
Project Report On Designing Control Panel For Smart Lighting

We as a team worked on a Project Smart Lighting for Residential Purpose. Our main task is to design a control panel for smart lighting. "The essence of strategy is choosing what not to do-Michael Porterer" When we started discussing ideas every input from all team members and putting them together to a final product was a tiring task, because of confusions and not being familiar with the work of other discipline. When we started, we were thinking of designing and manufacturing every component from light bulbs to Control Panel. As time passed idea of product was getting clearer. Our ideas went through lots of modification and changes to reach a final product. Our project succeeded on idea of collaboration as our final product is ideas, modification and team work.

Final product is what we intended to deliver as a task. As working with different discipline and team members from different cultural background and making those ideas in to concept and then to final product was a difficult task. The integrative methods facilitate problem solving and decision making among people with different disciplinary perspectives, reflecting the current industry toward designing and developing products in cross-functional teams(Product Design and Development, McGraw-Hill Education, 2011, Steven Eppinger, Karl Ulrich)

Other discipline work taught me a lot about their work, what is the process behind their work. For example, it was quite difficult for me to understand communication between control panel, sensors and lightbulbs. But was explained quite easily by IT discipline team members. Process of production is impacted by other discipline, as for example from Industrial design discipline we got a concept sketch and we have to make that sketch as a final product. But when concept sketch reach to product development discipline it goes through lots of modification according to manufacturing process and capital we are intended to invest. From other discipline requirement like different component required and add on component; design of product will change again it will change the manufacturing process and then complete process of production. As all aspects of the products life cycle are considered simultaneously. The specifications are gradually refined through iterations. (Seminar " Product development and Materials Engineering, 2018/09/13, Roland Stolt)

Product development process is covering contemporary design and development issues, such as identifying customer needs, design for manufacturing, prototyping and industrial design, this text presents a set of step-by-step product development methodologies aimed at bringing together the marketing, design and manufacturing functions of an enterprise. (Product Design and Development, McGraw-Hill, 1995Karl T. Ulrich,)

My discipline is to sync with Industrial Design discipline and production development discipline. It works through Design on paper to make it an actual product. Making actual product which is compatible with Manufacturing process, which look appealing to end user at the same time its sustainability and its capital investment. (Product Design and Development, McGraw-Hill, 1995Karl T. Ulrich,)

Deciding goals and strategies, in our case market research like what function competing product

has, planning a product, its function, its shapes, size and aesthetics and designing for end user with industrial design discipline. (Seminar “ Product development and Materials Engineering, 2018/09/13, Roland Stolt) Planning for manufacturing process and identify recyclable product. My main task is to identify component their material and their cost. How they fit in together to make a final product. I have gone through requirement of end user and Industrial design discipline and selected various products like Sensors, Circuit Board, Material for control panel cover, fixing method, light bulbs and other requirement from other discipline. (Seminar “Product development and Materials Engineering, 2018/09/13, Roland Stolt) I have gone through different manufacturing process to know end cost of product and then with production development discipline we decided to have own design and give it to supplier for manufacturing.

I have worked with team for deciding what functions our product should have to compete with other product in market. “Any damn fool can make something complex, it takes a genius to make something simple. – Pete Seeger” To make design simple and efficient we have decided to have less components but it should function efficiently and what it intended to design. I have decided how component will fit together to make it look appealing to end user. I have helped our team in deciding logo, name and tagline for our company. Our product is based on feeling and emotions we feel when we see firefly, so our company is named on firefly which is called as “Eldfluga” in Swedish and tagline for our company is “Illuminating life smartly”. I have worked with IT discipline to make our control pane user friendly and we come up with idea of having mobile app and also web version. As a team we have went through roller coaster ride it was exciting sometime confusing but at the end we succeeded in completing our task making a final product. This shorter time taught me a lot being a team member how to contribute to a better purpose and it gave me lifelong friends and experiences and memories to cherish. I learned to be a team member at the same time to be leader and supporter.