

EtechRobot®
Enhancing Education through Technology



07423-437351
+91-7999732826
+91-7987619448

ETR STAR

ROBOTICS & 3D PRINTING WORKSHOP

www.etchrobot.com

 **B.No. 24, Shivaji Marg, Neemuch**

EtechRobot Technology Private Limited

Workshop Highlights



15+ Projects



**Based On
School Curriculum**



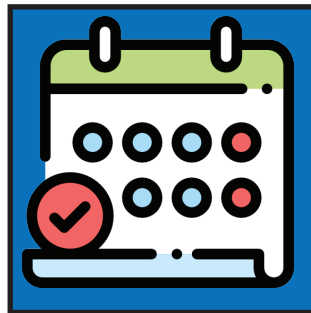
Certificate



Skill Development



**Class
8th & Above**



**Days
10**

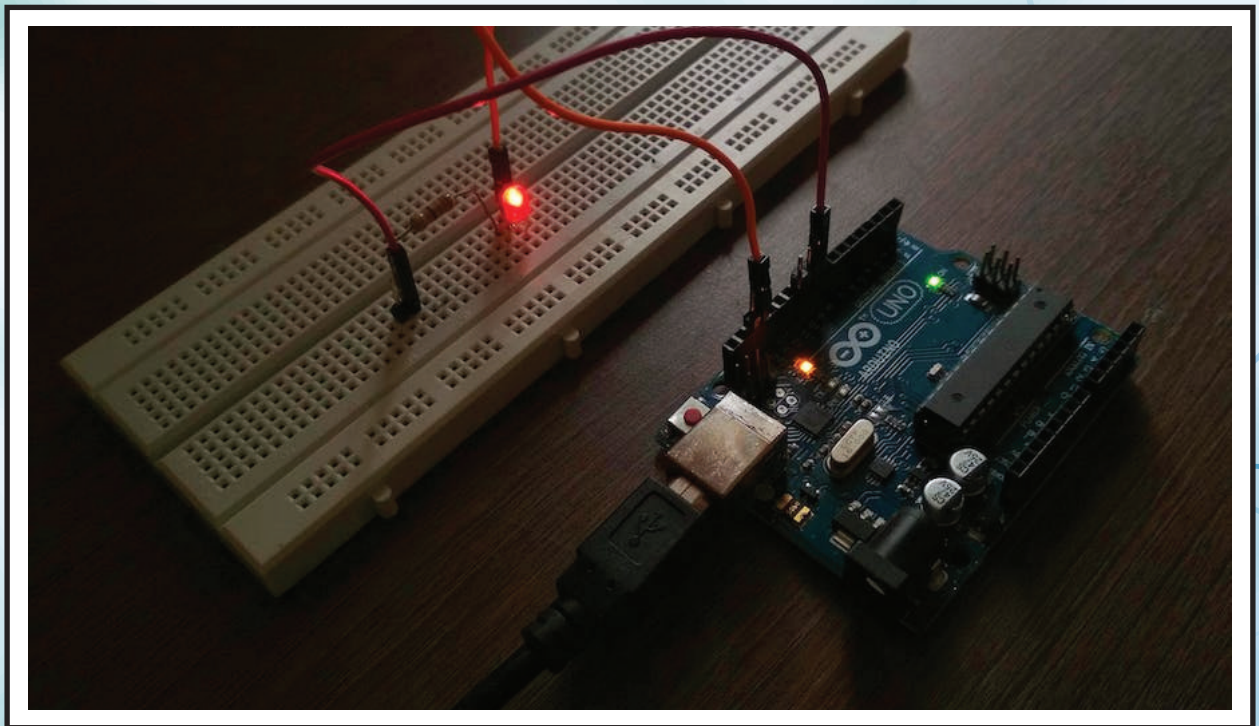


**Venue
EtechRobot
Neemuch**

DAY - 1

Introduction to Robotics

- Introduction to Robotics, Electronic components:- LED, Switches, Resistor, IC, Capacitor, Circuit Board etc.
- Different types of Microcontrollers
- Introduction to C Language



