Project Overview Document

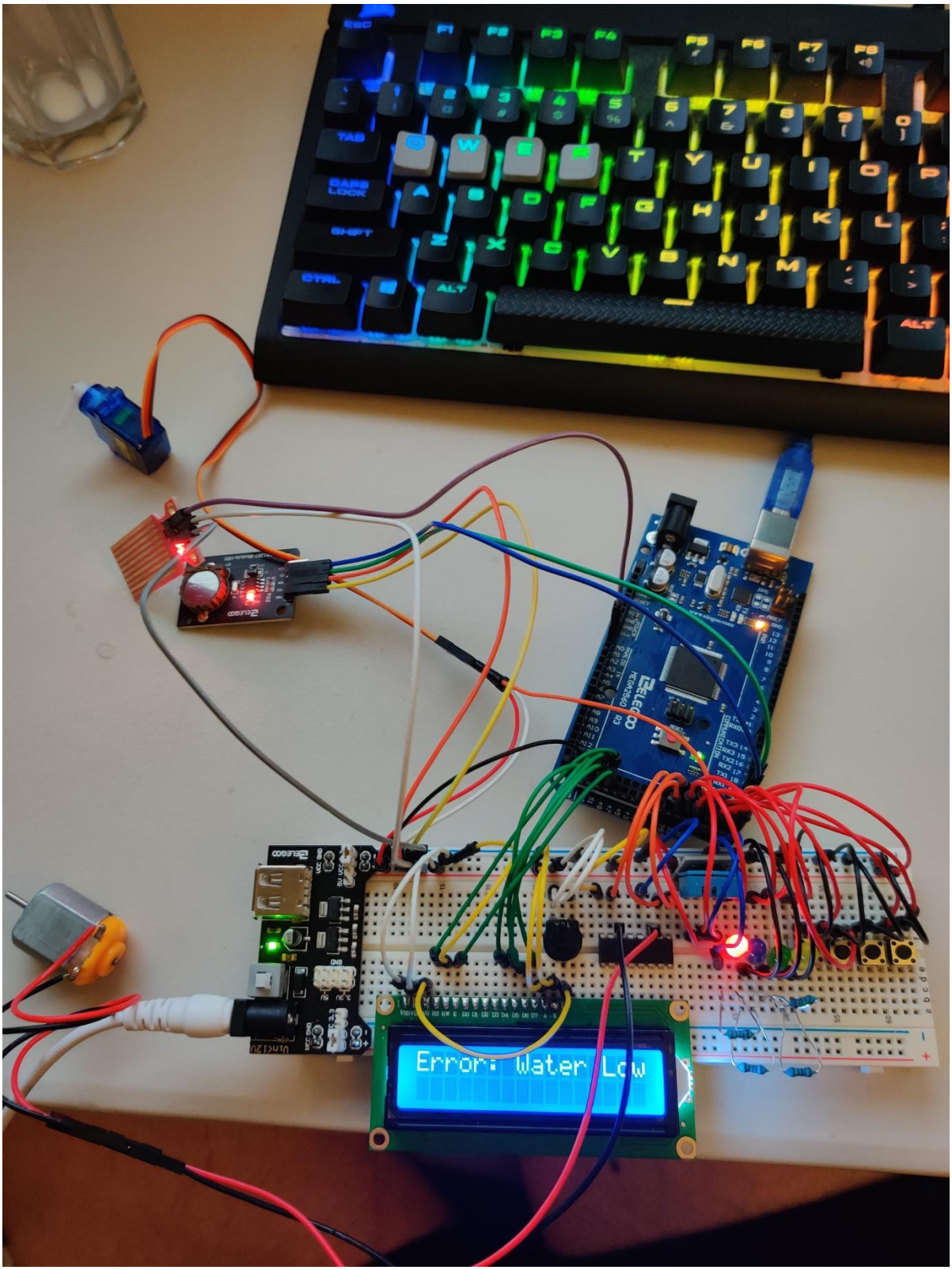
The goal of this project was to create an evaporation cooling system (aka swamp cooler). The system monitors the water levels in a reservoir and prints an alert to an LCD screen when the level is too low. The LCD screen also displays the current air temperature and humidity while the system is in the idle or running state. A fan motor turns on while the system is in the running state, until the room's temperature drops below 54 degrees. The system also has a disabled state, triggered by a button, to turn off the fan and temperature monitoring. During any of these states, the system's vent can be toggled from being open or closed. Every 4 seconds there is a serial printout displaying the time and date, the current state, and what temperature the room is at.

Link to a video of the system in action:
https://drive.google.com/file/d/1XeZPbKl48FnEd3edPWJpF14Lg652Prcy/view?usp=sharing

Schematics for all the components used in this system can be found here:
https://www.elegoo.com/blogs/arduino-projects/elegoo-mega-2560-the-most-complete-starter-kit-tutorial

Link to the Github repository can be found here:
https://github.com/jotreewater/CPEGroupProject

Our "test plan" is to go bullet point by bullet point through the system requirements, showing off each off the requested features of the system.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