

Intro to JavaScript Week 5 Coding Assignment

Points possible: 75

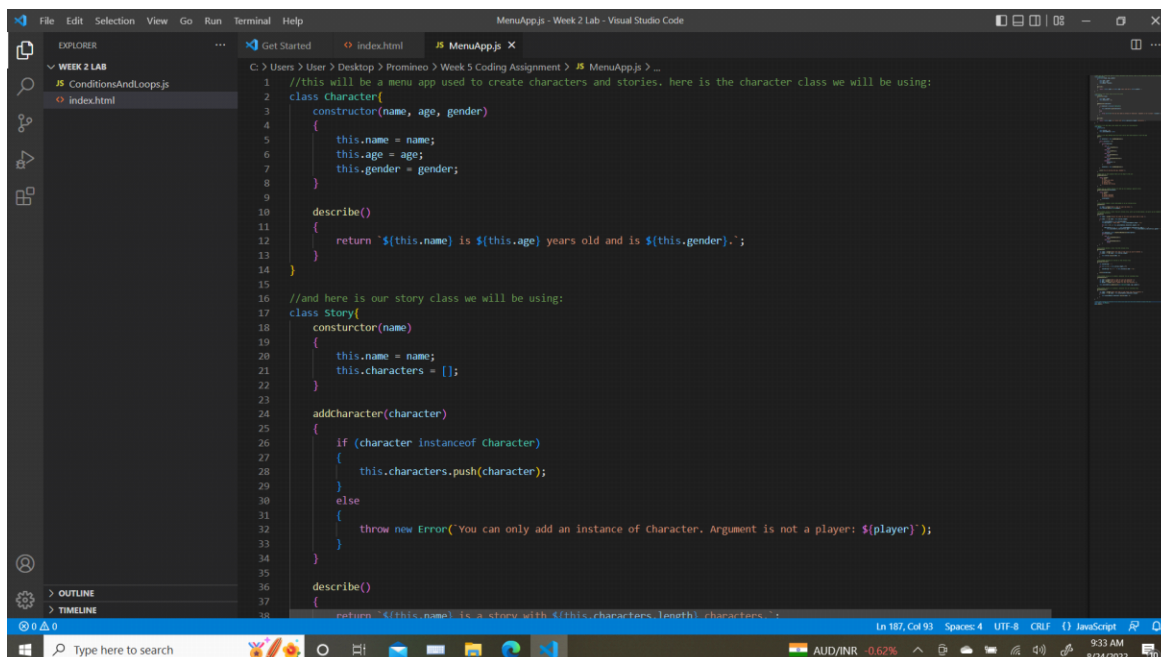
URL to Your GitHub Repository: <https://github.com/KatteNoel/Week-5-Coding-Assignment.git>

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.

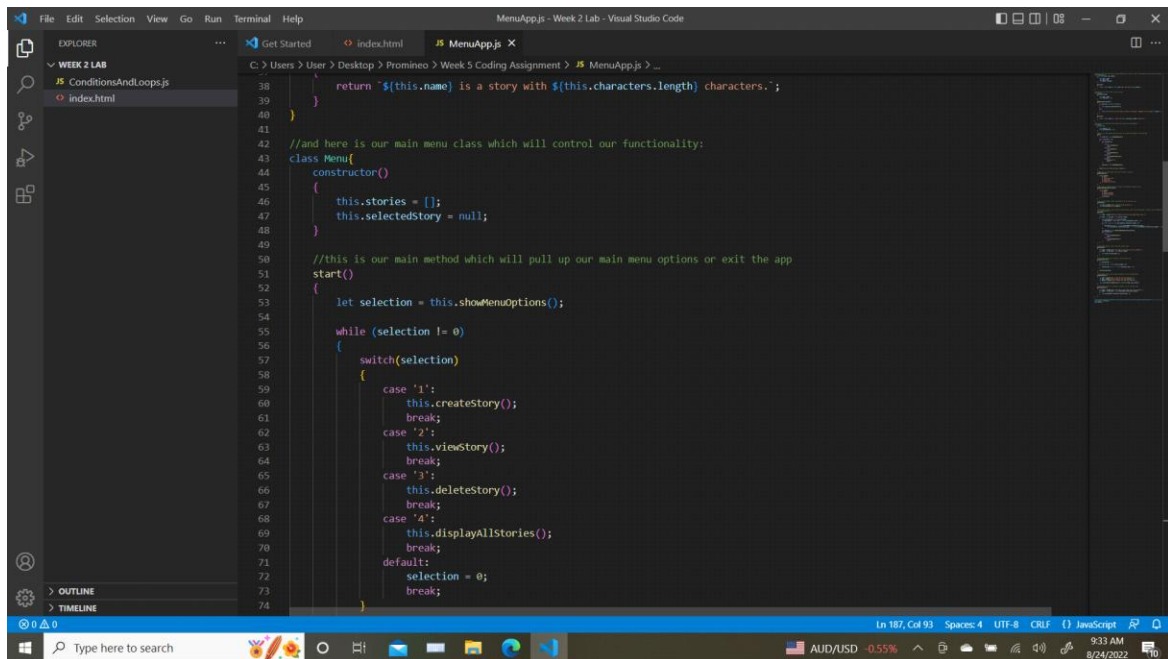
Coding Steps:

