

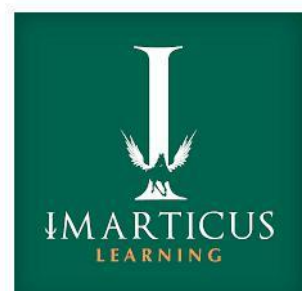


Forecasting and Predicting the furniture sales

Time series analysis comprises methods for analyzing time series data in order to extract meaningful statistics and other characteristics of the data

This dataset consists of daily sales data of various products at a superstore

You will need to apply Time Series(ARIMA) to build model to predict and forecast the sales of furniture for the next one year i.e. predict future values based on previously observed values. We have a 4-year furniture sales data.





Evaluation

Evaluation will be based on:

- Data Exploration & Preparation (15%)
- Feature Engineering (20%)
- Model Comparison (30%)
- Model Selection (25%)
- Presentation (10%)

Data Preparation

Remove unwanted columns that is not needed and check missing values. Aggregate sales data by date and finally index it with the time series data.

Feature Engineering

Check the stationarity of the data and decide the next step to be taken. Also decompose the data for further clarification and apply the time series model on the data

Model Comparison

Perform parameter selection to find optimal set of parameters that yields the best performance for the model.

Model Selection

Compare predicted value to the real values and set the forecast from the start to the end of the data.

Attribute Information:

Attribute 1: (Date)

Duration in month (from 2014-01-01 to 2017-12-01)

Attribute 2: (Numerical)

Sales (from 2014-01-01 to 2017-12-01)

