Internet Of Things

Lab - 3

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Aim :

To build a Smart Parking System with the help of Tinker CAD and concepts of IoT.

Software :

Tinker CAD Software.

Methodology :

This instructions given by our faculty [redacted] was followed. The instructions given has been recorded and is available at : [redacted]

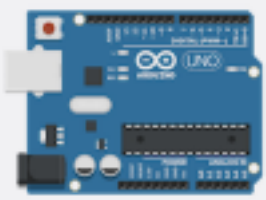
Simulation And Output :

1) The Components used :

Name	Quantity	Component
PING1 PING2 PING3	3	Ultrasonic Distance Sensor
U2	1	Arduino Uno R3
U4	1	LCD 16 x 2
Rpot1	1	250 kΩ, Potentiometer
R1	1	220 Ω Resistor

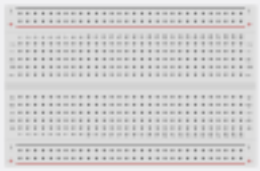
2) The Tinker-Cad Process and Output :

A. Arduino Uno R3 :



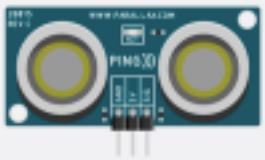
Arduino Uno R3
A programmable board you can use to build interactive circuits.

B. Breadboard :



Breadboard Small
A half-size breadboard with 30 rows, 10 columns, and two pairs of power rails.

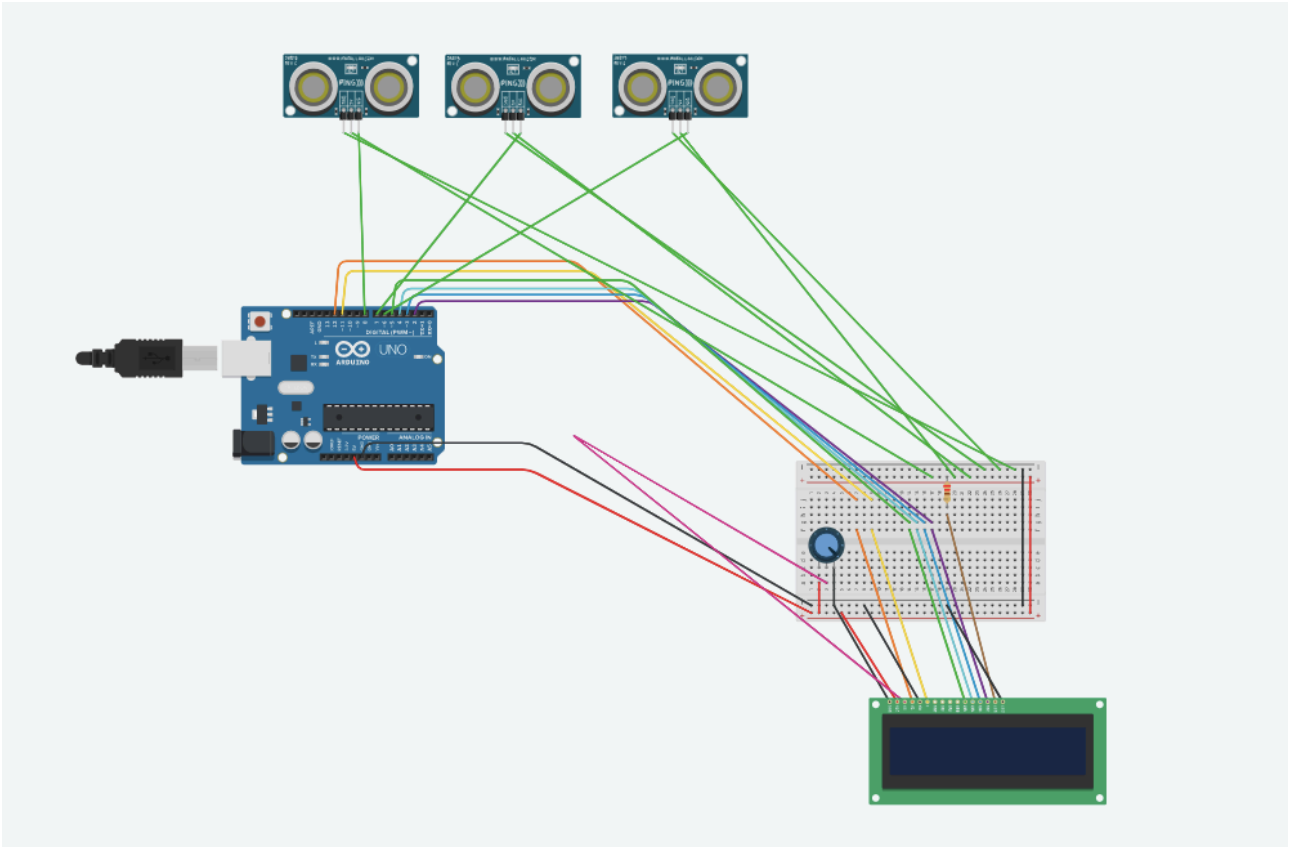
C. Ultrasonic Distance Sensors :



