Beehive telemetry

My needs:

On display:

Welcome screen

1.

Initialization…   
Beehive v. 0.1

2.

Name Of Scale (must be included in Bluetooth option to program)

3.

GSM Setup… Check SIM (here i would like to have a few check… operator, signal strength(%) ..  
RTC\_ Check Check D;M;Y and calibrate with GSM time

3.

SCALE CALIBRATION (only if we push button, other vise on power lost, check last configuration of calibration maybe stored in SD data logger or (calibration.txt)

4.

Temp. sens. test OK—or FAIL  
IR sensor test OK or FAIL

**5. then go to measurement (loop)**

W 34kg Δ +or - 2,10kg weight and difference in 24h (from 21:00 to 21:00)  
T = 27°C H= 65%

6.

GSM singnal 75% »PROVIDER«  
GPS coordinates

7.

Data logging  
logging in DATA.TXT ok

This is in loop… delay setup between (5000), but SD data write only 5- 10 min ? will se

Then we have to »asking scale«

8.

SEND SMS to the SCALE if we send text massage  
words:  
**WEIGHT** = answer : read real time measurement

Text massage:

Telemetry:  
Name of Scale  
W 34kg Δ + 5,10kg   
Temp.XX°C, Hum.XX%  
ACC balance on SIM  
Acu (bat OK or LOW)  
SIGNAL 75% GSM

**GPS** = answer

Text massage:

Time and date  
GPS Coordinates, (maybe link with map ?)

After maybe we can include some microphone or even Camera.. but this is STEP TWO ☺

Then we need PUSH SMS

On alarm (motion detection)  
On Battery LOW  
Or rain sensor

Just text massage:

ALARM MOTION DETECTION..

ALARM BATTERY LOW

IT`s RAINING….   
Temp.XX°C, Hum.XX% (

We have to worry about battery saving… so if possible, Display go to sleep after 5 min… by pressing the button or receiving sms turn back on for another 5 min..

We will se how long battery is working, and then we have to optimize it…

So we have two buttons. One is for calibration and Bluetooth if needed, second for display turn on.

Over Bluetooth we will need option to modify ( I will hire some developer or if you know some good One)

-Scale NAME

-Time to send massage:

1:00,2:00,3:00…till 24:00 option.. Maybe sometimes we need every hour SMS…

-Lock SIM GSM on some operators (we have 5of them)

Download Files (txt massage dataloging,