No-show appointment Project's analysis

A note specifying which dataset you analyzed :

- no show appointment data set

A statement of the question(s) you posed :

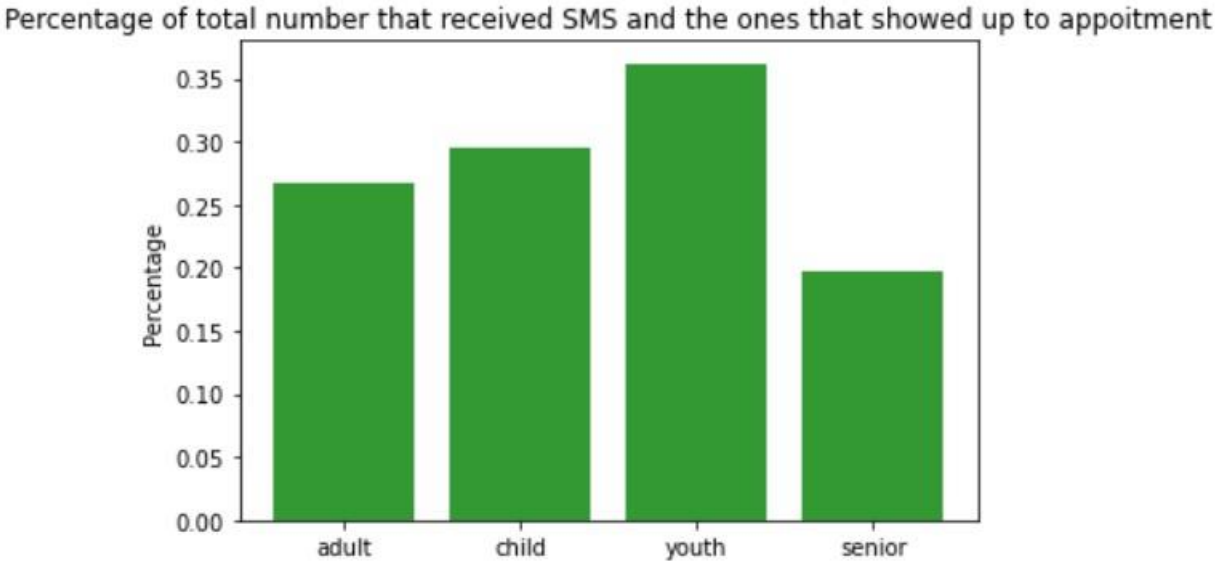
- Relation between SMS , Age categories and showing to appointment
- relation between day difference and showing up for each gender
- relation between gender and showing up at a specific time
- relation between day of the week and people showing up

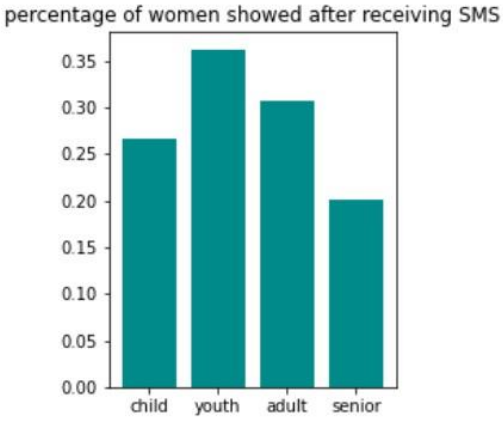
A description of what you did to investigate those questions :

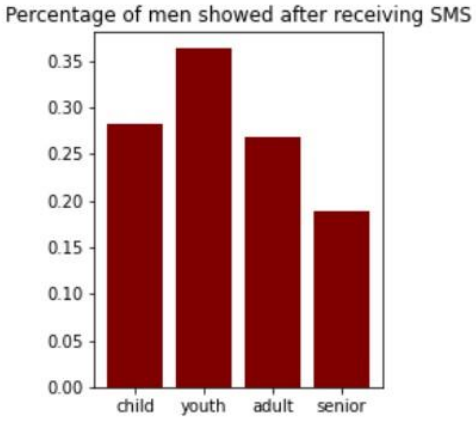
- Cleaning dataset as in:
  - As in removing age's outliers(-1 ,115)
- Extracted new features (columns) from the data as:
  - Categorizing age into (Child, Youth, Adult and Senior) o Extracting date and time data o Calculating the difference between the scheduled and appointment days
  - Getting name of each week day (Wednesday, Thursday , ….etc.)
- Analyzed those features
- Visualized relation between those features and showing up to an appointment

Summary statistics and plots communicating your final results :

