Assignment 2: D3.js

Submission date : 12 Feb Monday 10am
Type : Individual Marks : 5

1. Objective
The purpose of the assignment is to learn visualization through D3.js. You are to choose D3 visualizations best suited for the data and requirements listed in sections below.

2. Data
There is one data file provided with this assignment **kickstarter-2016.csv.**

The data has been extracted and cleaned up from the Kaggle dataset: https://www.kaggle.com/kemical/kickstarter-projects/data

kickstarter-2016.csv contains data about Kickstarter projects under the Technology category for the years 2009 - 2016.

You can process the data to derive new values.

3. Task
(i) Create appropriate visualisation to address any **two** of the following:

Show the change in categories over time.
Show the success rate of projects for each category over time.
Show the average amount pledged per project for each category.
Show the popularity of categories (average backers per project) against the success rate of projects for each category.
Show the average percentage of the goal reached per category.

(ii) Open ended.

- You are free to create **two** other visualisations which give you insights about the given data.
- Each visualisation must cover **at least 2 different attributes**.
- You are allowed to use / combine / modify the prompts from Task (i) which you have not addressed in your attempt for Task (i).

We have listed few visualization samples in Section 5 below for reference.

For each of the samples, a visualization link (including code) is given. You are allowed to use/modify the provided code samples for the assignment purpose. You are encouraged to explore D3 visualizations beyond what is mentioned here.

4. Submission

The deadline for submitting the assignment is **Monday 12 Feb , 10am.**
Submit a file labeled **<your matric number>_D3Assignment.zip containing**
(i) your code (HTML & JS files with d3.min.js). The code should be self contained and able to run without external dependencies.
(ii) a readme file with a simple explanation of your choices for visual encoding(for each of the four visualizations) and insights you gained (for two visualizations under open ended task) and any extra information on e.g. how to run your code.
Submit it in **IVLE Files /Student Submission /Assignment 2** Folder.

5. Sample Visualizations

Pie chart - https://bl.ocks.org/mbostock/3887235
Heat map - http://bl.ocks.org/tjdecke/5558084
Grouped bar chart - https://bl.ocks.org/mbostock/3887051
Line graph - https://bl.ocks.org/mbostock/3883245
Bubble Chart - https://bl.ocks.org/mbostock/4063269
Stacked Area Chart - https://bl.ocks.org/mbostock/3885211

6. Grading Rubrics

The maximum obtainable points for this assignment is 40 points. Each visualization will be graded for addressing the given requirement, meaningful representation and visualization appeal.

Each visualization will be marked on **10 points**

Expressiveness including explanations about visual encoding ; about insights gained and why the visualisation are chosen.
Effectiveness including Visualization appeal and clarity; Use of Labels, legends, user interactivity (tooltips or data-manipulation animation)

Tip : *Use the developer tools (F12) and console.log() regularly when writing visualization code, it will help with debugging.*

Send your queries to cs5346.tutor@gmail.com.