# Pollen Allergy Data Analysis

# Motivation

- Get valuable information
- User symptoms
- Medical treatments

# Data description

## Data set 1

- User ID, Date, Location, Region, Overall Symptoms

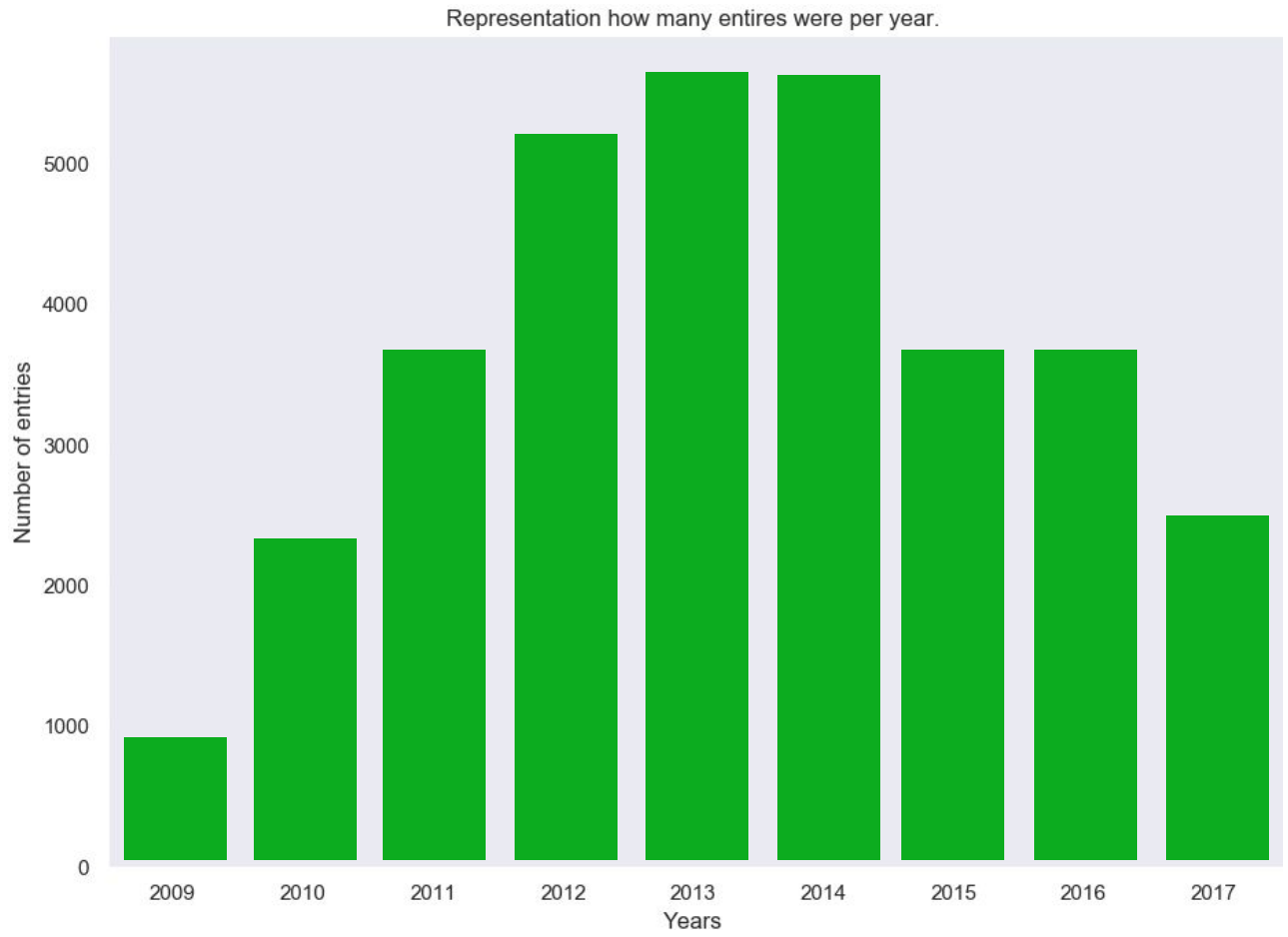
- Different kind of symptoms:
- Eye itching, Nose sneezing, Lungs Symptoms

