refocus

Home Assignment. Point-of-Sale System: Array Methods

Mentor-review | Level: Easy | JavaScript

Estimated time of completion: 1 hour

You need to submit this task for review.

Watch the video lessons to complete this task. If you have any questions, you may ask your mentor's help via the use the real time chat on the learning platform. You can find it on the down right corner of your screen.

After you submit the completed task, mentors will review it and send their feedback via email. Don't worry if your work is not approved: you can always retake the assignment, and it won't affect your final grade.

Goal

You are tasked to create a point-of-sale system. Part of a good point-of-sale system is inventory management. The initial requirement is to create a script that will process all the delivered items and add them to the current store's inventory.

Task 1: Define the Store Inventory Array

Instructions

To complete the task, follow these steps:

1. Open VS Code, and create a new file. Save the file as "point_of_sale_system.js."
2. Create a constant, and name it "store_inventory."
3. Set the value of "store_inventory" as an array of objects. To do this, use the table below. Set the table header as the object property keys. Each table row represents the values of the keys.

item	quantity	price_$
Shampoo	1	3
Soap	0	2
Toothpaste	2	3

Task 2: Define the Delivered Items Array

Instructions

To complete the task, follow these steps:

1. Create a constant, and name it "new_deliveries."
2. Set the value of "new_deliveries" as an array of objects. To do this, use the table below. Set the table header as the object property keys. Each table row represents the values of the keys.

item	quantity	price_$	inventory_index
Shampoo	5	4	0
Soap	10	2	1
Toothpaste	10	3	2

Task 3: Create a Function to Process Each Delivery Item

Instructions

To complete the task, follow these steps:

1. Define a function, and name it "processDeliveries()" with one parameter named "items_obj." This parameter will hold the object of the elements later when we pass processDeliveries as an argument to the forEach method. Let's imagine that the items_obj holds this type of data.

item	quantity	price_$	inventory_index
Soap	10	2	1

Note: An object's key-value pairs are also called properties.

2. Inside the processDeliveries function code block, create a statement that will increment the value of the "quantity" property inside the "store_inventory" array and update the "price_$" property from the same object in the array.
3. We know that the "items_obj" will have a property called "inventory_index" from the argument in the function. Use "items_obj.inventory_index" as the index for the "store_inventory" array. Remember that "store_inventory" is a global variable and can be accessible inside the "processDeliveries" function.
4. The "items_obj" object also has the properties "quantity" and "price_$." Use "items_obj.quantity" to update the quantity and "items_obj.price_$" to set the new "price_$" value of the current element of "store_inventory."

Hint: Your function's code block should look like the following.

```
store_inventory[items_obj.inventory_index].quantity += items_obj.quantity;
store_inventory[items_obj.inventory_index].price_$ = items_obj.price_$;
```

Task 4: Process All Delivered Items

Instructions

To complete the task, follow these steps:

1. Use the "forEach" method and the "processDeliveries" function as its argument to update the "store_inventory" array's data.
2. Print the following messages and objects using the "console.log()" command:
   - "Delivered items have been added to the inventory."
   - "New inventory summary:"
   - store_inventory
3. Run your code.

Expected Outcome

Your script's printed output should look like the following. Double-check if the "quantity" and "price_$" values for all elements are the same as in the screenshot below.

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   JUPYTER   Code

[Running] node "c:\Users\Darl Jed\Documents\JS_Homework\point_of_sale_system.js"
Delivered items have been added to the inventory.
New inventory summary:
[
  { item: 'Shampoo', quantity: 6, 'price_$': 4 },
  { item: 'Soap', quantity: 10, 'price_$': 2 },
  { item: 'Toothpaste', quantity: 12, 'price_$': 3 }
]

[Done] exited with code=0 in 0.232 seconds
```

How to upload completed tasks

To upload the assignment, make a ".zip" archive containing all the necessary files, and upload the file here.