**ABSTRACT**

Microcontroller is a single computer on an Integrated Chip(IC). A microcontroller contains one or more [CPUs](https://en.wikipedia.org/wiki/Central_processing_unit) along with [memory](https://en.wikipedia.org/wiki/Computer_memory) and programmable [input/output](https://en.wikipedia.org/wiki/Input/output) peripherals.

In the present era, these are used wherever the work has to be reduced because of its standalone behaviour. There are different types of microcontroller available in the market and for this project, Arduino microcontroller has been used. The different types of Arduino Microcontroller are: Arduino Nano, Arduino Uno, Arduino Mega 2560, Arduino Lilypad, etc.

This project is based on the use of Arduino Mega 2560, a Microcontroller. A 16X2 LCD Display has been interfaced with Arduino using Bluetooth.

An Arduino Mega 2560 is a microcontroller with 54 Digital I/O pins and 16 Analog Input pins which enables more number of devices to be connected. A 16X2 LCD Display can display 16 columns of data and has 2 rows. A Bluetooth Module HC-05 is used to transfer data between user and microcontroller.

The Bluetooth Module and LCD Display has been connected to Arduino Mega using breadboard. Data to be displayed is being transferred from the phone to Bluetooth and then to the Arduino. Arduino gives the output to LCD Display to print it accordingly. In this case, the user sends his battery percentage and it is getting displayed in LCD.

------------------------------------ **THANK YOU** ----------------------------------------