        .rx = pin_init("RX", INPUT),
        .baud_rate = 4800,
    };

    chip->uart0 = uart_init(chip, &uart_config);
    return chip;
}

```

GPS FAKE CHIP.JSON:

```

{
    "name": "GPS Fake",
    "author": "Anderson Costa",
    "pins": [
        "RX",
        "TX",
        "GND",
        "VCC"
    ]
}

```

NMEA.H:

```

#ifdefNMEA_h
#defineNMEA_h

```

```

#include"Arduino.h"
#define GPRMC      1
#define MTR        1.0
#define KM          0.001
#define MI          0.00062137112
#define NM          0.00053995680
#define PARSEC      0.000000000000
#define MPS          0.51444444
#define KMPH         1.852
#define KTS          1.0
#define LIGHTSPEED  0.000000001716
class NMEA
{
public:
    NMEA(int connect);
    int decode(char c);
    float gprmc_utc();
    char gprmc_status();
    float gprmc_latitude();
    float gprmc_longitude();
    float gprmc_speed(float unit);
    float gprmc_course();
    float gprmc_distance_to(float latitude, float longitude, float unit);
    float gprmc_course_to(float latitude, float longitude);
    char* sentence();
    int terms();
    char* term(int t);
    float term_decimal(int t);
    int libversion();
private:
    int _gprmc_only;
    float _gprmc_utc;
    char _gprmc_status;
    float _gprmc_lat;
    float _gprmc_long;
    float _gprmc_speed;
    float _gprmc_angle;
    char f_sentence[100];
    char* f_term[30];
    int f_terms;
    int _terms;
    char _sentence[100];
    char* _term[30];
    int n;

```

```

    int _gprmc_tag;
    int _state;
    int _parity;
    int _nt;
    float _degs;

    float distance_between(float lat1, float long1, float lat2, float long2,
float units_per_meter);
    float initial_course(float lat1, float long1, float lat2, float long2);
    int _dehex(char a);
    float _decimal(char* s);
};
#endif

```

NMEA.CPP:

```

#include "Arduino.h"
#include "NMEA.h"

#define _GPRMC_TERM "$GPRMC,"
#define _GNRMC_TERM "$GNRMC,"
#define _LIB_VERSION 1
NMEA::NMEA(int connect)
{
    _gprmc_only = connect;
    _gprmc_utc = 0.0;
    _gprmc_status = 'V';
    _gprmc_lat = 0.0;
    _gprmc_long = 0.0;
    _gprmc_speed = 0.0;
    _gprmc_angle = 0.0;
    _terms = 0;
    n = 0;
    _state = 0;
    _parity = 0;
    _nt = 0;

    f_sentence[0] = 0;
    f_terms = 0;
    for (int t = 0; t < 30; t++) {
        _term[t] = (char*) malloc (15 * sizeof(char));
        f_term[t] = (char*) malloc (15 * sizeof(char));
        (f_term[t])[0] = 0;
    }
}

```

```

int NMEA::decode(char c) {
    if ((n >= 100) || (_terms >= 30) || (_nt >= 15)) {
        _state = 0;
    }
    if ((c == 0x0A) || (c == 0x0D)) {
        _state = 0;
    }
    if (c == '$') {
        _gprmc_tag = 0;
        _parity = 0;
        _terms = 0;
        _nt = 0;
        _sentence[0] = c;
        n = 1;
        _state = 1;
        return 0;
    }
    switch (_state) {
        case 0;
            break;
        case 1;
            if (n < 7) {
                if ((c == _GNRMC_TERM[n]) || (c == _GPRMC_TERM[n])) {
                    _gprmc_tag++;
                }
            }
            _sentence[n++] = c;
            switch (c) {
                case ',':
                    (_term[_terms++])[_nt] = 0;
                    _nt = 0;
                    _parity = _parity ^ c;
                    break;
                case '*':
                    (_term[_terms++])[_nt] = 0;
                    _nt = 0;
                    _state++;
                    break;
                default:
                    (_term[_terms])[_nt++] = c;
                    _parity = _parity ^ c;
                    break;
            }
            break;
    }
}

```

