Minutes notes number 4
Present : Loïc, Tamara, Mikka,Louai
Not present: Dominik, Cyril

Order:
1. Introduction of trello
2. Presentation of work
3. Decisions to take
4. Set goals for next week

Presentation of Bandeau:
-3 V for LED
-20 mA
-9 LED -3 Blinking-180 mW

- need 200 mW

-Decision for the button- We will take a three state button

Decision: Split up the work in 2 parts:

Front part, LED part:
- PCB with the LED output logic (PIC…)
- 3-state button soldered on the PCB (OFF, power-save, full power)
- Connector
- Assume that the input cable delivers between 2.8-3.4 V like an ideal voltage source
- Beautiful design for the LED box
    - With angle modification system

Back part
- waterproof box (purchased, doesn't have to be asthetic for the prototype)
- It includes:
    - Harvesting system with 3 coils, each delivering min. 1.5V
    - AC-DC converter (very simple with 2 diodes)
    - DC-DC boost 1V - 4V
    - Super capacitor charging regulator
    - Super capacitor
    - Connector for cable (not forget the cable, should be elastic like a telephone cable)

Task for next meeting:
- Look at the Box attached at the back → Mikka

- Checking the pick, test the light with an reflector- Louai
- Checking on types of movement of the front part of the box, make a drawing in SolidWorks - Tamara
    - This drawing does not include the front part of the LED yet because we don't know about the reflectors and optical system, but think about how to fix those 2 together (screws? → simpler for prototype)
- Order the magnets of appropriate size and mag. Field (Cyril, dominic)
- Determine the size of the tube in order to produce min. 1.5V (Cyril)
    - It can be bigger than what we discussed on thursday, because it will be in an extern box
- Make a very primitive prototype (tube, coil, magnet) and test it at the oscillator and find out about the voltage and power (Dominic, Cyril)
- Define the components for the "power harvesting pcb" (AC-DC converter, DC-DC boost, supercapacitor charging regulator) (Mikka)
- PCB design software (try altium)