PieChart Object

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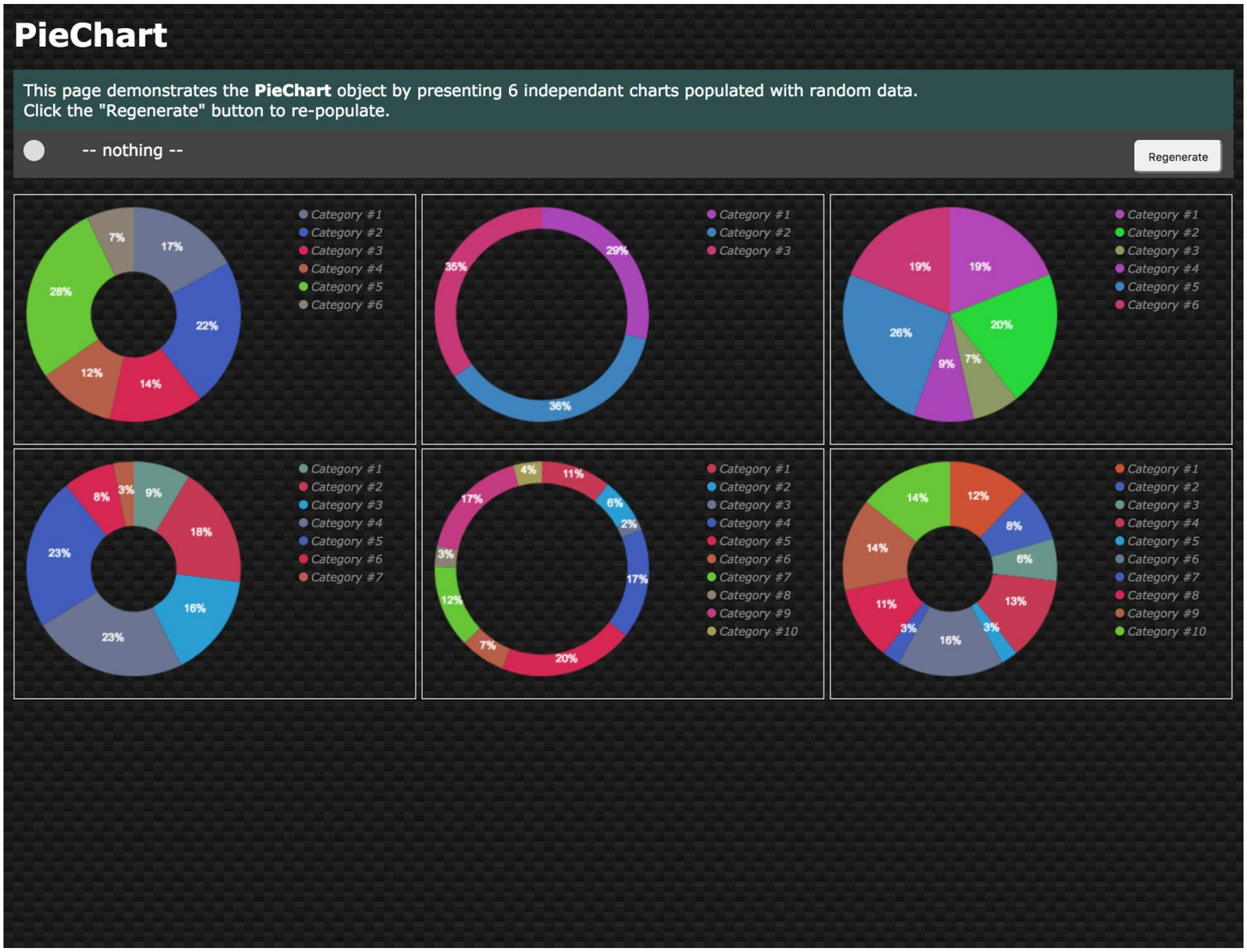
Introduction



PieChart

This page demonstrates the **PieChart** object by presenting 6 independant charts populated with random data.
Click the "Regenerate" button to re-populate.

-- nothing --

The **PieChart** Javascript object is TrackerDetect’s own implementation for creating pie-charts, mainly for **TrackerIQ**’s UI. This document will describe the object, its API and how to use it.