Projects

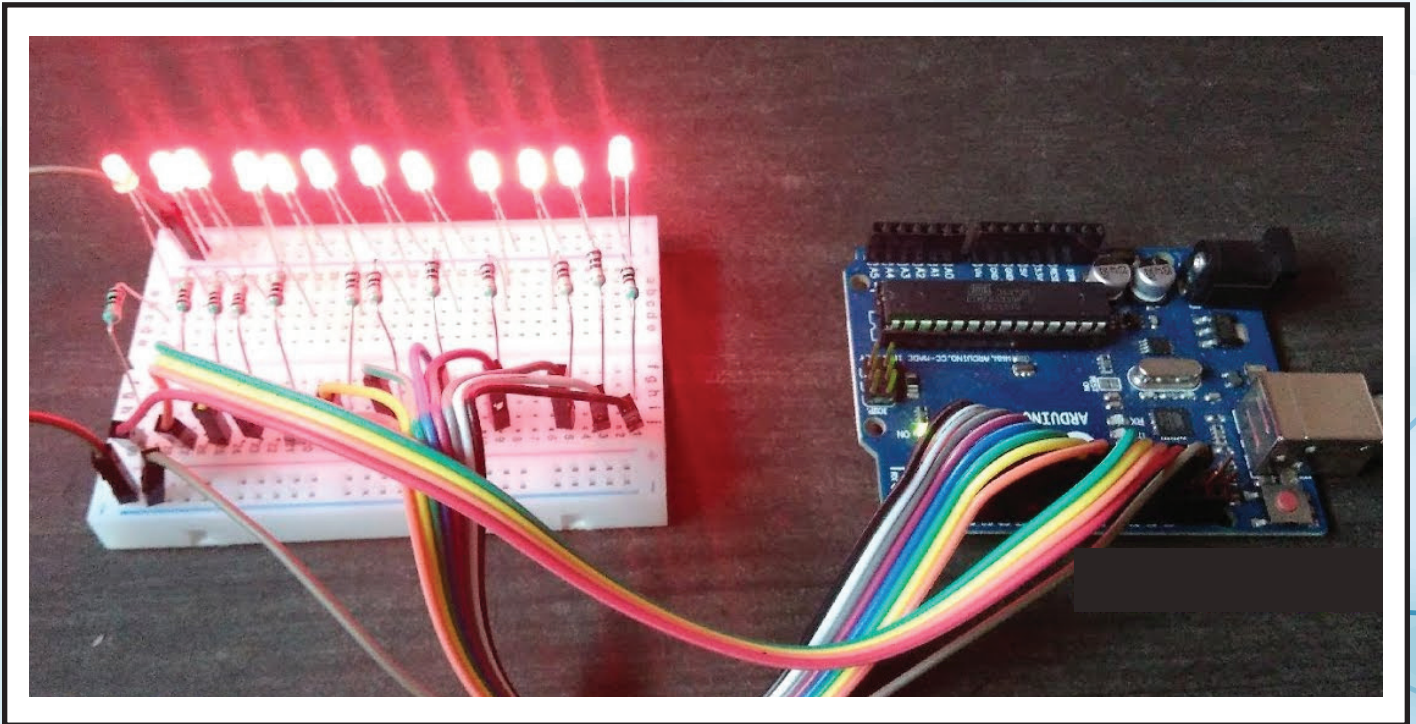
Blinking LED

01

DAY - 2

Digital & Analog

- I/O Pins in Microcontroller
- Introduction to Breadboard, Transistor, Diode & other components.



