# Project Title:

# Affect of day of the week, observed national Holidays and long weekend on stock price by the stock sectors

## Team Members:

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### Project Description and Outline:

The project evaluates relation between stock price movement for the days preceding non the trading days by the stock sectors.

### Research Questions to Answer:

Do weekends and holidays affect the stock price?

Do different sectors get affected differently?

Does the relation change during the prolong time period, in the scale of decades?

**Hypotheses:**

Null Hypothesis: Weekends and holidays have no impact on the stock market

Alternative Hypothesis: Price movement is related to trading date and varies by the stock sector

### Datasets to be used:

Kaggle Huge Stock Market Dataset: See [link](https://www.kaggle.com/borismarjanovic/price-volume-data-for-all-us-stocks-etfs).

Yahoo finance API. [Link](https://finance.yahoo.com/quote/%5EGSPC/history?period1=946702800&period2=1563595200&interval=1d&filter=history&frequency=1d)

Federal Holidays USA: <https://www.kaggle.com/gsnehaa21/federal-holidays-usa-19662020>

### Rough breakout of tasks:

1. Gather data
2. Python/Pandas/Jupyter Notebook coding
   1. Clean data
   2. Descriptive statistics
   3. Visualizations
   4. Correlation analysis
   5. Linear regression model
3. PowerPoint summary