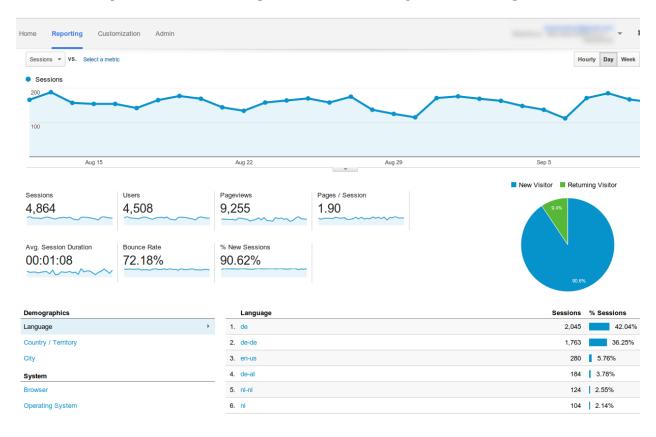
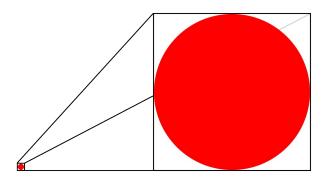
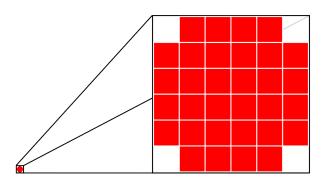
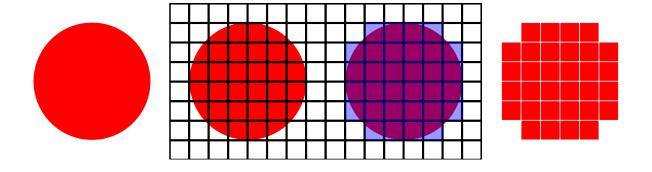
## Chapter 1: The Magic of SVG, D3.js, and AngularJS

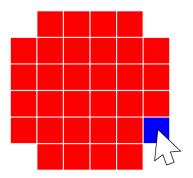


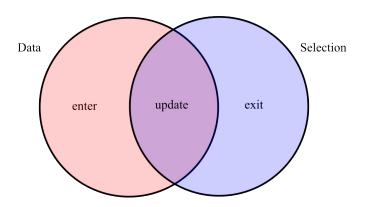


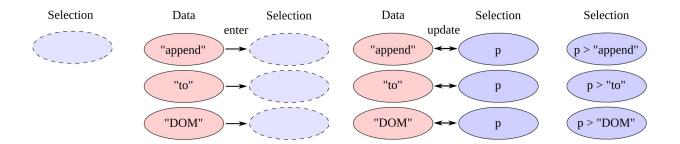


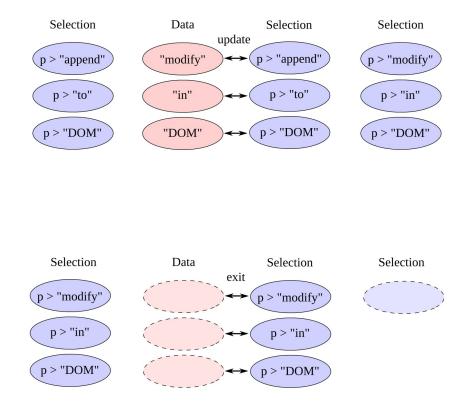


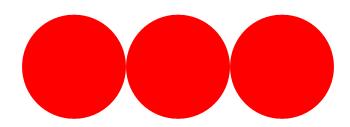




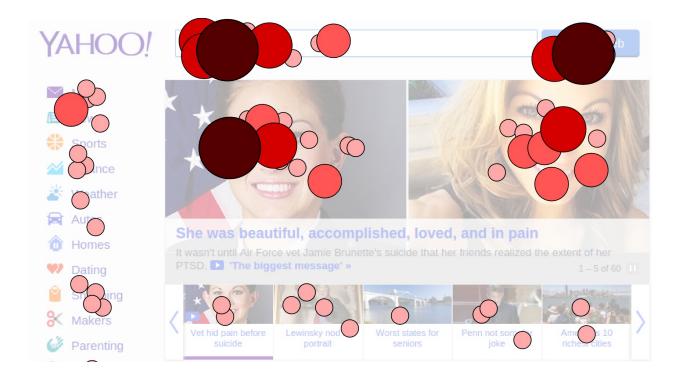








**Chapter 2: Getting Started with D3.js** 



Some fruits:

Apple

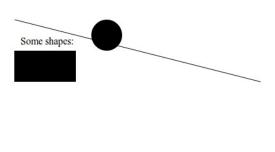
Banana

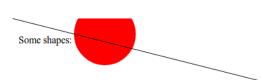
Orange

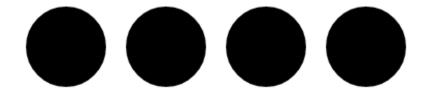
Some fruits:

Ranana

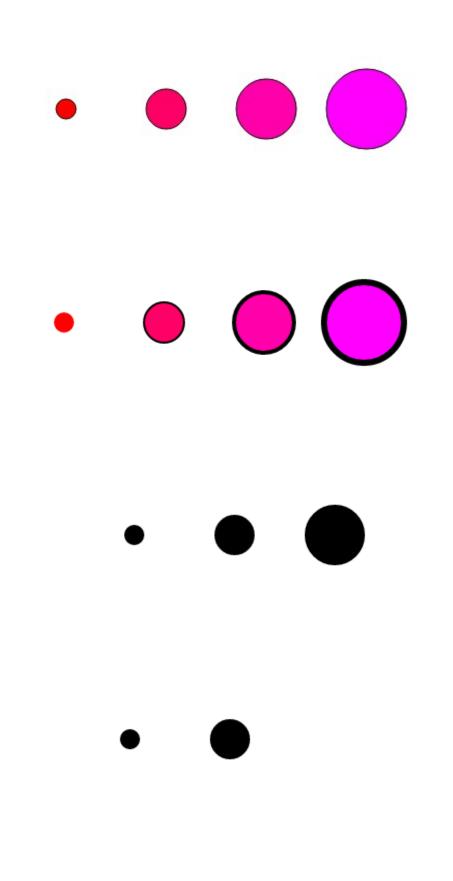
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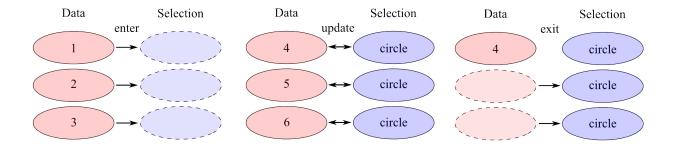


