**SMART SHOPPING BASKET**

#include <Arduino.h>

#include <LiquidCrystal\_I2C.h>

#include <Wire.h>

LiquidCrystal\_I2C lcd(0x27, 16, 2);

char input[12];

int count = 0;

int a;

int p1=0,p2=0,p3=0,p4=0;

int c1=0,c2=0,c3=0,c4=0;

double total = 0;

int count\_prod = 0;

void setup ()

{

// Pin direction

pinMode(3, INPUT\_PULLUP); //Push Switch

pinMode(4, OUTPUT); //RED LED

pinMode(5, OUTPUT); //BUZZER

pinMode(6, OUTPUT); //GREEN LED

// Initialization

Serial.begin(9600);

// lcd.begin();

lcd.init();

lcd.backlight();

lcd.setCursor(0, 0);

lcd.print(" AUTOMATIC BILL");

delay (2000);

lcd.setCursor(0, 1);

lcd.print(" SHOPPING CART ");

delay (2000);

lcd.clear();

lcd.setCursor(0, 0);

lcd.print(" WELCOME TO ");

lcd.setCursor(0, 1);

lcd.print("JUSTDOELECTRONIC");

}

void loop()

{

count = 0;

while (Serial.available() && count < 12)

{

input[count] = Serial.read();

delay(5);

}

int a=digitalRead(3);

if ((strncmp(input, "4000350ABAC5", 12) == 0) && (a == 1))

{

lcd.setCursor(0, 0);

lcd.print("Butter Added ");

lcd.setCursor(0, 1);

lcd.print("Price(Rm):4.00 ");

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

delay(2000);

total = total + 4.00;

count\_prod++;

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

}

else if ((strncmp(input, "4000350ABAC5", 12) == 0) && (a == 0))

{

if(p1>0)

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Butter Removed!!! ");

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

delay(2000);

total = total - 4.00;

lcd.clear();

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

}

else

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Not in cart!!! ");

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

delay(2000);

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

lcd.clear();

}

}

if ((strncmp(input, "4000351B7B15", 12) == 0) && (a == 1))

{

lcd.setCursor(0, 0);

lcd.print("Milk Added ");

lcd.setCursor(0, 1);

lcd.print("Price(Rm):6.00 ");

digitalWrite(6,HIGH);

delay(2000);

total = total + 6.00;

count\_prod++;

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

}

else if ((strncmp(input, "4000351B7B15", 12) == 0) && (a == 0))

{

if(p2>0)

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Butter Removed!!! ");

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

delay(2000);

lcd.clear();

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

}

else

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Not in cart!!! ");

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

delay(2000);

digitalWrite(4,LOW);

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

lcd.clear();

}

}

if ((strncmp(input, "4000355181A5", 12) == 0) && (a == 1))

{

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Total Price :-");

lcd.setCursor(0, 1);

lcd.print(total);

delay(5000);

lcd.clear();

lcd.setCursor(0, 0);

lcd.print(" THANKS FOR ");

lcd.setCursor(0, 1);

lcd.print(" VISITING ");

}

}