refocus

Home Assignment. Callbacks

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

Create a script that computes the total bill in a restaurant if clients come as a group. The condition is that if the customers are in a group of ≥6, they get a discount of 10%. If all of them are aged ≥10, they get a discount of 15%. Each customer needs to pay $299 per head. Compute the total bill for each customer group.

Task 1: Compute the discount

Instructions

To complete the task, follow these steps:

1. Open VS Code, and create a new file. Save it as "callback.js."
2. Declare a function named "discount." There should be two parameters: "percentage" and "amount." The function should compute and return the discounted amount based on these parameters.

Hint: To compute the discounted amount, use the formula below:
discounted_amount = amount - (amount * (percentage / 100))

Task 2: Check the age

Instructions

To complete the task, follow these steps:

1. Declare another function named "age_checker."
2. Add a parameter to the "age_checker" function named "age."
3. The "age_checker" function must return a boolean value: true or false. It should return "true" if the age is ≥10. Otherwise, it should return "false."

Task 3: Calculate the total bill

Instructions

To complete the task, follow these steps:

1. Declare a function named "calculate," and add two parameters: "customer_group," which accepts an array, and "discount_func," which accepts an object. All the next steps should be done inside the "calculate" function's code block.
2. Inside the "calculate" function, declare a constant named "group_count," and set its value to the element count of the "customer_group."
3. Create a variable named "sub_total," compute the total bill of the group, and put it in this variable. Remember that the amount per head is $299.
4. Create a condition. If "group_count" is <6, it will return the string below:

```
`Sorry, No Discount. Bill: ${sub_total} `
```

5. Create another constant named "all_aged_10_and_above." The value should be a boolean, which is a result of using the "every" array method to "customer_group." Use the "age_checker" function as an argument to the "every" method.
6. Create a new variable, and name it "discount." Set its initial value to 0. Create another variable named "grand_total" with no value for now.
7. Create an "if" condition. If "all_aged_10_and_above" is true, the value of "discount" will be 15. Use the "discount_func" parameter to set the value of "grand_total." Pass "discount" and "sub_total" as arguments to "discount_func."

   For the "else" statement, the value of "discount" should be 10. Use the "discount_func" parameter to set the value of "grand_total." Pass "discount" and "sub_total" as arguments to "discount_func."

Note: The "discount_func" function is called a callback. It is a function passed to the argument.

8. Use the "return" keyword so the function will return the string below:

```
`${discount}% discount. Bill: ${grand_total}`
```

Task 4: Test your functions

Instructions

To complete the task, follow these steps:

1. Create an array named "customer_group1," and put the values below into it. This array represents the age of each customer in a group.

8	12	11	11	18	24	5	10

2. Print the output of the "calculate" function using the "console.log" command. Pass "customer_group1" and "discount" as arguments to this function.
3. Create an array named "customer_group2," and put the values below into it.

10	11	11	13	19	14

4. Print the output of the "calculate" function using the "console.log" command. Pass "customer_group2" and "discount" as arguments to this function.
5. Create an array named "customer_group3," and put the values below into it. This array represents the age of each customer in a group.

12	12	14

6. Print the output of the "calculate" function using the "console.log" command. Pass "customer_group3" and "discount" as arguments to this function.
7. Run your code.

Expected Outcome

After running the script, you should see the following result on the console.

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   JUPYTER   Code
[Running] node "c:\Users\Darl Jed\Documents\JS_Homework\callback.js"
10% discount. Bill: 2152.8
15% discount. Bill: 1524.9
Sorry, No Discount. Bill:897

[Done] exited with code=0 in 0.478 seconds
```

How to upload completed tasks

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