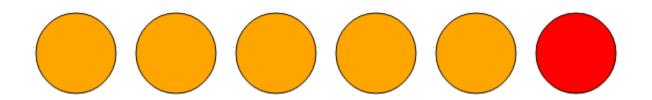


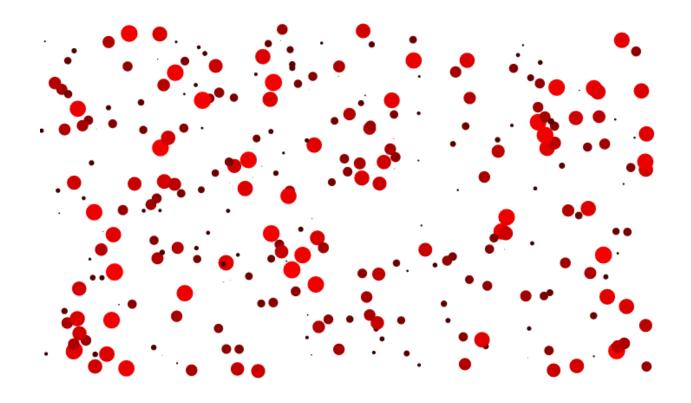




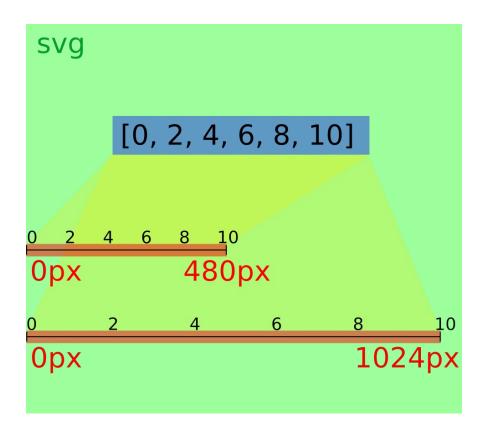


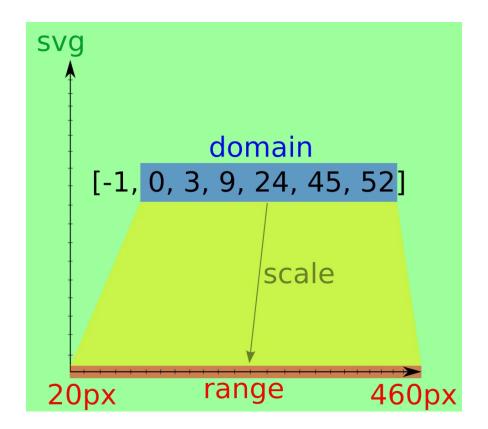


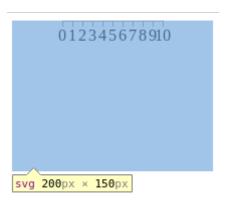


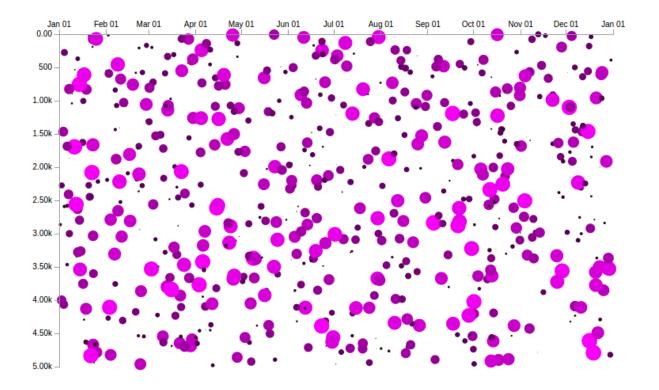


**Chapter 3: Manipulating Data** 







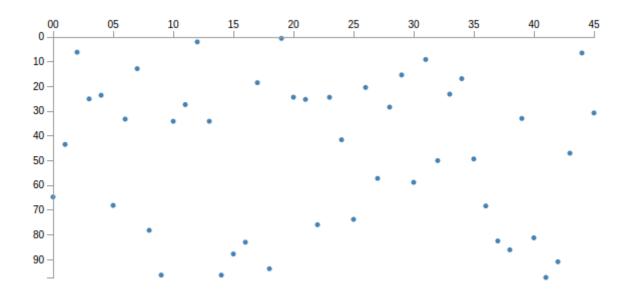


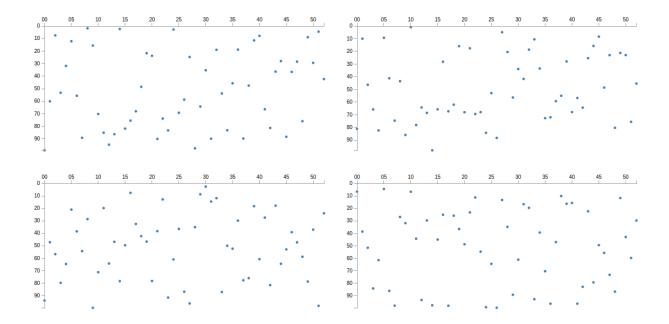
**Chapter 4: Building a Chart Directive** 

Q | Elements | Network Sources Timeline Profiles Resources Audits Console

```
▼<html ng-app="myApp" class="ng-scope">
  <head>...</head>
  ▼ <body>
     <!-- index.html -->
    ▼ <div ng-controller="MainCtrl" class="ng-scope">
       <!-- We can use the visualization directives here -->
       <!-- The first chart -->
     ▼ <my-scatter-chart class="chart ng-isolate-scope">
       ► <svg>...</svg>
       </my-scatter-chart>
       <!-- A second chart -->
      ▼ <my-scatter-chart class="chart ng-isolate-scope">
       ► <svg>...</svg>
       </my-scatter-chart>
       <!-- Another chart -->
      ▼ <my-scatter-chart class="chart ng-isolate-scope">
       ► <svg>...</svg>
       </my-scatter-chart>
     </div>
    </body>
  </html>
```

