Product design team 8
Minutes meeting 6, 28.10.2016

Present: Cyril, Loic, Micha, Tamara, Louai, Dominik
Excused: -

Communication channels used for this project:
Trello: https://trello.com/b/pVXtibGt/magnetic-inductive-headlight
Drive: https://drive.google.com/drive/u/0/folders/0B7IF6TarFXPeZUJkdJZTMDMwQjA
Blog: http://blogs.epfl.ch/productdesignteam8

Order address for components:
Office of Isabelle Schäfer, BM
Send an email before

link: pcb-pool

Points to discuss:

1. Time planning:
   a. Last week of preparation, PCB and components should be ready to be ordered for next week

2. Administrative:
   a. Component shopping list: put your components here https://docs.google.com/spreadsheets/d/1BTRhUZ2idXD4Jx0o6bYSDy_6iCIOLwxZiaAE9ag9fMw/edit#gid=0
   b. Budget: Put your orders (also possible future orders) in the budget, we need an estimation of the money spent: https://docs.google.com/spreadsheets/d/1ia4HwptgQsl9jIC8Ub7MljW6SiCgLqLR62BuRJlfI
   c. OpenSource PCB design software: KiCad / Altium EPFL licenses
   d. Preparation of the presentation on tuesday 8 november (Doodle)

3. Updates about the separate divisions
   a. **LED part (Head: Loic)**
      PCB design finished, new circuit on Trello and Google Drive
      Now: check on seedstudio for delivery times and other requirements
      Put the button in the shopping list!
      Add 4 screw holes to the PCB

   b. **Harvesting part (Cyrill, Dominik)**
      Things done: Basic tests, magnets ordered
      100 windings, 30mm magnet peak value 3V
      100 windings 20mm magnet peak value 2V
      tube: 3D printed, coil produced
Possibility to produce coils at mechanical labs at EPFL. (“costs: under 100 CHF”)

Decision: Produce 2 coil tubes, in parallel at 20mm diameter
make an analysis of the total volume, including the supercapacitor

c. **Harvesting PCB and storage (Micha)**
components ordering now, we decided to order a 100F and a 20F supercapacitor
still working on PCB, should be ordered at latest in 2 weeks

I propose robust jack connectors between the back part and the front part:
http://eu.mouser.com/ProductDetail/CUI/PJ-075DH-SMT-TR/?qs=sGAEpimZMvh4ezHM5rsUnyFoUXZ19TP2CQWvC8XIMbSwGamfxO1w%3d%3d

http://eu.mouser.com/ProductDetail/CUI/PJ-028-SMT-TR/?qs=sGAEpimZZMvh4ezHM5rsUnyFoUXZ19TPbA%2fIHI369r1DGx2ouMxg%3d%3d

d. **Mechanical and structure (Tamara, Louai)**
Design verified by the atelier
Re-design and re-verify in the atelier.
Actual mechanism for changing the angle is only possible with powder, they only do this every 2 weeks…
Worst case scenario: Make something with a screw to change the angle
Prices: 1.- per gram

4. Tasks for next week
   a. Loic: Add the button & the connector to the PCB, reduce the size
   b. Cyril: with Dominic
   c. Dominic: Ask the mechanical labo for the production of the tubes & coils budget CHF 200.-
   d. Louai: see point 3d
   e. Tamara: see point 3d
   f. Micha: Test the boost (components arrive next wednesday)