

Climatization System

Introduction

Dinoci Andrei-Vlad 1222B

In this project I want to create a simple climatization system. The system will be composed out of a fan, an LCD screen and 2 buttons for setting the wanted temperature.

- The fan will be turned on when the temperature will go over the temperature set by the user via the 2 buttons and this temperature as well as the fan speed will be displayed on the screen.
- Purpose: To cool a room

General description



Hardware Design



Parts List

- LCD screen
- Fan
- Buttons
- Breadboard
- Transistor
- Temperature sensor

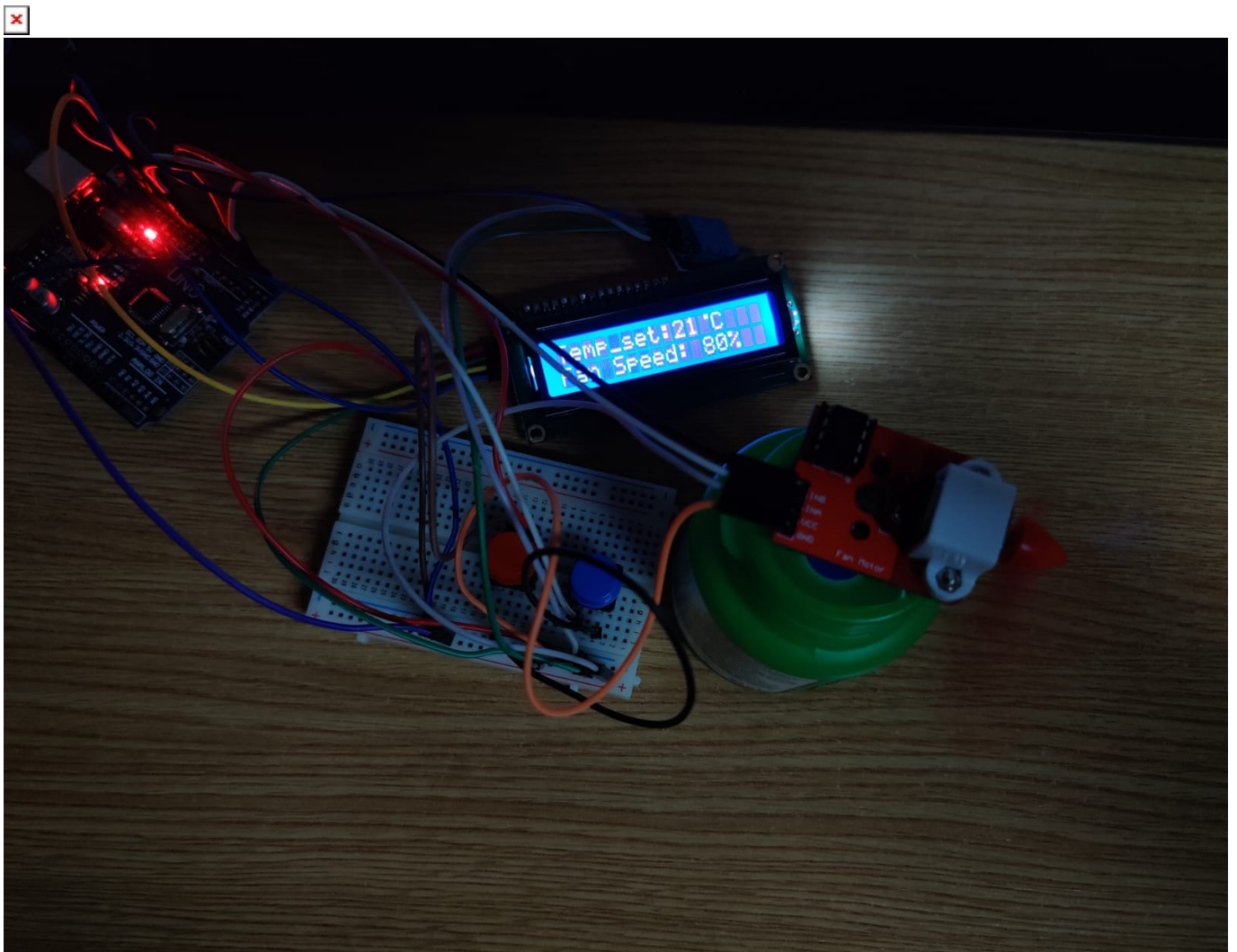
Software Design

I used the Arduino IDE for this project. The base temperature is 17°C. After that, using the 2 buttons on the breadboard, the user can increase or decrease the value. Based on the difference between the ambient temperature and the set temperature, the fan will spin faster or slower, using pwm. On the LCD display, there are printed the information about the temperature set by the user and also the fan speed.

Librarii si biblioteci third-party

- dht11.h for temperature sensor
- LiquidCrystal_I2C.h for the LCD display
- Wire.h for communicating with the I2C device on the back on the of the LCD

Results



Conclusions

Given the fact that this was my first major Arduino project, I am pretty satisfied with the results

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Journal

26/05/22 → finished wiki page

23/05/22 → finished project(software + hardware)

27/04/22 → parts arrived

22/04/22 → theme selection

Bibliography/Resources

[LCD Datasheet](#)

[Motor Datasheet](#)

[Temperature Datasheet](#)

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