**Generalized Approach**

1. Use dummy data representative of a time series. Data used in my case is listed below.

<https://datamarket.com/data/set/22t8/monthly-number-of-employed-persons-in-australia-thousands-feb-1978-apr-1991#!ds=22t8&display=line>

(Monthly number of employed persons in Australia: thousands. Feb 1978 – Apr 1991)

**Note: Only first 54 lines of data was used, and values were deleted at random to better mirror a time series with missing or unusable values.**

1. Datetime Indexing – Made dataframe fit for time series operations
2. Asking user to input forecast horizon
3. Data Exploration & Accounting for missing values
4. Time Series Decomposition
5. Model Selection
   1. Holt-Winters – additive
   2. Holt-Winters – multiplicative
   3. SARIMAX
      1. Grid Search for optimum hyperparameters
6. All models were evaluated using their respective AIC values
7. Displaying results for the 3 models used

Assumption: Time Series has some seasonality to it