CART 351 FALL 2021

EXERCISE 4: OFFICIALLY POSTED NOVEMEBR 21st 2021, PRESENTED NOV 24th

DUE: FRIDAY DECEMBER 3rd 2021 11:59 PM (1 + weeks)

This exercise is using **SQLITE** and the goal is to practice writing SQLITE queries and **VISUALIZING** the results in interesting patterns. **Everyone MUST** use the template code provided (you will get 0 if you do not) - it is implemented in html, CSS, JavaScript, PHP, and SQLite.
This exercise is more constrained in scope than exercise 3, and requires one to ONLY:

1. **Construct the SQLITE queries (as stated below) in the *runQueries.php* (in the template code)**
2. **Design, create and implement a UNIQUE visualization for every query that you implemented in (1) – all the code is to be written in client.js (in the template code).**

** DO not modify, remove the existing template files – rather you just need to ADD…. **

** You may use the visualizations already created as INSPIRATION ONLY – I do not want one to copy and paste and just change colors … rather please explore, experiment, and try out … .**

** You may add your own shapes or use the class already there etc. … but **NO images, videos, or sound – you will get 0.**
You can achieve bonus points if your resulting visualizations have interactivity, animation incorporated …. **

** The database has been created, and two tables, as well 1000 entries have been inserted. You can view the scripts in the dbScripts folder – but there is no need to change or modify or run any of these scripts – you will not be modifying the database in this exercise in any way – rather you will query the database. **

** **niceView.php:** contains the HTML markup for your visualization page – DO NOT CHANGE **

** **runQueries.php**: please read the comments within and follow the instructions **

** **client.js:** ALREADY implements the AJAX requests for you - you DO NOT need to implement any extra client-server communication code. It also ALREADY reads the value from the dropdown list and passes that value as a parameter to the request…
YOU just need to implement your visualization functions … **

Background

This is a fictional survey that I dreamt up – *we would like to explore how participating in a specific event affects ones mood given certain weather conditions and a specific date(day)*:

Let us imagine that we have done an online survey: we have asked 1000 participants to:

1/ Select an event that they have recently done from a predetermined list
2/ They will then select their mood before and after the event occurred (from predetermined lists)
3/ They would also rate the strength (1-10) of their after mood & the affect strength of the event.
4/ They would also specify the day and weather conditions when the event occurred…

In reality – this dataset of 1000 entries was constructed randomly – see insertData.php (in dbScripts folder) . DO NOT add new data or remove data from the dataset.

Queries to implement and visualize:

** Three: Select all entries in the database where the after_mood is positive (see helperArrays.php)**

** Four: Select all entries in the database & order each entry by associated event name. **

** Five: Select all entries in the database that occur on a Monday or a Tuesday and order them by the event_affect_strength **

** Six: Select all entries in the database where both the start_mood and after_mood fall into the negative category (see helperArrays.php) and order the entries by weather. **

N.B : You MUST use SQLITE to write the queries. DO NOT implement any filtering strategies on the client side….

Put the project online (linked from your class web page) by the due date and submit the URL on Moodle. Also provide a zip archive of the entire project available for download.

Good luck ☺
Please: – if you find this exercise not clear or too difficult then you MUST let me know....