html.ng-scope body div.ng-scope





```
🕲 🖨 🗊 ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data V
Visualizations with AngularJS and D3.js/chapter_4/code$ karma init test/config/k
arma.conf.js
Which testing framework do you want to use ?
Press tab to list possible options. Enter to move to the next question.
Do you want to use Require.js ?
This will add Require.js plugin.
Press tab to list possible options. Enter to move to the next question.
Do you want to capture any browsers automatically ?
Press tab to list possible options. Enter empty string to move to the next quest
ion.
> Chrome
What is the location of your source and test files ?
You can use glob patterns, eg. "js/*.js" or "test/**/*Spec.js".
Enter empty string to move to the next question.
Should any of the files included by the previous patterns be excluded ?
You can use glob patterns, eg. "**/*.swp".
Enter empty string to move to the next question.
Do you want Karma to watch all the files and run the tests on change ?
Press tab to list possible options.
Config file generated at "/home/ckoerner/Dropbox/not-private/Projekte/Interactiv
e Data Visualizations with AngularJS and D3.js/chapter 4/code/test/config/karma.
ckoerner@ckoerner-ThinkPad-T430:~/Dropbox/not-private/Projekte/Interactive Data
```

```
ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... x ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... x ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_4/code$ karma start test/config/karma.conf.js
INFO [karma]: Karma v0.12.24 server started at http://localhost:9876/
INFO [launcher]: Starting browser Chrome
INFO [chromium 34.0.1847 (Ubuntu)]: Connected on socket ytUb6pkQhsVqBzp1-J9a with id 96583138
Chromium 34.0.1847 (Ubuntu): Executed 0 of 0 ERROR (0.011 secs / 0 secs)
```

```
ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... × ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... × ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_4/code$ karma start test/config/karma.conf.js

INFO [karma]: Karma v0.12.24 server started at http://localhost:9876/
INFO [launcher]: Starting browser Chrome

INFO [chromium 34.0.1847 (Ubuntu)]: Connected on socket ytUb6pkQhsVqBzp1-J9a with id 96583138

Chromium 34.0.1847 (Ubuntu): Executed 0 of 0 ERROR (0.011 secs / 0 secs)

INFO [watcher]: Changed file "/home/ckoerner/Dropbox/not-private/Projekte/Interactive Data Visualizations with Angula rJS and D3.js/chapter_4/code/test/spec/chart.spec.js".

Chromium 34.0.1847 (Ubuntu): Executed 3 of 3 SUCCESS (0.115 secs / 0.112 secs)

INFO [watcher]: Changed file "/home/ckoerner/Dropbox/not-private/Projekte/Interactive Data Visualizations with Angula rJS and D3.js/chapter_4/code/test/spec/chart.spec.js".

Chromium 34.0.1847 (Ubuntu): Executed 3 of 3 SUCCESS (0.135 secs / 0.127 secs)

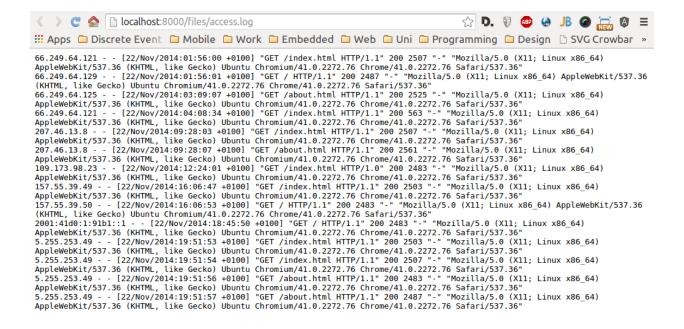
INFO [watcher]: Changed file "/home/ckoerner/Dropbox/not-private/Projekte/Interactive Data Visualizations with Angula rJS and D3.js/chapter_4/code/test/spec/chart.spec.js".

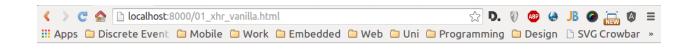
Chromium 34.0.1847 (Ubuntu): Executed 3 of 3 SUCCESS (0.094 secs / 0.083 secs)
```

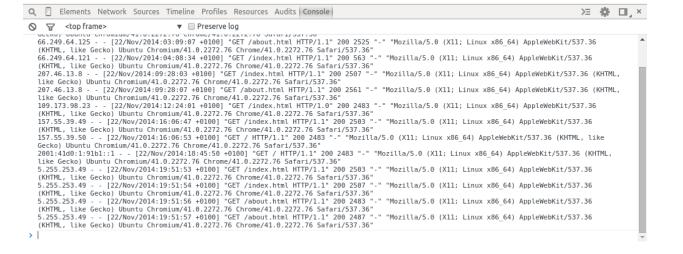
```
ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... x ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/In... x ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_4/code$ protractor test/config/protractor.conf.js Using the selenium server at http://localhost:4444/wd/hub

Finished in 0.007 seconds
0 tests, 0 assertions, 0 failures
ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_4/code$
```

**Chapter 5: Loading and Parsing Data** 







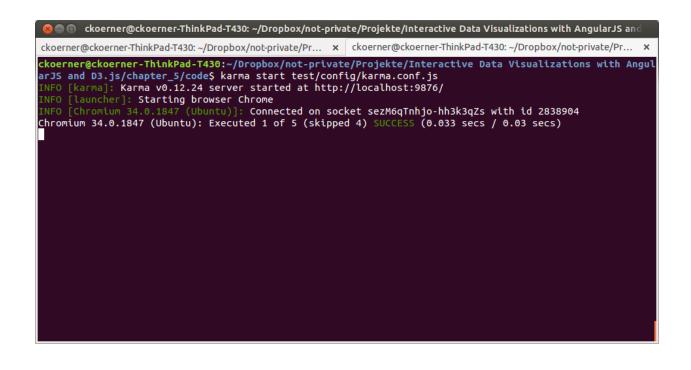
```
| Console | Sources | Timeline | Profiles | Resources | Audits | Console | September | Sources | Audits | Console | September | September
```



