

Product design team 9
Minutes meeting 9, 28.11.2016

Present: Loïc, Micha, Louai, Tamara, Cyrill
Excused: Dominic

Communication channels used for this project:

Trello : <https://trello.com/b/pVXtibGt/magnetic-inductive-headlight>

Drive : <https://drive.google.com/drive/u/0/folders/0B7IF6TarFXPeZUJkdIZTMDMwQjA>

Blog : <http://blogs.epfl.ch/productdesignteam8>

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

Points to discuss:

1. Time planning:
 - a.

2. Administrative:
 - a. 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/1ia4HwptgQsI9jIC8UbB7MIjW6SiCqLqLRF62BuRJfFI>
 - b.

3. Updates about the separate divisions
 - a. **LED part (Head : Loic)**
PCB arriving tomorrow

 - b. **Harvesting part (Cyrill, Dominik)**
Coils sent to the ateliers, 2 coils in production
Problem with spring: spring for resonance frequency too soft
idea: take 3 different springs, test and take the best one?

 - c. **Harvesting PCB and storage (Micha)**
PCB arriving tomorrow, components already arrived

 - d. **Mechanical and structure (Tamara, Louai)**
Is printing, should be finished tomorrow
Back-box:
1 PCB, 2 harvesting tubes, 2 supercaps
Wait for PCB and supercaps, find suitable box
Start working on the back box: Loic and Micha give you 1 PCB and 1

supercap tomorrow

- Silicon joint for waterproof?

e. Intellectual property and certification of the product (Loïc)

Look up which certifications are necessary and possible for our product (IP waterproof, CE, etc...)

The intellectual property of our product belongs to EPFL -> Should be discussed in the case that we were an independent company

CE certificate: https://en.wikipedia.org/wiki/CE_marking

IP certificate: dust (first number) -> x/4 -> protected against dust >1mm ; water resistance (second number) -> 4 -> basic waterproofing [-> needs to be discussed once the first prototype arrives -> modifications], water contact from all directions shouldn't influence the functioning of the product (doesn't give any guarantee if the product is submerged into water)

IPX4 easily to reach → check it for the final product

f. marketing

A production cost and market analysis has to be done! Know how many pcs are sellable per year → calculate the cost

g. report

Write the report until the end of december!

Method: Work together on Overleaf and distribute parts to write.

4. Tasks for this week

- a. Loic: Talk to Tamara and Louai about IP certification
- b. Cyrill: Find a solution with Dominik to the resonance frequency/spring problem and order
- c. Dominik: Talk to Tamara and give her the coil design
- d. Louai: TBD
- e. Tamara: TBD
- f. Micha: Market analysis

5. Tasks for next week

- a. Loic: Solder the parts jeudi 16h
- b. Cyrill: Order 3 springs and test. Order also the springs for Louai (on the budget)
- c. Dominik: Talk to Tamara and give her the coil dimensions
- d. Louai: back box design for next WE/THUR and then send it to the atelier
- e. Tamara: back box design for next WE/THUR and then send it to the atelier
- f. Micha: Solder the parts jeudi 16h (Todo: Market analysis)