Front End Technologies Week 12 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. Create a full CRUD application of your choice. If you can use an existing API, use AJAX to interact with it. However, you do not have to use an API. If you do not use an API, store the entities you will create, read, update, and delete in an array.

    a. Use a form to add new entities

    b. Build a way for users to update or delete entities

    c. Use Bootstrap and CSS to style your project

Screenshots of Code:

```html
index.html > html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <meta http-equiv="X-UA-Compatible" content="IE=edge">
6       <meta name="viewport" content="width=device-width, initial-scale=1.0">
7       <title>Home School Commonplace Notebook</title>
8       <link rel="stylesheet" href="app.css">
9       <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
10      integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p"
11      crossorigin="anonymous"></script>
12      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
13      rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
14      crossorigin="anonymous"/>
15      <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.4/css/all.min.css" />
16  </head>
17  <!-- Here is some of my bootstrap styling, along with stuff styled with plain CSS-->
18  <body class="container-fluid bg-secondary">
19    <div class="row bg-white border-success rounded my-md-3">
20      <div class="col-12">
21        <h4 class="my-3">Home School Commonplace Notebook</h4>
22        <div id="addNew" data-bs-toggle="modal" data-bs-target="#form" class="fixed-top">
23          <button type="button" class="btn btn-success align-self-center fas fa-plus">
24            Add New Quotation</button>
25        </div>
26          <h5 class="text-center my-3">Quotations</h5>
27          <div class="row-cols-md-1" id="quotes"></div>
28      </div>
29    </div>
30
31      <!-- Modal for my form for the creation of the entities-->
32  <form
33  class="modal fade"
34  id="form"
35  tabindex="-1"
36  aria-labelledby="exampleModalLabel"
37  aria-hidden="true"
38  >
39  <div class="modal-dialog">
40    <div class="modal-content">
41      <div class="modal-header">
42        <h5 class="modal-title" id="exampleModalLabel">Add New Quotation</h5>
43        <button
44          type="button"
45          class="btn-close btn-danger"
46          data-bs-dismiss="modal"
47          aria-label="Close"
48        ></button>
49      </div>
50      <div id="modal-body" class="modal-body my-5">
51        <p>Book Title</p>
52        <input type="text" class="form-control" name="" id="textInput1" />
53        <div id="msg1"></div>
54        <br />
55        <p>Author</p>
56        <input type="text" class="form-control" name="" id="textInput2" />
57        <div id="msg2"></div>
58        <br />
59        <p>Date Read</p>
60        <input type="date" class="form-control" name="" id="dateInput" />
61        <br />
62        <p>Quotation</p>
63        <textarea
64          name=""
65          class="form-control"
66          id="textarea"
67          cols="30"
68          rows="5"
69        ></textarea>
70
71      </div>
72      <div class="modal-footer" id="modal-footer">
73        <button type="button" class="btn btn-secondary" data-bs-dismiss="modal">
74          Close
75        </button>
76        <button type="submit" id="add" class="btn btn-primary">Add</button>
77      </div>
78    </div>
79  </div>
80  </form>
81      <script src="app.js"></script>
82      <script src="node_modules/jquery/dist/jquery.js"></script>
83  </body>
84  </html>
85
```
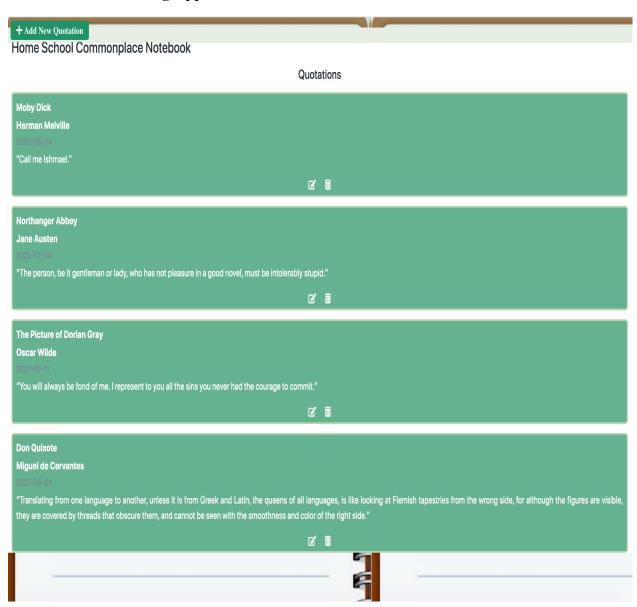
JS app.js > ...

```javascript
1    //These are the variables I created for DOM manipulation in JS.
2
3    let form = document.getElementById("form");
4
5    let textInput1 = document.getElementById("textInput1");
6
7    let textInput2 = document.getElementById("textInput2");
8
9    let dateInput = document.getElementById("dateInput");
10
11   let textarea = document.getElementById("textarea");
12
13   let msg1 = document.getElementById("msg1");
14
15   let msg2 = document.getElementById("msg2");
16
17   let quotes = document.getElementById("quotes");
18
19   let add = document.getElementById("add");
20
21   let modalFooter = document.getElementById("modal-footer");
22
23   let modalBody = document.getElementById("modal-body")
24
25   let msg3Holder = document.createElement("span")
26
27   //Below are the various events that I keyed to the form submission-- which functions to call
28   form.addEventListener("submit", (e) => {
29       e.preventDefault();
30       formValidation1();
31   });
32
33   form.addEventListener("submit", (e) => {
34       e.preventDefault();
35       formValidation2();
36   });
37
38   form.addEventListener("submit", (e) => {
39       e.preventDefault();
40       textareaValidation();
41   } )
42
43   form.addEventListener("submit", (e) => {
44       e.preventDefault();
45       if(textInput1.value != "" && textInput2.value !="" && textarea.value !=""){
46           acceptData();
47           add.setAttribute("data-bs-dismiss", "modal");
48           add.click();
49           (() => {add.setAttribute("data-bs-dismiss", "");
50       })();
51       }
52   })
53   //Here are the functions I created for the purpose of submission of a valid form
