

General documentation for {elliott.js}

{elliott.js} is a near realtime graphing library written in JavaScript. It has no external dependencies.

Usage

Here is a simple HTML page that illustates the use of {elliott.js}. This example assumes that you have `elliott.js` in a folder called `js`.

```
<html>
  <head>
    <title>Elliott.js test</title>
    <link href='http://fonts.googleapis.com/css?family=Nobile:400,700' rel='stylesheet' type='text/css'>
    <script type='text/javascript' src='js/elliott.js'></script>
  </head>
  <body>
    <canvas id='myCanvas' width='600' height='200'>
      This text is shown to browsers lacking HTML 5 support
    </canvas>
    <script type="text/javascript">
      var elliott = new Elliott('myCanvas', {
        'general': {
          'background': '#2F2C2B', // Graph background color. Set to 'transparent' for transparency.
          'title': 'Cars inside the city gates', // Graph title
          'titleFont': 'Nobile', // Font name for the title
          'titleFontSize': 11, // Graph title font size
          'titleFontColor': '#ffffff', // Graph title font color
          'yAxisTitle': 'Cars', // Y axis title
          'yAxisFont': 'Nobile', // Font name for the Y axis
          'yAxisFontSize': 10, // Y axis font size
          'yAxisFontColor': '#ffffff', // Y axis font color
          'yAxisNumTicks': 7, // How many ticks should be shown
          'yAxisTickFontSize': 8, // Y axis tick font size
          'logLevel': 'INFO', // Set log level (DEBUG, INFO, WARNING, ERROR). Defaults to no logging.
        },
        'barGraph': {
          'markerPosition': 20, // Show marker every n bars. Set to 0 to turn markers off
          'updateFrequency': 500, // How often should the graph be updated, in ms
          'incrementalValues': true, // Should values be incremental?
          'barBackgroundColor': '#2F2C2B', // Color of the bars (where there is no data). Set to 'transparent' for transparency.
          'barColor': '#ff6060', // Color of data in the bars
          'markerColor': '#333333', // Color of the marker bars
          'barWidth': 3, // How many px should the bars be
          'barSpacing': 1, // How many px space should be between the bars
        }
      });

      // Add some sample data
      elliott.add(Math.floor(2500000));
      var dataInterval2 = setInterval(function () {
        elliott.add(Math.floor((Math.random()*2200)+1));
        elliott.remove(Math.floor((Math.random()*1500)+1));
      }, 1000);
    </script>
  </body>
</html>
```

Function documentation

init - Instanciate

You instanciate {elliott.js} by calling `Elliott()`. It takes two arguments

```
Elliott(cavasID, configurationObject)
```

For example

```
var elliott = new Elliott('myCanvas', config);
```

add() - Add data

You add data to {elliott.js} by calling the `add(integer)` method:

```
var elliott = new Elliott('myCanvas', config);
elliott.add(10);
```

This function can be called wheter or not you have the `incrementalValues` set to `true`.

remove() - Remove data

You remove data from {elliott.js} by calling the `remove(integer)` method:

```
var elliott = new Elliott('myCanvas', config);
elliott.remove(10);
```

This function can be called wheter or not you have the `incrementalValues` set to `true`, but it probably more important when you have it set to `true` as you might need to remove data from the value that {elliott.js} holds.

Configuration parameters

Configuration to {elliott.js} is sent as a dictionary such as:

```
var elliott = new Elliott('myCanvas', {
  'general': {
    'background': '#2F2C2B', // Graph background color. Set to 'transparent' for transparency.
    'title': 'Cars inside the city gates', // Graph title
    'titleFont': 'Nobile', // Font name for the title
    'titleFontSize': 11, // Graph title font size
    'titleFontColor': '#ffffff', // Graph title font color
    'yAxisTitle': 'Cars', // Y axis title
    'yAxisFont': 'Nobile', // Font name for the Y axis
    'yAxisFontSize': 10, // Y axis font size
    'yAxisFontColor': '#ffffff', // Y axis font color
    'yAxisNumTicks': 7, // How many ticks should be shown
    'yAxisTickFontSize': 8, // Y axis tick font size
    'logLevel': 'INFO', // Set log level (DEBUG, INFO, WARNING, ERROR). Defaults to no logging.
  },
  'barGraph': {
    'markerPosition': 20, // Show marker every n bars. Set to 0 to turn markers off
    'updateFrequency': 500, // How often should the graph be updated, in ms
    'incrementalValues': true, // Should values be incremental?
    'barBackgroundColor': '#2F2C2B', // Color of the bars (where there is no data). Set to 'transparent' for transparency.
    'barColor': '#ff6060', // Color of data in the bars
    'markerColor': '#333333', // Color of the marker bars
    'barWidth': 3, // How many px should the bars be
    'barSpacing': 1, // How many px space should be between the bars
  }
});
```

As you can see the configuration is separated into two segments, 'general' and 'barGraph'. The naming is probably self-explaining. Settings under 'general' is not specific to the type of graph generated, while settings under 'barGraph' are specific for Elliott.BarGraph's.

General configuration

Configuration parameters for the 'general' section.

Parameter	Expected value	Comment
background	Hex color	Graph background color. Set to 'transparent' for transparency.
title	String	Graph title
titleFont	String	Graph title font name
titleFontSize	Integer	Graph title font size, in pixels
titleFontColor	Hex color	Graph title font color
yAxisTitle	String	Title for the Y axis values
yAxisFont	String	Font name for the Y axis title
yAxisFontSize	Integer	Font size for the Y axis title
yAxisFontColor	Hex color	Font color for the Y axis title
yAxisNumTicks	Integer	Number of ticks (value points) on the Y axis
yAxisTickFontSize	Integer	Font size for the Y axis ticks
logLevel	String or empty	Set log level (DEBUG, INFO, WARNING, ERROR). Defaults to no logging.

Bar graph configuration

Configuration parameters for the 'barGraph' section.

Parameter	Expected value	Comment
markerPosition	Integer	Show marker every n bars. Set to 0 to turn markers off
updateFrequency	Integer	How often should the graph be updated, in milliseconds
incrementalValues	Boolean	Should {elliott.js} save the current value, so that you only send deltas of the data changes continuously?
barBackgroundColor	Hex color	Background of data bars where there is no data to show. Set this to 'transparent' to get transparency
barColor	Hex color	Color of the data bars
markerColor	Hex color	Color of the markers
barWidth	Integer	Width of the data bars
barSpacing	Integer	Spacing between the data bars

Questions?

Please do not hesitate to contact me at sebastian.dahlgren@gmail.com or Twitter @sebdah.