#include <Keypad.h>

#include <LiquidCrystal.h>

LiquidCrystal lcd(5, 4, 3, 2, A4, A5);

const byte ROWS = 4; //four rows

const byte COLS = 4; //three columns

char keys[ROWS][COLS] = {

{'1','2','3','/'},

{'4','5','6','\*'},

{'7','8','9','-'},

{'C','0','=','+'}

};

byte rowPins[ROWS] = {A0, A1, 11, 10}; //connect to the row pinouts of the keypad

byte colPins[COLS] = {9, 8, 7, 6}; //connect to the column pinouts of the keypad

Keypad keypad = Keypad( makeKeymap(keys), rowPins, colPins, ROWS, COLS );

String no= "NO :",

time= "TIME:";

float distMenit= 0, distDetik= 0;

int menit= 0, detik= 0;

int ctrNotelp= 0;

int ctrTekan= 0;

int ctrC= 0;

String notelp[12];

bool start= false;

bool tekan= false;

bool calling= false;

bool endcall= false;

int biaya= 0;

void setup(){

Serial.begin(9600);

lcd.begin(16, 2);

lcd.setCursor(0, 0);

lcd.print(" WARTEL ");

lcd.setCursor(0, 1);

lcd.print(" MAHAL");

}

void loop(){

char key = keypad.getKey();

if (key == '-') {

lcd.clear();

lcd.setCursor(0, 0);

lcd.print(no);

lcd.setCursor(0, 1);

time+= (String(menit))+(String(menit))+":"+(String(detik))+(String(detik));

lcd.print(time);

start= true;

ctrC++;

}

if (start) {

if (key == '/' ||

key == '\*' ||

key == '-' ||

key == '+' ||

key == '=') {

if (key == '\*') {

notelp[ctrNotelp]= "";

if (ctrNotelp > 0) {

ctrNotelp--;

}

lcd.clear();

} else if (key == '-') {

if (ctrC == 1) {

ctrC++;

} else if (ctrC >= 1) {

calling= true;

}

} else if (key == '+') {

calling= false;

endcall= true;

no= "BIAYA :"+String(biaya);

time= "";

lcd.clear();

if (key == '/') {

start= false;

lcd.clear();

lcd.setCursor(0, 0);

lcd.print(" WARTEL ");

lcd.setCursor(0, 1);

lcd.print(" MAHAL");

}

}

} else {

if (key) {

Serial.println("masuk");

notelp[ctrNotelp]= String(key);

ctrNotelp++;

lcd.clear();

}

}

if (calling == true) {

Serial.println("calling");

distDetik+= millis()\*0.001;

detik= (int) distDetik;

if (detik >= 60) {

menit++;

}

if (detik % 10 == 0) {

biaya+= 50;

}

Serial.println(biaya);

lcd.clear();

}

lcd.setCursor(0, 0);

if (!endcall) no= "NO :";

for (int i= 0; i<12; i++) {

no+= notelp[i];

}

lcd.print(no);

time= "TIME:";

time+= (String(menit))+"0:0"+(String(detik));

lcd.setCursor(0, 1);

lcd.print(time);

}

}

