

# Attending a Doctor's Appointment ...Or Not.



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# Outline

- Overview/Business Problem
- Data
- Data Preparation
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# Overview/Business Problem

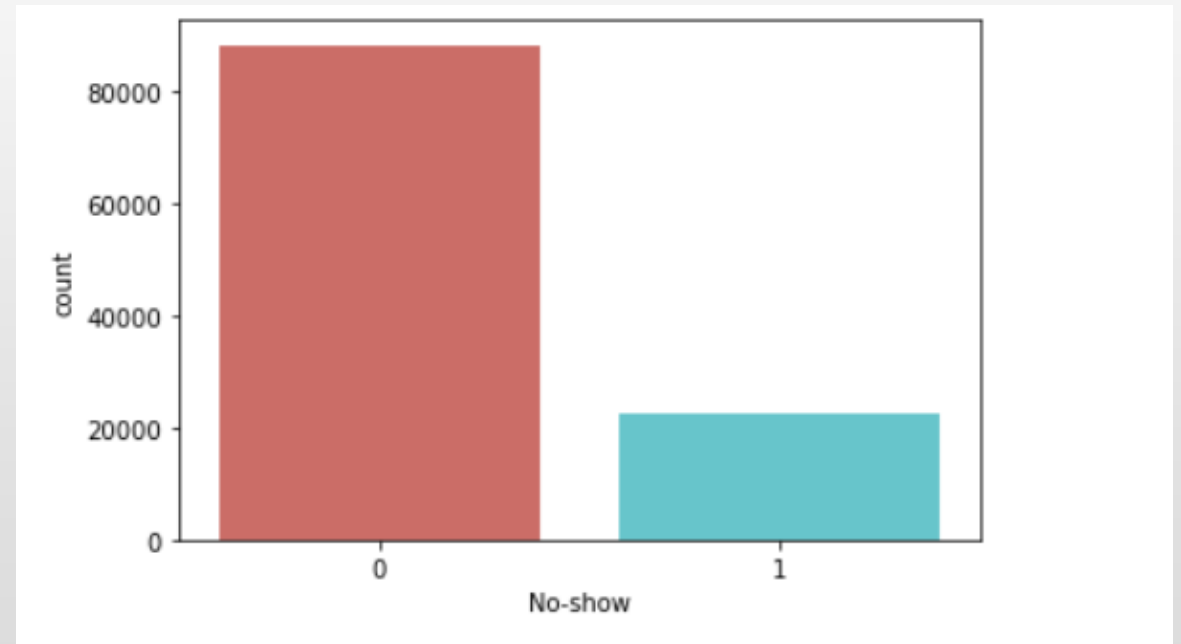
I am acting with a doctor's office in a Brazilian neighborhood. The doctor's office expresses concern that patients are not showing up for their scheduled doctor appointments. I desire to provide insight to the doctor's office on how to eliminate potential "no-show" appointments.

# Data

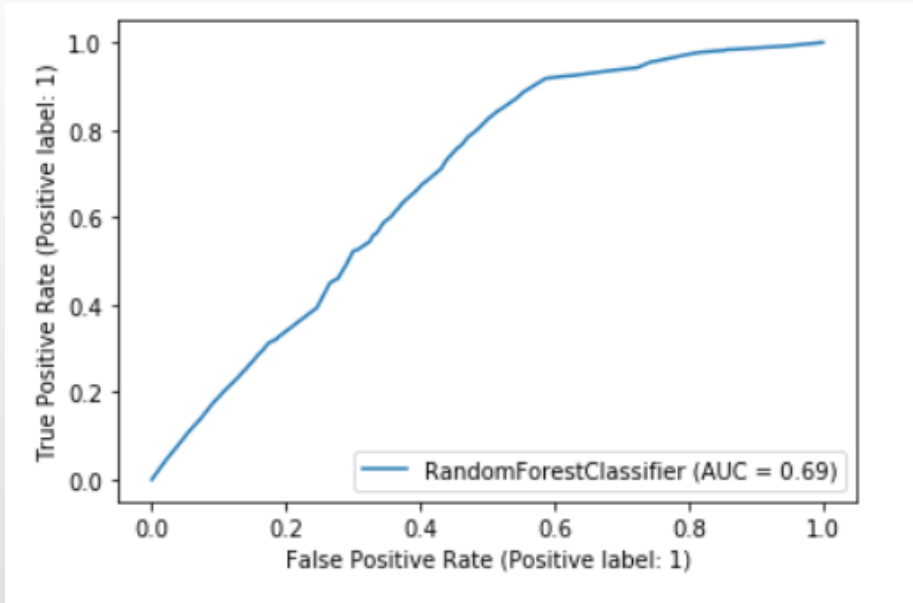
- This project uses data from a Kaggle dataset about medical appointment “no-shows”.
- The data covers appointment records for 81 neighborhoods in Brazil.
- There are 110527 rows of appointment records in this dataset.