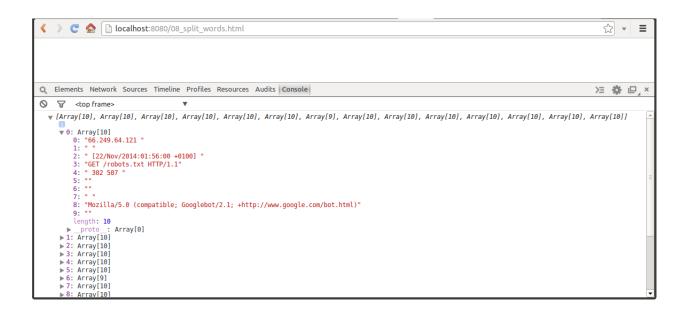
## files/access.log

66.249.64.121 - - [22/Nov/2014:01:56:00 +0100] "GET /index.html HTTP/1.1" 200 2507 "-" "Mozilla/5.0 (X11; Linux x86 64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 66.249.64.129 - - [22/Nov/2014:01:56:01 +0100] "GET / HTTP/1.1" 200 2487 - "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 66.249.64.125 - - [22/Nov/2014:03:09:07 +0100] "GET /about.html HTTP/1.1" 200 2525 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 66.249.64.121 [22/Nov/2014:04:08:34 +0100] "GET /index.html HTTP/1.1" 200 563 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 207.46.13.8 - - [22/Nov/2014:09:28:03 +0100] "GET /index.html HTTP/1.1" 200 2507 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 207.46.13.8 - - [22/Nov/2014:09:28:07 +0100] "GET /about.html HTTP/1.1" 200 2561 "-" "Mozilla/5.0 (X11; Linux x86\_64) 2503 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 157.55.39.50 - - [22/Nov/2014:16:06:53 +0100] "GET / HTTP/1.1" 200 2483 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 2001:41d0:1:91b1::1 - - [22/Nov/2014:18:45:50 +0100] "GET HTTP/1.1" 200 2483 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 5.255.253.49 - - [22/Nov/2014:19:51:53 +0100] "GET /index.html HTTP/1.1" 200 2503 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 5.255.253.49 - - [22/Nov/2014:19:51:54 +0100] "GET /index.html HTTP/1.1" 200 2507 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 5.255.253.49 - - [22/Nov/2014:19:51:56 +0100] "GET /about.html HTTP/1.1" 200 2483 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36" 5.255.253.49 - - [22/Nov/2014:19:51:57 +0100] "GET /about.html HTTP/1.1" 200 2487 "-" "Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36"

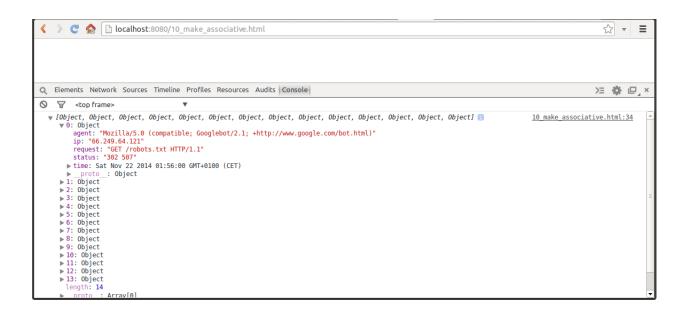
```
ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Pr... x | ckoerner@ckoerner-ThinkPad-T430: ~/Dropbox/not-private/Projekte/Interactive Data Visualizations with AngularJS and D3.js/chapter_5/code$ karma start test/config/karma.conf.js
INFO [karma]: Karma v0.12.24 server started at http://localhost:9876/
INFO [launcher]: Starting browser Chrome
INFO [chromium 34.0.1847 (Ubuntu)]: Connected on socket BCLz2Yzs4AVAZYBGT7GN with id 3388502
Chromium 34.0.1847 (Ubuntu): Executed 1 of 4 (skipped 3) SUCCESS (0.04 secs / 0.035 secs)
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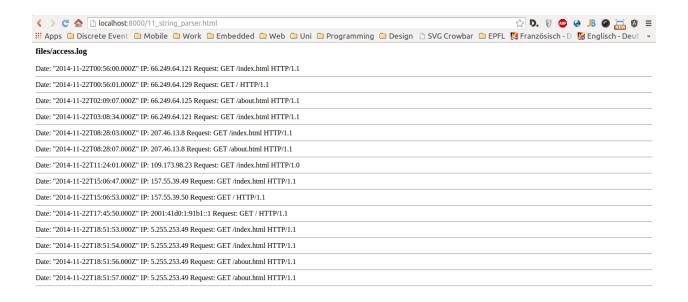


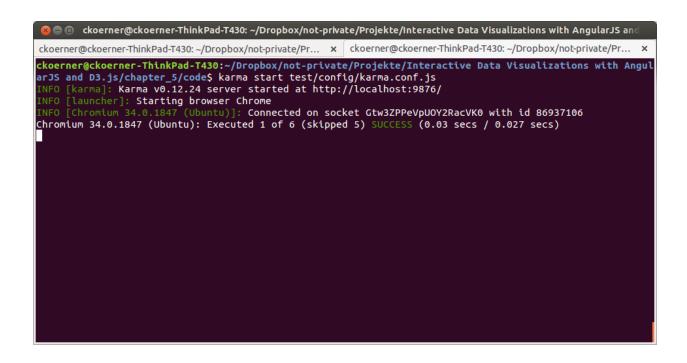














## files/access.log

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Key: Nov 22, 2014 3:10:00 AM Elements: [{"time":1416622147000,"ip":"66.249.64.125","request":"GET /about.html HTTP/1.1","status":"200 2525","agent":"Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36"}]

 $Key: Nov 22, 2014 4:10:00 \ AM \ Elements: [\{"time": 1416625714000,"!p": "66.249.64.121","request": "GET / index.html \ HTTP/1.1","status": "200 563","agent": "Mozilla/5.0 (X11; Linux x86_64) \ AppleWebKit/537.36 (KHTML, like Gecko) \ Ubuntu \ Chromium/41.0.2272.76 \ Chrome/41.0.2272.76 \ Safari/537.36"\}]$ 

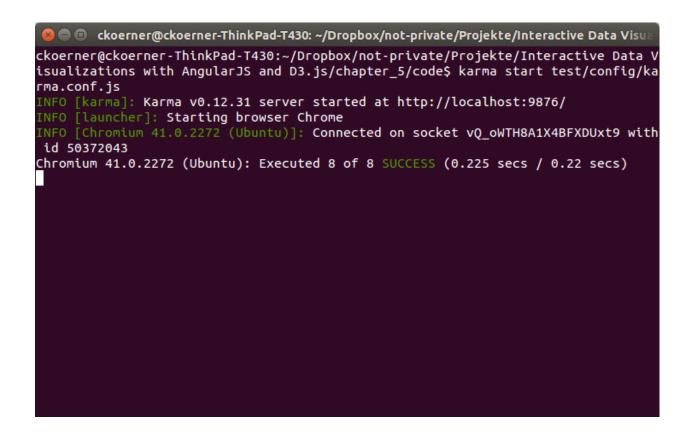
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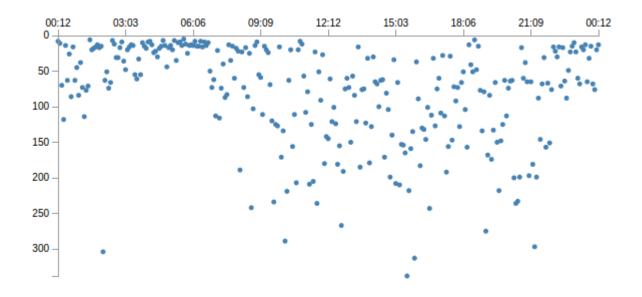
Key: Nov 22, 2014 12:25:00 PM Elements: [{"time":1416655441000,"ip":"109.173.98.23","request":"GET /index.html HTTP/1.0","status":"200 2483","agent":"Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36"}]

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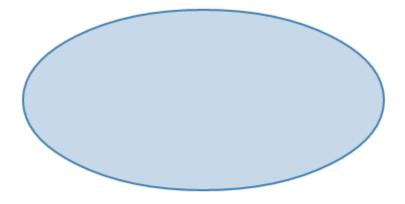
Key: Nov 22, 2014 6:45:00 PM Elements: [{"time":1416678350000,"ip":"2001:41d0:1:91b1::1","request":"GET / HTTP/1.1","status":"200 2483","agent":"Mozilla/5.0 (X11; Linux x86\_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/41.0.2272.76 Chrome/41.0.2272.76 Safari/537.36"}]

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**Chapter 6: Drawing Curves and Shapes** 







