Offline chart renderer

Requirement:

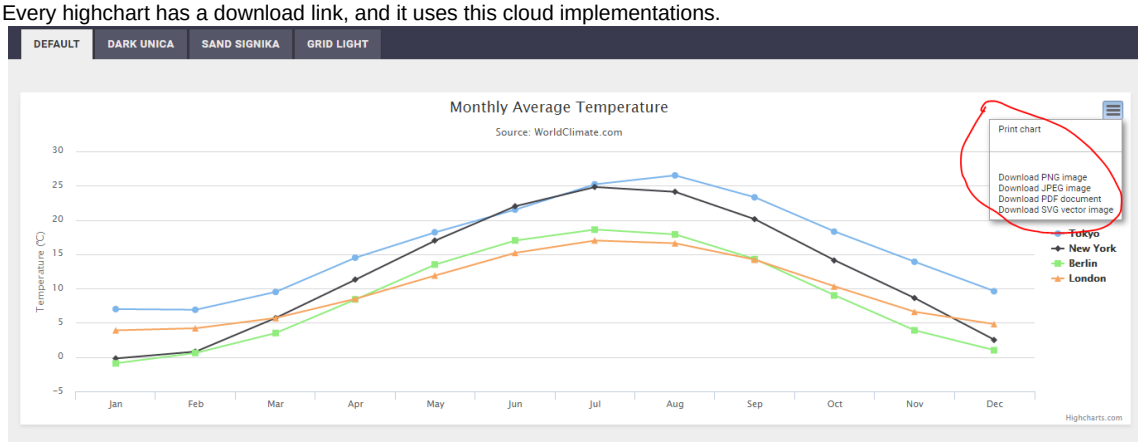
We need to generate car history pdfs as mail attachments/links. Since we would like to use a javascript chart library such as highcharts, we need javascript to render charts.

So we need a solution that can execute javascript at server side to render charts in SVG or pdfs. These images thhen can be used to integrate Car history report as html and then subsequently be converted to PDF.

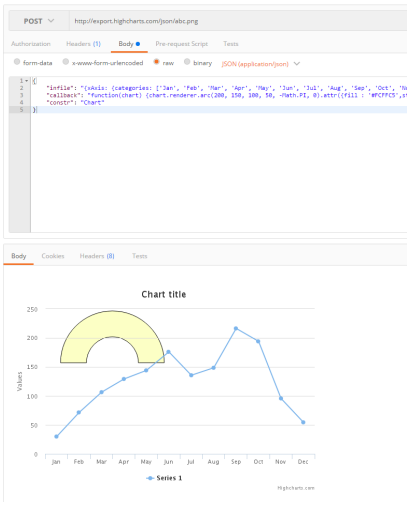
1. Prerender.io cloud solution
2. Prerender.io open source solution, local install and tests
    a. Nodejs solution
    b. outcome..???
3. Phantomjs headless browser + as local server
    a. a c++ healess browser
    b. web server provided is not production ready, max concurrent calls : 10

    > Using an embedded web server module called Mongoose, PhantomJS script can start a web server. This is intended for ease of communication between PhantomJS scripts and the outside world and is *not* recommended for use as a general production server. There is currently a limit of **10** concurrent requests; any other requests will be queued up.

    c. so any solution 'phantomjs prerenderer.js 8080' is not acceptable unless wrapped in some other solution like highcharts does.
4. **Highcharts- open source java server**
    a. Useful links to read
        i. https://www.npmjs.com/package/highcharts-phantomjs
        http://www.highcharts.com/articles/2-news/52-serverside-generated-charts
        http://www.highcharts.com/docs/export-module/setting-up-the-server
        https://github.com/highcharts/highcharts-export-server/tree/master/java
    b. Highcharts cloud solution:
        i. It is an AWS cloud implementation that uses AWS edge location, so is quite performant for any solution
        ii. Every highchart has a download link, and it uses this cloud implementations.



        iii. So highcharts is actively supporting it.
        iv. example post request http://export.highcharts.com/json/abc.png
        v. {
        "infile": "{xAxis: {categories: ['Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun', 'Jul', 'Aug', 'Sep', 'Oct', 'Nov', 'Dec']},series: [{data: [29.9, 71.5, 106.4, 129.2, 144.0, 176.0, 135.6, 148.5, 216.4, 194.1, 95.6, 54.4]}]};",
        "callback": "function(chart) {chart.renderer.arc(200, 150, 100, 50, -Math.PI, 0).attr({fill : '#FCFFC5',stroke : 'black','stroke-width' : 1}).add();}",
        "constr": "Chart"
        }



c. Higcharts setup own server
    i. Git repo: https://github.com/highcharts/highcharts-export-server
        1. Working fork https://github.com/ajit-scala/scala-school/tree/master/server-side-chart-rendering/java
    ii. how to run
        1. cd highcharts-export-server mvn install
        2. cd highcharts-export-web mvn jetty:run
        3. Make sure phantomjs 2.0 or above is installed and accessible from /usr/local/bin via simlink

5. https://github.com/ajit-scala/sPDF
    a. uses wkhtmltopdf to generate pdf.
    b. **sPDF** is heavily inspired by Ruby's PdfKit gem.
        i. we could also try PdfKit gem
    c. Working Spike: https://github.com/ajit-scala/sPDF
        i. Sbt run and then call http://localhost:9000/pdf or http://localhost:9000/chart