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// ViewController.m
// testBluetoothConnection
//
// Created by 王權 on 13/8/12.
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//

#import "ViewController.h"
#define sensorTag [CBUUID UUIDWithString:@"f000aa00-0451-4000
b000-000000000000"]
#define IR_Temp_Service [CBUUID UUIDWithString:@"f000aa00-0451-4000
b000-000000000000"]
#define IR_Temp_Char [CBUUID UUIDWithString:@"f000aa01-0451-4000
b000-000000000000"]

@interface ViewController () <CBCentralManagerDelegate,
CBPeripheralManagerDelegate>

@property (strong, nonatomic) CBCentralManager * centralManager;
@property (strong, nonatomic) NSMutableArray * nPeripherals;

@end

@implementation ViewController

- (void)viewDidLoad
{
    [super viewDidLoad];
    // Do any additional setup after loading the view, typically from a nib.
    _centralManager = [[CBCentralManager alloc] initWithDelegate:self queue:nil];
    _nPeripherals = [NSMutableArray new];
    NSLog(@"viewDidLoad finish");
}

- (void)didReceiveMemoryWarning
{
    [super didReceiveMemoryWarning];
    // Dispose of any resources that can be recreated.
}

#pragma mark - Central Manager delegate methods

- (void)centralManagerDidUpdateState:(CBCentralManager *)central{
    if (central.state == CBCentralManagerStatePoweredOn) {
        [self.centralManager scanForPeripheralsWithServices:nil options:nil];
        NSLog(@"scanForPeripheralsWithServices");
    }
    else{
        [self.nPeripherals removeAllObjects];
        NSLog(@"nPeripherals objects all removed");
    }
    NSLog(@"centralManagerDidUpdateState finish");
}

- (void)centralManager:(CBCentralManager *)central didDiscoverPeripheral:
(CBPeripheral *)peripheral advertisementData:(NSDictionary *)
advertisementData RSSI:(NSNumber *)RSSI{
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NSLog(@"didDiscoverPeripheral");
if(![self.nPeripherals containsObject:peripheral]){
    [self.nPeripherals addObject:peripheral];

    NSLog(@"Discovered potential peripheral %@", peripheral);
    [self.centralManager connectPeripheral:peripheral options:nil];
}
}

- (void)centralManager:(CBCentralManager *)central didFailToConnectPeripheral:
(CBPeripheral *)peripheral error:(NSError *)error{
    NSLog(@"Failed to connect peripheral %@ (%@)", peripheral, error);
}

- (void)centralManager:(CBCentralManager *)central didDisconnectPeripheral:
(CBPeripheral *)peripheral error:(NSError *)error{
    NSLog(@"Disconnected peripheral %@ (%@)",peripheral, error);
}

- (void)centralManager:(CBCentralManager *)central didConnectPeripheral:
(CBPeripheral *)peripheral{
    //Discover service
    peripheral.delegate = self;
    [peripheral discoverServices:@[IR_Temp_Service]];
}

#pragma mark - Peripheral delegate methods

- (void)peripheral:(CBPeripheral *)peripheral didDiscoverServices:(NSError *)
error{
    if (!error) {
        for (CBService * service in peripheral.services) {
            if([service.UUID isEqual:@[IR_Temp_Service]]){
                //Discover the characteristic
                [peripheral discoverCharacteristics:@[IR_Temp_Char]
                forService:service];
                return;
            }
        }
    }

    [self.centralManager cancelPeripheralConnection:peripheral];
}

- (void)peripheral:(CBPeripheral *)peripheral
didDiscoverCharacteristicsForService:(CBService *)service error:(NSError *)
error{
    if (!error) {
        for (CBCharacteristic * characteristic in service.characteristics) {
            //Subscribe to updates of the heart rate characteristic
            [peripheral setNotifyValue:YES forCharacteristic:characteristic];
            return;
        }
    }

    [self.centralManager cancelPeripheralConnection:peripheral];
}

- (void)peripheral:(CBPeripheral *)peripheral
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    didUpdateNotificationStateForCharacteristic:(CBCharacteristic *)
characteristic error:(NSError *)error{
    if (error) {
        NSLog(@"Failed to subscribe to peripheral %@ (%@)",peripheral, error);
        [self.centralManager cancelPeripheralConnection:peripheral];
        return;
    }
}

- (void)peripheral:(CBPeripheral *)peripheral didUpdateValueForCharacteristic:
(CBCharacteristic *)characteristic error:(NSError *)error{
    //Received updated data
    NSLog(@"Received updated data from peripheral");
}

@end
```