

Predictive Utility Analytics for STEWARD App (Sterling Ranch Development)

Siemens AG is a global powerhouse in electrical engineering and electronics. The company has 377,000 employees (as of September 30, 2017) working to develop and manufacture products, design and install complex systems and projects, and tailor a wide range of services for individual requirements.

Siemens Building Technologies:

Division Building Technologies (BT)- Facts and Figures



Sterling Ranch Development:

Sterling Ranch, Colorado is a planned community currently under construction in Douglas County, Colorado. Sterling Ranch, LLC, obtained approval for the project in May 2011, after several years of public hearings and wrangling over the project. As proposed, Sterling Ranch will comprise multiple small residential villages surrounding a single town center within walking distance of the residences. The town center will house all of the development's retail and office space. The total project will require 20 years to complete, and will eventually cover 3,400 acres and will be home to 31,000 people in 12,050 housing units and up to 4 million square feet of commercial/retail space.

More detailed information available at:

<http://sterlingranchcolorado.com/>

<https://lumiere.technology/>

STEWARD Mobile Application and project overview:

Siemens Building Technologies, under contract from Sterling Ranch entities developed a mobile application (STEWARD) for use by residents and workers within the Sterling Ranch development. The application (App) provides for real time control of home automation and home security functions while also providing a “window” for visualization and notifications of community events and functions. The STEWARD app is deployed with the Sterling Ranch development. All of the homes built within Sterling Ranch contain a compliment of: dual water meters (1 for indoor water usage and 1 for outdoor water usage), natural gas meter, and digital electric meter (with load by load sub metering capability). The data from the utility meters are monitored by the STEWARD App and displayed in real time units of utilities as well as monetized in dollars. This project scope is to utilize the current STEWARD app source code to further develop the app to include predictive utility analytics. Use case example: A home owner makes a change to their residential thermostat and immediately gets a notification from the STEWARD app identifying the cost impact (on the monthly utility bill; natural gas and electricity in this use case) of making this change.

The predictive utility sub-app should contain user preferences to that an individual user can choose how they receive notifications, frequency, and cost increase/decrease “dead band”.

Project collaborators will be Sterling Ranch, Siemens, and Axios (Software developers).

The existing Steward App is written in Java Script and React Native. The predictive utility analytics sub-app will need to perform on iOS and Android platforms, on a variety of mobile and tablet devices.

Contact – Marty Skolnick, North American Director of Business Development – Real Estate Innovation, Siemens Industry, Inc. – (303) 618-8514
marty.skolnick@siemens.com.