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## **Energy Saving System for Classroom**

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Abstract: Saving energy has become one of the most important issues these days. The most waste of energy is caused by the inefficient use of the consumer electronics. Particularly, a light accounts for a great part of the total energy consumption. Various light control systems are introduced in current markets, because the installed lighting systems are outdated and energy-inefficient. However, due to architectural limitations, the existing light control systems cannot be successfully applied to home and office buildings. Therefore, this paper proposes an IOT based classroom system considering energy efficiency and user Satisfaction. Now a days saving energy has become one of the most important issues. The maximum waste of energy is caused due to inefficient use of the consumer electronics Particularly lights and fans accounts for a great part of the total energy consumption.

Keywords: Saving energy, Classroom Project, IOT based Project, Lighting System

## REFERENCES

- [1]. "S Matta and S. M. Mahmud. An intelligent light control system for power saving."
- [2]. S. Tompros, N. Mouratidis, M. Draaijer, A. Foglar, and H. Hrasnica," Enabling applicability of energy saving applications on the appliances of the home environment." IEEE Network, vol. 23, no. 6, pp. 8-16, Nov.-Dec. 2009.
- [3]. Thingspeak: J. Han, C.-S. Choi, and I. Lee, "More efficient home energy management system based on ZigBee communication and infrared remote controls, "IEEE Trans. on Consumer Electron., vol. 57, no. 1, pp. 85-89, Feb. 2011.
- [4]. Jinsung Byun received his B. S and M.S. degree in the School of Electrical and Electronics Engineering from Chung-Ang University, Seoul, Korea in 2008 and 2010. He is currently a Ph.D. candidate at Chung-Ang University. His current research interest includes ubiquitous computing, situation-aware middleware technologies, wireless sensor network, MAC and routing protocols, and embedded system design.
- [5]. G W Denardin. C. H. Barriquello, R. A. Pinto, M. F. Silva, A. Campos, and R. N do Prado. "An Intelligent System for Street Lighting Control and Measurement, in Proceedings of the IEEE Industry Applications.
- [6]. Insung Hong received his B.S and M.S degree in Electrical and Electronics Engineering from Chung-Ang University, Seoul, Korea, in 2009 and 2011. He is currently a Ph.D. candidate at Chung-Ang University. His current research interests include ubiquitous computing, embedded system, and intelligent system and home network.
- [7]. DT Delaney G. M. P. O'Hare, and A. G. Ruzzelli. "Evaluation of energy-efficiency in lighting systems using sensor networks in Proceedings of the First ACM Workshop on Embedded Sensing Systems for Energy-Efficiency buildings, pp 61-66, 2009.
- [8]. S. Tompros, N. Mouratidis, M. Draaijer, A. Foglar, and H. Hrasnica," Enabling applicability of energy saving application on the appliances of the home environment," IEEE network, VOL. 23, NO. 6, PP. 8-16, NOV.-DEC. 2009.
- [9]. Y.Uhm, I. Hong, G. Kim, B. Lee, and S. Park,"Design and implementation of power aware LED light enabler with location aware adaptive middleware and context aware user pattern," IEEE Trans. On Consumer Electron, vol. 56, no. 1, pp. 231-239, FEB. 2010.
- [10]. S. Matta and S. M. Mahmud," An intelligent light control system for power saving," in proceedings of the annual conference of the IEEE industrial electronics society. Pp. 3316-3321, 2010.
- [11]. F. Leccese, "Remote-Control System of high efficiency and intelligent street lighting using a zigBee network of devices and sensors." IEEE Trans. On Power Delivery, vol. 28, no. 1, pp. 21-28, Jan. 2013.

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