- Different medicine taken:
- Eye drops, Nose drops, Tablets

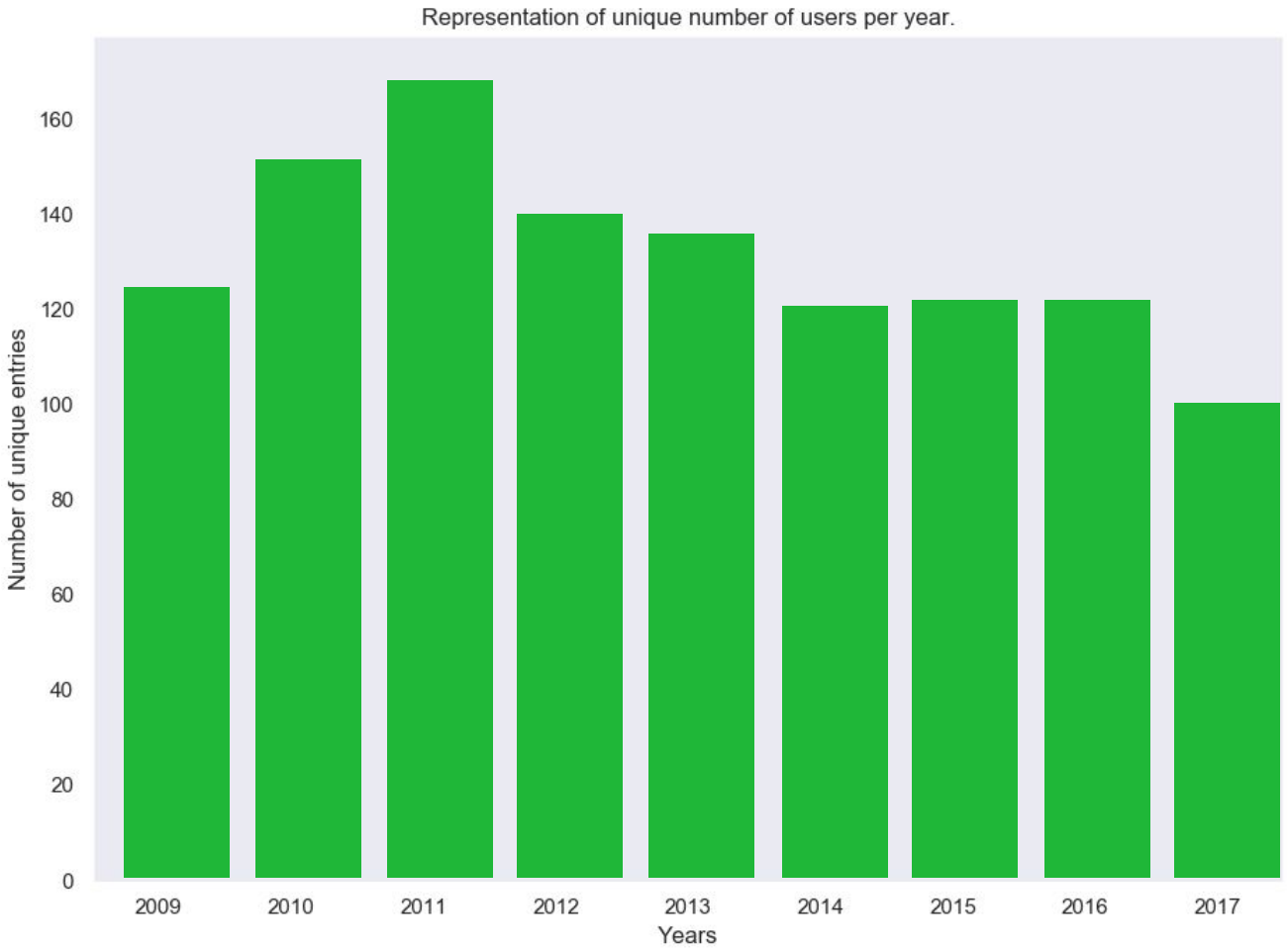
## Data set 2

- 365 days, Different kind of pollen

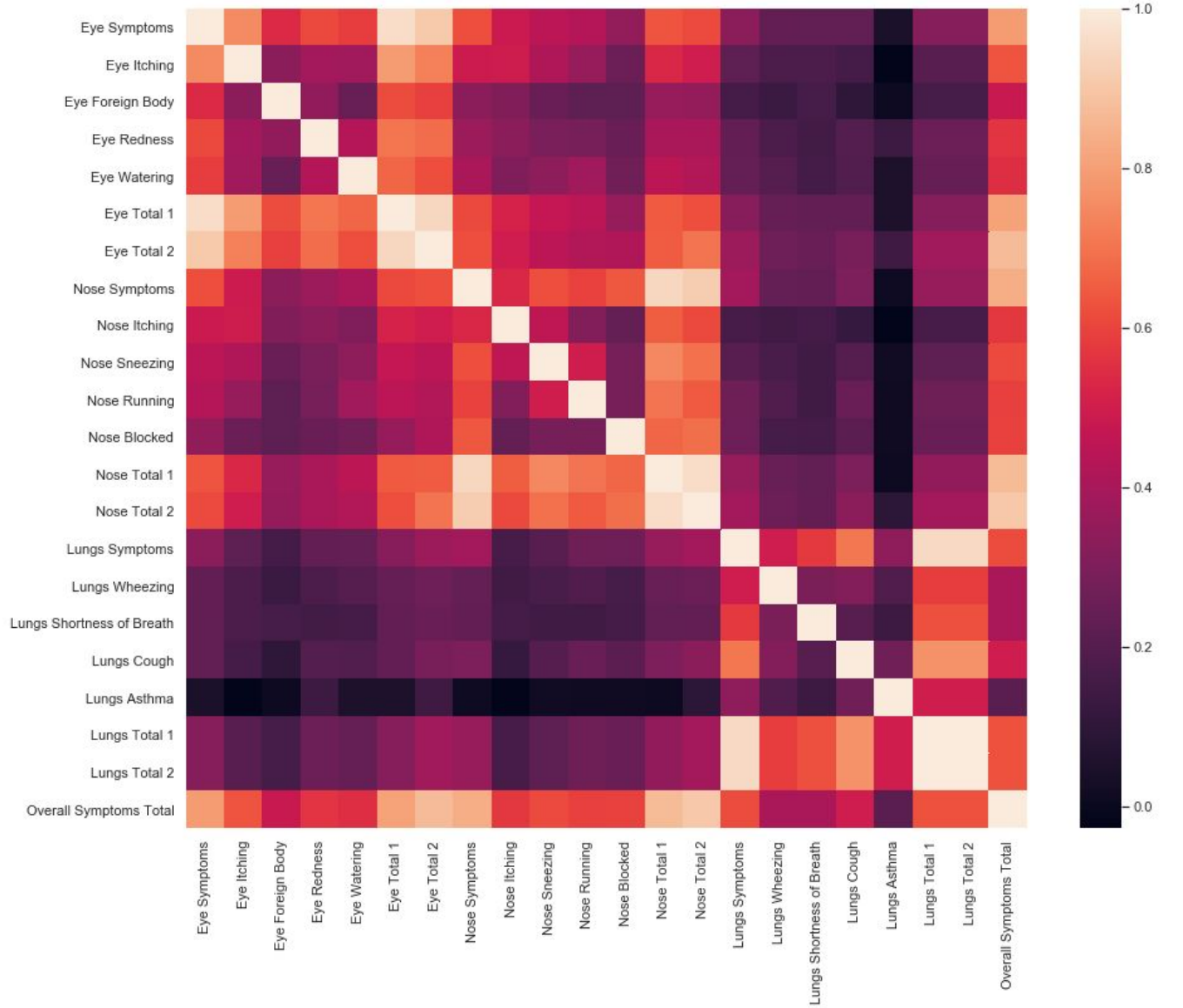
# Entries per year



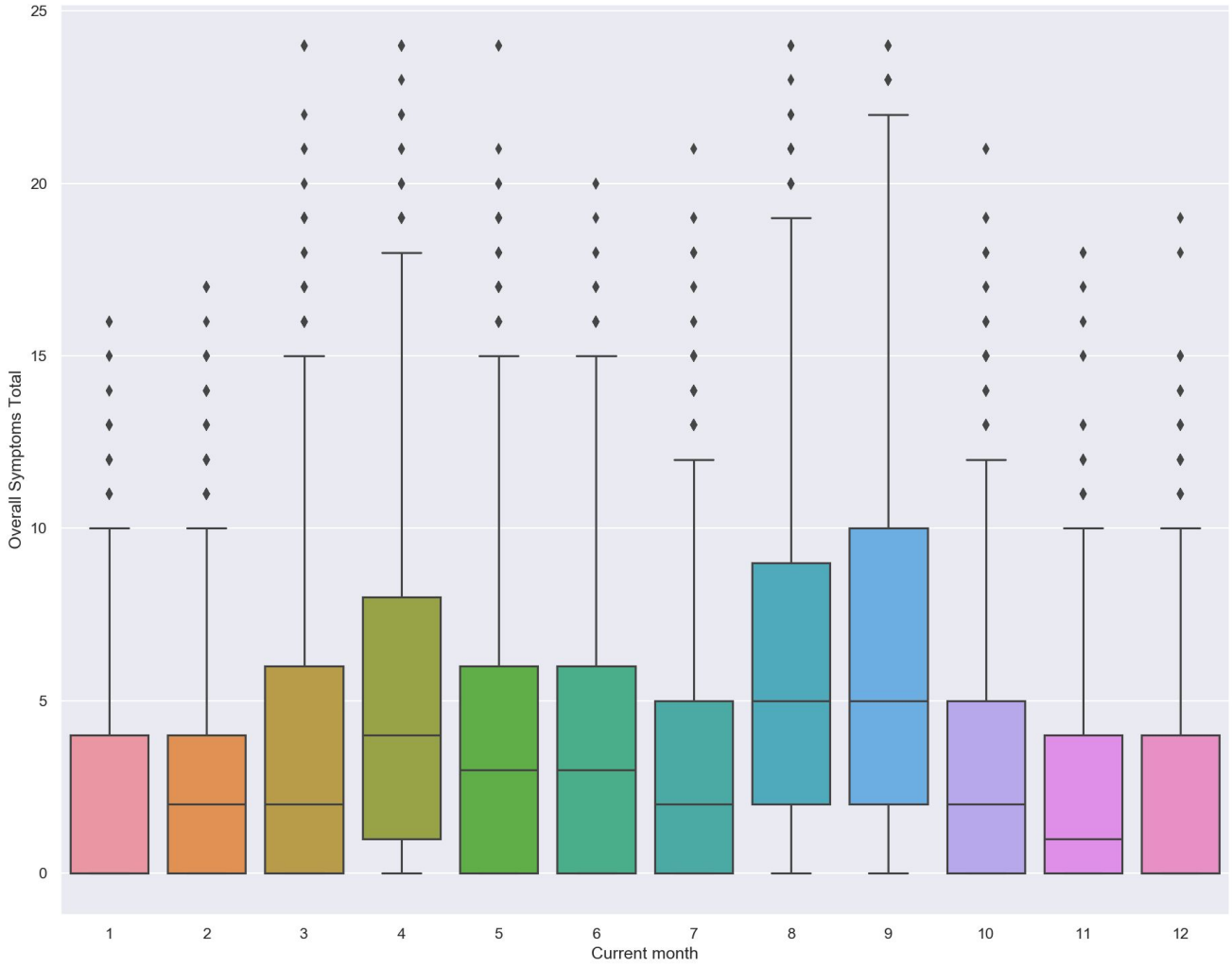
