Assignment set by David Coyle – 3 November 2020

COMP30680 Web Application Development

Assignment 2: JavaScript and JSON

This assignment focuses on the use of JavaScript to read, manipulate and present JSON data in a webpage. The data needed for this assignment is included in a JSON file:

1. ***scheduling.json*** – this file provides information on the schedule of the 2020 ACM Conference on Human Factors in Computing Systems (CHI'20). The conference took place over six days and the json data contains information on the scheduling of sessions on each day.

Your job is to present this data in a webpage. To do this you will need to combine HTML, CSS and JavaScript.

Requirements:

- Begin by creating a webpage called schedule.html. When this page is opened it should read data from the file 'scheduling.json' and provide an interface that allows the user to choose what information to display. The user should be able to:
    - Select the day and date for which scheduling information will be displayed, e.g. Sunday 26th April or Monday 27th. This selection is mandatory. The user must choose a day to display before any information is displayed.
    - Select a time slot for which information will be displayed, e.g. 09.00 – 10.15. This selection is optional. If no option is chosen, the schedule for the full day should be displayed.

      NOTE: the information necessary to create a list of days/dates and associated timeslots for a given day is available in the json file. Ten marks will be deducted if the days/dates or timeslots are hardcoded, instead of being read from the json file.
    - A submit button.
- When the user clicks the submit button the webpage should update to display the following information:
    - The day selected.
    - Information on the sessions that will run during the day and time slot selected. For each session you should display the following information only: the title of the session, the start time, the location (room), the session type.
    - By default, you should display all types of session during the given timeslots. But you are also required to include radio buttons that allow the user to filter the results to display:
        - Only sessions of type 'paper'.
        - Only other types of sessions (i.e. anything except paper sessions).
        - All sessions.
- The webpage should allow the user to request more detailed information on a session displayed in step 2 above, e.g. by clicking on a session name or a more information button beside the session name. When this option is clicked the following additional information on the 'submissions' in the session should be displayed:
    - The start time for each submission.
    - The title of each submission.
    - A link to the 'doiUrl' for each submission. Clicking this link should take the user to the webpage specified in the url. This webpage should open in a new browser window or tab.

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Marking

This assignment is worth 50% of the total module mark. You will receive an overall grade for the assignment. In determining the grade, the following weighting will be used:

a) **30%**: for implementing the functionality described in step 1 above.
b) **30%**: for implementing the functionality described in step 2 above.
c) **30%**: for implementing the functionality described in step 3 above.
d) **10%:** overall impression and quality of the overall design. For example, have you included appropriate and effective error handing? Is the information presented in a clear and uncluttered manner.

Submitting

Submit a single zip file using BrightSpace. The zip file should include a folder containing your webpage and any associated files.

Please name your zip file using the following format: "Firstname_Lastname_A2_COMP30680.zip".

The deadline for submission is listed on BrightSpace under assignment 2.

Code validation:

Your webpage should be consistent with the HTML 5 standard.

Code reuse

The webpage must be your own work. Any code snippets that are not directly written by you (e.g. used from a tutorial) must be referenced as such within your code. You must directly comment the code to explain its source. Failure to reference code that is not yours will be treated as plagiarism.

Viewing the JSON data

In order to get an initial overview of the data in the JSON file, it is helpful to view it in a JSON viewer such as the one available at:

https://codebeautify.org/jsonviewer

This will give you a tree like view of the data, as shown in the screenshot below. In this image we can see that the JSON data contains information on 934 past Nobel Prize winners. You can also investigate the structure of the JSON data, by navigating through the tree view.

The CHI2020 conference did not take place due to the situation with Covid-19. However, the original proceedings website, which uses this JSON file, can be viewed at:

https://programs.sigchi.org/chi/2020/program

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