DESIGN AND BUILD A MONITORING SYTEM USING AVR MICROCHIP

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Home automation is the residential extension of building automation. It is automation of the home, housework or household activity. Home automation may include centralized control of lighting, HVAC (heating, ventilation and air conditioning), appliances, security locks of gates and doors and other systems, to provide improved convenience, comfort, energy efficiency and security. Home automation for the elderly and disabled can provide increased quality of life for persons who might otherwise require caregivers or institutional care.

The popularity of home automation has been increasing greatly in recent years due to much higher affordability and simplicity through smartphone and tablet connectivity. The concept of the "Internet of Things" has tied in closely with the popularization of home automation.

This thesis describes how to create a smart monitor which control lights in house. This monitor provides function to save more energy and have more efficient and flexible way to control with applying 220V light control algorithm. Whenever and wherever users want to turn on, turn off and even change level of brightness of the light system, they just need one thing that is an android phone with internet connection.