

SiSense front-end developer test - Calendar Heat-map widget

Instructions:

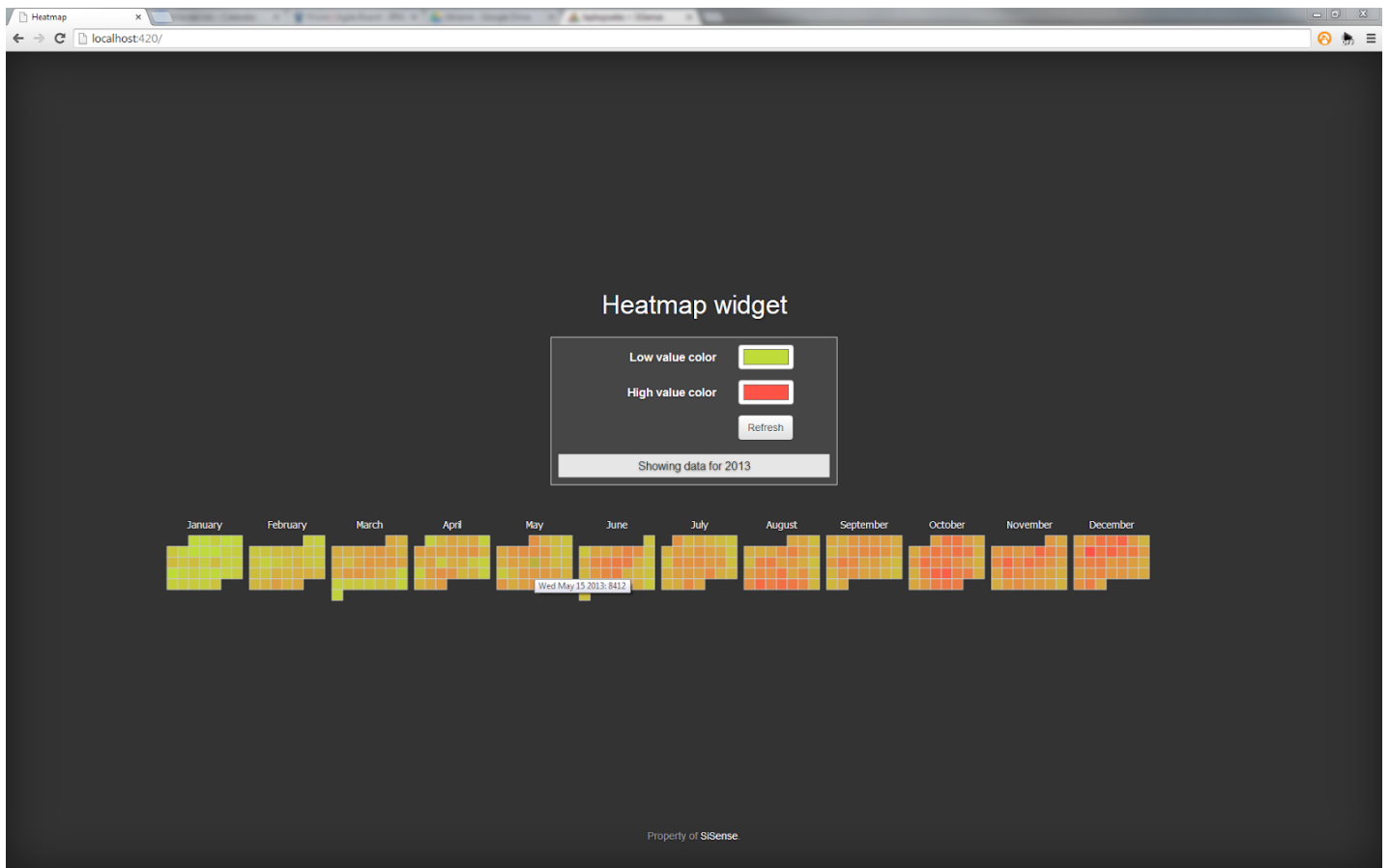
- You are provided with a basic project, set up with the minimal code you need to start and some sample data. Please read the comments in each file. There's already an interface to run the widget once you're done.
- Your goal is to develop a "calendar heat map" widget that visualizes numeric data of an entire year from a dataset, *as seen in the screenshot below*.
- The widget **must** be rendered by the **D3.js** library - but you **do not** need to be familiar with it to complete the test!
- You can also use any javascript or css library you wish - don't worry about dependencies.
- You cannot copy an existing implementation, but it's **ok** to use one as a basis for your solution. Here's a good one to learn from: <http://bl.ocks.org/mbostock/4063318>
- Time to complete the test: about 2-3 hours.

Specifics:

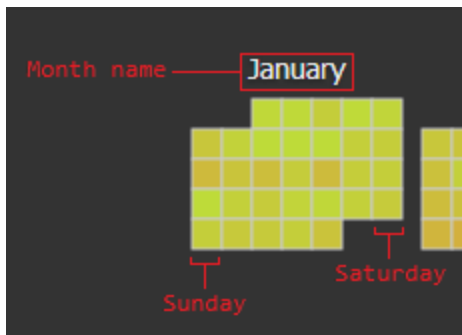
- The widget will receive a very simple dataset - an array of tuples: [date, value]
For example:

```
[ [ "2013-01-01T00:00:00", 846 ] ... [ "2013-06-24T00:00:00", 524 ] ]
```
- The widget consists of:
 - A micro-calendar display for each month of the chosen year.
 - Each month has a title with the month name above it.
 - Each day cell is filled with a color depending on it's value, within the data set provided.
- Days that have no value should be white (blank).
- When the mouse hovers above a day, a tooltip is shown with the date and the value of that date.

Screenshot of final product:



Month structure:



Tooltip when hovering over a day:

