Home Automation Using GSM

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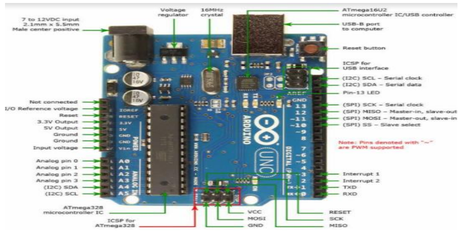
Abstract:

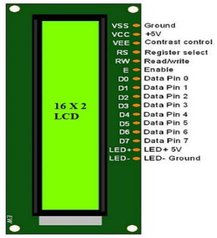
Home Automation System is used to control home appliances remotely. In this modern era of digitization and automation, the life of human beings is getting very simple as almost everything is automatic. In this paper, we will deliberate how to control home appliances, safety and security system using GSM technology by using mobile phone associated with a SIM card. This is an SMS based system. In which the load can be controlled wirelessly. The advantage of using GSM technology is that we can control the home appliances from remote places anywhere in the world. The main objective of this project is to explore and control home appliances by remotely. There are many existing home automation systems in the market like Z-WAVE, INSTEON etc. But every system has its pros and cons to implement the model of the project.

Materials:

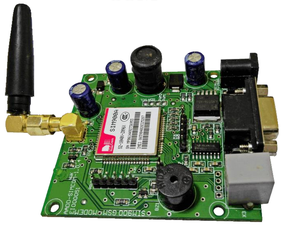
PIN diagram of Arduino Uno



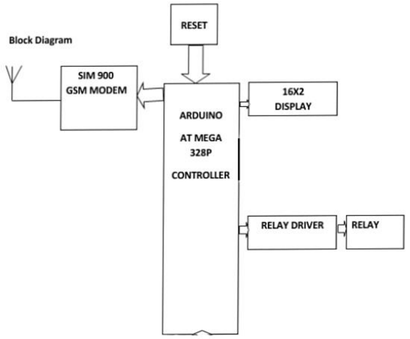
PIN diagram of LCD Display



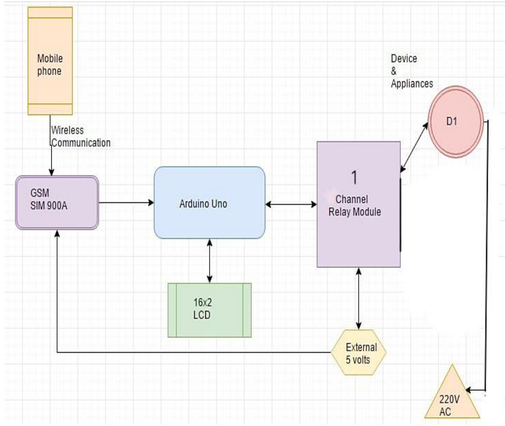
GSM



Block Diagram:

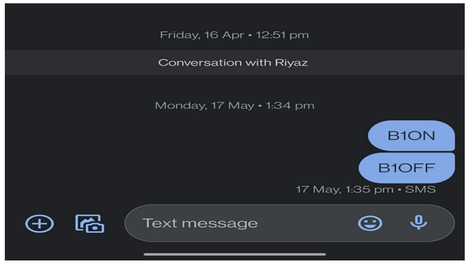


Proposed Methodology:

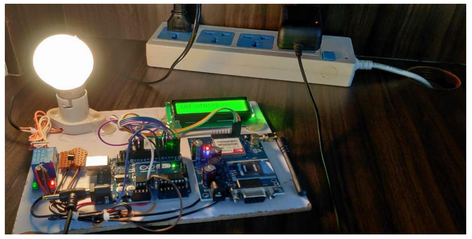


Results:

Command send from Mobile



While user send ON command



While user send OFF command

Conclusion:

The main purpose of the project is to provide a smart and efficient way to control our home appliances with the help of modern communication technology. With the combination of Arduino and GSM this project is not only a modern approach to next generation home but also a very friendly and easy to use system. Integrating features of all the hardware components which we are used had developed. GSM technology provide home security and it is cost effective as compared to the previously existing systems The project "Home Automation using GSM Modem" has been successfully designed and tested.

References:

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