Assignment [Module 06] | Nutritional Value Rating Program

Start Assignment

Due Monday by 11:59pm   **Points** 97   **Submitting** a website url
Available Nov 6 at 12am - Nov 13 at 11:59pm

Due Date: Monday, 13 November @ 11:59pm

Points Available: 97 points

Purpose: Along with theoretical knowledge, coding assignments offer students the opportunity to apply the principles they've learned. Coding assignments strengthen a student's understanding of the concepts learned through lecture, and assigned readings. To complete the assignment, students will use their problem-solving skills and the principles of the JavaScript API to breakdown a complex application into smaller components. Students are tasked to produce a simple program which is designed to strengthen your existing web design skills and to integrate interactive behavior using JavaScript.

Assignment Instructions

You are required to assign a rating scheme to the provided Nutritional Chart. The ratings are based on the provided calorie and carbohydrate rating charts. Once the ratings have been applied, the program will allow users to submit a query to list the highest rating or lowest rating foods based on calorie or carbohydrates.

Users should also be able to filter the chart so it displays the food groups that meet a specific rating e.g. only four (4) stars, only four (4) and five (5) stars.

NUTRITIONAL CHART: Carbs and Calories of specific foods and beverages

Food	Carbohydrates (Grams)	Rating	Calories	Rating
Milk (higher % of simple carbohydrates; less nutrient dense)				
Chocolate milk (1 cup)	26		208	
Low fat (2%) milk	12		121	

Pudding (any flavor) (1/2 cup)	30		161	
Skim milk (1 cup)	12		86	
Yogurt (fruit-flavored, low fat) (1 cup)	42		225	
Beans (higher % of complex carbohydrates; more nutrient dense)				
Garbanzo beans (chickpeas) (1 cup)	45		269	
Navy beans (1 cup)	48		259	
Refried beans (1/2 cup)	26		142	
White beans (1 cup)	45		249	
Fruits (higher % of simple carbohydrates; less nutrient dense)				
Applesauce (1 cup)	60		232	
Cantaloupe (1 cup)	14		57	
Grapes (1 cup)	28		114	
Raspberries (1 cup)	14		61	
Strawberries (1 cup)	11		45	
Vegetables (higher % of complex carbohydrates; more nutrient dense)				
Carrot (1 medium)	8		31	
Corn (1/2 cup)	21		89	
Peas, green (1/2 cup)	12		63	
Potato (1 large, baked, plain)	50		220	
Sweet Potato (1 large)	28		118	
Grains (higher % of complex carbohydrates; more nutrient dense)				
Bagel (1)	31		165	
Cookie (oatmeal raisin)(1)	9		62	
Noodles (spaghetti)(1 cup)	34		159	
Oatmeal (1/2 cup)	12		66	

Pancake (4 inch diameter)	10		41	
Pizza (cheese)(1 slice)	39		290	
Popcorn, plain (1 cup, popped)	6		26	
Pretzels (1 ounce)	21		106	
Rice, brown (1 cup)	50		232	
Waffles (2, 3.5" x 5.5")	17		130	

Rating rules by carbs

Carbs	Rating
46 > carbs	one (1) star
36 > = carbs < = 45	two (2) star
26 > = carbs < = 35	three (3) star
10 > = carbs < = 25	four (4) star
carbs < 10	five (5) star

Rating rules by calories

Calories	Rating
231 > calories	one (1) star
151 > = calories < = 230	two (2) star
111 > = calories < = 150	three (3) star
75 > = calories < = 110	four (4) star
calories < 75	five (5) star

Summary of program requirements

Students are required to compare the calorie and carbohydrate listed for each food against the appropriate chart and add the appropriate rating to the chart. Students should provide a way for users to list the foods of the chart based on a specific query or filtering option.

Supported Queries - Users should be able to list the foods by:

- Carbs by the highest or lowest rating
- Calories by the highest or lowest rating

Supported filtering options - Users should be able to list foods grouped by a single rating, ALL

- five (5) starred
- four (4) starred
- three (3) starred
- two (2) starred
- one(1) starred

Display requirements

The program should display the following:

1. When the food ratings are listed for carbs, the following information should be displayed:

Food	Carbohydrates	Rating	Calories

2. When the food ratings are listed for calories, the following information should be displayed:

Food	Calories	Rating	Carbohydrates

3. When the food ratings are listed by rating category, the following information should be displayed

Food	<<heading>>	<<heading>>	<<heading>>
foodName	<<data>>	<<data>	<<data>
foodName	<<data>>	<<data>>	<<data>>
foodName	<<data>>	<<data>>	<<data>>
foodName	<<data>>	<<data>>	<<data>>
foodName	<<data>>	<<data>>	<<data>>

NOTE: A visual indicator should highlight the top three (3) regardless of list.

Submission requirements

- Create a new page on your website with a link to the home page of your website. Entitle the link so it clearly indicates which assignment the link reference.

- Create a link from the assignment to the home page.
- Ensure to test your program for functionality.
- Submit the URL to your website within the Assignment Submission area to ensure your assignment is graded.