- Create a menu app as seen in this week's video. What you create is up to you as long as it meets the following requirements.
 - Use at least one array.
 - Use at least two classes.
 - Your menu should have the options to create, view, and delete elements.

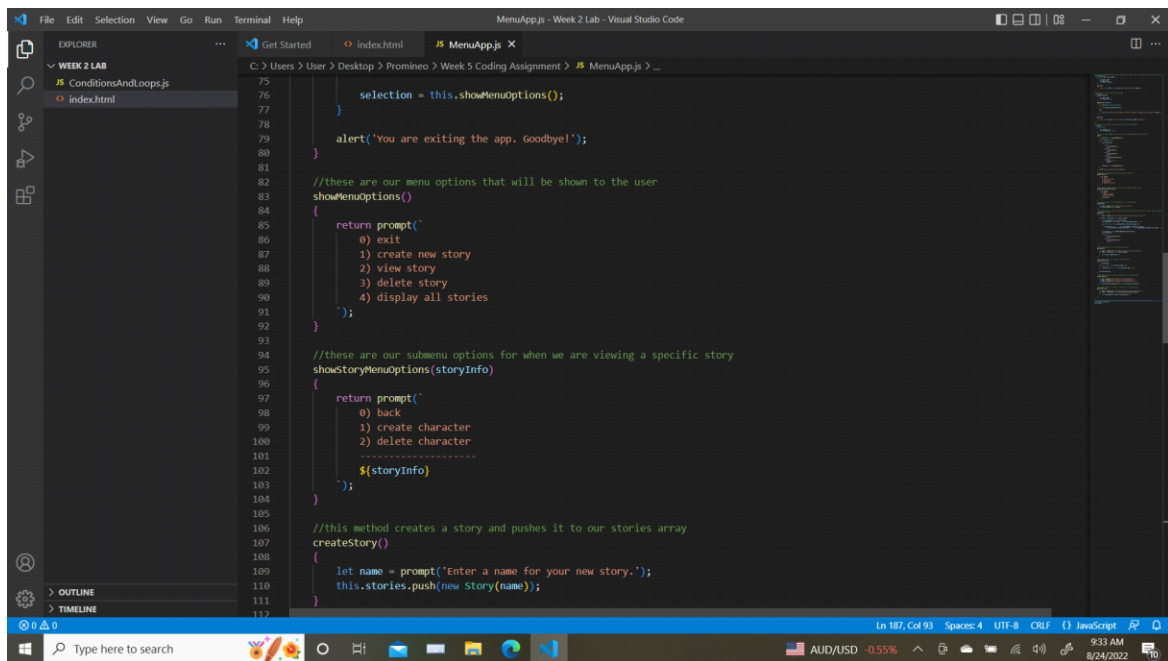
Screenshots of Code:



```
1 //this will be a menu app used to create characters and stories, here is the character class we will be using:
2 class Character{
3   constructor(name, age, gender)
4   {
5     this.name = name;
6     this.age = age;
7     this.gender = gender;
8   }
9
10  describe()
11  {
12    return `${this.name} is ${this.age} years old and is ${this.gender}.`;
13  }
14 }
15
16 //and here is our story class we will be using:
17 class Story{
18   constructor(name)
19   {
20     this.name = name;
21     this.characters = [];
22   }
23
24   addCharacter(character)
25   {
26     if (character instanceof Character)
27     {
28       this.characters.push(character);
29     }
30     else
31     {
32       throw new Error("You can only add an instance of Character. Argument is not a player: ${player}");
33     }
34   }
35
36   describe()
37   {
38     return `${this.name} is a story with ${this.characters.length} characters...`
39   }
40 }
```



```
38     return `${this.name} is a story with ${this.characters.length} characters.`;
39   }
40 }
41
42 //and here is our main menu class which will control our functionality:
43 class Menu{
44   constructor()
45   {
46     this.stories = [];
47     this.selectedStory = null;
48   }
49
50 //this is our main method which will pull up our main menu options or exit the app
51 start()
52 {
53   let selection = this.showMenuOptions();
54
55   while (selection != 0)
56   {
57     switch(selection)
58     {
59       case '1':
60         this.createStory();
61         break;
62       case '2':
63         this.viewStory();
64         break;
65       case '3':
66         this.deleteStory();
67         break;
68       case '4':
69         this.displayAllStories();
70         break;
71       default:
72         selection = 0;
73         break;
74     }
75   }
76 }
```