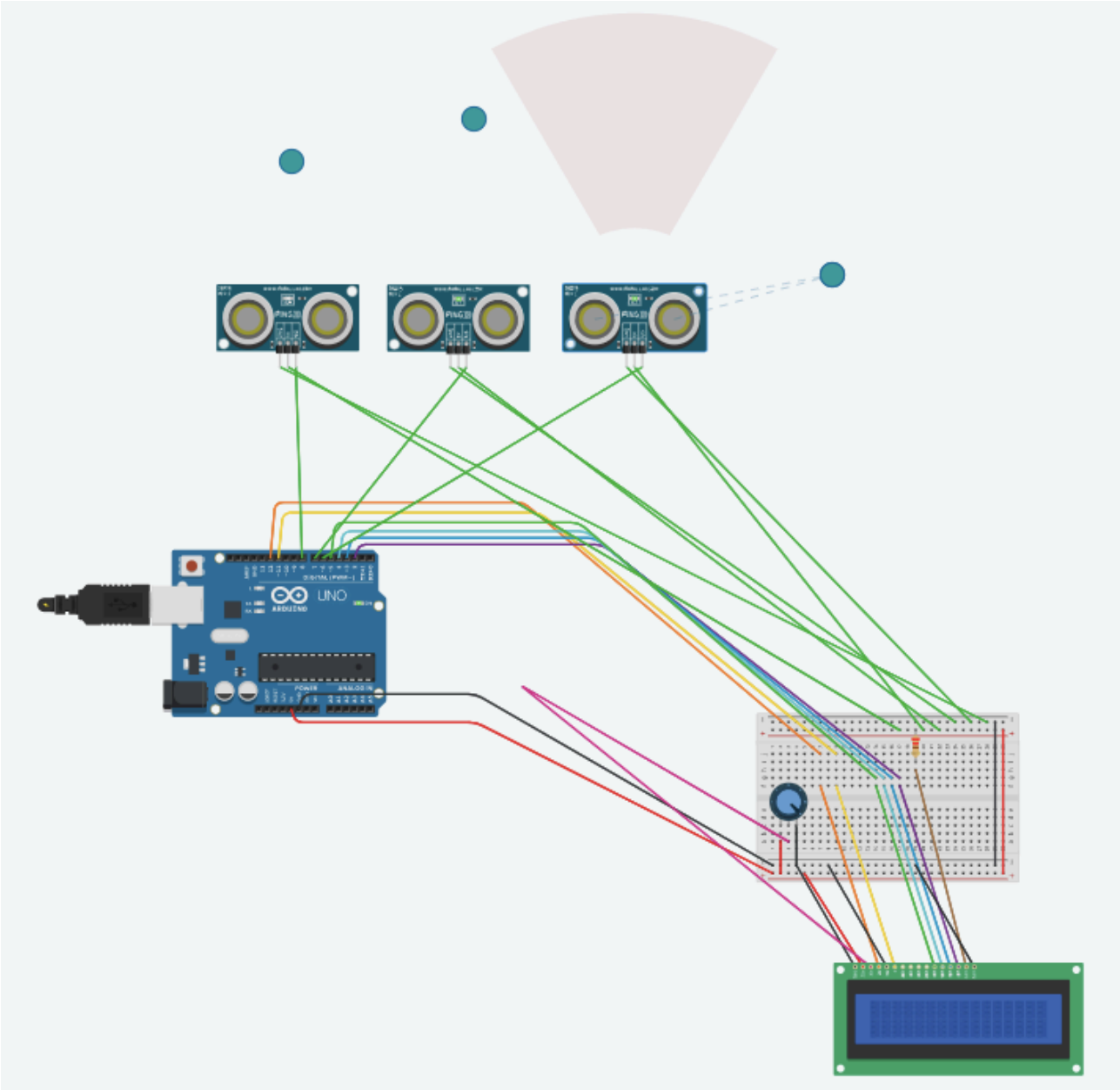
Ultrasonic Distance Sensor
A sensor that uses sound waves to determine how far away an object is from it.

D. LCD Starter Kit :

E. Complete Circuit Diagram :



Output :



Result :

Thus, with the help of Tinker-Cad we have designed a circuit of a Smart Parking Lot, in which we have implemented three lots and used Arduino to recognise and note down if a Parking space is vacant or not, and this information can be used for various purposes depending on the situation.