Proposal Presentation

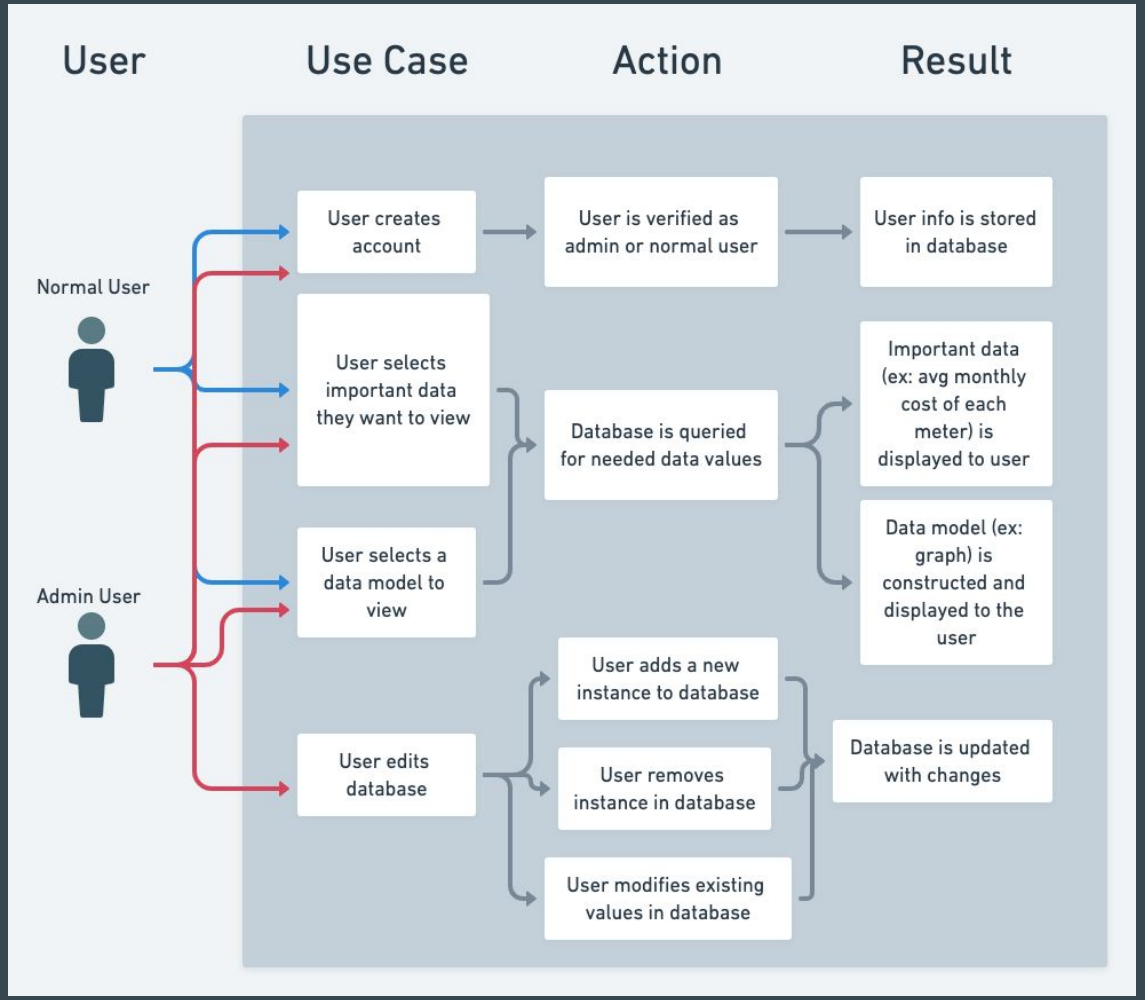
By Group 01-1

Problem Statement

- When is it most economical and least polluting for the campus to produce its own power as opposed to using an electrical grid on both a site and source basis?

Objective of the Module

- The objective of our module is to provide the user with a web application that provides useful interpretations of data regarding TCNJ's energy supply
- This will be done by displaying useful data models and results of useful, complex and efficient queries



End Product Description

- Our end product will be a web application created using python and flask.
- This application will use a Postgres database containing data about TCNJ's energy supply to provide the user with useful information.

Importance of Our Module

- Our module is important for the school because it provides needed information to the user about TCNJ's energy supply
- Sustainability is very important and it is crucial that TCNJ is equipped with the necessary information to make decisions about how they will address this topic in the future
- Our application will help TCNJ move forward in a way that is both economical and environment-friendly.

Research Plan

- Our research plan is to calculate and find the average monthly cost, how this cost changes between months, the average monthly cost per type of meter, and the energy production
- We will be analyzing the given data to find the most important data points and relationships that exist between different values
- After completing our analysis, we can create meaningful queries and implement our database.

Comparisons to Other Systems

- Similar to Energy Star Portfolio Manager or AASHE Stars
- Specifically designed for TCNJ's needs
- Adds functionality to cater to the sustainability plan set for 2020-2024

Other applications of the system

- Can be modified to allow for projections for energy costs in the future
- Can also be modified to allow for cost predictions of different energy sources that may be developed and considered for implementation at TCNJ