54   let formValidation1 = () => {
55       if (textInput1.value === "") {
56           console.log("failure");
57           msg1.innerHTML = "Book Title cannot be blank";
58       } else {
59           console.log("success");
60           msg1.innerHTML = "";
61       }
62   };
63
64   let formValidation2 = () => {
65       if (textInput2.value === "") {
66           console.log("failure");
67           msg2.innerHTML = "Author cannot be blank";
68       } else {
69           console.log("success");
70           msg2.innerHTML = "";
71       }
72   };
73
74   let textareaValidation = () => {
75       if (textarea.value === "") {
76           console.log("failure");
77           msg3Holder.innerHTML = "Quotation cannot be blank";
78           modalBody.appendChild(msg3Holder);
79       }
80       else {
81           console.log("success");
82           textarea.innerHTML = "";
83       }
84   };
85   //Here is my data storage array.
86   let data = [];
87
```
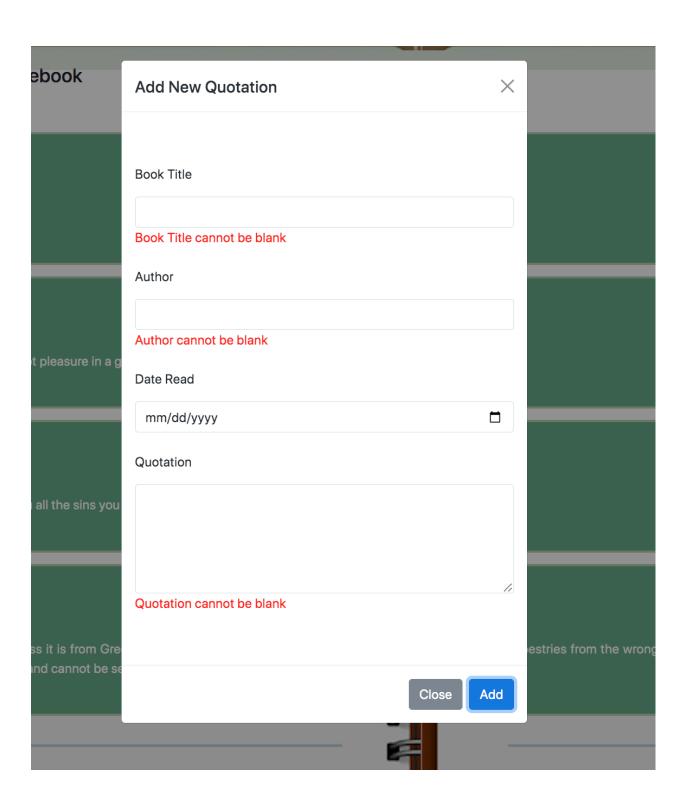
```
 86      let data = [];
 87
 88      //This function takes the form data and pushes it into data array.
 89      let acceptData = () => {
 90        data.push({
 91          title: textInput1.value,
 92          author: textInput2.value,
 93          date: dateInput.value,
 94          quotation: textarea.value,
 95        });
 96
 97        localStorage.setItem("data", JSON.stringify(data));
 98
 99        console.log(data);
100        createQuotes();
101      };
102
103      //This function first creates a div, styled with bootstrap, and inputs the information
104      //from the data object array, then appends them into the html, then resets the form.
105      let createQuotes = () => {
106        quotes.innerHTML = "";
107        data.map((x, y) => {
108          return (quotes.innerHTML += `
109          <div class="bg-success p-2 text-white bg-opacity-75 position-relative" id=${y}>
110              <span class="fw-bold">${x.title}</span>
111              <span class="fw-bold">${x.author}</span>
112              <span class="small text-secondary">${x.date}</span>
113              <p>${x.quotation}</p>
114
115              <span class="options">
116                <i onClick= "editQuote(this)" data-bs-toggle="modal" data-bs-target="#form" class="fas fa-edit"></i>
117                <i onClick ="deleteQuote(this);createQuotes()" class="fas fa-trash-alt"></i>
118              </span>
119          </div>
120          `);
121        });
122        resetForm();
123      };
124    //My reset form makes all the values blank once a new object is submitted to the data array.
125      let resetForm = () => {
126        textInput1.value = "";
127        textInput2.value = "";
128        dateInput.value = "";
129        textarea.value = "";
130        msg3Holder.remove();
131      };
132    //This is the function that provides the "delete" part of the CRUD functionality. It uses the
133    //"splice" array method to remove only the object it starts with.
134      let deleteQuote = (e) => {
135        e.parentElement.parentElement.remove();
136
137        data.splice(e.parentElement.parentElement.id, 1);
138
139        localStorage.setItem("data", JSON.stringify(data));
140
141        console.log(data);
142      };
143
144      //This is the function used for the "update" part of CRUD functionality.
145      let editQuote = (e) => {
146        let selectedQuote = e.parentElement.parentElement;
147
148        textInput1.value = selectedQuote.children[0].innerHTML;
149        textInput2.value = selectedQuote.children[1].innerHTML;
150        dateInput.value = selectedQuote.children[2].innerHTML;
151        textarea.value = selectedQuote.children[3].innerHTML;
152
153        deleteQuote(e);
154      };
155    //This is an IIFE that I used to make sure the data stays stored by
156    //the CRUD app, even if it is refreshed.
157      (() => {
158        data = JSON.parse(localStorage.getItem("data")) || [];
159        console.log(data);
160        createQuotes();
161      })();
162
```

```css
 1  body {
 2      font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;
 3      margin: 0 50px;
 4      background-image: url("notebook.jpg");
 5      overflow: auto;
 6      display: flex;
 7      justify-content: center;
 8      align-items: center;
 9      height: max-content;
10  }
11
12  #addNew {
13      display: flex;
14      justify-content: space-between;
15      align-items: center;
16      background-color: rgba(171, 206, 161, 0.35);
17      padding: 5px 10px;
18      border-radius: 5px;
19      cursor: pointer;
20  }
21
22  .fa-plus {
23      background-color: #abcea1;
24      padding: 3px;
25      border-radius: 3px;
26  }
27
28  #msg1, #msg2 {
29      color: red;
30  }
31
32  #modal-body span {
33      color: red;
34  }
35
36  #quotes {
37      display: grid;
38      grid-template-columns: 1fr;
39      gap: 14px;
40  }
41
42  #quotes div {
43      border: 3px solid #abcea1;
44      background-color: #e2eede;
45      border-radius: 6px;
46      padding: 5px;
47      display: grid;
48      gap: 4px;
49      text-align: justify;
50  }
51
52  #quotes div .options {
53      justify-self: center;
54      display: flex;
55      gap: 20px;
56  }
57
58  #quotes div .options i {
59      cursor: pointer;
60  }
61
62  div {
63      inline-size:auto;
64      overflow-wrap: break-word;
65  }
66
67
```