# Unique users



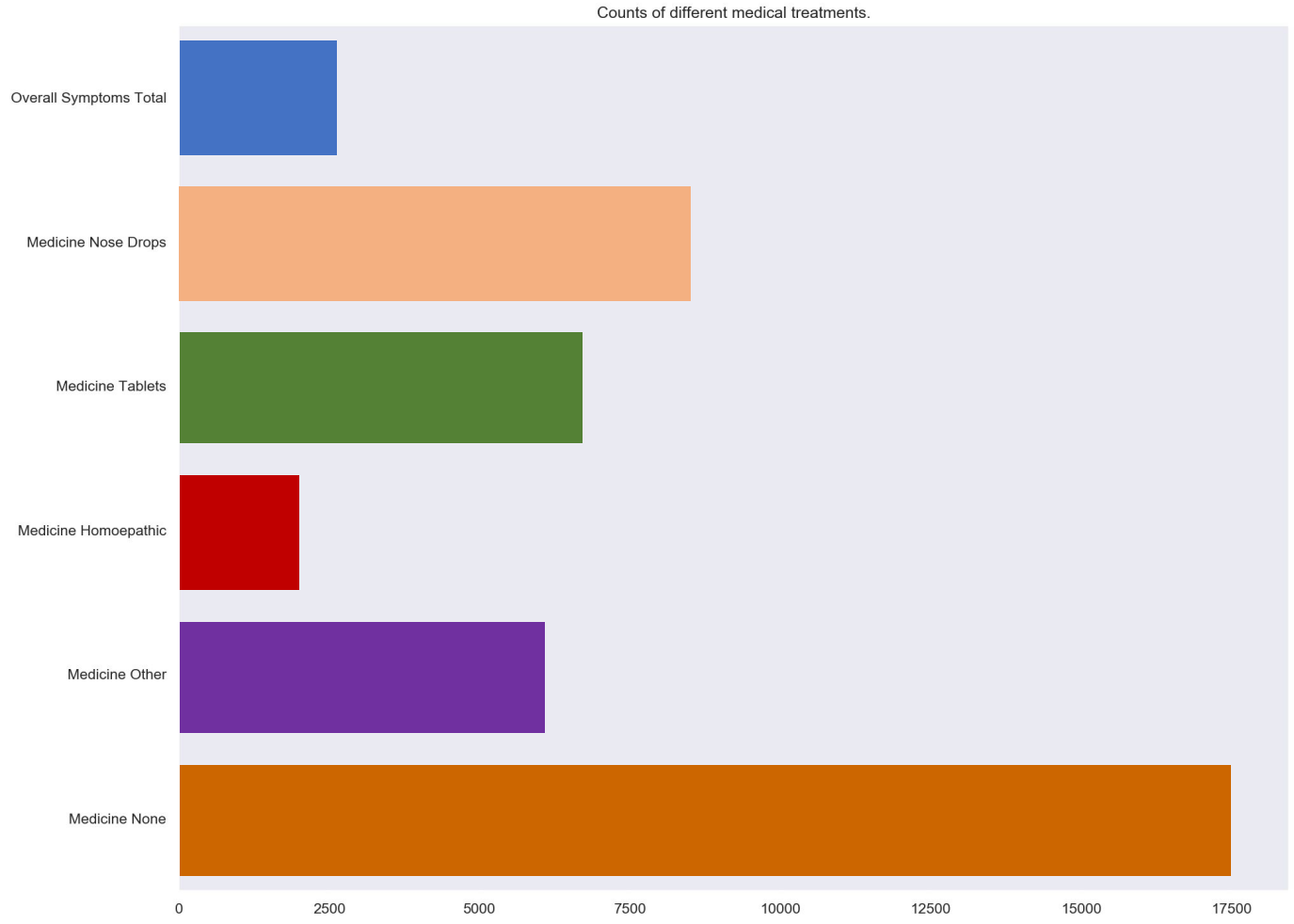
# Pairwise correlations



# Overall symptoms on month level

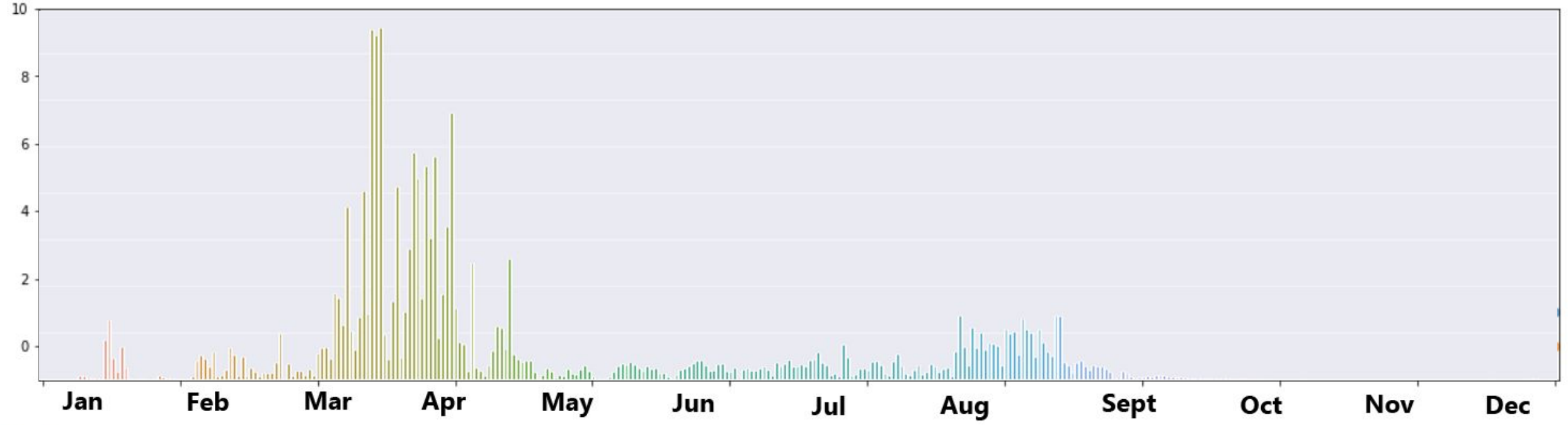



# Counts of different medical treatments

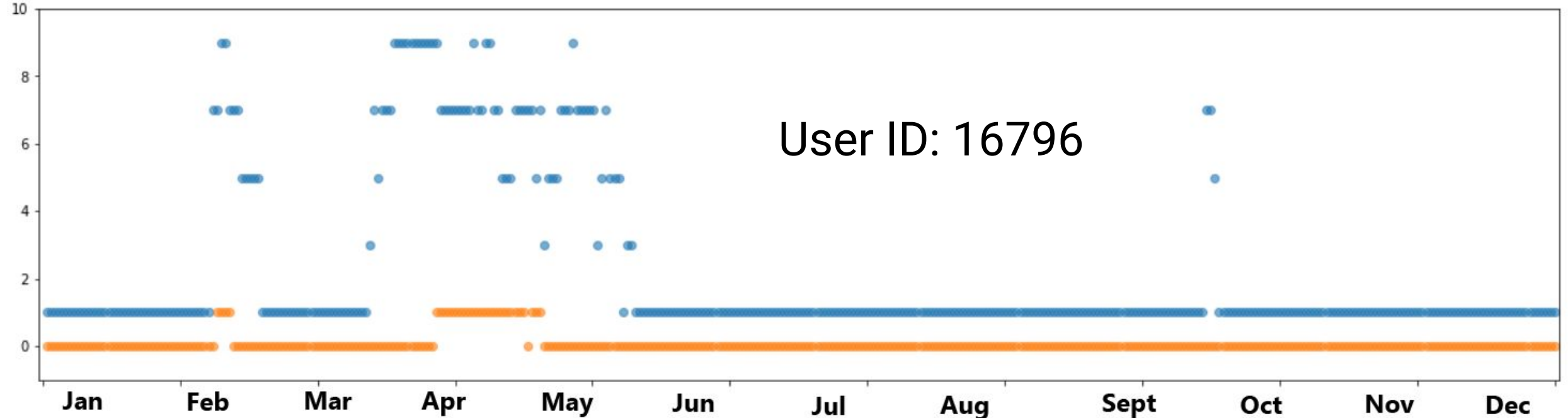



