Josh Wanner

SDEV 140-53P

Instructor: Marlene Gordon

Project Topic

11/9/2021

GreenPy

Name of GUI Application: GreenPy

Purpose: The purpose of the GUI application will be to display the temperature, humidity level, wind speed, light level, current time, and current date in a greenhouse.

Reasons: In displaying the temperature, humidity level, wind speed, and light level of a green house, we are better able to draw attention to any measurements which are in a non-optimal amount. In providing the current time and date, we allow for the later potential of storing this data with time stamps, it better track past conditions of the micro-environment.

Goals:

* Display the temperature in degrees of Fahrenheit and Celsius
* Display the humidity as a percentage
* Display pH
* Display light level as optimal, low, or dark
* Display time in as hours and minutes in 00:00 format
* Display date as month, day, year in 00/00/0000 format
* Develop acceptable levels of each measurement, and color code the displays by if the measurement is optimal (green), above optimal (red), or below optimal (blue).

Audience: The intended audience for the project is anyone who has an interest in growing plants in an indoor controlled environment to pursue optimal growing conditions for their plants.

Outline:

78º/25º

82%

2

Dark

Temperature

Humidity

Wind Speed

Light Level

20:43

11/09/2021

Green Py