```
Q Elements Network Sources Timeline Profiles Resources Audits Console
```



```
Q Elements Network Sources Timeline Profiles Resources Audits Console
```



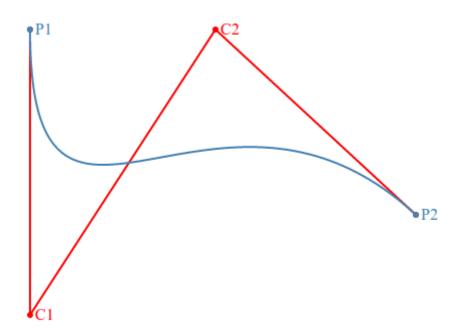


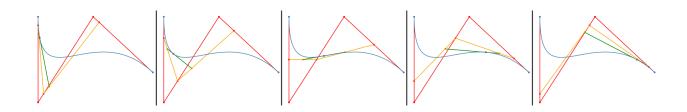


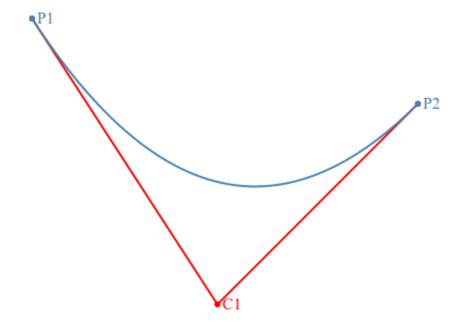
$$f(x) = a \cdot x^3 + b \cdot x^2 + c \cdot x + d$$

$$f(t) = \sum_{i=0}^{n} B_{i,n}(t) \cdot P_{i}$$

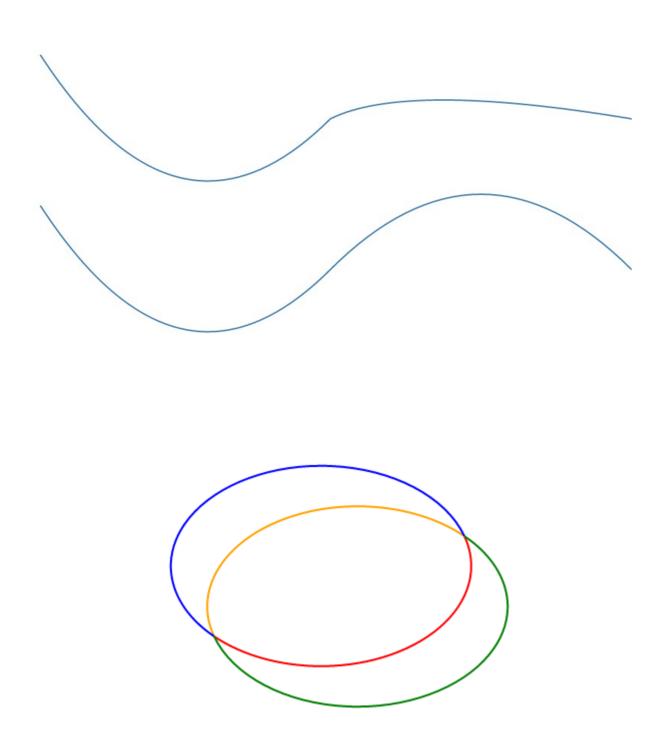
$$B_{i,n}(t) = \binom{n}{i} t^{i} \left(1 - t\right)^{n-i}$$

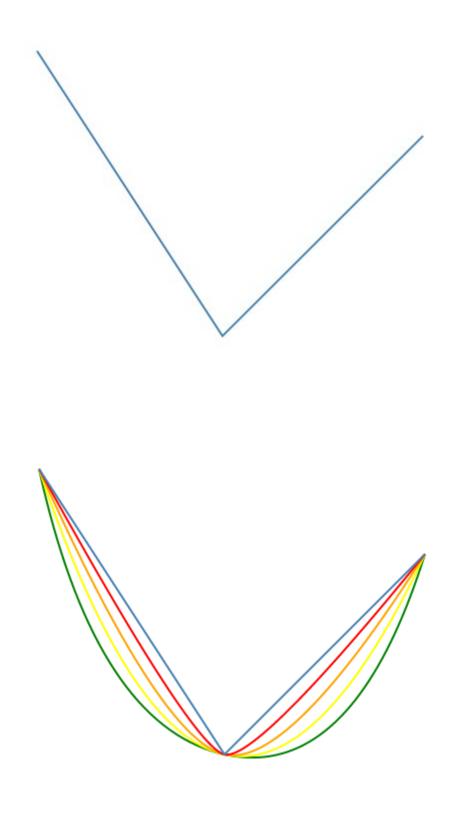


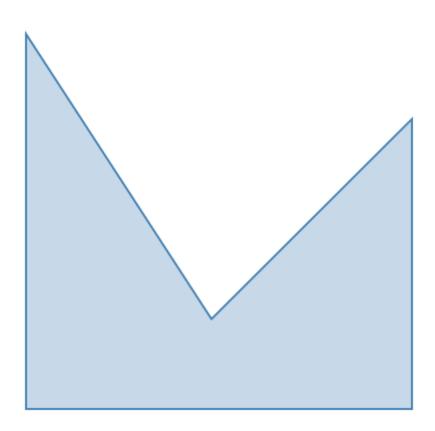


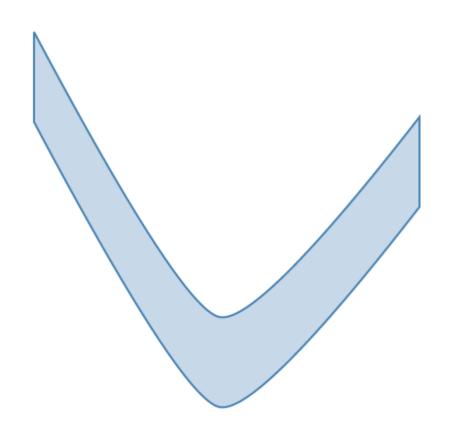


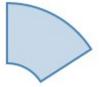


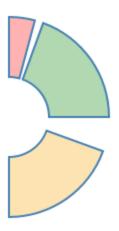


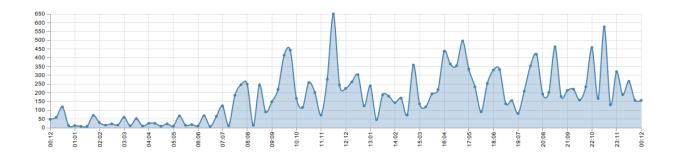


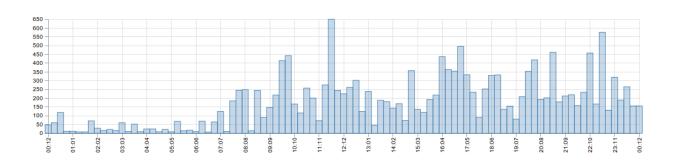




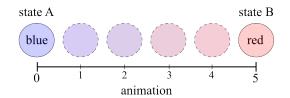


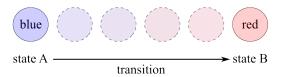


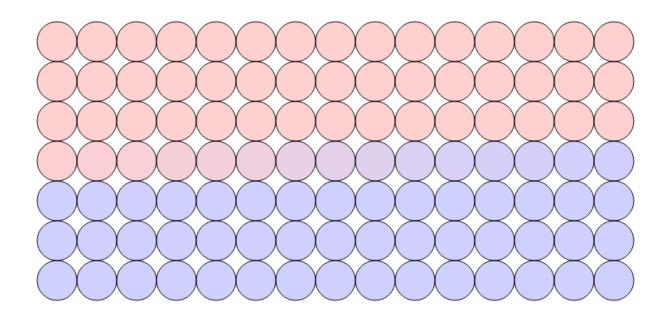


