



EcoClass

Initiative By

-Team Phoenix-

EMPOWERING CLASSROOMS, ENERGIZING THE FUTURE!

Team Phoenix



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Problem

In today's modern world, energy conservation has emerged as a critical factor for sustainable development across all sectors. The education system, including school classrooms, is not exempt from the pressing need to optimize energy consumption. Classroom energy consumption often suffers from inefficiencies and a lack of monitoring, resulting in unnecessary waste and increased energy expenses. Furthermore, the lack of awareness and engagement among students and teachers worsens the problem. Excessive energy usage not only harms the environment but also impacts educational institutions' budgets, affecting overall economic growth.

Solution

This application provides a comprehensive solution for energy conservation in school classrooms. There are two main users students and teachers. By integrating smart energy usage monitoring devices, this application effectively track the energy consumption of various electrical equipment, such as lighting systems, fans, smart boards, and plug points. Users can effortlessly monitor energy usage for each equipment type, including detailed insights into daily, weekly, and monthly consumption patterns. Intuitive graphs and visualizations depict energy consumption variations over time, enabling informed decision-making. By educating students and teachers about effective energy conservation practices, this initiative empowers them to take proactive steps towards reducing their energy footprint.



New Innovative Areas

To foster active participation and engagement, classrooms are encouraged to earn points based on their energy conservation efforts. Attaining the "green level," indicating exceptional energy consumption, rewards classrooms with points. At the end of each month, the classroom with the highest points receives recognition as the "Best Class for Energy Conservation." This friendly competition promotes teamwork and motivates energy-saving behaviors.

This application provides notifications and alerts to classrooms that surpass the "red level," signifying excessive energy consumption. These notifications prompt classrooms to access a dedicated section offering energy-saving tips, videos, and resources.

Teachers play a crucial role in promoting energy conservation. This application caters to their specific needs by providing real-time energy usage monitoring, detailed reports, and analytics. Moreover, they can share energy-saving tips, information, and challenges with their students, fostering a collaborative approach to conservation.