Projects

Disco Light 02

Controlling Buzzer 03

RGB LED 04

DAY - 3

Sensors

- Different types of sensors their applications & usage with Microcontroller



Projects

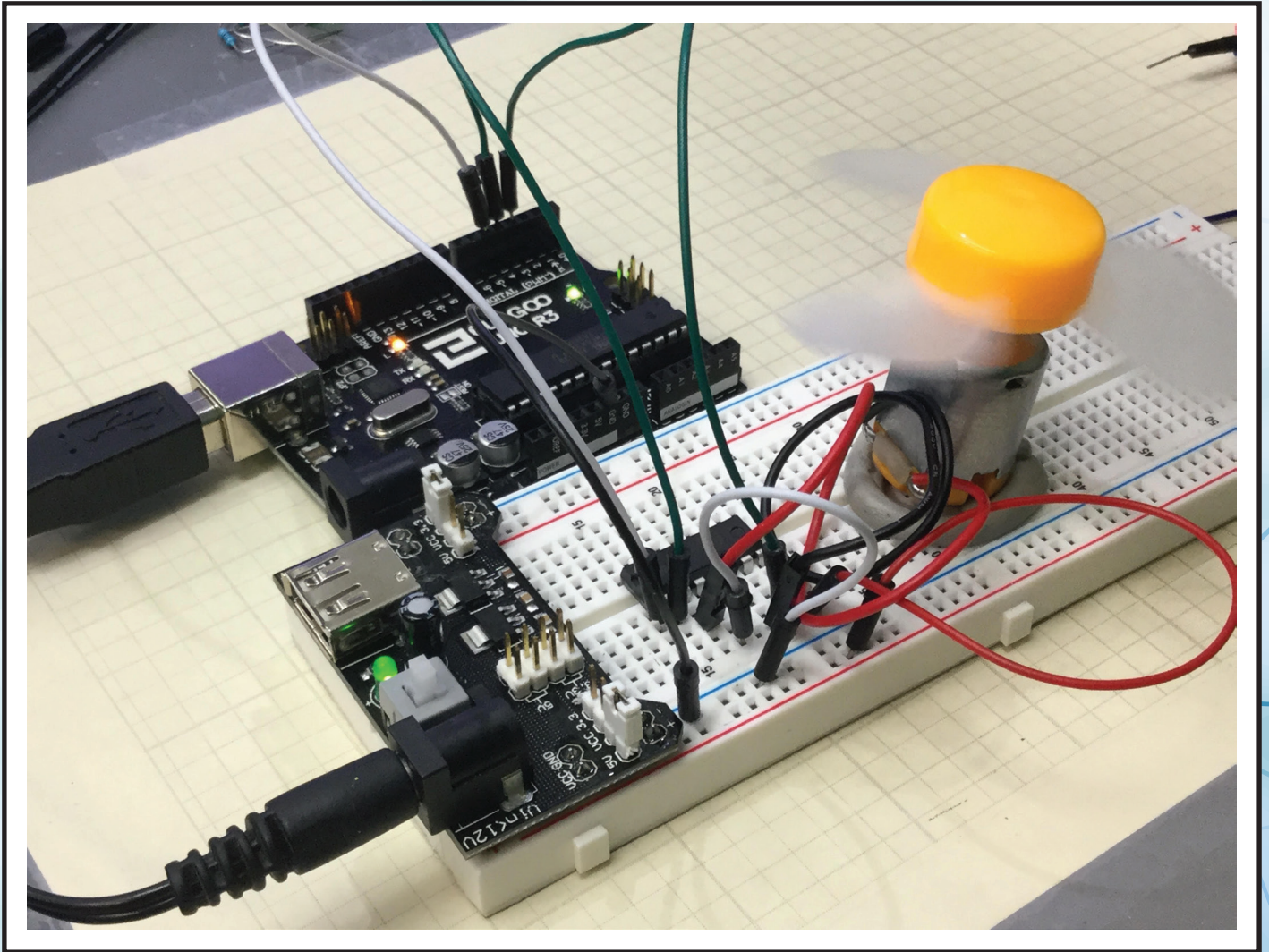
Car Reverse Parking Alert System 05

LPG Leakage Detector 06

DAY - 4

Actuators

- Different types of Actuators and their applications.



