Recurrent neural networks can be used on data that changes with time because of the ability of the neural network to hold important information in its memory. Time series data is a set of sequential data that has been collected over a certain period of time. Examples are climate change data, stock price data, daily temperature reports etc. Time-series models are the models that will try and predict future values based on past and current values.

While using LSTM, we can decide what the model has to save in memory or remember and what it can forget. Keeping the dates and the changes that occur during those time periods is what makes time series forecasting possible with LSTM.

**Data processing**

* Import the required libraries from Keras
* Download the dataset from this link : <https://finance.yahoo.com/quote/TSLA/history?period1=1436486400&period2=1594339200&interval=1d&filter=history&frequency=1d>
* Upload the data to the notebook
* Split the data into train and test set
* Scale the training data between 0 and 1
* Create a data structure with 60 time-steps and 1 output

**Build an RNN model**

* Construct a simple LSTM model
* Compile the model and fit the data into the model
* Preprocess the test data and make predictions on test data
* Plot the model predictions vs the actual data