```

case2:
    _sentence[n++] = c;
    (_term[_terms]][_nt++] = c;
    _parity = _parity - (16 * _dehex(c));
    _state++;
    break;
case3:
    _sentence[n++] = c;
    _sentence[n++] = 0;
    (_term[_terms]][_nt++] = c;
    (_term[_terms+1]][_nt] = 0;
    _state = 0;
    _parity = _parity - _dehex(c);
    if (_parity == 0) {
        if ((!_gprmc_only) || (_gprmc_tag == 6)) {
            while ((--n) >= 0) {
                f_sentence[n] = _sentence[n];
            }
            for (f_terms = 0; f_terms < _terms; f_terms++) {
                _nt = 0;
                while ((_term[f_terms]][_nt]) {
                    (f_term[f_terms]][_nt] = (_term[f_terms]][_nt]);
                    _nt++;
                }
                (f_term[f_terms]][_nt] = 0;
            }

            if (_gprmc_tag == 6){
                _gprmc_utc = _decimal(_term[1]);
                _gprmc_status = (_term[2])[0];
                _gprmc_lat = _decimal(_term[3]) / 100.0;
                _degs = floor(_gprmc_lat);
                _gprmc_lat = (100.0 * (_gprmc_lat - _degs)) / 60.0;
                _gprmc_lat += _degs;
                if ((_term[4])[0] == 'S') {
                    _gprmc_lat = 0.0 - _gprmc_lat;
                }
                _gprmc_long = _decimal(_term[5]) / 100.0;
                _degs = floor(_gprmc_long);
                _gprmc_long = (100.0 * (_gprmc_long - _degs)) / 60.0;
                _gprmc_long += _deg;
                if ((_term[6])[0] == 'W') {
                    _gprmc_long = 0.0 - _gprmc_long;
                }
                _gprmc_speed = _decimal(_term[7]);
            }
        }
    }

```



```

        _gprmc_angle = _decimal(_term[8]);
    }

    return 1;
}
}
break;
default:
    _state = 0;
    break;
}
return 0;
}

floatNMEA::gprmc_utc(){
    return _gprmc_utc;
}

charNMEA::gprmc_status() {
    return _gprmc_status;
}

floatNMEA::gprmc_latitude() {
    return _gprmc_lat;
}

floatNMEA::gprmc_longitude() {
    return _gprmc_long;
}

floatNMEA::gprmc_speed(float unit) {
    return (_gprmc_speed * unit);
}

floatNMEA::gprmc_course() {
    return _gprmc_angle;
}

floatNMEA::gprmc_distance_to(float latitude, float longitude, float unit) {
    return distance_between(_gprmc_lat, _gprmc_long, latitude, longitude, unit);
}

floatNMEA::gprmc_course_to(float latitude, float longitude) {
    return initial_course(_gprmc_lat, _gprmc_long, latitude, longitude);
}

```

```

char* NMEA::sentence() {
    return f_sentence;
}

int NMEA::terms() {
    return f_terms;
}

char* NMEA::term(int t) {
    return f_term[t];
}

float NMEA::term_decimal(int t) {
    return _decimal(f_term[t]);
}

int NMEA::libversion() {
    return _LIB_VERSION;
}

float NMEA::distance_between (float lat1, float long1, float lat2, float long2,
float units_per_meter)
{
    float delta = radians(long1 - long2);
    float s_dlong = sin(delta);
    float c_dlong = cos(delta);

    lat1 = radians(lat1);
    lat2 = radians(lat2);

    float slat1 = sin(lat1);
    float clat1 = cos(lat1);
    float slat2 = sin(lat2);
    float clat2 = cos(lat2);

    delta = (clat1 * slat2) - (slat1 * clat2 * c_dlong);
    delta = sq(delta);
    delta += sq(clat2 * s_dlong);
    delta = sqrt(delta);

    float denom = (slat1 * slat2) + (clat1 * clat2 * c_dlong);

    delta = atan2(delta, denom);

    return delta * 6372795 * units_per_meter;
}

```

```

floatNMEA::_initial_course (float lat1, float long1, float lat2, float long2) {
    float dlon = radians(long2 - long1);
    lat1 = radians(lat1);
    lat2 = radians(lat2);
    float a1 = sin(dlon) * cos(lat2);
    float a2 = sin(lat1) * cos(lat2) * cos(dlon);
    a2 = cos(lat1) * sin(lat2) - a2;
    a2 = atan2(a1, a2);
    if (a2 < 0.0) {
        a2 += TWO_PI;
    }
    return degrees(a2);
}

```

