Project Proposal for Group 1

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

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. There is inclement weather coming and we want to stock up on what customers are more likely to be ordering during that time so we can stock up?

We plan to use the following datasets:

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

<https://openweathermap.org/api>

**openweathermap.org**

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

Simple and fast and free weather API from OpenWeatherMap you have access to current weather data, hourly, 5- and 16-day forecasts. Historical weather data for 40 years back for any coordinate. Weather maps, UV Index, air pollution  
and historical data

Rough breakdown of tasks:

Sergio: Do people shop more online when there is inclement weather?

What category of product online product is ordered when there is inclement weather?

Larry: Do people shop more online when the temperatures are extreme (<20)(>85)

Does one city shop more online when the temperatures are extreme (<20)(>85)

Emily: What season has the highest shopping?

Matthew; Did the season with the most shopping have the most rain?

Does one city tent to order more when there is inclement weather?

Rebecca: Did the season with the most shopping have the most extreme temperatures?