# Data Preparation

- Recorded 88208 attended appointments and 22319 “no-show” appointments
- Changed AppointmentDay column to DayoftheWeek column
- Created DayDifference column
- Grouped by the “no-show” column

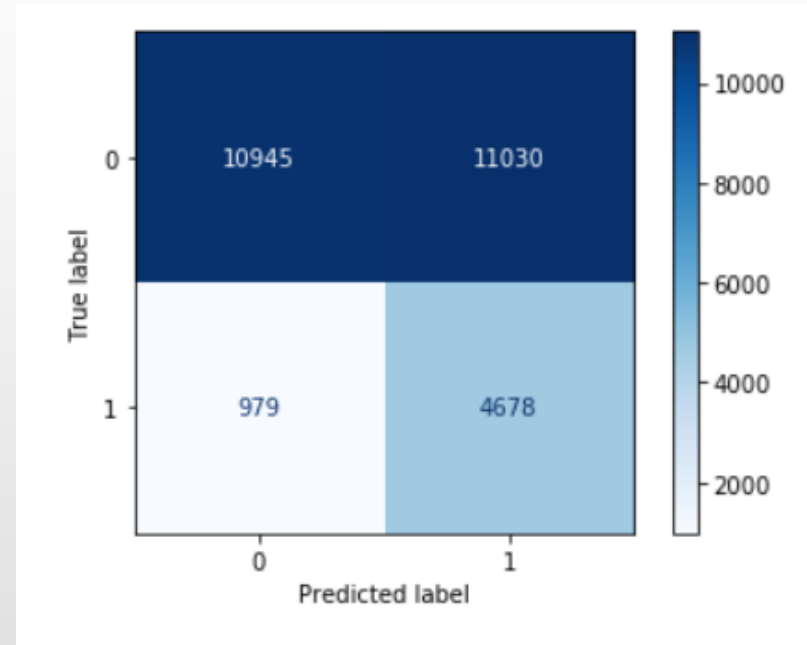


# Data Modeling –Tree Based



**Train Accuracy Score: 0.568**

**Test Recall Score: 0.832**



**Test Accuracy Score: 0.574**

**Test F1 Score: 0.441**

**- Age, SMS\_received, and DayDifference most influential columns**

# Conclusions

- Include age differences in analyses
- Book less appointments farther out from the appointment day
- Remind people more frequently of their appointments whether by phone or by text

# Recommendations for Further Analysis

- **Consider gender more in future analyses**
- **Procure a “no-show” examination based on neighborhoods**



# Contact Information

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GITHUB LINK:

[HTTPS://GITHUB.COM/JMSTIPANOWICH/DOCAPPOINTMENTREPOSITORY](https://github.com/JMSTIPANOWICH/DOCAPPOINTMENTREPOSITORY)

PICTURE SOURCE:

[HTTPS://PHYSICIANREVIEWS.ORG/HOW-TO-MAKE-A-DOCTORS-APPOINTMENT/](https://physicianreviews.org/how-to-make-a-doctors-appointment/)

THANK YOU!!!!!!