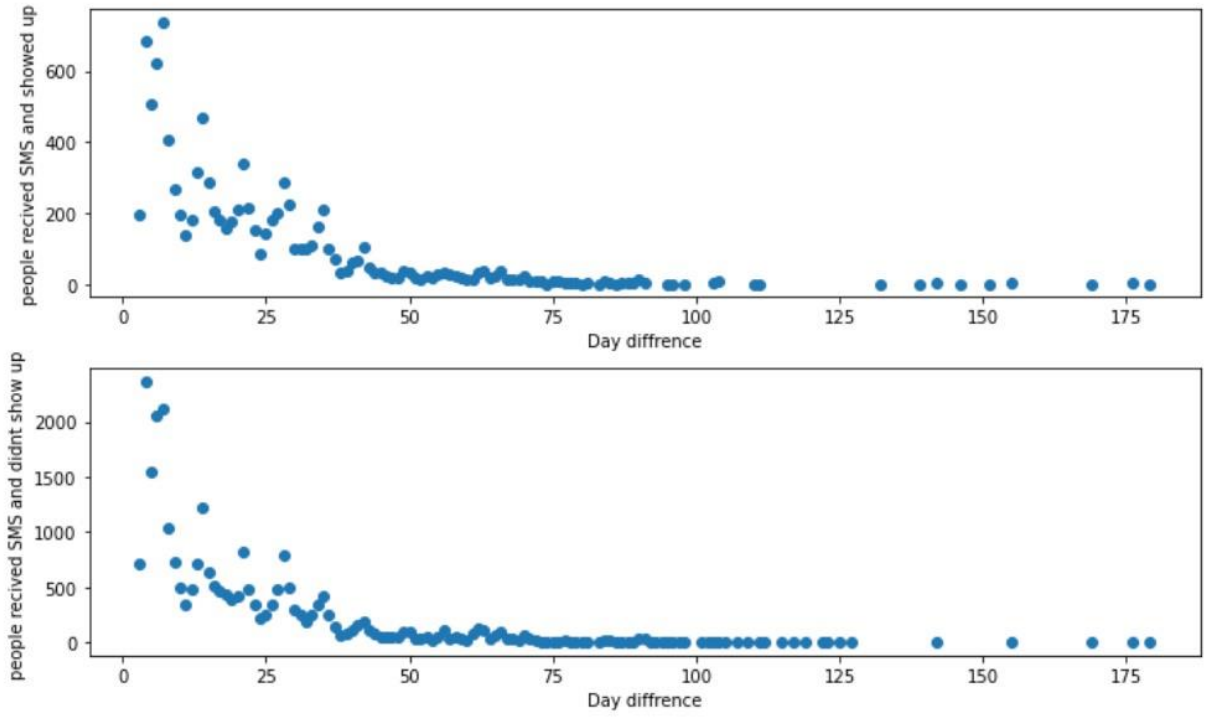
Percentage of total number of people received SMS and the ones that showed up to the appointment



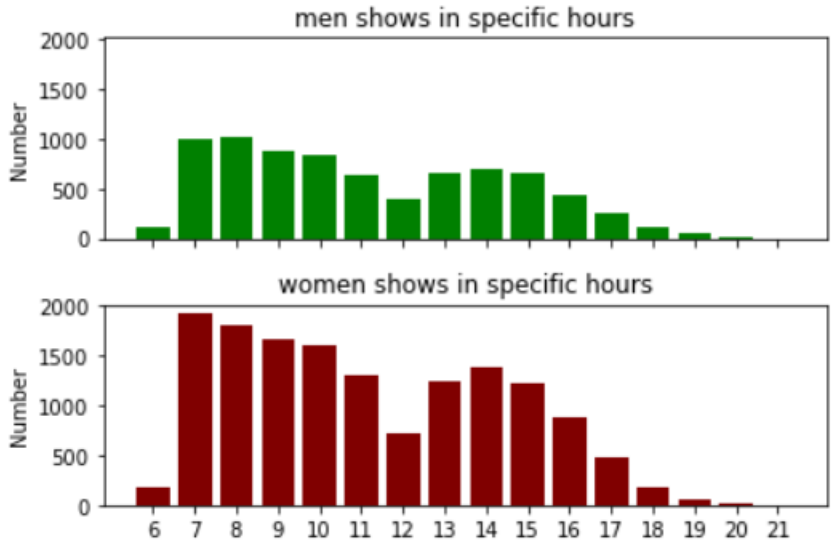




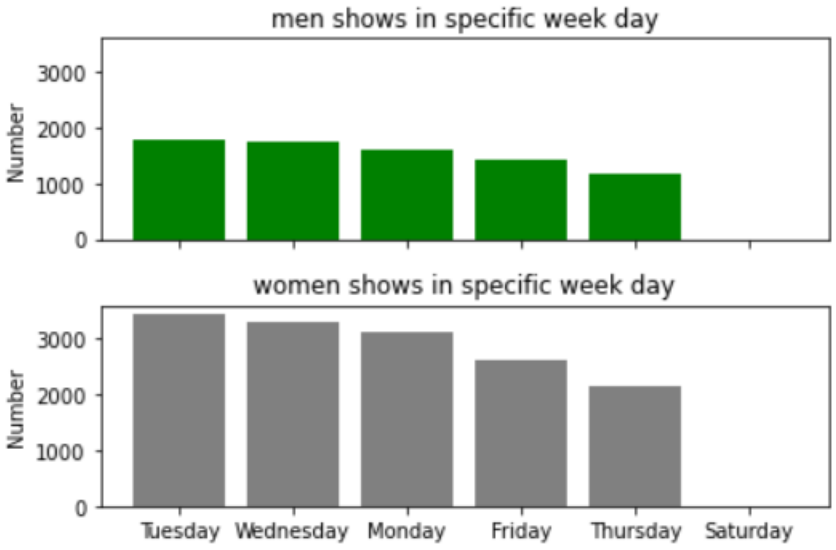
Relation between day difference and showing up for each gender



Relation between gender and showing up at a specific time



Relation between day of the week and people showing up



Conclusion & limitations :

Limitations:

- Most of our variables are categorical.
- Dataset was biased towards women(65%) more than men(35%).
- Dataset only contains data of 3 months (4,5,6).
- Their wasn't enough information about the circumstances of sending an SMS (like time sent, number of times a patient received a SMS, etc....)

Result:

- Youth are more likely to show up for appointment when receive an SMS than Adults.
- As the day difference increase less people show up for appointment.
- Men and women generally prefer early appointments(7 am to 10 am).
- Most people likely to show to appointments on Tuesday.