# **Documentation**

Assumptions:

1. Data is in ascending order of datetime.
2. No 1-minute candle is missing.

## API’s exposed:

1. GET <http://127.0.0.1:8080/>

Used for ingesting the data from Nifty100 database and make a dictionary to store Spark dataframe. Also implemented Data cleaning, filtering, processing and aggregation.

1. GET <http://127.0.0.1:8080/get_stock_data>

Used to get the time series data in form of Dataframe implementing aggregation of given stock on candle time interval.

1. GET <http://127.0.0.1:8080/get_indicator_values>

Used to get latest value of all technical indicators of given stock name and candle interval

1. GET <http://127.0.0.1:8080/technical_indicator_chart>

Used to get the time series data of given indicator applied on the given stock name and specified candle interval which is then used to plot the chart.

Apart from these there are also different functions to calculate temporary values and data.

## Frontend Pages

1. Home page: Used to display stock price of any Nifty 100 stocks and chosen Candle Interval

URL: http://127.0.0.1:8080/

A chart with many small colored squares

Description automatically generated with medium confidence

1. Technical Indicator table: Used to display the latest values of all technical indicator of a chosen stock and Candle Interval

URL: http://127.0.0.1:8080/indicators\_table

