CPS310: Arduino Proposal

For the Arduino project, we plan to make a laptop cooler. The laptop cooler will have a fan with a variable speed based on temperature readings obtained directly from a laptop. If time permits, a component that allows a person to switch the fan's speed manually may be added. These temperature readings, along with the fan's current speed, will be displayed on an attached LCD screen. LED lights will also be present. Different coloured lights will be on depending on the current temperature reading. A flashing red light would indicate that the temperature reached a critical limit, a solid red light would indicate that the temperature reading is high, a solid yellow light would indicate that the temperature is warm, a solid green light would indicate that the temperature is within an optimal range, and a solid blue light would indicate that the temperature reading is low for maximum performance.

Phase 1

- Getting basic functions of the fan operational.

Phase 2

- Reading in temperatures from the computer and having them displayed on the screen.

Phase 3

- Getting the fan to change speeds based on temperature readings.
- Getting the fan's current speed to display on the LCD screen.

Phase 4

- Getting LEDs to display properly based on temperature.

Phase 5 (Optional)

- Adding a component to manually control the fan speed.