GSM BASED WIRELESS CONTROL OF ELECTRICAL APPLIANCES

ABSTRACT:-
It is basically known that any electrical appliance is controlled with a switch that regulates the electricity to electrical devices. As a reason of the latest technological advances, automation and wireless control of devices has becoming more popular. This project puts forth the equipment which enables users to control their home appliances using their cellular phone. It shows the construction and working of the device to wirelessly control the home appliances based on GSM networking and 8051 microcontroller. Initially an authenticated signal is sent from the user's cellular phone via Global System for Mobile Communication (GSM) network to the phone which is fixed to the equipment. This signal or code consists of the information about the function or action to be taken place i.e. what appliance should be turned off or turned on. The receiver phone receives the DTMF signal or a SMS message that is send from the user’s phone and then sends it to the DTMF decoder or the GSM modem which in turn sends the output digital signal to the microcontroller. Then the microcontroller, based on the received signal, controls the different relays connected through ULN2003 (Darlington transistor) and triggers the required appliance.