PROMINEO TECH

Front End Technologies Week 10 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: In VS Code, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your JavaScript project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

1. Using HTML, Bootstrap, and JavaScript create a single page website that contains the following:
    a. A Bootstrap styled table representing your choice of data.
    b. A Bootstrap styled form that allows a user to add a new row to the table when submitted.

Screenshots of Code:

```html
<body>
    <div class="container">
        <div class="row">
            <div class="col">
                <h1>My Grocery List</h1>
            </div>
        </div>
        <div class="row text-center">
            <div class="col">
                <table class="table table-striped table-info table-hover" id="list">
                    <tr>
                        <th>Item</th>
                        <th>Quantity</th>
                    </tr>
                </table>
            </div>
        </div>
        <div class="container" >
            <div class="row text-center">
                <div class="col alert alert-warning alert-dismissible fade show" role="alert" id="alert" style="display:none">

                </div>
                <form class="form-group">
                    <div class="col mt-3">
                        <input type="text" id="item" placeholder="Item">
                    </div>
                    <div class="col mt-3">
                        <input type="number" id="quantity" placeholder="Quantity">
                    </div>
                    <button id="additem" type="button" class="btn btn-success mt-3">Add Item</button>
                </form>

            </div>
        </div>
    </div>

    <script src="script.js"></script>
    <script src="node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>
</body>
```
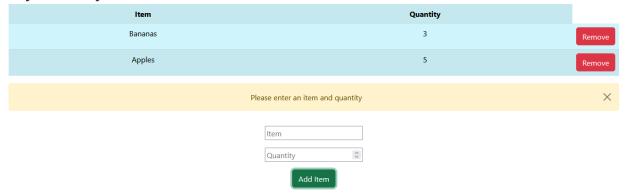
```javascript
1    //itemID is an indentify to allow tracking of items added into the list
2
3    let itemID = 0
4
5
6    //addItem function takes an input of item and quantity from the input
7    //adds item and quantity into the grocery list
8    //adds a remove button to the end of the row to remove items
9
10   function addItem(item, quantity) {
11       let table = document.getElementById('list')
12       let row = table.insertRow(1)
13       row.setAttribute('id', `item-${itemID}`)
14       row.insertCell(0).innerHTML = item
15       row.insertCell(1).innerHTML = quantity
16       row.insertCell(2).appendChild(createDeleteButton(itemID++))
17   }
18
19   //Eventlistener for the add item button
20   //takes the values of the item and quantity inputs and checks if they are empty
21   //if empty alert out values are needed
22   //then checks if items are already in list using checkItems() function
23   //if items already exist in list createAlert() is called to add a styled alert
24   //If item has a value and does not exist then addItem() is called to able row into table
25
26   document.getElementById('additem').addEventListener('click', () => {
27
28       document.getElementById('alert').setAttribute('style', 'display:none')
29       let item = document.getElementById('item').value
30       let quantity = document.getElementById('quantity').value
31
32       if(item == '' || quantity == ''){
33           createAlert(item, quantity)
34       }
35       else if(checkItems(item)){
36           createAlert(item, quantity)
37       }
38       else{
39           addItem(item, quantity)
40           document.getElementById('item').value = ''
41           document.getElementById('quantity').value = ''
42       }
43   })
44
45
```

```javascript
//function to create the delete button with the itemID
//uses itemID to attached delete button to specific item in table when row is made
//button removes item from the table

function createDeleteButton(itemID){
    let removeButton = document.createElement('button')
    removeButton.className = 'btn btn-danger'
    removeButton.id = itemID
    removeButton.innerHTML = 'Remove'
    removeButton.onclick = () =>{
        document.getElementById(`item-${itemID}`).parentNode.removeChild(document.getElementById(`item-${itemID}`))
    }
    return removeButton
}

//function to check if and item already exists in the table
//grabs all td elements and stores in an array
//for loop iterates through the cells text content and attempts to match the item
//if a match is found return true

function checkItems(item) {
    let rows = document.querySelectorAll('tr')
    for (let i = 0; i < rows.length; i++) {
        if(rows[i].cells[0].textContent.toLowerCase() === item.toLowerCase()){
            return true
        }
    }
}
```

```javascript
//Creates the alert if an item is already in the list
//adds a button to dismiss the alert which then hides the element using display:none

function createAlert(item, quantity){
    let alertButton = document.createElement('button')
    alertButton.setAttribute('class', "btn-close")
    alertButton.setAttribute('type', 'button')
    alertButton.setAttribute('id', 'dismissButton')
    alertButton.setAttribute('aria-label', 'close')
    let alert = document.getElementById('alert')
    alert.setAttribute('style', 'display:block')
    if(item === '' || quantity === ''){
        alert.innerHTML = `Please enter an item and quantity`
    }
    else{
    alert.innerHTML = `${item} is already in list, please remove and change quantity`
    }
    alert.appendChild(alertButton)
    document.getElementById('dismissButton').addEventListener('click', () =>{
        alert.setAttribute('style', 'display:none')
    })
}
```
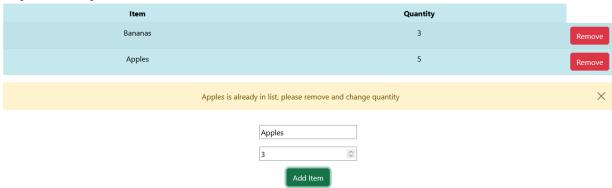
Screenshots of Running Application:

My Grocery List

Item	Quantity	
Bananas	3	Remove
Apples	5	Remove

Please enter an item and quantity ✕

Item

Quantity

Add Item

My Grocery List

Item	Quantity	
Bananas	3	Remove
Apples	5	Remove

Apples is already in list, please remove and change quantity ✕

Apples

3

Add Item

URL to GitHub Repository: https://github.com/n-harvey/week10CodingAssignment