

Home Energy Management

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Aim: Develop a system that gives users the ability to autonomously adjust their energy usage in order to reduce their monthly electrical bill. Introduction/Background

The energy industry is rapidly approaching a significant bottleneck in the supply of energy causing a possible energy crisis in the world within the next few years. The Home Energy Management System (HEMS) is designed to resolve this potential problem by taking advantage of Real-Time Pricing (RTP) and giving users total control over their electrical consumption.

Objectives

Our objective is to develop a system that will allow the real-time control and autonomous adjustments of energy usage based on predefined settings provided by the user, thus allowing HEM's algorithm to determine the load usage based on the data gathered from the utility RTP.



- Main Controller —
- HEM Algorithm
- Thermostat

Team No: 10



