Mendor Graphs

Example use in HTML5

- Import libraries:
  - ```
    <script src="scripts/jquery-1.8.3.min.js"></script>
    <script src="scripts/jquery-ui.js"></script>
    <script src="scripts/jquery.format-1.2.js"></script>
    <script src="scripts/raphael-min.js"></script>
    <script src="scripts/raphael-popup.js"></script>
    <script src="scripts/datetime.js"></script>
    <script src="scripts/MendorGraph.js"></script>
    ```

- Create MendorGraph object:
  - ```
    <div id="mendorGraph" class="canvas" style="width:1200px; height:800px; overflow:auto;">
    ```
  - ```
    <script>
        var mendorGraph = new MendorGraph({
                    frameId : "mendorGraph",
                    personId: 10000000,
                    startDate : new Date(2011, 7, 25),     // 25.08.2011
                    endDate : new Date(2011, 9, 5),        // 05.10.2011
        })
        .loadDataFromInternet({
                    useDumpData : false,
        });
    </script>
    ```

Raphaël – Small JavaScript library

- Uses the SVG W3C Recommendation and VML as a base for creating graphics, makes graphical objects as DOM objects, which can be used with JavaScript event handlers or modified later.
    - Supports: Firefox 3.0+, Safari 3.0+, Chrome 5.0+, Opera 9.5+, Internet Explorer 6.0+
- Sample use:
    - var paper = Raphael(frameId, '100%', '100%');
    - paper

```
.rect(this.minX.hour, this.minY, this.maxX - this.minX.hour, this.maxY - this.minY)
.attr({
            'stroke-width' : 0,
            'fill' : 'white',
            'fill-opacity' : 0.0,
})
.mouseover(function() {
            floatingAxisElement.show();
})
.mouseout(function() {
            floatingAxisElement.hide();
})
.mousemove(function(event) {
            floatingAxisElement.translate(
            event.layerX - floatingAxisElement.currentX, 0);
            floatingAxisElement.currentX = event.layerX;
});
```

SVG styles

- All styles are defined in one place:
  - function createMendorGraphStyle() {
    ```
    var style = {
                hour : {
                        axis : {
                                'stroke' : '#666',
                                'stroke-width' : 2,
                        },
                        font : {

                                'font-family' : 'Arial, Helvetica, sans-serif',
                                'font-size' : 12,
                                'font-weight' : 'normal',
                                'stroke-width' : 0,
                                'fill' : 'black',
                        },
                },
                ….
        };
        return style;
    }
    ```

CORS Problem & Solutions

- CORS (Cross-origin resource sharing) defines a way in which the browser and the server can interact to determine whether or not to allow the cross-origin request.

- Solution 1 (easiest): Web page and Web service (XML/JSON data) are accessed from the same domain (http://mendor.com)

- Solution 2: Add a value to HTTP-header:
  - Access-Control-Allow-Origin: http://www.example-social-network.com
  - Problem: Requests using Web applications (PHP, Ruby on Rails, etc.)

- Solution 3: Modify security configuration of browser:
  - chrome.exe --disable-web-security
  - Problem: unsecured

Statistics:

- File sizes (total ~ 200 Kb):
  - raphael-min.js – 90Kb
  - raphael-popup.js – 4Kb
  - MendorGraph.js – 16Kb
  - datetime.js – 2Kb