Screenshots of Running Application:

+ Add New Quotation

Home School Commonplace Notebook

Quotations

Moby Dick

Herman Melville

2002-05-04

"Call me Ishmael."

Northanger Abbey

Jane Austen

2022-07-06

"The person, be it gentleman or lady, who has not pleasure in a good novel, must be intolerably stupid."

The Picture of Dorian Gray

Oscar Wilde

2001-09-11

"You will always be fond of me. I represent to you all the sins you never had the courage to commit."

Don Quixote

Miguel de Cervantes

2022-08-04

"Translating from one language to another, unless it is from Greek and Latin, the queens of all languages, is like looking at Flemish tapestries from the wrong side, for although the figures are visible, they are covered by threads that obscure them, and cannot be seen with the smoothness and color of the right side."

ce Notebook

Add New Quotation ✕

Book Title

Author

Date Read

mm/dd/yyyy 📅

Quotation

who has not pleasure in a g

sent to you all the sins you

other, unless it is from Gre   estries from the wrong side, for alt
ure them, and cannot be seen with the smoothness and color of the right side."

Close Add

Add New Quotation

Book Title

Book Title cannot be blank

Author

Author cannot be blank

Date Read

mm/dd/yyyy

Quotation

Quotation cannot be blank

Close Add

URL to GitHub Repository:

https://github.com/zaccrabtree/commonplacenotebook.git