Projects

Controlling Motor using Microcontroller 07

Servo Motor 08

DAY - 5

Sensors with Actuators

- Integrating Sensors with Actuators.



Projects

Smart Irrigation System

09

Automatic Rain Sensing Wiper

10

DAY - 6

Automatic Hand Sanitizer

- Practical applications & implementation of Sensors in day to day life.



Projects

Automatic Hand Sanitizer

11

Crop Protection System

12

DAY - 7

Liquid Crystal Display

- Working principle and applications of Liquid Crystal Display



Projects

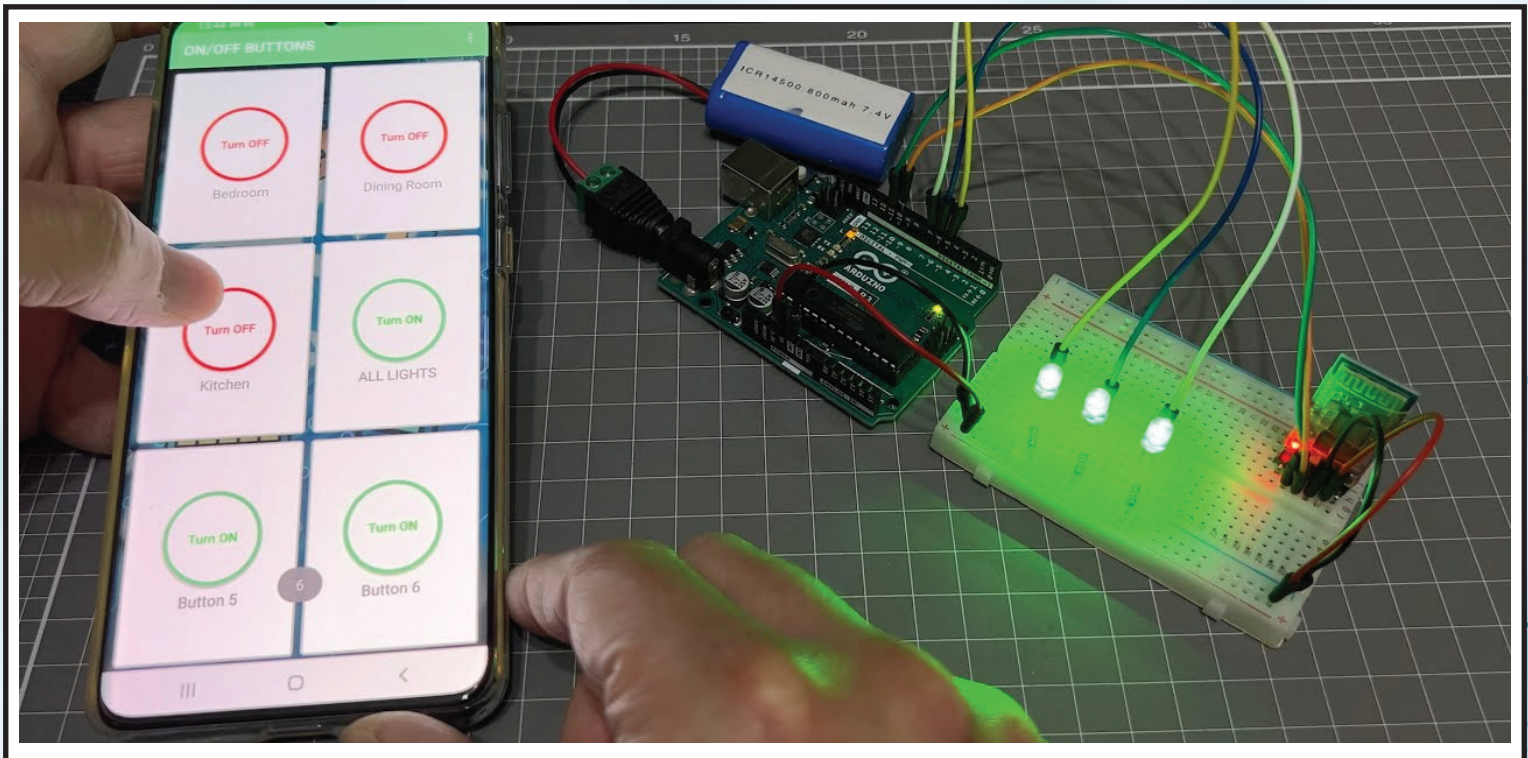
Displaying Name on LCD 13

Scrolling Text 14

DAY - 8

IoT

- Controlling Microcontroller via Bluetooth communication using an Android app.



