

Category: Student Work

Project: Eclipse

What was the challenge?

Several scientific studies have shown that some behaviours and bad habits of the waking period can influence the quality night's sleep. A lot of products on sale allow to control the human quality night's sleep detecting some vital functions during the night, but they don't monitor the people during the day. So it's not easy for the people to understand the reason of their difficulties.

What was the solution?

Eclipse keeps tracking people's sleep-awake cycles and their daily activities, highlighting those factors impacting on the quality of nocturne rest. The project tends to balance the sleep-wake cycle of the person, following her along all the 24h. This permit to the people to identify the existence of some bad influence or sleep disorders, which don't permit a right execution of night's sleep.

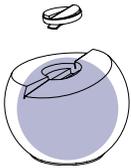
What was the effect?

It consists of three devices: a clip, wearable during the day (awake phase), which can distinguish artificial light from natural light and tracking the person's movement quantity; a band, to be placed under the bed sheet, monitoring heart rate and nocturnal movements; finally, a base receiver spreads out a luminous feedback which chromaticism is based upon the user's sleep-awake cycle quality and refers to the parameters previously detected. The color scale considers a range from violet (negative feedback) to blue (positive feedback) going through middle stages, pink and light blue. This kind of feedback

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allows to people to understand the situation of their well-being level through an emotional engagement.

Finally, the application resumes as a characteristic trait the color feedback that overlaps the information and statistics with different shades of white. The Home page reports a little infographic that shows the distinction between data collected during the period of sleep and waking. A total coverage of the circle matches an optimal state of the parameters, while an empty circle indicates a bad condition or an imbalance of values. Statistics are available for inspection by all parameters measured during sleep and awake. This section also offers the chance to see the different data cataloged by day, week and month, providing a wider framework.

