

We about is when the
electricity bill comes



**ASSIGN
BUSTER**

We are in the 21st century where there has been so much of development in various technologies which in turn has greatly improved the quality of life and has brought about convenience and comfort in our homes making our homes more luxurious and smart. There is a huge demand for products which can make our homes smart. For ex, if we take electricity, conventionally, the total electric power consumption info is read via a power meter manually. How much power is being consumed by each device is something which a naïve user won't even know. All he is worried about is when the electricity bill comes over the month-end.

There is a lot of scope for products in this area which can schedule, remotely monitor, control and perform automatic power management in homes and commercial places. With the smart phones and WiFi technology/products becoming more and more common, the idea is to develop smart device based systems which help to achieve the functions of smart home energy saving. 2.

OBJECTIVES: I. To design and develop Wi-Fi enabled smart plug II. To control home appliances remotely III. To monitor device energy consumption from anywhere 3.

SCOPE OF WORK: a. Ensuring the Wi-Fi connectivity with home appliances b. Perform the energy consumption measurement of home appliances c. Perform the remote switching of devices through mobile phone. d. Analyzing the costs, savings, time/efforts and long term benefits in setting up and running the proposed system. e.

Designing/updating the Android application to install on android mobile phone.

4 PLAN OF WORK

5. No Description of work Expected week of completion

1 System Study Requirement analysis based on power measurement, device switching, Wi-Fi connectivity and mobile application development End of week 1

2 Analysis and design Identify and analyze the power measurement sensors, Identify and analyze the Wi-Fi module, and identify and analyze the tools to develop mobile application End of week 2

3 Development Design and develop power measurement module. Design and development of Wi-Fi interface. Develop the android application End of week 3

4 System integration Integrating the measurement module, Wi-Fi module and mobile application for final design End of week 4

5 Testing the application Testing the developed system by connecting it to home appliances End of week 5

6 Documentation Preparing the documentation as per supervisor guidelines End of week 6

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