Project Status

Our project can be made up of several elements.

The main controller
The sensor readout
Electronic on/off switching for the lights, water pump, ventilation
A physical box

The sensor readout is more or less complete, but has not been soldered to PCB.
The main controller doesn’t do much other than read the sensor readout and write it to a website using flask. It should contain code to actually act on the sensor readout.
The electronic switching works but is not implemented or controlled by the main controller.
The physical box has not been made, but a candidate has been sourced to solve this issue.

Aim of the project

The aim of the project is to automate the cultivation of plants in a controlled environment using off-the-shelf components, electronics and a bit of programming. In the process we will log data and calculate the power usage, cost of materials and make a conclusion based on the data to find out if it’s feasible.

Objectives

The objectives to build the automated greenhouse are:

- build a main controller
- build a sensor readout unit
- build a box for the greenhouse
- build a ventilation system
- build a web-service to visualize collected data
- assemble everything
- analyze data and write conclusion