

The Breathe and Release Yogis for Employees

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Abstract

The main objective of The Breathe And Release For Employees is to offer free yoga and meditation sessions for employees to relief stress. Data from the New York City Metropolitan Transportation Authority(MTA) containing the daily entries and exits of subway users by turnstile is explored to find foot traffic which can increase the chances of finding stressed employees. The goal of finding the most foot traffic is focused on employees working during weekdays between the hours of 8am and 5pm. The main objective is to make these locations and hours as convenient as possible for employees.

Design

Over the past few years, there has been a substantial increase in workplace stress and worry. Since Yoga and Meditation has become one of the leading new alternative medical treatment options to relief stress, The Breathe And Release yogis for employees are offering free yoga and meditation sessions. These sessions will help employees feel and live a well-being life and become more productive in society. The exploratory data analysis performed on the MTA data will be a guide on where and what time to offer the sessions. Data

Data

Data is provided by New York City Metropolitan Transportation Authority of the daily entries and exits of people using all the subway stations in the city by turnstile. The date range is from August, 1 to December, 1, 2021. The dataset has 2.5 million records and 11 features. The data from New York City is available at [MTA Turnstile Data](#). Data used was on weekdays between the hours of 5am and 6pm

Database:

- Data was retrieved from [MTA Turnstile Data](#) and a database was created using SQLite, SQLAlchemy and Python.

Algorithms

Exploratory Data Analysis:

- Calculated the daily entries and exits based on the cumulative numbers given
- Removed duplicate records and abnormal audit adjustments
- Adjusted outliers and replaced by station median values
- Added additional features for analysis purpose

Visualizations:

- Provided several visualizations using Python libraries Matplotlib and Seaborn

Tools

- SQLite, DBbrowser and SQLAlchemy to build a database
- NumPy and Pandas for data manipulation
- Matplotlib and Seaborn for visualization

Communication

The results will be communicated via data visualization in a presentation. All work performed is on Github <https://github.com/kasteway/NY-MTA-Turnstile-EDA>.



