

Design with MicroProcessors

Smart Alarm Clock

Dreghici Popa Vlad, 30432

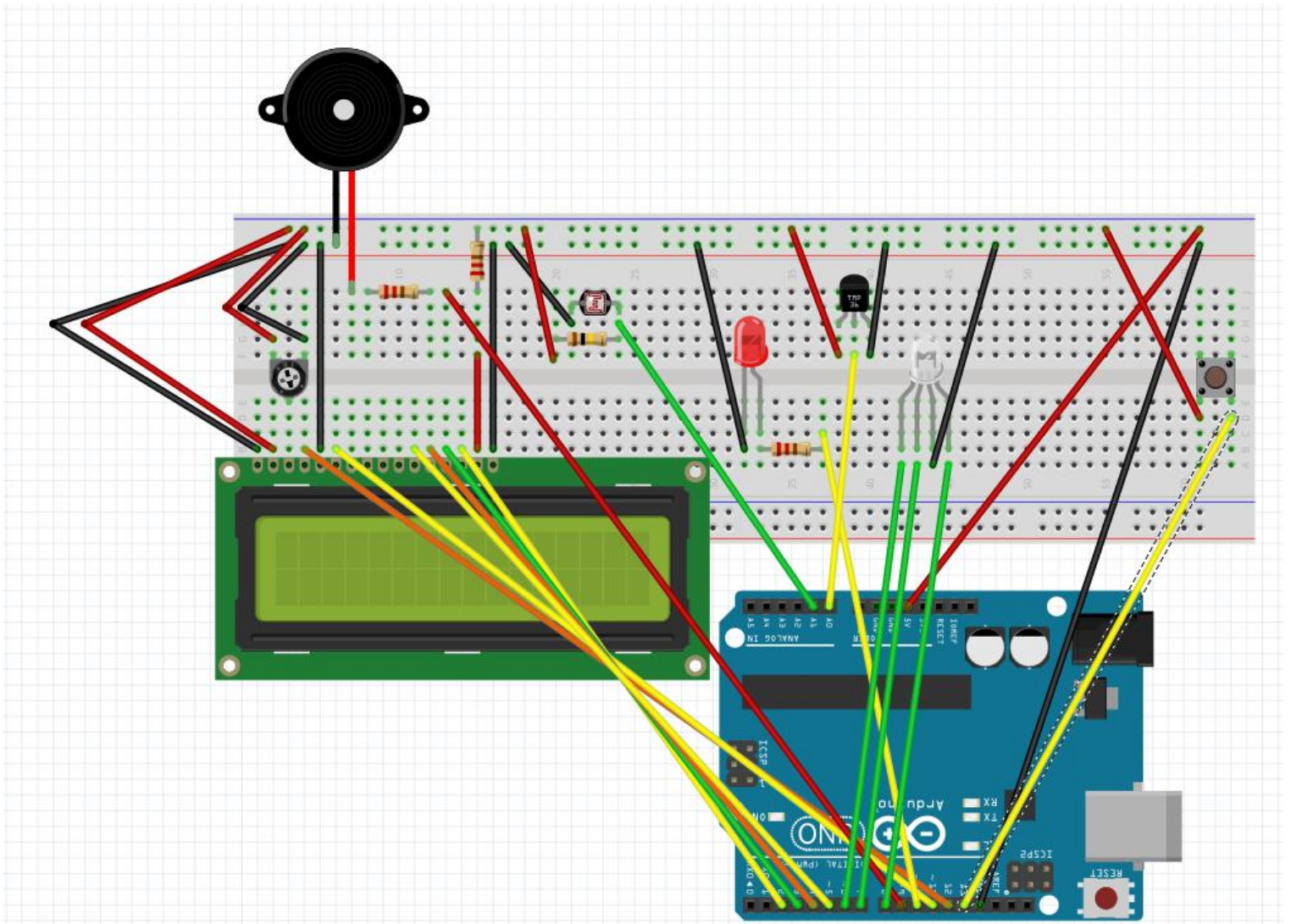
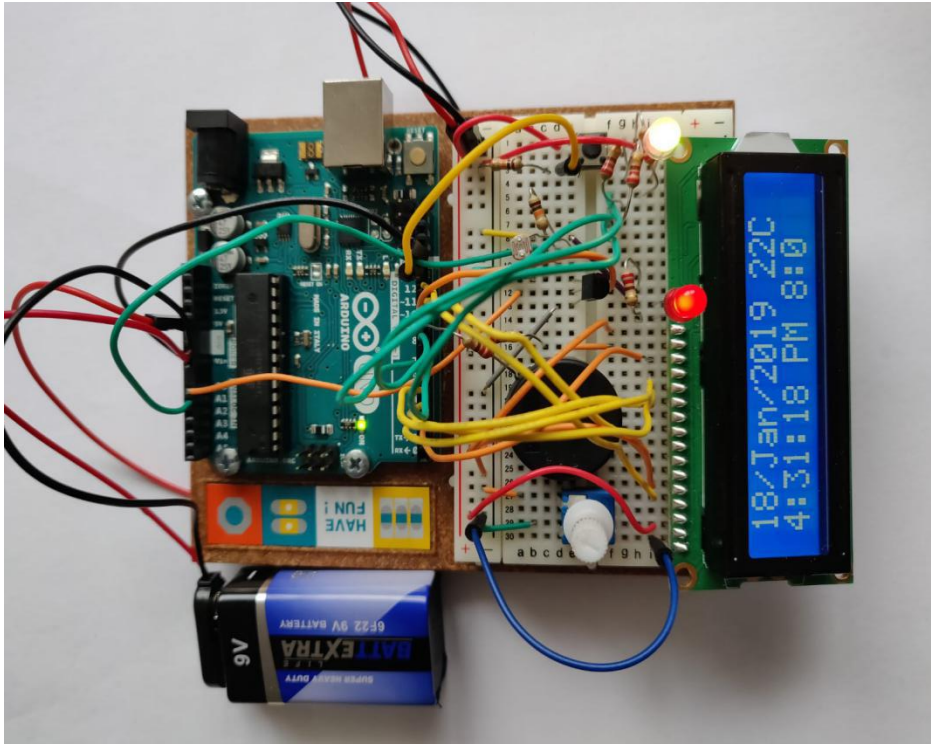
1. Project Description

For my project I decided to build a smart alarm clock. The basic idea is that the project will be able to tell the date, time and temperature of the environment it is in. Also the user will be able to have an alarm set, have the ability to snooze and the ability to stop the alarm completely. Also, another feature is the ambient light, the red led will have a brightness set depending on the light around and the RGB led will have a different light depending on the temperature in the room.

2. HDL

The components used for this project are the following:

- Arduino UNO
- Small breadboard (a big one would have been better)
- 16 by 2 LCD Screen
- Potentiometer
- Piezo element
- TMP36 temperature sensor
- Simple red led
- RGB led
- 220ohms resistors
- 1xPhotocell
- 1xButton
- Many, many wires
- For ease of use a 9V battery with battery adaptor



3. Flowchart