Projects

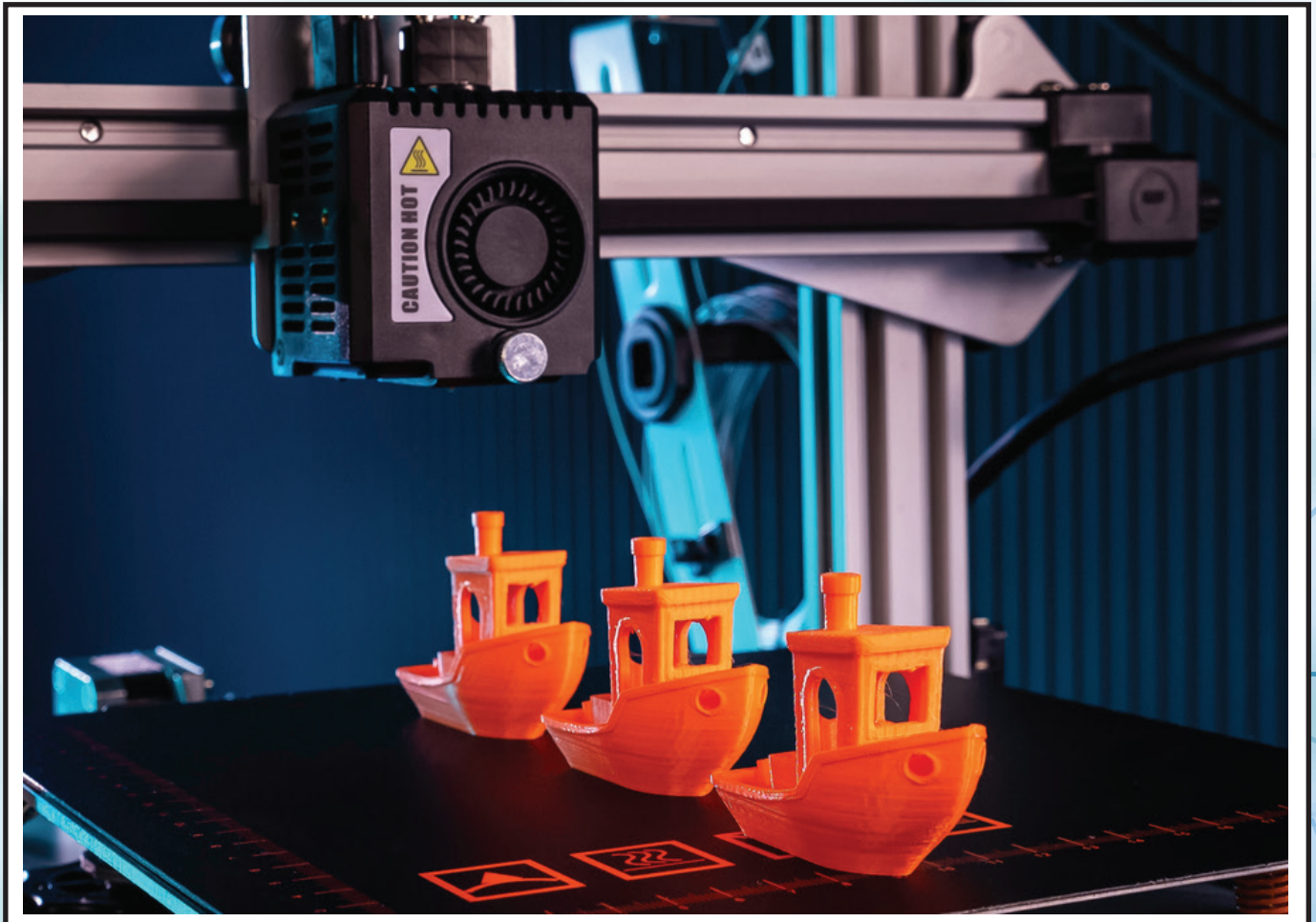
Controlling an LED using a Smartphone 15

