Subject:	Fwd: Sunburst Chart with Angular 2 + D3JS
From:	Syed Awase khirni <awasekhirni@gmail.com>
Date:	2017-06-20, 5:47 a.m.
To:	Venkata Andlagutti <Venkata.Andlagutti@harman.com>, "Kumar, Johnson" <johnson.kumar@harman.com>
Content-Type:	multipart/alternative; boundary="001a11c11e2c09b7d90552612560"
Message-ID:	<CAFkQYDUm4DeQWuasQ3naxxpsjNxeDcYicbjCH2VfT3wHE-=B_Q@mail.gmail.com>
Delivered-To:	awasekhirni@gmail.com
References:	<CAFkQYDWtZkedyJ+Yf87bCQNayw_z=MSBt=mw_DgD_TZdpfgM3A@mail.gmail.com>
	<CA+ZY6BheYOm8S=0X28_vZvJjEYeKCtdhWvqN7BXgyK81n3=iSA@mail.gmail.com>
In-Reply-To:	<CA+ZY6BheYOm8S=0X28_vZvJjEYeKCtdhWvqN7BXgyK81n3=iSA@mail.gmail.com>
Received:	by 10.140.102.16 with HTTP; Tue, 20 Jun 2017 02:47:50 -0700 (PDT)
MIME-Version:	1.0
X-MT-Debeaconized-From:	15cc4e6aa7bf16c8
Received:	from 224054973946 named unknown by gmailapi.google.com with HTTPREST; Tue, 20 Jun 2017 05:48:52 -0400
X-Mozilla-Status2:	00000000
X-Mozilla-Status:	0000
X-UIDL:	GmailId15cc4e6a8ac9fc68
X-Account-Key:	account1

---------- Forwarded message ----------
From: **jaya balan** <sjjaya2005@gmail.com>
Date: Tue, Jun 20, 2017 at 3:16 PM
Subject: Re: Sunburst Chart with Angular 2 + D3JS
To: Syed Awase khirni <awasekhirni@gmail.com>

Hi Syed,
Thank you very much for making it work. Yes, this will help us to demo the initial version to Client.

Thanks,
Jayabalan S

On Tue, Jun 20, 2017 at 3:13 PM, Syed Awase khirni <awasekhirni@gmail.com> wrote:

Hello,

I worked in the night, have finally brought the sunburst chart demo with D3JS and Angular 2. I finally managed to bring the sunburst chart with d3js version 4.
Sunburst Chart Demo for your client requirement. This will help you to demo to your client about your progress. D3JS , Highcharts has been taught extra along with Angular 2.4 based on audience/participants request