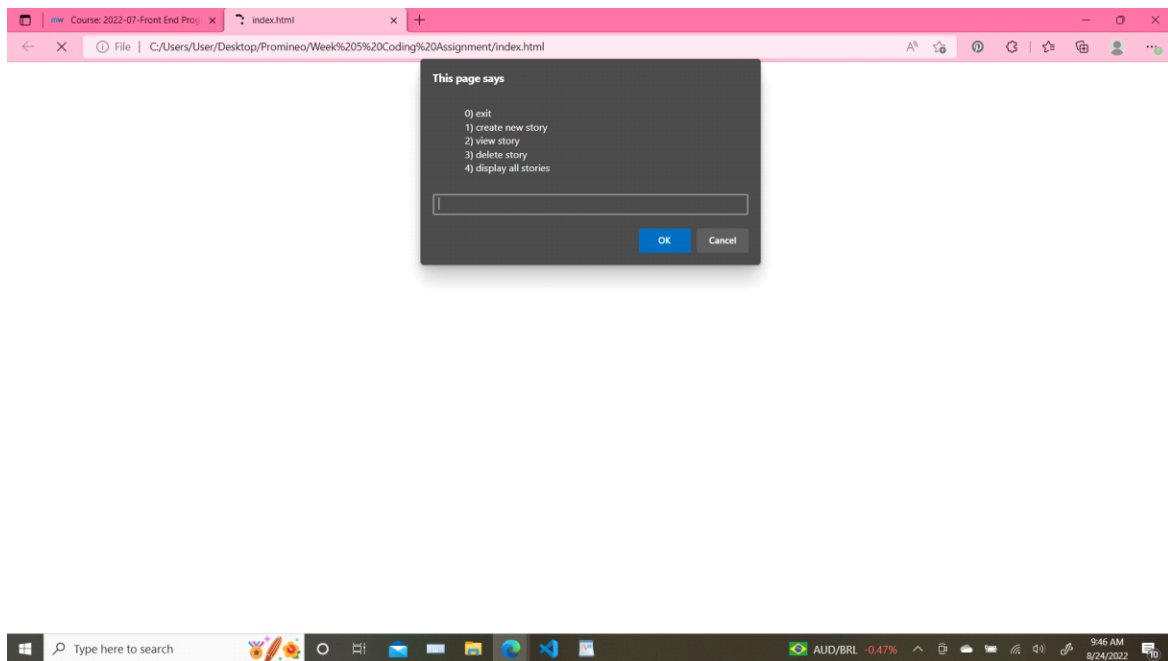
```
75     selection = this.showMenuOptions();
76   }
77   alert('You are exiting the app. Goodbye!');
78 }
79
80 //these are our menu options that will be shown to the user
81 showMenuOptions()
82 {
83   return prompt('
84     0) exit
85     1) create new story
86     2) view story
87     3) delete story
88     4) display all stories
89   ');
90 }
91
92 //these are our submenu options for when we are viewing a specific story
93 showStoryMenuOptions(storyInfo)
94 {
95   return prompt('
96     0) back
97     1) create character
98     2) delete character
99     -----
100     ${storyInfo}
101   ');
102 }
103
104 //this method creates a story and pushes it to our stories array
105 createStory()
106 {
107   let name = prompt('Enter a name for your new story. ');
108   this.stories.push(new Story(name));
109 }
110
111
112 }
```

