



PROJECT SPECIFICATION

Forecasting Sales

Plan Your Analysis

CRITERIA	MEETS SPECIFICATIONS
Section Format	The section is written clearly and is concise. The section is written in less than 250 words.
Key Decisions	All following questions have been answered: 1. Does the dataset meet the criteria of a time series dataset? Make sure to explore all four key characteristics of a time series data. 2. Which records should be used as the holdout sample?

Determine Trend, Seasonal, and Error Components

CRITERIA	MEETS SPECIFICATIONS
Section Format	The section is written clearly and is concise. The section is written in less than 250 words.

Build Your Models

CRITERIA	MEETS SPECIFICATIONS
Section Format	The section is written clearly and is concise. The section is written in less than 500 words.
ETS	All following questions have been answered: 1. What are the model terms for ETS? Explain why you chose those terms. 2. Describe the in-sample errors. Use at least RMSE and MASE when examining results

CRITERIA	MEETS SPECIFICATIONS
ARIMA	<p>All following questions have been answered:</p> <ol style="list-style-type: none">1. What are the model terms for ARIMA? Explain why you chose those terms. Graph the Auto-Correlation Function (ACF) and Partial Autocorrelation Function Plots (PACF) for the time series and seasonal component and use these graphs to justify choosing your model terms.2. Describe the in-sample errors. Use at least RMSE and MASE when examining results3. Regraph ACF and PACF for both the Time Series and Seasonal Difference and include these graphs in your answer

Forecast

CRITERIA	MEETS SPECIFICATIONS
Section Format	The section is written clearly and is concise. The section is written in less than 250 words.
Forecast	<p>All following questions have been answered:</p> <ol style="list-style-type: none">1. Which model did you choose? Justify your answer by showing: in-sample error measurements and forecast error measurements against the holdout sample.2. What is the forecast for the next four periods? Graph the results using 95% and 80% confidence intervals.

[Student FAQ](#)