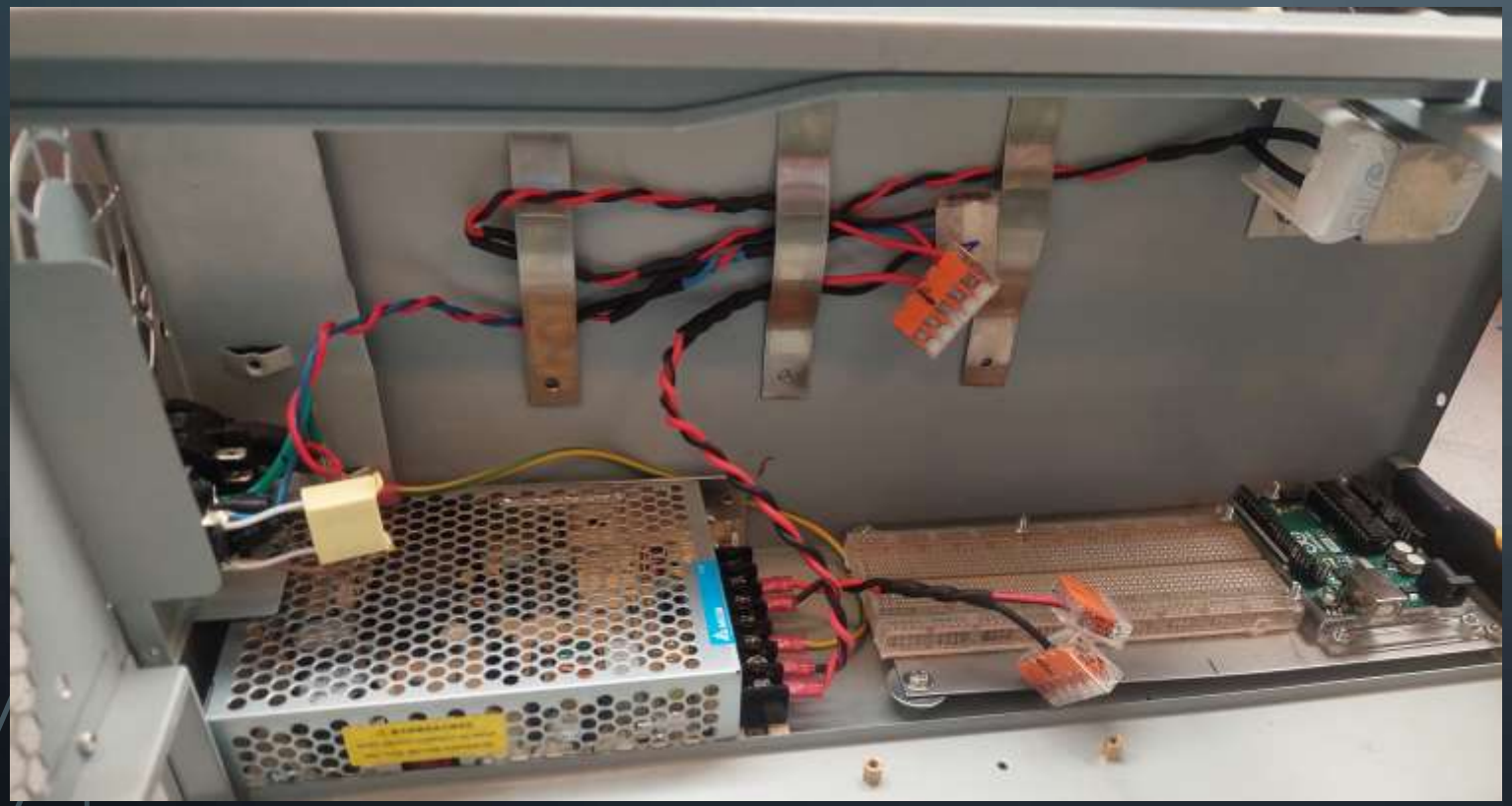
БАРМАН РОБОТ

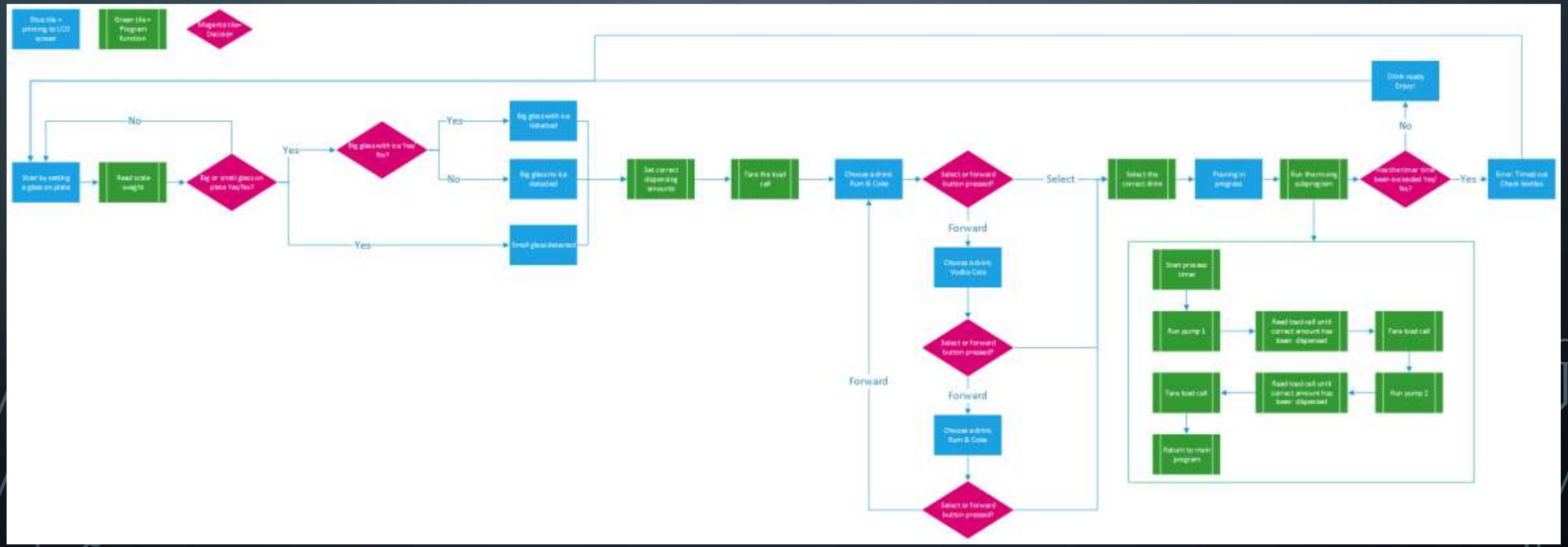
ИЗГОТВЕН ОТ

БОРИЛ ИГНАТОВ – 0MI0600124

ЗАДАНИЕ



БЛОКОВА СХЕМА



АЛГОРИТЪМ

```
void pump_liquid(float amount) { // runs the pump until the desired amount of liquid weight has been reached
  Serial.print(amount);
  int accelerate = 2000;
  for (int i = 0; i<= 350; i++){ // accelerates the pump
    digitalWrite(enable_pin, HIGH);
    digitalWrite(stepPin, HIGH);
    delayMicroseconds(accelerate);
    digitalWrite(stepPin, LOW);
    delayMicroseconds(accelerate);
    accelerate = accelerate - 4;
  }

  reading = loadcell.get_value() / LOADCELL_DIVIDER;
  Serial.print(reading);
  int k = 0;
  while (reading < amount && reading > 1){
    digitalWrite(stepPin, HIGH);
    delayMicroseconds(600);
    digitalWrite(stepPin, LOW);
    delayMicroseconds(600);

    if (k > 100){
      reading = loadcell.get_value() / LOADCELL_DIVIDER;
      k = 0;
    }
    k++;
  }
  digitalWrite(enable_pin, LOW);

  terminateProcess();

}
```

```
void run_lcd(){
  if (run_pump == 0) {
    // Start screen
    if (n == 0) {
      lcd.clear();
      lcd.print("Press 'select' ");
      lcd.setCursor(0,1);
      lcd.print("to start the machine!");
    }

    else {
      lcd.clear();
      lcd.setCursor(0,0);
      lcd.print("Number of drink: ");
      lcd.print(n);
      delay(500);    // removes the flashing of the screen during activity
    }

  }

  else {
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Is prepared!");
    lcd.print(n);
    pump_liquid(amount);
    delay(5000);
  }
}
```

ЗАКЛЮЧЕНИЕ