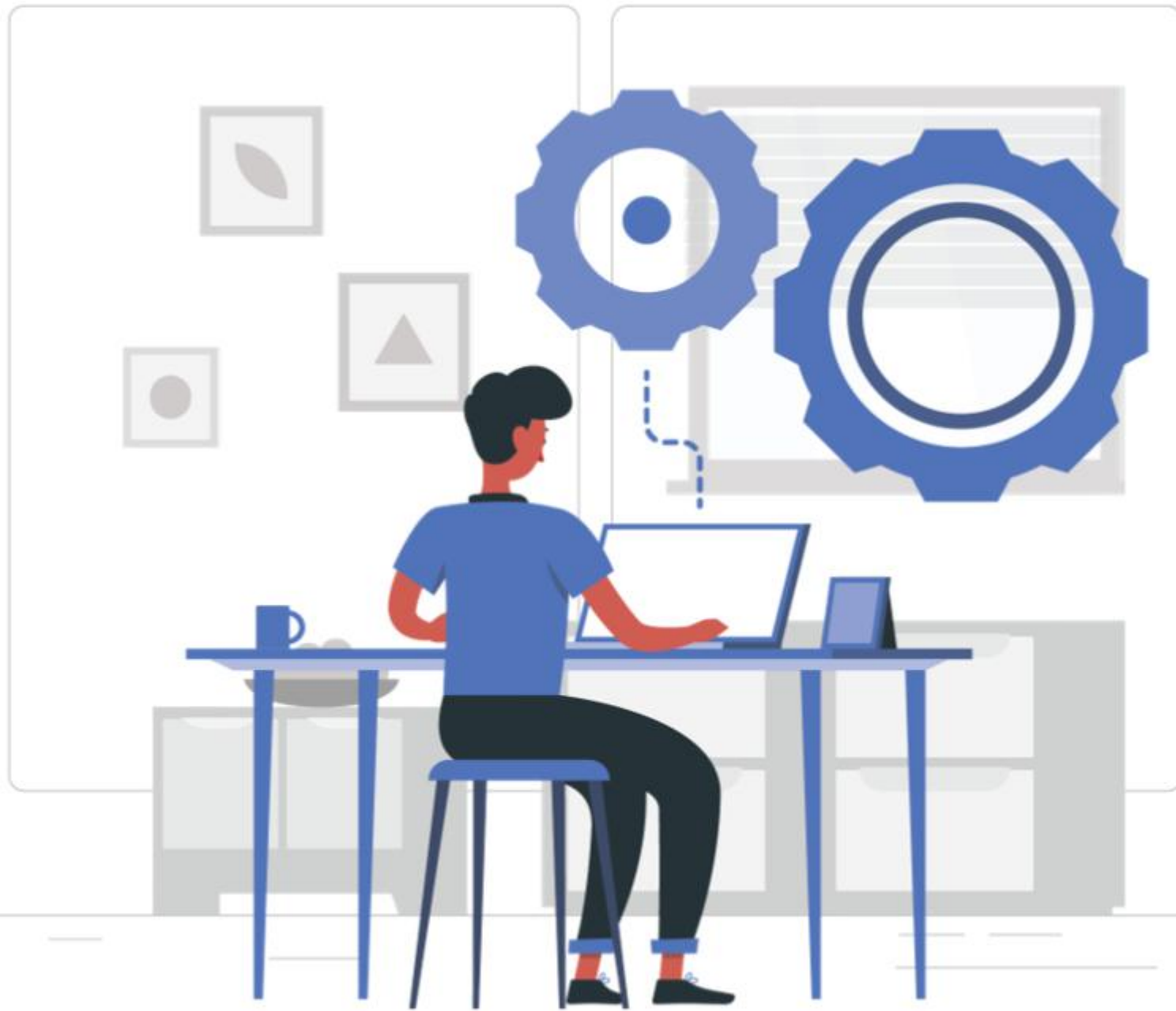


Practice

Perform Common Array Operations Using JavaScript Array Methods





Practices

- Practice 1: Filter premium products
- Practice 2: Apply discount on non-premium products
- Practice 3: Find the inventory of each product
- Practice 4: Implement function chaining

Reference Data for All Practices

- The following products data can be used as reference while executing all the four practices. The same data is used for automated testing also.
- The products data is initialized as an array of objects where each object with product name and price as its properties in the file ``data/products.js``
- The table given below shows the product names and their respective prices.