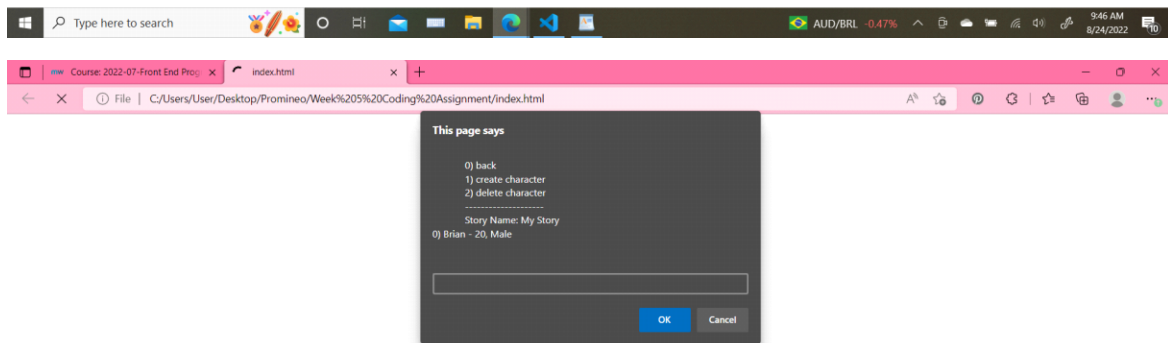
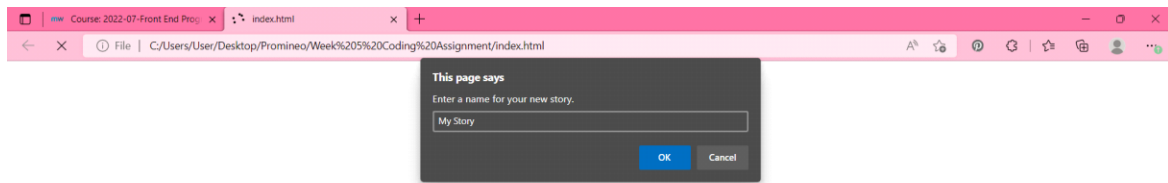
```
113 //this method selects a story from our stories array, pulls up its description, and pulls up our submenu to allow us to create
114 //or delete characters
115 viewStory()
116 {
117     let index = prompt('Select the index of the story you would like to view. ');
118
119     if (index > -1 && index < this.stories.length)
120     {
121         this.selectedStory = this.stories[index];
122         let description = 'Story Name: ' + this.selectedStory.name + '\n';
123
124         for (let i = 0; i < this.selectedStory.characters.length; i++)
125         {
126             description += i + ' ' + this.selectedStory.characters[i].name + ' - ' +
127                 this.selectedStory.characters[i].age + ', ' + this.selectedStory.characters[i].gender + '\n';
128         }
129
130         let selection = this.showStoryMenuOptions(description);
131         switch(selection)
132         {
133             case '1':
134                 this.createCharacter();
135                 break;
136             case '2':
137                 this.deleteCharacter();
138                 break;
139         }
140     }
141 }
142
143 //this method deletes a story from the stories array
144 deleteStory()
145 {
146     let index = prompt('Enter the index of the story you wish to delete. ');
147     if (index > -1 && index < this.stories.length)
148     {
149         this.stories.splice(index, 1);
150     }
151 }
152
153 //this method displays all stories in the stories array
154 displayAllStories()
155 {
156     let storyString = '';
157
158     for (let i = 0; i < this.stories.length; i++)
159     {
160         storyString += i + ' ' + this.stories[i].name + '\n';
161     }
162
163     alert(storyString);
164 }
165
166 //this method allows us to create a character for our selected story
167 createCharacter()
168 {
169     let name = prompt('Enter a name for your new character. ');
170     let age = prompt('Enter an age for your new character. ');
171     let gender = prompt('Enter a gender for your new character. ');
172
173     this.selectedStory.addCharacter(new Character(name, age, gender));
174 }
175
176 //this method allows us to delete a character for our selected story
177 deleteCharacter()
178 {
179     let index = prompt('Enter the index of the player you wish to delete. ');
180     if (index > -1 && index < this.selectedStory.characters.length)
```

```
181         this.selectedStory.characters.splice(index, 1);
182     }
183 }
184
185 //this method allows us to create a character for our selected story
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187 {
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189     let age = prompt('Enter an age for your new character. ');
190     let gender = prompt('Enter a gender for your new character. ');
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192     this.selectedStory.addCharacter(new Character(name, age, gender));
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196 deleteCharacter()
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198     let index = prompt('Enter the index of the player you wish to delete. ');
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156   let storyString = '';
157   for (let i = 0; i < this.stories.length; i++)
158   {
159     storyString += i + ' ' + this.stories[i].name + '\n';
160   }
161   alert(storyString);
162 }
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164 //this method allows us to create a character for our selected story
165 createCharacter()
166 {
167   let name = prompt('Enter a name for your new character. ');
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169   let gender = prompt('Enter a gender for your new character. ');
170   this.selectedStory.addCharacter(new Character(name, age, gender));
171 }
172
173 //this method allows us to delete a character for our selected story
174 deleteCharacter()
175 {
176   let index = prompt('Enter the index of the player you wish to delete. ');
177   if (index > -1 && index < this.selectedStory.characters.length)
178   {
179     this.selectedStory.characters.splice(index, 1);
180   }
181 }
182
183 //this code creates an instance of our menu class and runs the start method to begin the app
184 const menu = new Menu();
185 menu.start();
```

Screenshots of Running Application:





Video URL: <https://youtu.be/MMRAzX1VvOE>