# Top 10 users

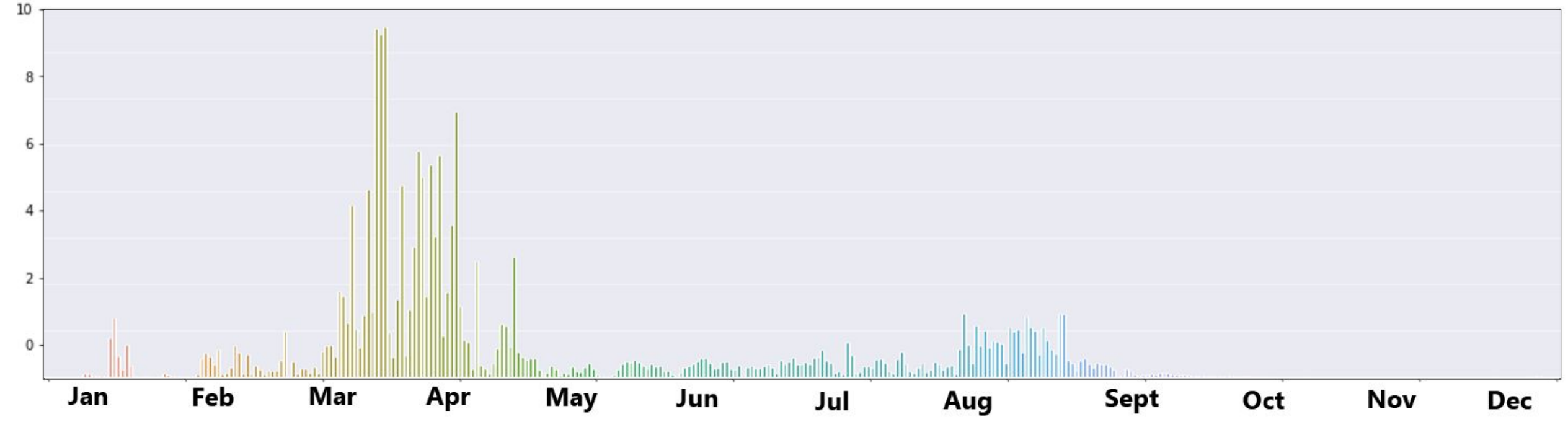
- User with ID 16769 made 2259 entries
- User with ID 10021 made 1515 entries
- User with ID 37561 made 1308 entries
- User with ID 17507 made 1303 entries
- User with ID 9862 made 1197 entries
- User with ID 20686 made 1120 entries