Product Name	Price (USD)
Gucci Round Bucklet Belt	400
Gucci Round Bucklet Belt	450
Gucci Round Bucklet Belt	300
Gucci Round Bucklet Belt	320
Smiley T-Shirt	350
Smiley T-Shirt	150
Shinie Nail Paint	100
Shinie Nail Paint	250
Esbeda Wallet	250

An illustration of a woman with dark hair and glasses, wearing a red top, and a man with brown hair and glasses, wearing an orange top. They are sitting at a desk with a large blue computer monitor. The woman is holding a yellow folder. On the desk, there is a coffee cup, a pencil, and a notepad. The background is light green with some abstract shapes and a large green leaf on the right.

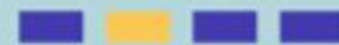
PRACTICE

Practice 1: Filter the Premium Products from an Array of Products

At Ricky's fashion store, you can't have discounts on premium products. Premium products are the ones whose price is greater than or equal to \$300.

List the premium products after filtering based on the product price using the array filter method.

Note: Steps to do this practice is given in the upcoming slide.



Tasks

- Open the file **p1-submission.js** inside the folder **p1-premium-products**.
- Use the Array's filter method to get the array of premium products whose prices are greater than or equal to \$300.

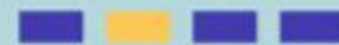
PRACTICE

Practice 2: Apply Discount on Non-premium Products

The owner at Ricky's fashion store wants to give a discount of 10% on non-premium products to increase his sales.

Help him apply a 10% discount on all non-premium products.

Note: Steps to do this practice is given in the upcoming slide.



Tasks

- Open the file **p2-submission.js** inside the folder **p2-discounted-price**.
- Use the Array's filter arrow method to get the array of non-premium products whose price is less than \$300.
- Use the Array's map method to apply a 10% discount on non-premium products. It should return the array of non-premium products with the following expected values.

Product Name	Discounted Price
Gucci Round Bucklet Belt	270
Smiley T-Shirt	135
Shinie Nail Paint	90
Shinie Nail Paint	225
Esbeda Wallet	25

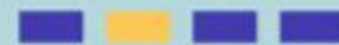
PRACTICE

Practice 3: Find the Inventory of Each Product

The shop owner at Ricky's fashion store wants to know the inventory of each product so that he can order the items which have gone below their reorder level.

Get the inventory of each product using the Array's reduce method.

Note: Steps to do this practice is given in the upcoming slide.



Tasks

- Open the file **p3-submission.js** inside the folder **p3-product-stock**.
- Use the Array's reduce method to find the count of each product.
- The reduce method should return an array of objects where each object contains productName and stock as its properties with the following expected values.

Product Name	Stock
Gucci Round Bucklet Belt	4
Smiley T-Shirt	2
Shinie Nail Paint	2
Esbeda Wallet	1

PRACTICE

Practice 4: Implement Function Chaining

Array operations can be chained together if they are performed on the same array object to enhance performance.

Get the inventory of each non-premium product using the JavaScript function chaining strategy.

Note: Steps to do this practice is given in the upcoming slide.



Tasks

- Open the file **p4-submission.js** inside the folder **p4-function-chaining**.
- Chain Array's filter, map and reduce methods to get the number of each non-premium product whose price is less than \$300.
- The array of product details with product name and stock as its properties returned should correspond to the following expected values.

Product Name	Stock
Gucci Round Bucklet Belt	1
Smiley T-Shirt	1
Shinie Nail Paint	2
Esbeda Wallet	1