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* StandardRTLSAnchorMain_TWR.ino
*
* This is an example master anchor in a RTLS using two way ranging ISO/IEC 24730-62_2013 messages
*/

#include <DW1000Ng.hpp>
#include <DW1000NgUtils.hpp>
#include <DW1000NgRanging.hpp>
#include <DW1000NgRTLS.hpp>

////////////////////////////////////
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_SSD1306.h>

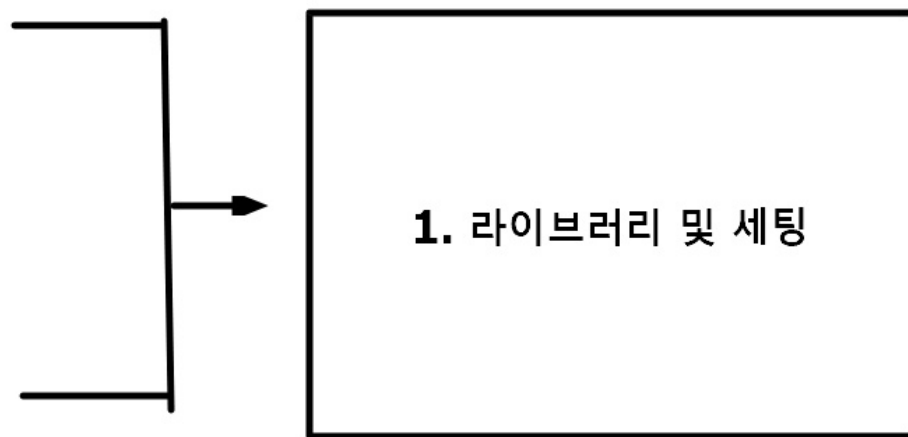
#define SCREEN_WIDTH 128 // OLED display width, in pixels
#define SCREEN_HEIGHT 64 // OLED display height, in pixels

// Declaration for an SSD1306 display connected to I2C (SDA, SCL pins)
Adafruit_SSD1306 display(SCREEN_WIDTH, SCREEN_HEIGHT, &Wire, -1);

////////////////////////////////////

typedef struct Position {
    double x;
    double y;
} Position;

```



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false,
false,
true /* This allows blink frames */
};

void setup() {
    // DEBUG monitoring
    Serial.begin(115200);
    Serial.println(F("### DW1000Ng-arduino-ranging-anchorMain ###"));

    ///////////////////////////////////////////////////////////////////

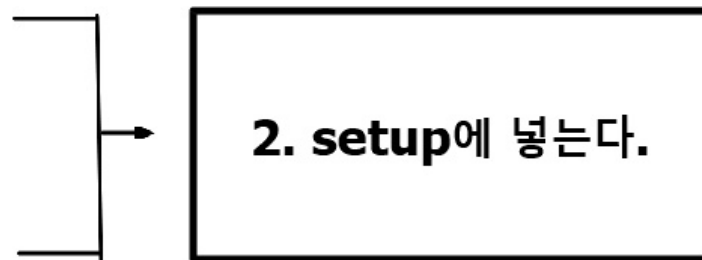
    display.begin(SSD1306_SWITCHCAPVCC, 0x3c);

    ///////////////////////////////////////////////////////////////////

    // initialize the driver
    #if defined(ESP8266)
    DW1000Ng::initializeNoInterrupt(PIN_SS);
    #else
    DW1000Ng::initializeNoInterrupt(PIN_SS, PIN_RST);
    #endif
    Serial.println(F("DW1000Ng initialized ..."));
    // general configuration
    DW1000Ng::applyConfiguration(DEFAULT_CONFIG);
    DW1000Ng::enableFrameFiltering(ANCHOR_FRAME_FILTER_CONFIG);

    DW1000Ng::setEUI("AA:BB:CC:DD:EE:FF:00:01");

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if(!result.success) return;  
range_self = result.range;  
  
String rangeString = "Range: ";
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rangeString += range_self; rangeString += " m";
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////////////////////////////////////
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display.clearDisplay();  
display.setTextSize(2);  
display.setTextColor(WHITE);  
display.setCursor(0, 10);  
display.print("Range: ");  
display.setCursor(0, 30);
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```
display.print(range_self); display.print("m");  
display.display();
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////////////////////////////////////
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rangeString += "\t RX power: "; rangeString += DW1000Ng::getReceivePower(); rangeString += " dBm";  
Serial.println(rangeString);
```

