

# [We about is when the electricity bill comes](https://assignbuster.com/we-about-is-when-the-electricity-bill-comes/)

Weare in the 21st century where in there has been so much ofdevelopment in various technologies which in turn has greatly improved thequality of life and has brought about convenience and comfort in our homesmaking our homes more luxurious and smart. There is a huge demand for productswhich 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 userwon’t even know. All he is worried about is when the electricity bill comesover the month-end.

Thereis 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. Withthe smart phones and WiFi technology/products becoming more and more common, the idea is to develop smart device based systems which help to achieve thefunctions of smart home energy saving. 2.

OBJECTIVES: I.                  To design and develop Wi-Fi enabled smart plugII.               To control  home appliancesremotelyIII.            To monitor device energyconsumption from anywhere3.

SCOPE OF WORK: a. Ensuring the Wi-Fi connectivity with home appliancesb. Performthe energy consumption measurement of home appliancesc. Performthe remote switching of devices through mobile phone.

d. Analyzing the costs, savings, time/effortsand 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   S. 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 5 4 System integration Integrating the measurement module, Wi-Fi module and mobile application for final design End of week 7 5 Testing the application Testing the developed system by connecting it to home appliances End of week 8 6 Documentation Preparing the documentation as per supervisor guidelines End of week 9