

Activity #5 - Array

1. Write a JavaScript program called `menuSelector` that allows users to select a fruit from a menu. The program should utilize an array to store the available fruits and implement a do-while loop to allow users to make selections until they choose to exit.

Requirements

1. **Create an Array:** Define an array called `fruits` that contains at least five different fruit names, such as:
 - "Apple"
 - "Banana"
 - "Cherry"
 - "Date"
 - "Elderberry"
2. **Display Menu:** Use a do-while loop to display a menu to the user with the following options:
 - Select a fruit by its corresponding number (1 to 5).
 - Exit the program.
3. **Use Switch Statement:** Implement a switch statement to handle the user's selection and display a message indicating the selected fruit.
4. **Error Handling:** If the user selects an invalid option (e.g., a number not in the range or a non-numeric input), display an error message.
5. **Continue or Exit:** After processing the selection, prompt the user to ask if they want to continue. If they respond with "no," exit the loop and thank them for using the menu.

Source Code

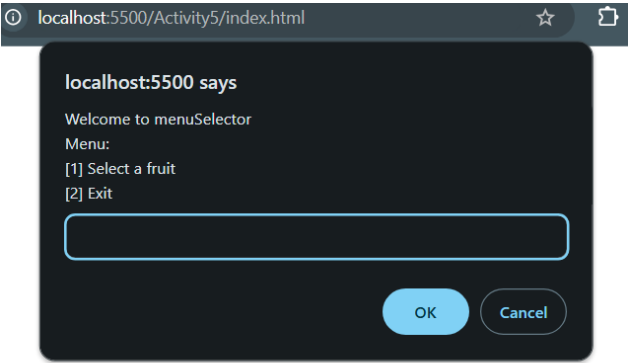
File:

[https://drive.google.com/drive/folders/1J--IPeXDStSU8jARb0YI73pqZOPXFtoM?usp=drive link](https://drive.google.com/drive/folders/1J--IPeXDStSU8jARb0YI73pqZOPXFtoM?usp=drive_link)

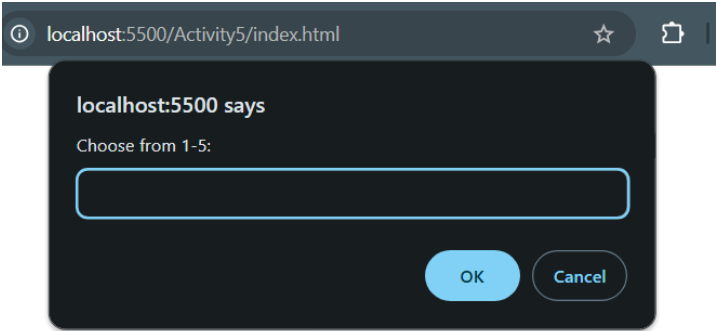
```
JS javascript.js X index.html
Activity5 > JS javascript.js > ...
1  /* create an array: define an array called fruits that contains at least five
2     different fruit names
3  */
4  let fruits = ["Apple", "Banana", "Cherry", "Dates", "Elderberry"];
5
6  let userInput = 0;
7  do{
8      // display a menu
9      userInput = parseInt(prompt("Welcome to menuSelector\nMenu: \n[1] Select a fruit \n[2] Exit"));
10
11      // userIInput = 1 prompt user to select from 1-5
12      if(userInput == 1){
13          let fruitSelection = parseInt(prompt("Choose from 1-5: "));
14
15          // Use Switch statement: this will display the fruit based on the selection of the user
16          switch (fruitSelection){
17              case 1:
18                  alert("You Selected: " + fruits[fruitSelection - 1]);
19                  break;
20              case 2:
21                  alert("You Selected: " + fruits[fruitSelection - 1]);
22                  break;
23              case 3:
24                  alert("You Selected: " + fruits[fruitSelection - 1]);
25                  break;
26              case 4:
27                  alert("You Selected: " + fruits[fruitSelection - 1]);
28                  break;
29              case 5:
30                  alert("You Selected: " + fruits[fruitSelection - 1]);
31                  break;
32              default:
33                  alert("Error: Your input is out of range!");
34                  break;
35          }
36
37          // Continue or Exit: This will prompt the user if they want to continue in using the program
38          do{
39              continueSelection = parseInt(prompt("Do you want to continue?: \n[1] Yes | [2] No"));
40
41              if(continueSelection == 1){
42                  continue;
43              } else if(continueSelection == 2){
44                  break;
45              } else {
46                  alert("Error: Your input is out of range!");
47              }
48          } while (continueSelection != 2);
49      } while (userInput != 2);
50
51      // display something
52      alert("Thank you for using the program!");
53  }
```

