# JavaScript Challenge 4 - Dynamic Content Filter

## Objective:

The goal of this exercise is to create a dynamic content filter using JavaScript. You will be provided with the HTML and CSS code. Your task is to write the JavaScript code to filter the list of items based on the user's input.

## Video Demonstration:

[Click here to watch the video demonstration of how the final result should look and behave.](#)

## HTML and CSS:

The HTML and CSS code will be provided to you. The HTML contains an input field and an unordered list of items. The CSS provides styling for these elements.

## JavaScript Challenge:

## Objective:

Create a filter functionality for the list of items provided. When a user types a query into the input field, the list should dynamically update to display only the items that match the query.

## Requirements:

1. **Capture User Input**: Attach an event listener to the input field that is triggered on the `keyup` event. You'll need this to detect when the user is typing in the filter field.

2. **Filter Items**:

   - Write a function that gets triggered on every key press in the input field.
   - Retrieve the current text from the input field, and convert it to lowercase to ensure case insensitivity.
   - Select all the items in the list, and loop through them to apply the filtering logic.

3. **Case Insensitivity**: Make sure that the filtering process is case-insensitive. Whether a user types "apple" or "APPLE," the result should include the item "Apple."

4. **Hide/Show Items**:

   - Determine whether each item in the list includes the text from the input field.
   - Show only those items that match the user's query.
   - Hide the items that don't match by setting their `display` style to `'none'`.

## Tips:

- Consider using the `toLowerCase()` method to convert both the input text and the item's text to lowercase, ensuring that the filtering is case-insensitive.
- Utilize the `indexOf()` method to check if the item's text includes the search query. If `indexOf()` returns `-1`, it means the query is not found in that item.
- Use the `textContent` property to retrieve the text content of a list item, and the `style.display` property to hide or show the items.

## Evaluation Criteria:

- The filtering functionality must work as intended, dynamically updating the list based on the user's input.
- The solution must be case-insensitive.
- Code must be clean, efficient, and adhere to best practices.