WEB230 - JavaScript 1

Assignment 6b - Event Delegation

Before starting, study the HTML and open it in a browser so that you understand the structure of the document. You will add functionality to perform several tasks in our shopping list app.

- Clicking the red "X" at the right of an item will delete that item.
- Clicking on the item will style it with a strike-through to show that it has been picked up.
- Entering an item in the input field at the bottom will add the item if either the "+" button is clicked or the "Enter" key is pressed.

Here are the steps to make this happen:

Using Delegation

1. Add a click event handler to the list element (`ul`). This will handle events for both the removing and the marking actions.

2. Add a `console.log()` in the event handler to display the `tagName` of the `target` . Notice that when you click on an item in the list you get "LI" but when you click on the red "X" you get "SPAN".

Clicking the item

1. Since we are using delegation, you have to determine which element was clicked on. In the `ul` we have both `li` and `span` elements. Use an `if` statement to determine if the element clicked was an `li` element.

2. If it was, then add the class `completed` to the target element. That will cause it to be displayed lighter and with a strike-through.

Clicking the red "X"

1. Use another `if` statement to determine if the element clicked was a `span` element.

2. If it was, delete the `li` . (This is the `target` 's parent element not the `span` itself).

Adding a new item

We want this event to happen two different ways, when the "+" button is clicked or when the "Enter" key is pressed. Therefore we will create a named function that we can use twice.

1. Add an `click` event handler to the `a` element (the plus sign) that will console.log a message.

2. Add a `keydown` event handler on the `input` element that will console.log a different message.

3. Create a named function that will add a new `li` element at the bottom of the list with whatever is in the `input` field. (Hint: input fields have a property `value` to get the data entered. `textContent` does not work with inputs.) Make sure you look at the HTML file and create new `li` elements that look just like the ones that are there. I.E. Make sure you create a span element in it so the red "X" will appear.

4. Call this function from each of the event handlers to add the item.

5. Add code to the `keydown` event handler to make sure it only adds an item if the "Enter" key is pressed. (Hint: remember the `event.key` property?)

6. Clear the input box after creating a new list item. (Hint: `input` elements don't have a `textContent` property since they are "Empty Elements". The `value` property is used instead.)

About Delegation

Notice that you did not have to add an event handler for the new list items that you added. Because the event handler is "delegated" to the list (`ul`) we don't need to add event handlers when we add new items.