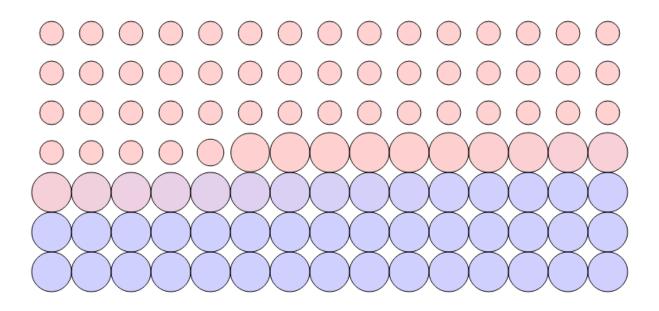


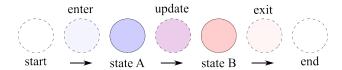
## **Chapter 7: Controlling Transitions and Animations**

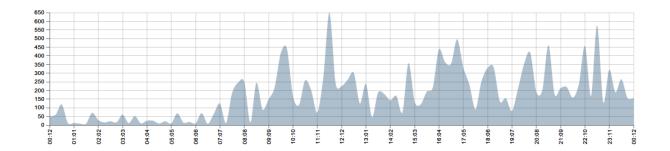


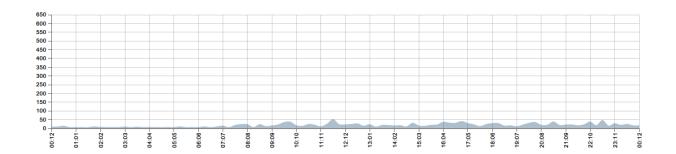


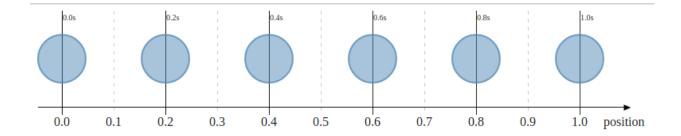


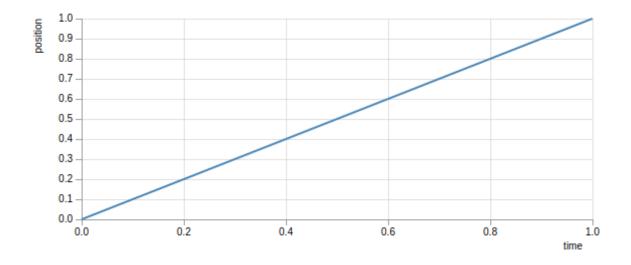


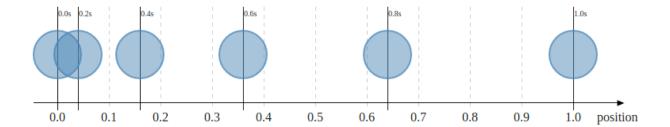


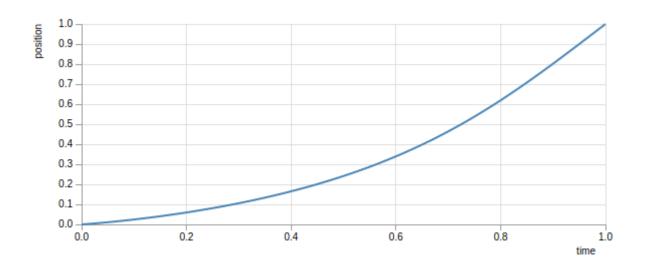


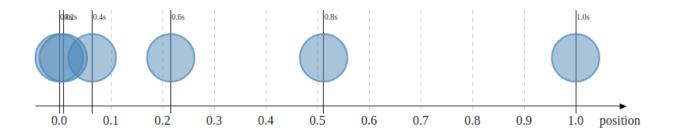


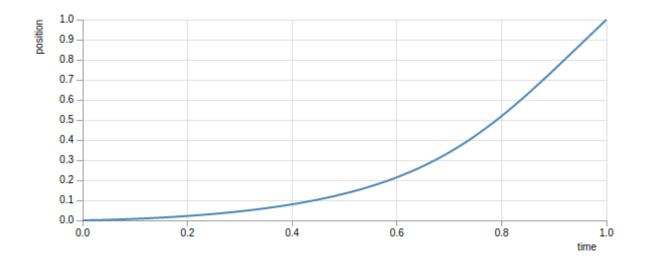


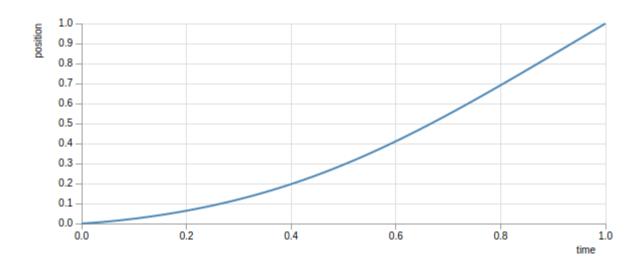


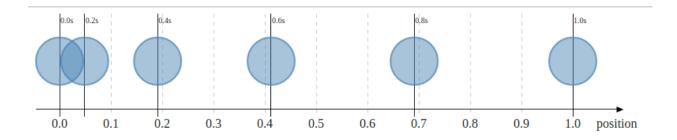


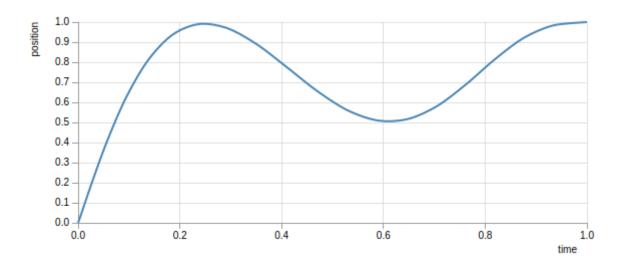


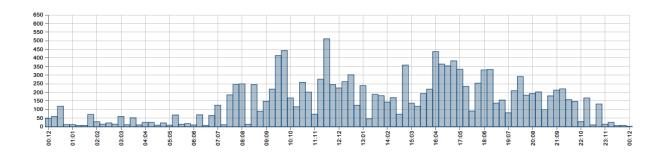


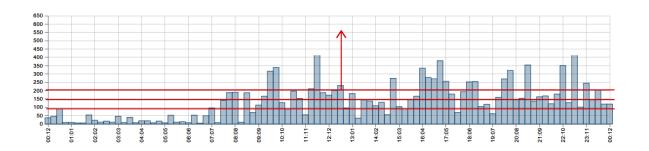


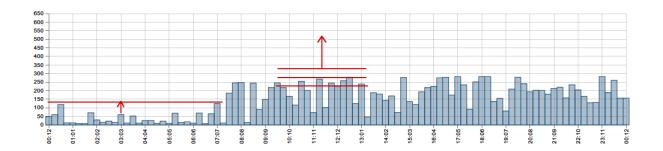


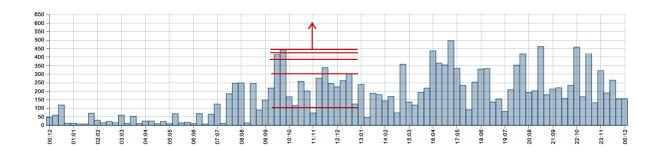


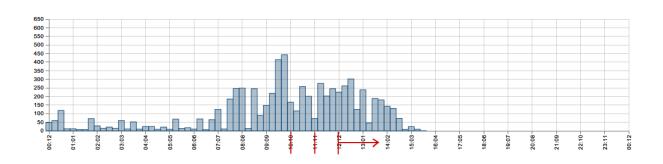


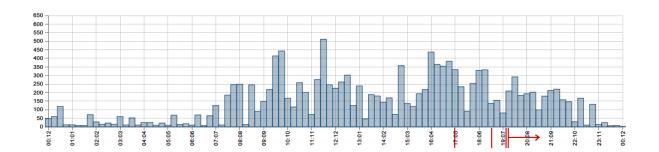




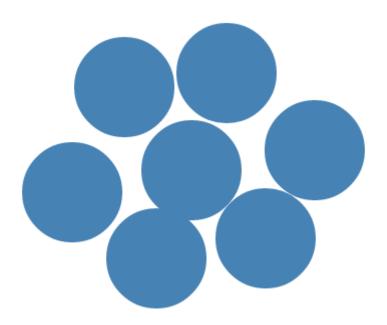








