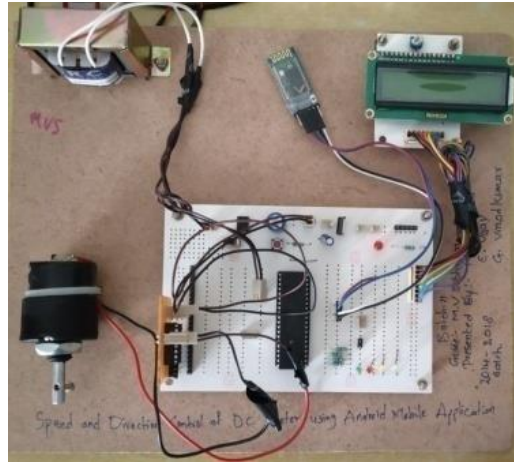


Product Development

- Speed Control of DC motor using Android Application:



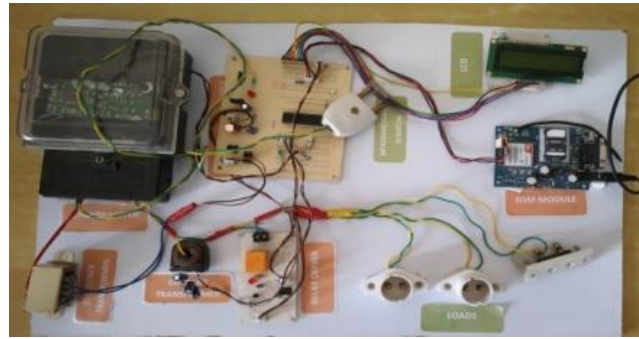
The project is to control speed of DC motor through Google Android smart phone. It is done wirelessly through Android smart phone using the Bluetooth feature present in it. In the project the Android smart phone is used as a remote control for motor speed control. The controlling device of the whole system is a Microcontroller. Also, the live status of the DC motor can be seen on LCD display. In achieving the task the controller is loaded with a program written using Embedded 'C' language.

- Coreless DC Motor:



This project is specialized form of DC motors called coreless DC motor. These motors are used where small motors and where rapid acceleration is needed. The difference of coreless motor is, this type of motor has a rotor that is constructed without any iron core. They can be cylindrical or disc form. The speed of the motor is 500 to 1000 RPM.

- GSM based Energy meter:



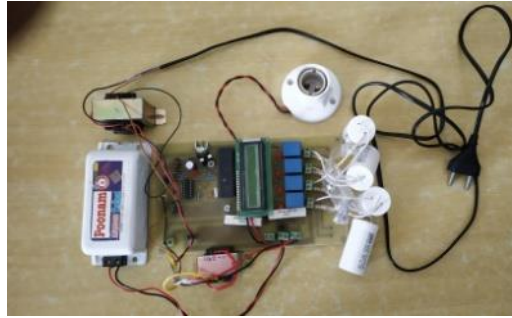
This project is the design of a simple low cost wireless GSM energy meter and its association with web interface for automatic billing and managing the collected data globally. The proposed system replaces. Traditional meter reading methods and enables remote access of existing energy meter by the energy provider.

- Bluetooth Controlled Robo vehicle survey camera:



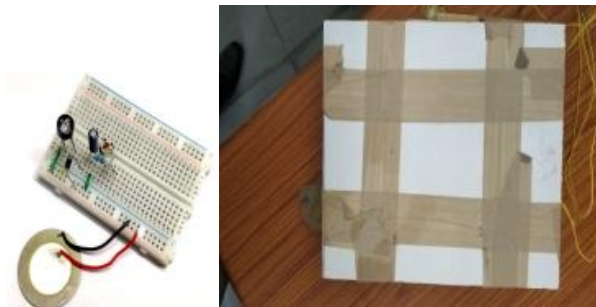
The project is designing a robot that can be operated using Android Apps. The controlling of Robot is done wireless through android smart phone using the Bluetooth module. The controlling device of the whole system is a Microcontroller. Bluetooth module, DC motors are interfaced to the microcontroller. The data received by the Bluetooth module from android smart phones fed as input to the controller, the controller acts accordingly on the DC motors of the robot. The robot in the project can be made to move in all the four directions using the Android phone.

- Automatic Power Factor Correction Using Capacitive Bank:



The power factor correction of electrical loads is a problem common to all industrial companies. Earlier the power factor correction was done by adjusting the capacitive bank manually. The automated power factor corrector (APFC) using capacitive load bank is helpful in providing the power factor correction. APFC thus helps us to decrease the time taken to correct the power factor which helps to increase the efficiency.

- Foot Step Power Generation using Piezoelectric Sensor:



Due to increase in demand of energy consumption for the devices we have to think over the alternative renewable energy in human surroundings. So, either we need a long lasting battery or a smaller power generator which uses human power to generate electricity and feed the device. For this, Piezoelectric Effect is the best example to produce electricity by using the footstep power of the human body.

- Load sharing of Transformers:



The aim of the project is to protect the transformer under overload condition by load sharing due to overload on transformer the efficiency drops and windings get overheated and may get burnt. Thus by sharing load on transformer is protected. This will be done by connecting another transformer in parallel through a microcontroller.

- Gesture based Intelligent wheel chair:



The main aim of the project is to control the wheel chair by using MEMS accelerometer Sensor. The MEMS accelerometer tilts are processed by micro controller and which is wirelessly transmitted using Zigbee technology. The wheel chair can be moved in all directions using MEMS sensor wirelessly.