Controlling brightness of an LED 16

DAY - 9

3D Printing

- 3D Printing Technology
- Application of 3D Printing in various industries.



Working

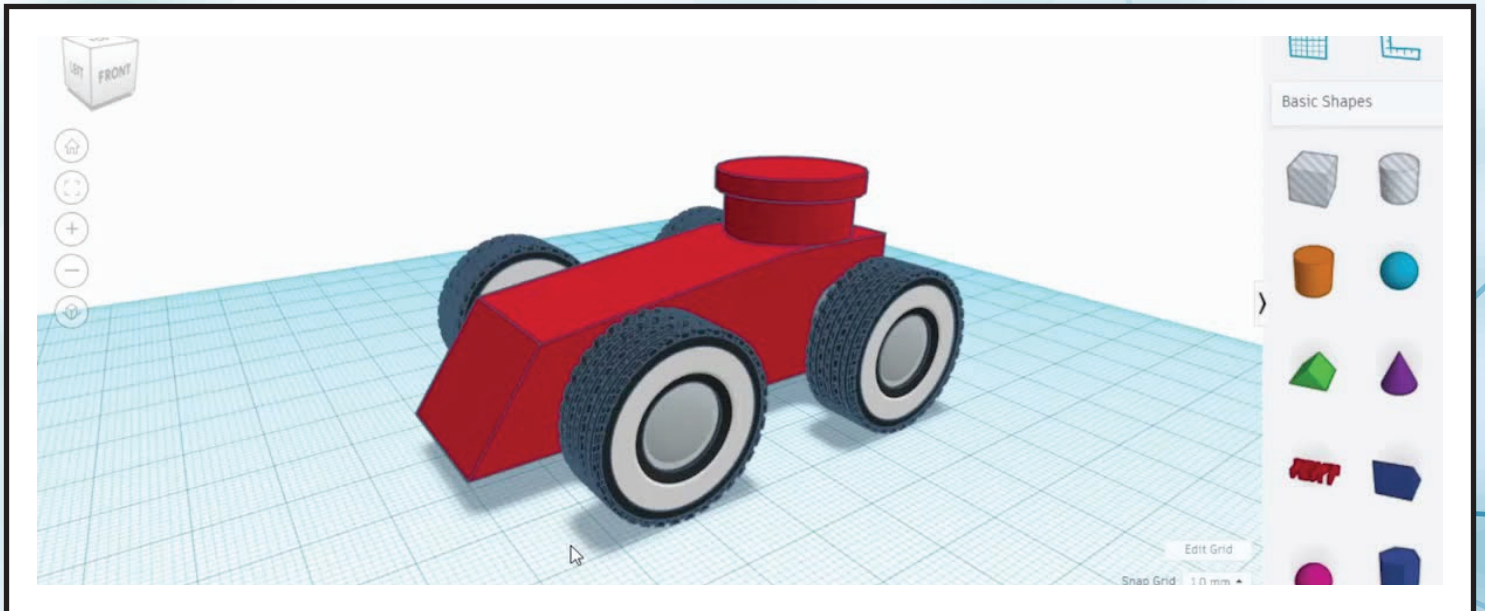
3D Printer Working & Demonstration

17

DAY - 10

3D Modeling

- Introduction to 3D Modeling Software
- Creating 3D Digital designs using CAD.
- Exploring Various 3D Printable File Formats



Projects

Designing a custom Object

18