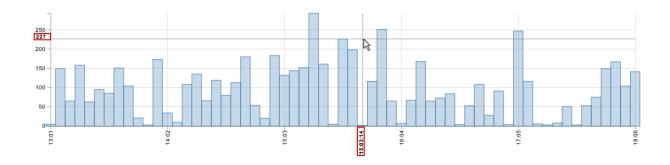
**Chapter 8: Bringing the Chart to Life with Interactions** 

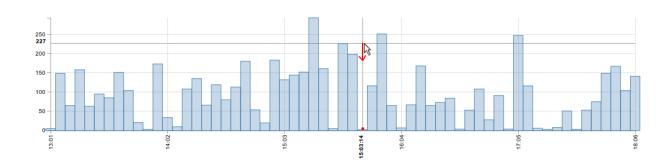


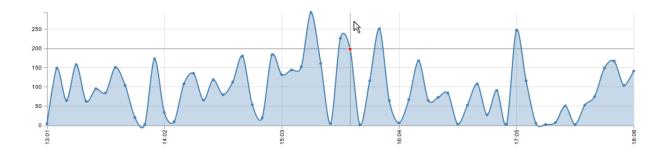


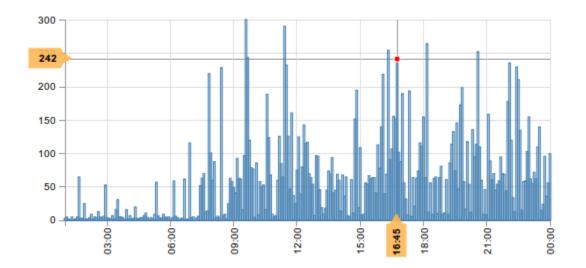
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Q	Eleme	ents	Network	Sources	Timeline	Profiles	<b>&gt;&gt;</b>	>=	42:	₽,:
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T	rigger	red i	mouseup			(	01_event	listenin	g.htr	ml:41
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Т	rigger	red i	mousedown			(	01_event	listenin	g.htr	nl:41
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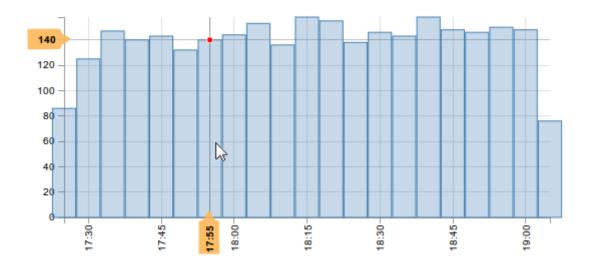


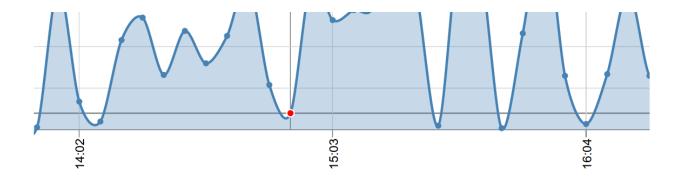


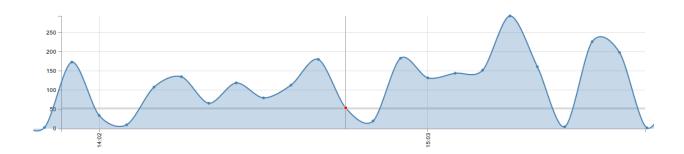




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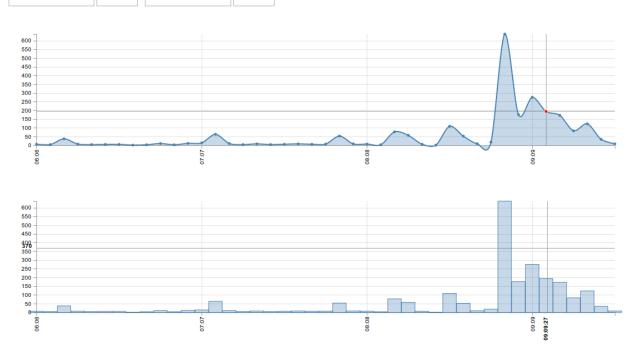




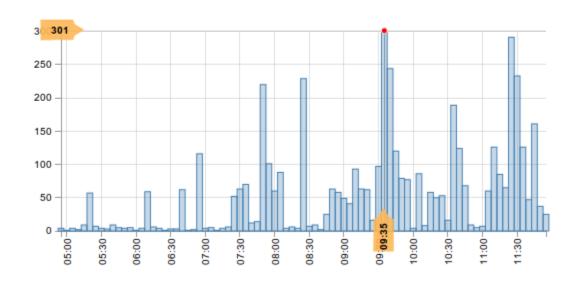
<b>←</b>		<b>&gt;</b>				
