



ANDROID BASED HOME AUTOMATION AND ENERGY CONSERVATION

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Abstract- Wireless Sensor Network (WSN) consists of three main components: nodes, gateways, and software. The spatially distributed measurement nodes interface with sensors to monitor assets or their environment. In a WSN network the devices are connected to WSN nodes wherein the entire nodes uses Zigbee network to transfer the status of connected applications to a controller which controls the whole applications but the main drawback of Wireless sensor networks is its high interference, low coverage area and ability to control only low power devices. In order to overcome these drawbacks Android equipped devices are used to control the applications over GPRS network. Android equipped devices allow the user to control various applications over wireless networks. Being an open sourced platform it allows the user to design a custom module which controls the home applications by connecting the android equipped device and its corresponding home applications to an MCU wherein it uses relay circuits to connect the entire applications using GPRS network to connect the application controller and the android device. These devices can be used to control industrial applications, home applications like light, fan etc., and thereby conserving electricity.

Index terms: Wireless Sensor Network (WSN), Network Centric Capability(NCC),Data Terminal Equipment (DTE),Software Defined Radio (SDR)