Project Deliverable E: Project Schedule and Cost
GNG 1103 – Engineering Design
Solar II

Introduction

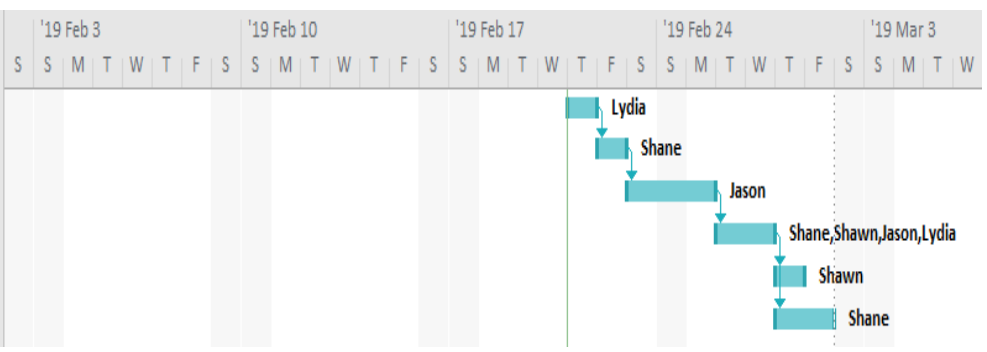
Solar panels can transfer sunlight into electric energy for daily use. Our goal is to connect a circuit to let the solar panels power appliances like fridges or toasters. Therefore, we are going to make a plan about building a prototype, which is basically a small circuit about how all the machines work.

Task

1. Draw up a blueprint From Feb 21 to Feb 21, by Shane
2. Make a purchase list From Feb 22 to Feb 22, by Lydia
3. Procurement From Feb 23 to Feb 25, by Jason
4. Assemble From Feb 26 to Feb 27, by Shane, Shawn, Jason, Lydia
5. Test From Feb 28 to Feb 28, by Shawn
6. Adjust if necessary From Feb 28 to March 1, by Shane

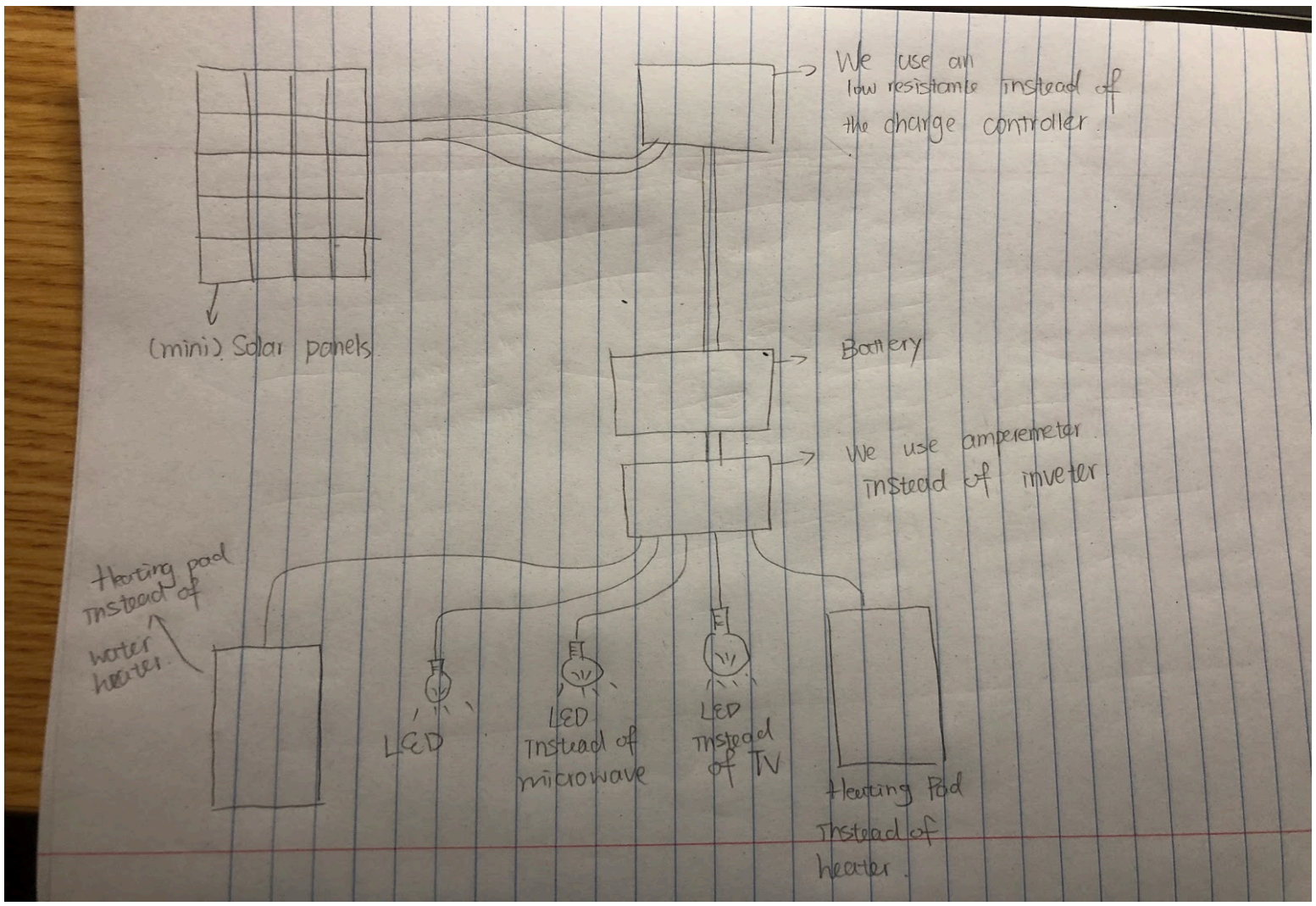
Schedule

Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
	Draw up a blueprint	1 day	Thu 19/2/21	Thu 19/2/21		Lydia
	Make a purchase list	1 day	Fri 19/2/22	Fri 19/2/22	1	Shane
	Procurement	2 days	Sat 19/2/23	Mon 19/2/25	2	Jason
	Assemble	2 days	Tue 19/2/26	Wed 19/2/27	3	Shane,Shawn,Jasor
	Test	1 day	Thu 19/2/28	Thu 19/2/28	4	Shawn
	Adjust if necessary	2 days	Thu 19/2/28	Fri 19/3/1	4	Shane



Plan

In order to check whether the circuit connection of the housework, we decide to build a model of the circuit connection. We choose a low resistance instead of a charge controller, an ampere meter instead of the inverter, two heating pad instead of a water heater and heater, and some LED lights instead of various household appliances. The circuit is shown below:



Test

1. Place the solar panel under the light source.

2. Wait for several minutes and then run the circuit, Check all equipment is working or not. If all equipment work, it means the test has passed.

3. Connect a LED with battery, if it lights, it means the energy has been stored

4. If there is equipment does not work. Let the multimeter's positive lead to your equipment's positive wire. Then connect the multimeter negative lead to the negative wire.

5. Then Check whether the equipment voltage and current are in good condition

.

Cost

1 Mini solar panel	$29.9

2 heating pads	$10 * 2
1 low resistor	$10.99
1 battery	$10
1 amperemeter	$10.26
3 LED lights	$9.99 * 3
some electric wires	$7
Total	$117.85

Conclusion

We connect all the equipment into one circuit and run it to test if it is functional. Through this process of making a plan about building a prototype, we can understand more about what we are going to do in our final project. Making a prototype also helps us test if the idea in our mind is doable in order to reduce the possibility of making mistakes.