SODV1201

Assignment 2: Introduction to Web Programming

Instructions

Q1: Get the Weather Using An API

In this question, you are required to create a single web page that is completely self-contained (i.e. does not load any external JavaScript files) and retrieve the current local weather using a free online service.

There are several free weather service providers available; it's up to you to find one, study its API, figure out what endpoint to use, and write the JavaScript code to retrieve the current weather for Calgary. **You will need to figure out how to decode the response from the API**, which will most likely be a JSON-encoded object. You should retrieve at least the temperature and a description of the weather (e.g. partially cloudy, sunny, snowing, etc). Your web page should display this information, but does not need to be styled at all (i.e. don't waste time making it pretty, just display the weather by updating HTML DOM elements). Please make sure your HTML page validates through W3C and do not use **document.write** at all!

Q2. Make BVC Sport Club Event Registration page

In this question you are required to create a user registration web page using REST API approach based on the following case study.

There are many students and staff who would like to attend the event prepared by BVC Sport club. In order to register for the event, everyone has to provide their ID, Full name, Address, their status as student, staff or volunteer. Based on who they are they have to pay a registration fee. The fee range is as follow, if it is student, the fee will be 10\$, if it is staff, they fee will be 50\$ and if it is volunteer the fee will be 0\$. When they register on the page, they get a confirmation message with the detail information they completed right away. All the users registered using your form should be stored as local file for future use.

Q3: Create a simple API

In this question you are required to create a simple API that can be used to retrieve all user information who are registered to attend BVC sport club event that you have created on Q2

Submission Directions

- Use all the skills and knowledges you got from all previous modules to build dynamic web application
- Try to include the checklist details as much as you can
- Once done, compress your project as zip or rar file and upload it to D2L Dropbox named Assignment 2 folder.

Note: The assignment's written questions not submitted as a single file will not be graded!

Marking Criteria

Checklists/Marking Items	Description	Points
Submission method & format		
Author identification, course code, assignment title, date in web page		
Correctly displays current local weather using DOM elements	and readable code with adequate whitespace; Use meaningful variable names; demonstrate code hygiene; ensure there are no spelling, grammar, or sentence structure errors; test carefully; use a consistent visual style; avoid submitting incomplete or superficial work; don't plagiarize; follow submission guidelines properly and submit on time!	20
Correctly executes an API call to a free weather provider		20
Code is readable and well-organized with adequate whitespace		5
Code has detailed inline explanations (comments)		
Well formatted and styled BVC Sport Club webpage Working Registration form for the event Proper form validation Response/Confirmation after form submission Clean code and detailed inline explanation/comments Proper naming, module, package and API usage Working API to fetch the dataset you have created		30
One on one check-in depending on what you have submitted [JC1][TB2]		Up to instructor's discretion