

# Requirements

You must build a “replay web server”. The purpose of this server is to replay historical trade messages as if it were simulating production data flow, but at 60x the rate of timestamped historical data. This server must load a static set of trades from a file, and it must be able to stream them on-demand via WebSocket. The server should host a web page that is able to subscribe to the WebSocket, and visualize the data in real-time as it is received over WebSocket.

A file named *trades.txt* has been provided for you. It contains a trade message per line. Your application must process it as-is, without modification. We will test your application using other files in the same format.

Endpoint naming conventions and data visualizations are up to you. Please feel free to do some market research to determine how you might visualize trade data. You may use open source libraries that you would likely use on-the-job to accomplish your goal. We must be able to easily start your web server, provide it with any arbitrary *trades.txt* file, and see it in action by visiting <http://localhost:8080/>

## Stretch Goals

Here are some *completely optional* stretch goals, if you have the time:

- Be able to specify a replay rate for the historical data over the WebSocket (1x, 5x, 60x, etc).
- Calculate and visualize “candlesticks”/“kline” data from the trades, bucketed by 1 minute intervals.
- Be able to specify the replay file as an input in the front-end, which will dynamically load and stream it on-demand.