

DMS 104 Project 1

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Digital Dorm Light

The Digital Dorm Light aims to offer a personalized illuminatory setting while also supporting an individual's mental health.

Prototype



Revenue or Cost Focus

The Digital Dorm light is cost-focused, specifically in terms of cost reduction. The main goal of the product is to help those who may be suffering from seasonal depression, or who would like to prevent its effects caused by a consistently dark dorm room.

We would like the product to be as cost-effective as possible. The Light would be promoted as a dorm accessory both online and on college campuses. The product should be economically accessible, as it is a mode of primary prevention for mental health.

There could also be a collaboration between the Dorm Light and the University of Rochester, offering special UR-themed lights. This collaboration could help assume more financial risk, and promote the light to our target audience.

Desire to Innovate

The concept of the Digital Dorm Light is **not** exactly new. In fact, there are existing, but separate products that have similar functions as the Digital Dorm Light. For instance, as for the modular light concept, there is an existing product called the [“Modular touch LED lights”](#), but it mainly serves as an LED modular light. There is also a [sunrise/sunset simulator alarm](#) available on the market, however, this product mainly serves as an alarm and the lighting is very limited. The Digital Dorm Light aims to take these two main pieces of technology and advance it to the next level. The Digital Dorm Light will be modular pieces that could allow the users to assemble as they wish. In addition, the light pieces can also be attached to the walls. There would also be a personalized setting of different lighting to accommodate different times and moods of the day (for example: sunrise and sunset simulation, purple lighting for sleep mode, and more customizable options for the users). Furthermore, the Digital Dorm Light would contain a power setting from high to low and users would be able to control that setting according to their preference at the time.

The Digital Dorm Light will attract stakeholders interested in helping improve the general wellness and provide adequate lighting at an affordable price.

Length of Time Horizon

Our product mainly aims to solve the issue of lack of natural light and minimal artificial lighting in the dorm rooms of colleges. This problem is much more pressing during the winter months, so the investors of the Digital Dorm Light have established Fall 2020 as the target for launch of the product, as it is also the start of the new academic year in universities.

Design Schedule Detail

The set-back schedule for the design, development, manufacturing and delivery of the first working Digital Dorm Light is as follows;

Design Research	February 2020
User & Domain Analysis (U&DA) Complete	February 2020
Development of Requirements and Context Scenarios	March 2020 (first half)

Development of Framework and Design Language	March 2020 (second half)
Form & Behavior Specification (F&BS)	March 2020
Detailed Design Development	April 2020
Delivery of final design and presentation	Late April 2020

Understanding of the Problem

The Digital Dorm Light idea came to life to address the issue of mental health and how sufficient lighting in a dorm place, where you spend a big part of your day, is essential for one's mental health sustainability. We want people to have access to this kind of lighting even when it's naturally unavailable at an affordable price and delivered with a convenient, practical design. Although this concept might seem simple, its challenge would lie in its design. The Digital Dorm Light is in no way trying to *cure* clinical depression, however it aims to be a *supplemental* product that would help improve lighting; which in turn could help improve seasonal depression and general wellness. In the designing stage of the product, modularity for ease of installation in the dorms needs to be met, in addition to figuring out whether the lights would be battery-powered or with a cord in order to maximize its efficiency and avoid certain fire hazards.

Willingness to Invest

Due to the nature of our project dealing with mental illness and students, a primary focus for our team is to ensure the commonality of our values in alignment with that of our investors/stakeholders. It is essential that not only do our investors regard a genuine concern for the upcoming generation and their well-being, but that they also care about the scope of mental illness as a whole and how it impacts individuals (not only students) on a day to day basis. Furthermore, our team also feels the need to pronounce a capable enough sized investment so that our product in development fulfills the greatest amount of it's possible potential. We're shooting for the development of our project to initially disposition itself in a low risk, yet long term success environment and through the possibility of outsourcing promising initiatives (from students, for students; student body survey, psychologist recommendations; etc.), we believe that this is very much both an achievable and sustainable starting point.

Risk Factors

One major concern is the accessibility of the product. The Digital Dorm Light is a digital device, and similar products in the market are not cheap. If not designed correctly, our product could be too expensive for most students to afford; it must be affordable while also being profitable.

Another issue to consider is the advocacy for the product. The concern by the investors would be that the Digital Dorm Light doesn't actually improve general wellness. Psychological approval may be required to vouch for the effectiveness of the product. However, it is important to keep in mind that our product is marketed more to those with seasonal depression rather than people with clinical depression. Students must view the Digital Dorm Light as a tool meant to help deal with mental health issues, not cure it.

Team Members and Roles

- Team Lead - Lauren Allende
- IxDG - Carolina Lion He
- IxDS - Joshua Newton
- VisD - Joshua Choi
- ID - Nadine Eldallal