```

intNMEA::_dehex(char a) {
    if (int(a) >= 65) {
        return int(a) - 55;
    }
    else {
        return int(a) - 48;
    }
}

```

```

floatNMEA::_decimal(char* s) {
    long r1 = 0;
    float rr = 0.0;
    float rb = 0.1;
    boolean dec = false;
    int i = 0;

    if ((s[i] == '-') || (s[i] == '+')) {
        i++;
    }
    while (s[i] != 0) {
        if (s[i] == '.') {
            dec = true;
        }
        else {
            if (!dec) {
                r1 = (10 * r1) + (s[i] - 48);
            }
            else {
                rr += rb * (float)(s[i] - 48);
                rb /= 10.0;
            }
        }
    }
}

```

```

    }
  }
  i++;
}
rr += (float)r1;
if (s[0] == '-') {
  rr = 0.0 - rr;
}
return rr;
}

```

GPS.CHIPS.EXAMPLE.IN:

```
#include "NMEA.h"
```

```
#define LEN(arr) ((int)(sizeof(arr) / sizeof(arr)[0]))
```

```

union {
  char bytes[4];
  float valor;
} velocidadeGPS;

```

```

float latitude;
float longitude;
NMEA gps(GPRMC);

```

```

void setup() {
  Serial.begin(9600);
  Serial1.begin(4800);
  Serial.println("Data received from GPS Fake:");
}

```

```

void loop() {
  while (Serial1.available()) {
    char serialData = Serial1.read();
    Serial.print(serialData);
    if (gps.decode(serialData)) {
      if (gps.gprmc_status() == 'A') {
        velocidadeGPS.valor = gps.gprmc_speed(KMPH);
      } else {
        velocidadeGPS.valor = 0;
      }
    }

    latitude = gps.gprmc_latitude();
    longitude = gps.gprmc_longitude();
  }
}

```

```

        Serial.println();
        Serial.println();
        Serial.print(" Latitude: ");
        Serial.println(latitude, 8);
        Serial.print("Longitude: ");
        Serial.println(longitude, 8);
        Serial.print("    Speed: ");
        Serial.print(velocidadeGPS.valor);
        Serial.println(" Km/h");
        convertCoordinatesToCartesian(latitude, longitude);
    }
}
}

void convertCoordinatesToCartesian(float latitude, float longitude) {
    float latRadius = latitude * (PI) / 180;
    float lonRadius = longitude * (PI) / 180;

    int earthRadius = 6371; // Radius in km

    float posX = earthRadius * cos(latRadius) * cos(lonRadius);
    float posY = earthRadius * cos(latRadius) * sin(lonRadius);

    Serial.print("        X: ");
    Serial.println(posX);

    Serial.print("        Y: ");
    Serial.println(posY);
}
LINK: https://wokwi.com/projects/348673807535309395

```

Service Details - | x IBM Watson IoT F x (no subject) - na x W gps-fake.chip.c x IBM-Project-379 x +

z3y6g9.internetofthings.ibmcloud.com/dashboard/devices/browse

### IBM Watson IoT Platform

Browse Action Device Types Interfaces

242 Disconnected nasi Device

Identity Device Information Recent Events State

The recent events listed show the live stream of data that is coming and going from

Event	Value	Form
event_1	{"randomNumber":16,"distance":348,"location":...	json
event_1	{"randomNumber":7,"distance":130,"location":63}	json
event_1	{"randomNumber":285,"distance":383,"location":...	json
event_1	{"randomNumber":177,"distance":370,"location":...	json
event_1	{"randomNumber":269,"distance":253,"location":...	json

Device Type: nasi

Event type name: event\_1 Send

Schedule: 20 Every Minute

Payload: Specify the event payload in the editor window or by uploading a [CSV file](#).

```
0 {
1   "randomNumber":random(0, 400),
2   "distance":random(100,400),
3   "location":random(10,100)
4 }
5
```

Upload a CSV file Cancel Save

Type here to search

13:15 19-11-2022

