Project Plan

Abstract

The PG Parks and Recreation department is responsible for operating and maintaining facilities at local and regional parks providing recreational service and programs. This enables members of the PG community to be engaged, entertained, learn new skills, and feel inclusive within their community. Providing these services requires capital investments into building facilities and maintaining parks throughout the Prince George's County area resulting in the use of vast amounts of energy and resources to accomplish these goals. It is our job to help the department manage its expenditures and energy usage while still enabling them to fulfill their mission and commitment to the County.

Scope

This project involves analyzing the data set for all of the facilities and developing visualizations that will provide a better understanding of the energy output of the facilities as well as making informed decisions regarding the construction of future facilities. We will clean and analyze the data and finally provide visualizations that will provide a better picture of the conditions of the facilities.

Work breakdown structure

We decided to divide our team roles into three groups: Data Cleaning, Data Analysis, Data Visualization and Presentation. Even though we decided to give roles to each member, our team is aware that the technical process in this project can be flexible. We plan to work on group assignments such as background research, proposal, and reports altogether.

Roles	Member Name
Data Cleaning	Dagmawi Solomon Iskander Lou
Data Analysis	Do Kim Zhaojie Yin
Data Visualization / Presentation	Dylan Cathcart Thitna Gruga

Deliverable

This project will have multiple deliverables. We plan to deliver a cleaned dataset, data analysis, data visualization, presentation, and report to provide analysis about energy usage in facilities operated by PG Parks and Recreation department. The cleaned dataset will be saved as either .csv or .xlsx format with python, data analysis will be saved as .ipynb, and visualizations will be created with Tableau.

Project Plan
PALS Energy Data Analysis

Schedule

	Phases	**Task**	**Start Date**	**End Date**
1.	Data Gathering	1.1 Introduction meeting with the client	3/9/2022	3/9/2022
		1.2 Explore the dataset	3/9/2022	3/16/2022
		1.3 Second meeting: ask client questions about the dataset	3/16/2022	3/16/2022
2.	Analyzing First Facility	2.1 Clean the data, find gaps and inconsistencies	03/16/2022	03/23/2022
		2.3 Perform exploratory and descriptive analysis	03/16/2022	03/23/2022
		2.3 Produce visualizations on Python and Tableau	03/16/2022	03/23/2022
		2.4 Come up with solutions to address the issues	03/23/2022	03/30/2022
		2.5 Third meeting: get client's feedback on our data analysis	03/23/2022	03/30/2022
3.	Analyzing Other Facilities	3.1 Consult with client about the issues and our solutions	04/06/2022	04/13/2022
		3.2 Tableau	04/06/2022	04/13/2022

4.	Data Visualization	4.1 Develop final graphs and charts	04/13/2022	04/20/2022
		4.2 Create visualizations for specific trends	04/13/2022	04/20/2022
5.	Reporting	5.1 Finalize work and create a document	04/20/2022	04/27/2022
		5.2 Work on presentation	04/20/2022	04/25/2022
		5.3 Report to the client	04/25/2022	04/27/2022
6	Finalize every documentation	6.1 Make sure we are not missing any requirements	04/27/2022	05/04/2022
7	Final deadline	7.1 Submit every document and present our work to the client.	05/04/2022	05/10/2022