Please follow the instructions step by step
Step 1: Create this component

```
import { Component, OnInit, OnChanges, ViewChild, ElementRef, Input, ViewEncapsulation, SimpleChanges }
from '@angular/core';

import * as d3 from 'd3';
import { ScaleLinear } from 'd3';
import * as d3scale from 'd3-scale';
import * as d3hierarchy from 'd3-hierarchy';

@Component({
    selector: 'newsun-burst',
    templateUrl: 'app/components/views/newsunburstview.html',
    styleUrls: ['./app/components/styles/newsunburststyles.css'],
    encapsulation: ViewEncapsulation.None

})

export class NuoSunburstComponent implements OnInit, OnChanges {

    @ViewChild('sunburstchart') private chartContainer: ElementRef;
    @Input() private data: Array<any>;
    private margin: any = { top: 20, bottom: 20, left: 20, right: 20 };
    private chart: any;//data
    private width: number;
    private height: number;
    private radius: number;
    private xScale: any;
    private yScale: any;
    private colors: any;
    private xAxis: any;
    private yAxis: any;
    private mytext: any;
    private arc: any;
    private x: any;
    private y: any;
```

```typescript
    private formatNumber: any;
    private partition: any;
    private svg: any;
    private root: any;



    ngOnChanges(changes: SimpleChanges): void {
        throw new Error("Method not implemented.");
    }
    ngOnInit(): void {
        this.createSunburst();
    }



    constructor() { }





    createSunburst() {

        let width = 960,
            height = 700,
            radius = (Math.min(width, height) / 2) - 10;

        let formatNumber = d3.format(",d");

        let x = d3.scaleLinear()
            .range([0, 2 * Math.PI]);

        let y = d3.scaleSqrt()
            .range([0, radius]);

        let color = d3.scaleOrdinal(d3.schemeCategory20);

        let partition = d3.partition();

        let arc = d3.arc()
            .startAngle(function (d:any) { return Math.max(0, Math.min(2 * Math.PI, x(d.x0))); })
            .endAngle(function (d:any) { return Math.max(0, Math.min(2 * Math.PI, x(d.x1))); })
            .innerRadius(function (d:any) { return Math.max(0, y(d.y0)); })
            .outerRadius(function (d:any) { return Math.max(0, y(d.y1)); });


        let svg = d3.select("body").append("svg")
            .attr("width", width)
            .attr("height",height)
            .append("g")
            .attr("transform", "translate(" + width / 2 + "," + (height / 2) + ")");

        let text,
            path;

        d3.json("app/data/flare.json", function (error, root) {
            if (error) throw error;

             root = d3.hierarchy(root);
            root.sum(function (d) { return d.size; });
```

```
            svg.selectAll("path")
                .data(partition(root).descendants())
                .enter().append("g").attr("class", "node");

            path = svg.selectAll(".node")
                .append("path")
                .attr("d", arc)
                .style("fill", function (d:any) { return color((d.children ? d : d.parent).data.name); })
                .on("click", (d:any)=> {
            //Hide text while Sunburst transitions
            //this.text.transition().attr("opacity", 0);

            svg.transition()
                .duration(750)
                .tween("scale", function () {
                    let xd = d3.interpolate(x.domain(), [d.x0, d.x1]),
                        yd = d3.interpolate(y.domain(), [d.y0, 1]),
                        yr = d3.interpolate(y.range(), [d.y0 ? 20 : 0, radius]);
                    return function (t:any) { x.domain(xd(t)); this.y.domain(yd(t)).range(yr(t)); };
                })
                .selectAll("path")
                .attrTween("d", function (d:any) { return function () { return this.arc(d); }; })
                .on("end", function (e, i) {
                    // check if the animated element's data e lies within the visible angle span given in
d
                    if (e.x0 > d.x0 && e.x0 < d.x1) {
                        // get a selection of the associated text element
                        let arcText = d3.select(this.parentNode).select("text");
                        // fade in the text element and recalculate positions
                        arcText.transition().duration(750)
                            .attr("opacity", 1)
                            .attr("class", "visible")
                            .attr("transform", function () { return "rotate(" + (x((d.x0 + d.x1) / 2) -
Math.PI / 2) / Math.PI * 180 + ")" })
                            .attr("x", function (d) { return y(d.y0); })
                            .text(function (d:any) {
                                return d.data.name === "root" ? "" : d.data.name
                            });
                    }
                });
        });

            text = svg.selectAll(".node")
                .append("text")
                .attr("transform", function (d:any) {
                    return "rotate(" + (x((d.x0 + d.x1) / 2) - Math.PI / 2) / Math.PI * 180 + ")";
                })
                .attr("x", function (d:any) {
                    return y(d.y0);
                })
                .attr("dx", "6") // margin
                .attr("dy", ".35em") // vertical-align
                .text(function (d:any) {
                    return d.data.name === "root" ? "" : d.data.name
                });
        });

            d3.select(self.frameElement).style("height", this.height + "px");

    }

 }

step 2: create app/data/flare.json
```

```
step 3: create html and css files
step 4: in the component view(html) add the following
<div class="d3-chart" #sunburstchart></div>
```

I HAVE ALSO PASTED THE SNAPSHOT OF RESULT I HAVE OBTAINED.
 CLICK IS NOT WORKING.

SHALL TRY TO LOOK INTO IT DURING MY FREE TIME.
YOU CAN NOW START LOOKING FORWARD TO DEMO FOR YOUR CLIENT.

HOPE THIS WILL HELP YOU WITH ANGULAR 2 AND D3JS.

regards
Syed Awase

On Mon, Jun 12, 2017 at 6:52 PM, Syed Awase khirni <awasekhirni@gmail.com> wrote:
Please find enclosed here with Material for Angular 2 Session

--

Awase Khirni Syed Ph.D (GIS, University of Zurich), M.E (BITS,Pilani).
TPRI | SYCLIQ CESSNA BUSINESS PARK
https://in.linkedin.com/in/drawasekhrinisyed
Mobile: 0091-9035433124
Tel: 0091-80-42116134

--

Awase Khirni Syed Ph.D (GIS, University of Zurich), M.E (BITS,Pilani).
TPRI | SYCLIQ CESSNA BUSINESS PARK
https://in.linkedin.com/in/drawasekhrinisyed
Mobile: 0091-9035433124
Tel: 0091-80-42116134

--

Awase Khirni Syed Ph.D (GIS, University of Zurich), M.E (BITS,Pilani).
TPRI | SYCLIQ CESSNA BUSINESS PARK
https://in.linkedin.com/in/drawasekhrinisyed
Mobile: 0091-9035433124
Tel: 0091-80-42116134

  Sent with Mailtrack

--

Awase Khirni Syed Ph.D (GIS, University of Zurich), M.E (BITS,Pilani).
TPRI | SYCLIQ CESSNA BUSINESS PARK
https://in.linkedin.com/in/drawasekhrinisyed
Mobile: 0091-9035433124

Tel: 0091-80-42116134

Sent with Mailtrack