SMART HOME ENERGY MODEL

WHAT?

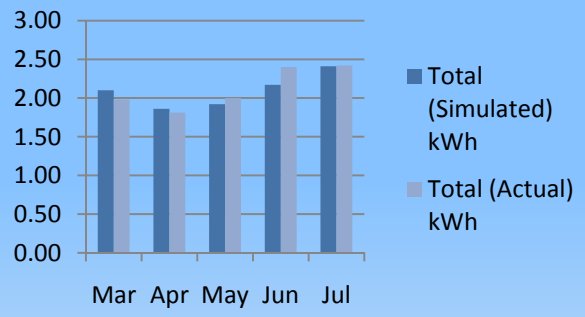
A building energy model is a simulation of the energy usage in a building - the Smart Home in this case. It takes all the necessary inputs like building materials, HVAC equipment and type of weather, then uses this data through some sort of algorithm to calculate the results.

WHY?

The purpose of this energy model was so that the Smart Home can compare its energy usage to a simulated one. This way the residents and visitor can reflect over its energy usage and hopefully be more energy efficient in the future.

HOW?

This energy model was made by collecting data and making assumptions. The data was collected from manufacturer home pages, building footprints and people involved in the Smart Home project. The assumptions was made by own observations, literature and with the aid of knowledgeable People. The simulation was then made by the software eQUEST.



RESULTS?

How accurate was the results from the model? A comparison with actual data over the energy usage of the Smart Home showed the results in the graph above. The results were satisfying.

FOR MORE INFORMATION

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