Plotly.js Cheat Sheet

Plotly.js (https://plot.ly/javascript/) is a JavaScript library for interactive plots. There are APIs for other programming languages available as well.

Using Plotly.js

Include a Plotly.js graph into a HTML document

```
//load library
<script src=``pathTo/plotly-latest.min.js>
</script>

<script>
// add data and plotly code here
Plotly.newPlot('divID',
               [plotConfigAndData],
               layout);
</script>
<div id="divID"> </div>
```

Plots

General structure

```
// some kind of data generation and juggling
var trace = {
    // data (as arrays)
    x: [0,1,2,3,...],
    // y: [0,1,2,3,...],
    // z: [0,1,2,3,...],

    // mode:
    // any combination of lines, markers,text
    // or none
    mode:"lines+markers" ,

    // types:
    // scatter, bar, heatmap, tonexty
    // histogram, box, histogram2d, scattergeo
    // surface (if x,y and z provided: 3D
    type:"scatter",

    // name for legend
    name:"nameString",

    // some more options
    // ...
};
```

```
// some layout definitions
var layout {
    // ...
}
```

```
// position plot in a predefined <div></div>
Plotly.newPlot('divID', [trace, trace2,...],
               layout);
```

If math.js (https://mathjs.org/) is used, the array has to be accessed as follows:

```
var trace = {
    x: variableName._data,
    // ...
}
```

Marker

Marker and marker color

```
marker: {
        color: 'blue',
        symbol: 'star-triangle-up'
}
```

Full list of markers: https://plot.ly/javascript/reference/#box-marker-symbol

Layout

```
var layout = {
    title:"titleString",
    height: 100 // pixels
    width: 100 // pixels
    showlegend: true // bool
    xaxis: {
        title: "xaxisTitleString",
        domain: [1, 10] // range of domain
        }
    // similar for yaxis and zaxis
}
```