Grand Plan Outline

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# Introduction:

My master plan is to have a sensor network.

Power it by solar power.

Read those sensors with a microcontroller.

Have that microcontroller send data with a GSM module to a server.

Have a microcontroller

Have a website that reads those sensors.

How will the website work? I don’t know.

Option 1: Have a website that when a request is made for the website, poll the Raspberry Pi for all data, and then once the website has it, compile it to HTML and JSON form and send that as a response.

Option 2: Have a website that when a request is made for the website, load the last JSON file created, put it into an HTML site, send that as a response. JSON files are created in the Raspberry Pi every 10 minutes.

Have a separate page that you can request data from a specific time.

Have a separate page that displays data in graph form. Select data from a time frame. (default: 1 year)

Things I must do first:

1.) Get all components listed

2.) Create a wiring diagram with:

Wire sizes, etc.

Something that I can really use to rewire the greenhouse.

If a meteorite hit the greenhouse right now, I must be able to use the greenhouse to rebuild the greenhouse from scratch.

3.) Get Petersen’s approval

4.) Get Tela’s approval

<https://www.morningstarcorp.com/parallel-charging-using-multiple-controllers-separate-pv-arrays/>