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26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

<b>←</b>		<b>→</b>				
Su	Мо	Tu	We	Th	Fr	Sa
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
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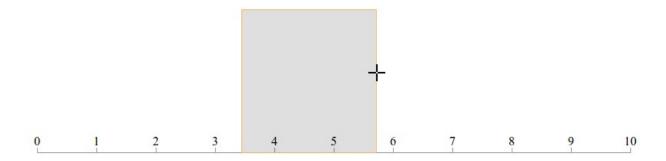


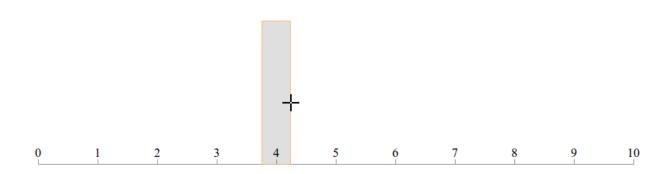


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0 1 2 3 4 5 6 7 8 9 10

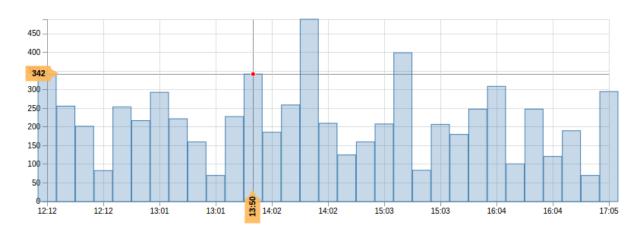
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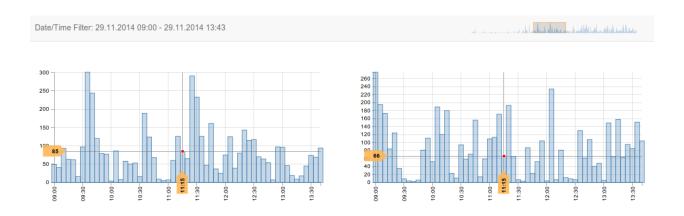




3.80 3.85 3.90 3.95 4.00 4.05 4.10 4.15 4.20

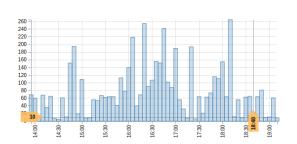
## - Lumman Man March



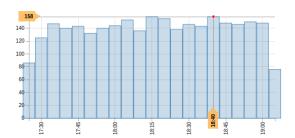


Chapter 9: Building a Real-time Visualization to Monitor Server Logs

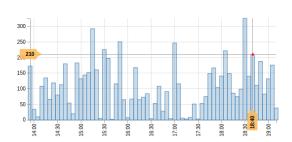
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## mysql.slow-queries



nginx.access



nginx.error

