

In our brainstorming session, we evaluated two solutions against key project constraints like cost, technical feasibility, manufacturability, and compliance. Solution 1, while advanced, posed issues with its complex setup, higher costs, and scalability, potentially complicating compliance. Conversely, Solution 2, using simpler technologies like LDRs and operational amplifiers, proved more cost-effective and easier to manufacture. It met our needs for simplicity, affordability, and straightforward regulatory compliance, leading us to choose it unanimously. This solution aligns well with our goals to deliver a reliable, easy-to-maintain, and consumer-friendly night light