- User with ID 25782 made 972 entries
- User with ID 89069 made 736 entries
- User with ID 21089 made 734 entries
- User with ID 2747 made 717 entries

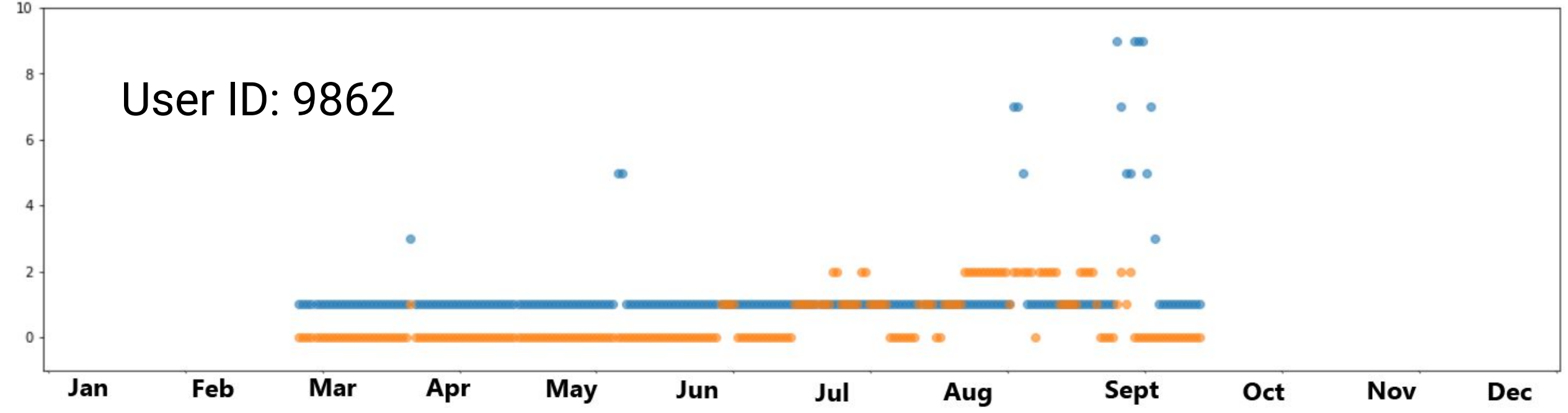



2014




User ID: 16796


10
8
6
4
2
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
Oct
Nov
Dec
2014


User ID: 9862
10
8
6
4
2
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
Oct
Nov
Dec

# List of Python packages and functions

Seaborn

matplotlib

SciPy

NumPy

pandas

- Collection, counter
- Itertools
- Operator
- Datetime

- Calendar
- Time
- Math
- Os

# Conclusions

- Period Mart, April and August, September pollen season
- In this period user symptoms increase
- Also medications increase

# Ideas for future work

- Adding Gender and Age
- Tracking the weather


Thank you for
your attention