Take Home exercise - Frontend

This exercise involves a very short learning curve of HeatMap technology. We want to see your ability to learn new frameworks quickly and resourcefully. What we're looking for is a simple service that will create a rain intensity layer on top of geographical map in a web page (html file).

## Steps:

1. Create a local MongoDB server.
2. Insert the JSONs files we provided into your local DB.
3. Using heat map or polygons APIs, create a web page that contains a rain layer (rain intensity map) on top of geographical map (see the images attached below).
4. Each intensity level is represented by different shades or colors (for example 4 mm/h = red, 10 mm/h = green etc). Please see the attached dictionary "RainColorsV2.csv"
5. Lastly, every 10 seconds you should upload a new layer (Create a new layer using different JSON file).

## Few notes:

- Performance is the key here:
  - You should be able to move the map very smoothly from one side to the other (right-left, up-down).
  - The transition between one JSON file to another should happen very quickly (make it almost invisible).
  - Make sure you check that everything looks great on different zoom levels (see the examples below).
- There are several API's for heat map, here are some examples:
  - https://developers.google.com/maps/documentation/javascript/examples/polygon-simple
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- In the JSON file you will see cases in which there is Na (at the intensity level) please assign zero instead.
- Please have everything you did coded in your scripts, and document where you feel the code doesn't speak for itself.
- When you're done, please send me an email and we will schedule a Skype call to go over your awesome work (should take about 15-20 minutes).

## Deliverable

Please submit a zipped archive to email and PDF's or md files that explain everything you did with some basic examples of the results.