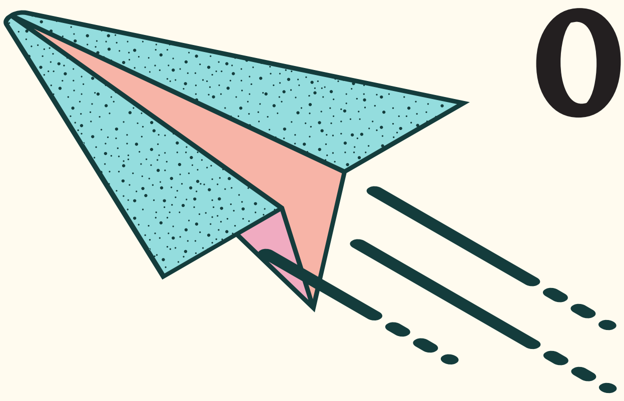
CHALLENGE

Holt-Winters and Airmiles

The Holt-Winters model is part of the Exponential Smoothing family of models, and it is, as a result, also called Triple Exponential Smoothing. Exponential Smoothing is a process where the weight of the information decays over time. Holt-Winters performs exponential Smoothing on 3 levels: Level, Trend, Seasonality.



01 DATA FREQUENCY

You must specify the frequency of the time series index. Please use "MS", for Month Start, since the dates use the first day of the month

02 VISUALIZE THE DATA

Getting to know the Data is very important, and visualization can be very helpful for you to understand better the trend, cyclical patterns and even the variability of the Time Series

03 TRAINING AND TEST SET

Set the Test Set to be 12 months. The easy way is to just set the last 12. The goal of splitting between training and test is to have an unbiased way of assessing your model, since it only knows the training data

04 HOLT-WINTERS

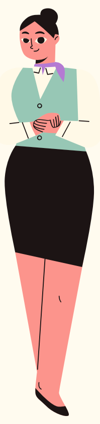
Build the model with the time series during the training period. Please remember that Holt-Winters does not allow external regressors

05 FORECASTING

Ready, set, go. Forecast 12 months using the model. You are also encouraged to visualize the results.

06 ACCURACY ASSESSMENT

Well done, you are at the last step. Please assess the accuracy of the model using the MAE. We cannot really say whether it is good or bad, but it is a start :)



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