

Situation:

Our client required an accessible and effective solution that reduces sleeprelated and relaxation issues for the user. The mounting challenges faced by individuals grappling with sleep disturbances and the pervasive consequences of chronic stress underscore the critical need for advanced, efficacious solutions.



Problem:

Previous solutions are primarily medication or medical appointments. We have identified these solutions as a source of hesitancy and inaccessibility for people. These evaluations made us look towards a digital platform that enables users to access our solution anywhere. The challenge at hand was to design a solution that effectively assists individuals in their sleep journey and facilitates relaxation, requiring research on proven solutions that are effective and can be implemented on a digital platform.



Solution:

To create an accessible and effective solution that addresses sleep-related and relaxation issues, our application follows the root principle of our brain activity shifting from an average 40Hz frequency for audio stimuli or 30Hz for visual stimuli to a 4 Hz frequency during sleep.

30Hz Shades: The 30Hz Shades employs a visual stimulus, where two squares appear and disappear at a rate of 30Hz. Over seven minutes, this rate decreases to 4Hz. By focusing on these squares, the viewer's brain activity synchronizes with the decreasing frequency, thus promoting relaxation and sleep readiness.

Binaural Beats: Binaural Beats produce two distinct frequencies for each ear, starting with a 40Hz difference and gradually decreasing it to 4Hz over seven minutes. The brain attempts to reconcile the two frequencies, transitioning towards the delta state, akin to the brainwaves during deep sleep.