Shenzhen iNet mobile internet technology Co., Ltd

Body fat scale SDK instructions

Version	Update Time	Author	Update information
v1.0	2018/09/10	wz	Init version
v1.1	2019/02/27	wz	Add ADC error callback and sdk log switch
V1.2	2019/04/25	wz	Add BM15 Algorithm

Contents

A. Conditions of Use:

1. Minimum supported iOS version is 8.0
2. The Bluetooth version used by the device requires 4.0 and above

B. Start using:

1. Import InetBleSDK.framework into the Xcode project.
2. Import #import <InetBleSDK/InetBleSDK.h> in the xxxViewController.m you need to use, and follow the <BluetoothManagerDelegate, AnalysisBLEDataManagerDelegate> protocol, set the delegate, and implement the delegate method.
3. After the connection scale acquires BleDataAnalysisStatus_SyncTimeSuccess, it needs to synchronize the user information to the scale end, otherwise the body fat data cannot be obtained.
4. The unit only supports 4 kinds (kg, lb, st, kg) at most. Please refer to the scale for specific units.

C. Discovery device:

1. Check Bluetooth status:

   The current BLE status can be obtained by [BluetoothManager shareManager].bleState, and the startBleScan method can only be called under CBCentralManagerStatePoweredOn.

   Real-time monitoring of BLE status via delegatemethod -BluetoothManager: updateCentralManagerState.

2. Start scanning:

   Call [[BluetoothManager shareManager] startBleScan]; start scanning.

3. Stop scanning:

   Call [[BluetoothManager shareManager] stopBleScan]; start scanning.

4. Discovery equipment:

The scanned device will pass the -BluetoothManager:didDiscoverDevice: callback.

D. Device Type:

The device is mainly divided into the following two categories, and the device type can be obtained according to the property acNumber of the deviceModel of the -BluetoothManager:didDiscoverDevice: delegatemethod callback.

1. Broadcast scale:

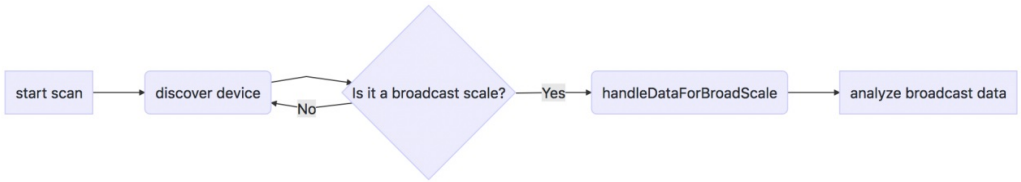
   The weight data is obtained by parsing the Bluetooth broadcast data, the weight broadcast scale without temperature (acNumber=0), and the weight broadcast scale with temperature (acNumber=1). Currently, the SDK only supports the BM15 broadcast scale, and other broadcast scales will be added in subsequent versions. stand by.

2. Connection scale:

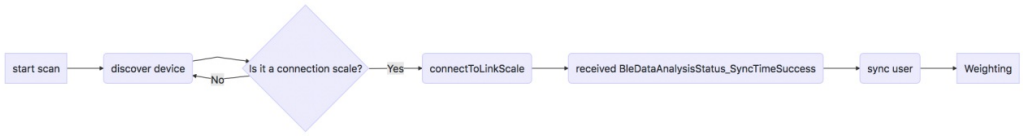
   The body fat data is calculated by the scale end and transmitted to the App via Bluetooth. The connection scale has no temperature (acNumber=2) and the connection scale temperature (acNumber=3).

E. Flow Description

1. Broadcast scale



2. Connection scale



F. Communicate with Device:

1. Connect the device:

   a) When scanning to the device, the -BluetoothManager:didDiscoverDevice: delegatemethod is triggered.

b) After scanning to the device that needs to be connected, call connectToLinkScale: in the BluetoothManager to connect to the device.

2. Connection status:

Use -BluetoothManager:updateCentralManagerState: to call back the connection status of Bluetooth and devices.

3. Write data:

Once the device is successfully connected, data can be written to the connected scale by the method provided in WriteToBLEManager. It mainly includes the following methods:

a) Sync current user: -synchronousUserWithSex: withHeight: withAge:

b) Sync current unit: -write_To_Unit:

4. The device sends data to the app:

The data sent by the device to the app, via AnalysisBLEDataManagerDelegate

The following delegate methods:

- (void)AnalysisBLEDataManager:(AnalysisBLEDataManager *)analysisManager updateBleDataAnalysisStatus:(BleDataAnalysisStatus)bleDataAnalysisStatus;

In addition, you can also implement the following delegate methods to view the progress of data parsing:

- (void)AnalysisBLEDataManager:(AnalysisBLEDataManager *)analysisManager updateBleDataAnalysisStatus:(BleDataAnalysisStatus)bleDataAnalysisStatus;

5. Disconnect:

You can disconnect by calling [[BluetoothManager shareManager] closeBleAndDisconnect].

G. Model description:

1. DeviceModel (ble device info)

Type	Param	Description
NSString *	deviceUUIDString	UUID
NSString *	deviceName	Device name
NSNumber *	acNumber	Type of scale

NSString *	deviceAddress	MAC
BOOL	deviceIsLight	Is the scale light on
NSInteger	Algorithm_number	Algorithm ID
NSInteger	DID_number	DID
CBPeripheral *	peripheral	Peripheral info

2. UserInfoModel (user measure info)

Type	Param	Description
double	weightTimeStamp	Weight time(millisecond)
float	weightsum	Weight sum
float	temperature	Temperature of scale
float	BMI	BMI
float	fatRate	Fat rate
float	muscle	Muscle rate
float	moisture	Moisture
float	boneMass	Bone weight
float	subcutaneousFat	Subcutaneous Fat
float	BMR	BMR
float	proteinRate	Protein Rate
float	visceralFat	Visceral Fat
float	physicalAge	Physical Age
float	newAdc	adc

int	weightOriPoint	Original KG decimal point
int	weightKgPoint	Show KG decimal point
int	weightLbPoint	Show Lb decimal point
int	weightStPoint	Show St decimal point
int	KGgraduation	Show KG graduation
int	LBgradution	Show LB graduation