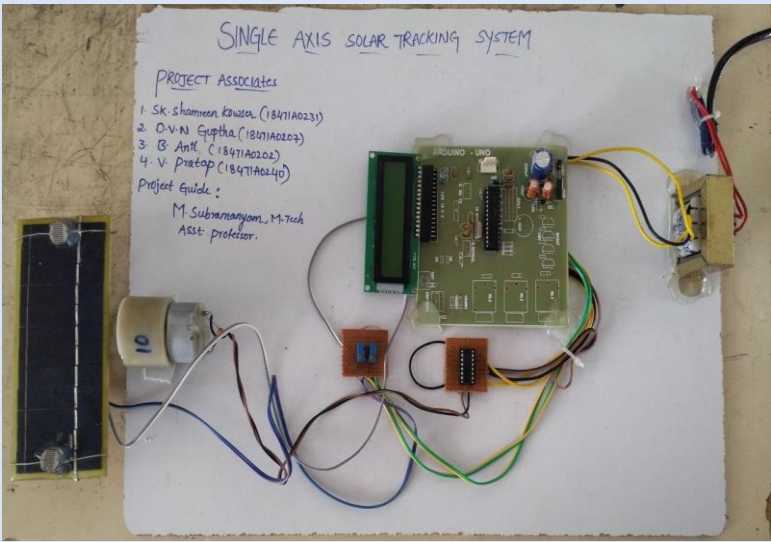

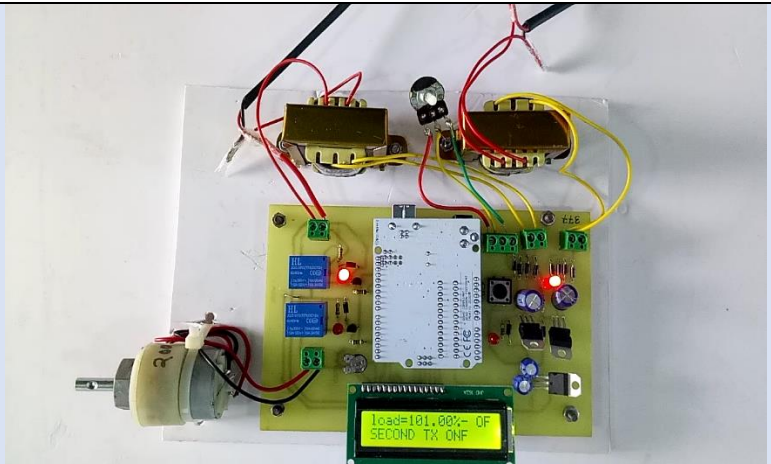
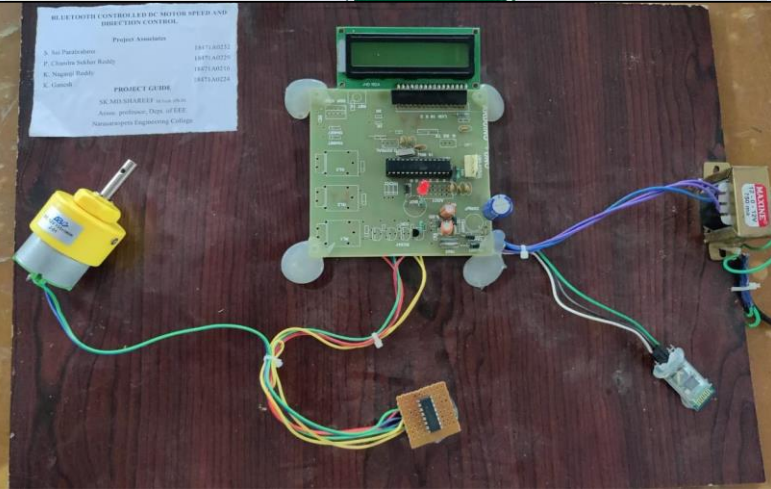




3	Single Axis Solar Tracking System	<p>To detect the position of the sun on the sky, two LDRs have been used and to rotate the orientation of the Solar PV panel a servo motor has been used. The sensors and servo motor have properly been interfaced. The servo motor has been mechanically coupled with the PV panel. The whole system has been assembled together and its performance has been tested. This tracker changes the direction of the solar panel based on the direction of the sun facing to the panel successfully. Single axis solar tracker tracks the sun on daily basis and makes the solar panel more efficient.</p>	
4	DC MOTOR SPEED CONTROL BY USING 555 TIMER	<p>This project is designed to control the speed of a DC motor using PWM control using 555 IC. The speed of the DC motor is directly proportional to the voltage applied across its terminals. Hence, if the voltage across the motor terminal is varied, then the speed can also be varied.</p>	

5	Automatic Load Sharing	<p>During this condition, when the load demand exceeds the reference value, The Microcontroller on the other hand the Arduino will give a control signal to energize the relay coil. Thus, the standby transformer will be connected in parallel and will share the load equally since the transformers are of the same ratings.</p>	
6	Bluetooth Controlled DC Motor Speed and Direction Control	<p>In Bluetooth controlled DC motor the speed and direction control are achieved by using an Arduino controller, i.e., Bluetooth modem receives the voice signals/instructions as input and passes to Arduino and based on the voice signals/instructions given DC motor works in respective directions and speeds</p>	

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### Automatic Fire Detection and Alarm System

When a fire breaks out, time is of the essence. Prompt measures need to be taken to evacuate the trapped people and contain the fire before it spreads out of hand. However, to accomplish this we need a system that can detect fires before it is too late.

This fully automated Fire Detection and Alarm System is equipped with a temperature sensor and a 555 timer IC. This fire detection can sense changes in temperature and sound an alarm in case of fires.

