**Bridget LaBonney** 

**CPE 301** 

**Final Project** 

## **Project Overview**

This project is designed to run a small swamp cooler built from an Arduino ATMega2560 and additional parts. It was designed in the Arduino IDE using ANSI-C. The main strategy used to solve the problem was to structure each state as a function, and then fulfill conditions within the loop to switch between them. The swamp cooler automatically activates when the temperature is above 23 C or the start/stop button is hit, and automatically turns off when the temperature is below or at 23 C. Any water reservoir can be used, though water threshold would have to be set by the user in the program. It is currently set up for 30 units of water, going into an error state when the water hits 5 units of water.