Example

```
<html>
        <head>
                <link rel="stylesheet" type="text/css"
href="piechart.css">
        </head>
        <body>
                <div id=”mychart”></div>
        </body>
        <script src="jquery-3.2.1.min.js"></script>
        <script src="piechart.js"></script>
```

```
    <script>
        var options = {
            Doughnut: 0.6
        };
        $(function(){
            new PieChart("mychart", options);
        });
    </script>
</html>
```

Properties

Property	Description
selectedSlice	A 1-based index of the currently selected slice.

Methods

Method	Description
PieChart(id,options)	Constructor that accepts two arguments: the ID of a DOM element (typically a DIV) that should contain the chart, and an options object.

setData(data)	Set the raw data to be presented as a pie chart. The data is a Javascript array of objects with the following structure:
	{
	name: *<slice name>*,
	value: *<slice native value>*
	}
	The value property can be any positive number (>= 0). Null arrays are allowed too, which in this case, the PieChart object will present an empty chart.

redraw()	Redraw the chart.
getSliceInfo(index)	Return slice information by slice index (1-based). The information returned is in fact the raw slice information initially entered with setData().

getSelectedSliceInformation()	Return information about the currently selected slice.
setOptions(options)	Assign new options set.

Events

The PieChart object defines slice-related events. In all of them, the event object's details contain information about the relevant slice.

Event	**Description**
sliceclick	A sliced was clicked.
slicedblclick	A slice was double-clicked
slicein	New slice has been selected
sliceout	A slice has been unselected.

Options

The PieChart object accepts its options as a Javascript structure, which its entries are described in the following table:

Key	**Type**	**Description**
interactive	Boolean	Turn interactivity on/off. Default: *false*.
colors	Array of strings	Array of slice colors. The PieChart object expects the array size to be as long as the number of requested slices. In case where this attribute is missing or shorter than the actual number of slices, the PieChart object will add random colors as needed.
defaultColor	String	The color used to fill empty charts. Default: #DDD.
text	Object	Properties for drawing slice labels.
text.font	String	Describe the font that will be used to draw slice labels. The format of this string is the same as used in a CSS's *font* property. Default: '`11px Arial`'.
text.color	String	The color to use for slice labels. Default is black.

doughnut	Number	Specify the part of the pie's radius to be used as the doughnut hole. For example, a value of 0.5 would tell the PieChart object to dedicate half of the radius to the doughnut hole. Should set to zero of no doughnut hole is required. The PieChart object do not allow this value to be higher than 0.9. Default: 0.
selectionOffset	Number	The value by which the PieChart objects increases a slice's radius whenever it's selected in order for it to pop out. Default: 8. Setting to zero (0) would prevent the PieChart object from highlighting selected slices.
stroke.color	String	The color used for strokes. If missing, stroking will be turned off.
legendPos	String	Position of legend. Can be "***top***", "***right***", "***bottom***", "***left***". Default: "***right***".
hsl	Object	An object that contains the options for the random-colors generator. If missing, the random generator will use its own defaults.
hsl.h	Object	Set the minimum and maximum values for the HSL's H component.
hsl.h.min	Number	0-360
hsl.h.max	Number	0-360
hsl.s	Object	Set the minimum and maximum values for the HSL's S component.
hsl.h.min	Number	0-100
hsl.h.max	Number	0-100
hsl.l	Object	Set the minimum and maximum values for the HSL's L component.
hsl.l.min	Number	0-100
hsl.l.max	Number	0-100

DOM Structure

Whenever a PieChart object is assigned to an HTML element, it creates the following DOM structure:

```
<div id=”mychart”>
     <canvas class=”chart”></canvas>
     <div class=”legend”>
          <ul>
               <li>
                    <span></span>
                    <span></span>
               </li>
          </ul>
     </div>
</div>
```

The first legend’s row <span> is for presenting the associated color, and the second one is for the slice’s label.

Custom Styling

Although the PieChart object takes care of most of the styling involved, the user can add additional CSS instructions to customize the chart styling as needed. See DOM Structure to help formulate CSS selectors appropriately.

Dependencies

The PieChart object relies on the existent of the JQUERY library.