**Solar Switch**

In this project I am going to implement a calculator used to determine the cost, number of solar panels and space needed to switch to solar power. In the beginning, three of the most optimal solar panels will be displayed for the user to select with their price, size (taking into consideration the space needed between each solar panel) and power rate. The user will be asked how much power is needed and total available space including the ground and the roof. With this information my program will calculate the number of solar panels which can be installed, display results (estimate of the total cost, how much more space is needed if not sufficient, etc.) and determine whether enough power is generated. If the amount of power is insufficient, a message will come up stating that only a certain amount of power is produced and how much more space is needed. If possible, my program will visualize the project elements such as the area and solar panels, as well as a tips bar which has information such as how regularly you should clean the panels, whether solar panels are waterproof, etc.

Solar panels info:

Solar panel gap = 0.15m

1. Sun Power: Size: (1.70m x 1.20m) Price per panel: 256.50 Power rate: 4.92 kW per day (12hours)
2. Silfab: Size: (2.06m x 1.18m) Price per panel: 342.98 Power rate: 4.80 kW per day

(12 hours)

1. Q-cells: Size: (2.37m x 1.19m) Price per panel: 340.00 Power rate: 5.70 kW per day

(12 hours)