Sustainable Renewable Energy COSC 2315 Final Project

Perform the following applying the critical analysis skills and programming techniques acquired in COSC2315.

Program objectives: Applying programming techniques to authentic problems, develop a system to monitor the solar panels for cleanliness, position, temperature.

Individual Assessment

Students will use a thermal sensor and a photo resistor in conjunction with a microprocessor to read the temperature of a solar panels. The data will be stored in array. The data will be used to call a function to make automated adjustment to the solar panel through the use of mechanization.

Student Deliverables

- Source Code for the program uploaded to Blackboard group project assignment
- Student will deliver a set of data points for use in additional research.

Demonstrate your understanding of the fundamentals of programming and electricity by taking the online quiz. Sample questions below.

- What are the different types of data types used for storage of numbers? Which are the best for the current application?
- What structure would you use to perform a specified action?
- What conditional operators are required and why?
- What variations of arguments are required to call the functions and why?
- What are nested loops and how are they beneficial to this application?