**Group 1 Project 1: Odyssey e Commerce**

**Team Members**: Sergio, Larry, Emely, Matthew, Rebecca

**Project Description:**

The aim of our project is to uncover patterns in shopping habits. We’ll examine relationships between online shopping volume and weather, categories of items bought and season, gender differences over the course of a year's worth of weather patterns, and other related relationships derived from the data. Our customer is a hypothetical e-commerce start-up wanting to look for predictable shopping trends for targeted paid advertising. What are the predictable shopping rends during inclement weather that they could leverage for targeted paid advertising, with the aim of strategically stocking up on products that customers are more likely to order during such periods.

**Research Questions**:

* How does inclement weather affect shopping habits?
* How do extreme temperatures (<20)(>85) affect online shopping habits?
* How does season affect online shopping habits?
* How does gender impact online shopping habits?
* Does the availability of discounts or promotions influence online shopping behavior on online shopping habits?
* Are promotions or discounts used more often during inclement weather events?
* Does the duration of inclement weather affect online shopping habits?
* Is there a correlation between the peak shopping season and the occurrence of the most extreme temperatures within a given geographical region?

**Data**

Dataset 1: A data set for online shopping

<https://datasetsearch.research.google.com/search?src=3&query=amazon%20sales%20dataset&docid=L2cvMTF2MTVkcTU4aA%3D%3D>

We need weather data so we will make an API call here.

[**Weather API - OpenWeatherMap**](https://openweathermap.org/api)

**Rough breakdown of tasks:**

Scraping data

Merging data frame on date

Analysis of research questions

Creating project presentation

Creating Read Me file