

# Machine Coding Round Three

## Snack Table

The goal of this assignment is to create a table with filter and sorting functionality for snacks list using React JS.

### Instructions:

1. Create this application using React JS Hooks.
2. You have to make the UI as shown in the image in the question below. You can use plain CSS or any CSS library you want.
3. You have been provided the JSON data below for this question.
4. This is a frontend assignment. No backend involved.
5. You have to host your site live and submit the live link along with Github link of your code or you can choose to code on CodeSandbox and submit the CodeSandbox link.
6. You have to complete the below mentioned features and make your submission here on LMS in 1.5 hrs.
7. You can use google for your coding errors and queries.

### App Features:

1. Display a table to show the snacks data, with columns for ID, Product Name, Product Weight, Price, Calories and Ingredients. The JSON to populate data for these columns have been provided below at the end.
2. Create a search input field to allow users to filter the snacks by product name or ingredients, regardless of the case. Update the table dynamically as the user types in the search input to show only the products matching your search input.
3. Sorting:
  - Make all the table headers clickable to enable sorting (Ascending/Descending order) by the respective column. All the columns should have sorting functionality.
  - Indicate that the header is clickable by showing a pointer or some CSS as per your wish.
  - Update the displayed table dynamically when the sorting order changes.

Note: You cannot use any npm package for table.

This is how your table should look:

## Snack Table

Search with Products or Ingredients....

| ID | Product Name      | Product Weight | Price (INR) | Calories | Ingredients  |
|----|-------------------|----------------|-------------|----------|--|
| 1  | Granola Bar       | 21g            | 299         | 150      | Oats, Honey, Nuts, Dried Fruits                        |
| 2  | Fruit and Nut Mix | 73g            | 749         | 353      | Almonds, Cashews, Dried Cranberries, Dried Blueberries |
| 3  | Veggie Chips      | 28g            | 279         | 130      | Sweet Potatoes, Beets, Kale, Sea Salt                  |
| 4  | Protein Balls     | 100g           | 499         | 318      | Dates, Almond Butter, Protein Powder, Chia Seeds       |

Filtered View on Search:

## Snack Table

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| ID | Product Name | Product Weight | Price (INR) | Calories | Ingredients                           |
|----|--------------|----------------|-------------|----------|---------------------------------------|
| 1  | Granola Bar  | 21g            | 299         | 150      | Oats, Honey, Nuts, Dried Fruits       |
| 3  | Veggie Chips | 28g            | 279         | 130      | Sweet Potatoes, Beets, Kale, Sea Salt |

Sort by Price (Descending) View:

Similarly your sorting should work for all the columns.

# Snack Table

Search with Products or Ingredients....

| ID | Product Name      | Product Weight | Price (INR) | Calories | Ingredients  |
|----|-------------------|----------------|-------------|----------|--|
| 2  | Fruit and Nut Mix | 73g            | 749         | 353      | Almonds, Cashews, Dried Cranberries, Dried Blueberries |
| 4  | Protein Balls     | 100g           | 499         | 318      | Dates, Almond Butter, Protein Powder, Chia Seeds       |
| 1  | Granola Bar       | 21g            | 299         | 150      | Oats, Honey, Nuts, Dried Fruits                        |
| 3  | Veggie Chips      | 28g            | 279         | 130      | Sweet Potatoes, Beets, Kale, Sea Salt                  |

## JSON Data:

```
const snacks = [  
  {  
    id: 1,  
    product_name: "Granola Bar",  
    product_weight: "21g",  
    price: 299,  
    calories: 150,  
    ingredients: ["Oats", "Honey", "Nuts", "Dried Fruits"]  
  },  
  {  
    id: 2,  
    product_name: "Fruit and Nut Mix",  
    product_weight: "73g",  
    price: 749,  
    calories: 353,  
    ingredients: [  
      "Almonds",  
      "Cashews",  
      "Dried Cranberries",  
      "Dried Blueberries"  
    ]  
  },  
  {  
    id: 3,  
    product_name: "Veggie Chips",  
    product_weight: "28g",  
    price: 279,  
    calories: 130,  
    ingredients: ["Sweet Potatoes", "Beets", "Kale", "Sea Salt"]  
  },  
  {  
    id: 4,  
    product_name: "Protein Balls",  
    product_weight: "100g",  
    price: 499,  
    calories: 318,  
    ingredients: ["Dates", "Almond Butter", "Protein Powder", "Chia Seeds"]  
  }  
];
```