MAKE SKILLED IoT INTERNSHIP

ASSIGNMENT – 16

ARDUINO LOGICAL THINKING TASK

**Blind stick.**

* HERE WE WILL BE USING ARDUINO INTERFACE.
  + COMPONENTS REQUIRED:
  1. ARDUINO UNO BOARD
  2. PC / LAPTOP INSTALLED WITH ARDUINO IDE SOFTWARE
  3. ULTRASONIC SENSOR
  4. BUZZER
  5. JUMPING WIRES
* CIRCUIT DIAGRAM 1
* Graphical user interface, diagram

  Description automatically generated
* PROGRAM 1

int trigPin = 9;

int echoPin = 8;

int buzz = 2;

float duration\_us, distance\_cm;

void setup() {

Serial.begin (9600);

pinMode(buzz, OUTPUT);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

}

void loop() {

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration\_us = pulseIn(echoPin, HIGH);

distance\_cm = 0.017 \* duration\_us;

Serial.print("distance: ");

Serial.print(distance\_cm);

Serial.println(" cm");

delay(1000);

if (distance\_cm > 20)

digitalWrite(buzz, HIGH);

delay(3000);

digitalWrite(buzz, LOW);

}