

**Group Name:** Solo Science Team

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**Specialization:** Data Science

### **Problem Description**

A large company in the Australia beverages industry wants to improve their product sales through various super-markets and engage into heavy promotions throughout the year. To ensure efficient inventory management, they require a weekly demand forecast for each product that factors in the impact of seasonal variations and holidays.

### **Data Understanding**

**1) Data type for analysis:**

The data that the company is analyzing is time-series data with weekly granularity, meaning there is one observation for each week. This data is multivariate, including several variables that influence demand, as well as information about holiday and seasonality.

**2) Problems in the data:**

There were no null values identified in the dataset. However, there were 26 out of 1218 data points that were 3 standard deviations away from the mean.

**3) Approaches to problems in the dataset:**

Outliers in the dataset should be decided whether to be dropped by performing data visualization with histograms or density plots to check the shape of the variable distributions and identify potential skewness for the dataset.

### **Version Control and Source Code Management**

GitHub Repository Link: [asherchok/retail-forecasting: Data Glacier internship forecasting project repository \(github.com\)](https://github.com/asherchok/retail-forecasting: Data Glacier internship forecasting project repository)