Output:

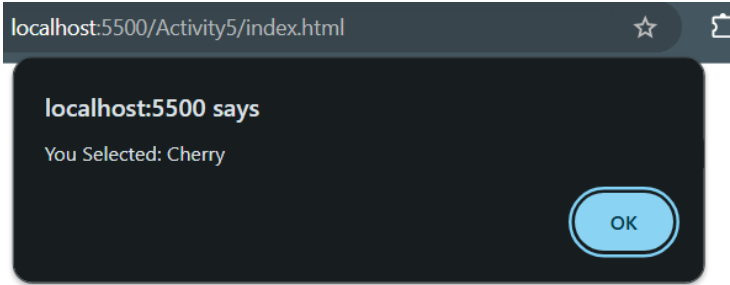
Main Menu:



a. If the user input is 1:



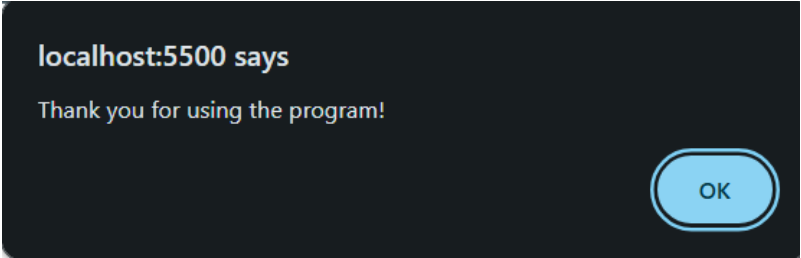
- If the user selects from 1 to 5 (sample input: 3):



- If the user input is out of range:



b. If the user input is 2:



c. Prompt user asking if they want to continue on using the program:

localhost:5500 says

Do you want to continue?:
[1] Yes | [2] No

OK

Cancel

- If input is 1:

localhost:5500 says

Welcome to menuSelector
Menu:
[1] Select a fruit
[2] Exit

OK

Cancel

- Else if input is 2:

localhost:5500 says

Thank you for using the program!

OK

2. Write a JavaScript program called libraryMenu that allows users to manage a library of books. The program should use an array to store book titles and implement a do-while loop to allow users to select options for viewing, adding, or removing books until they choose to exit.

Requirements

1. **Create an Array:** Define an array called books that contains at least five different book titles (e.g., "1984", "To Kill a Mockingbird", "The Great Gatsby", "Moby Dick", "Pride and Prejudice").
2. **Display Menu:** Use a do-while loop to display a menu with the following options:
 - View all books
 - Add a new book
 - Remove a book
 - Exit the program
3. **Use Switch Statement:** Implement a switch statement to handle the user's selection and perform the corresponding action.
4. **Error Handling:** If the user tries to remove a book that doesn't exist, display an error message.
5. **Continue or Exit:** After processing the selection, ask the user if they want to continue. If they answer "no," exit the loop and thank them for using the library.

Source Code

File:

https://drive.google.com/drive/folders/1DbHa-ld47mV6x0TG2KbvqZr6uCxllWq0?usp=drive_link

```
index.html JS javascript.js X
Activity5 > LibraryMenuSelector > JS javascript.js > ...
1  let books = ["1984", "To Kill a Mockingbird", "The Great Gatsby", "Moby Dick", "Pride and Prejudice"];
2  let userInput = 0;
3
4  do {
5      userInput = parseInt(prompt("Library Menu: \n[1] View All Books\n[2] Add New Book\n[3] Remove Book\n[4] Exit the Program"));
6
7      switch (userInput) {
8          case 1: {
9              let bookList = "View All Books:\n";
10             for (let i = 0; i < books.length; i++) {
11                 bookList += "[" + (i + 1) + "]: " + books[i] + "\n";
12             }
13             alert(bookList);
14             break;
15         }
16
17         case 2: {
18             let addBook = prompt("Input the title of the book: ");
19             books.push(addBook);
20             alert("Book is now added.");
21             break;
22         }
23
24         case 3: {
25             let bookList = "List of Books:\n";
26             for (let i = 0; i < books.length; i++) {
27                 bookList += "[" + (i + 1) + "]: " + books[i] + "\n";
28             }
29             let removeBook = parseInt(prompt("Remove Book:\n" + bookList + "Select the number of the book to be removed: "));
30             if (removeBook > books.length || removeBook <= 0) {
31                 alert("Error: The book does not exist!");
32             } else {
33                 books.splice(removeBook - 1, 1);
34                 alert("Book has been removed.");
35             }
36             break;
37         }
38
39         case 4: {
40             break;
41         }
42
43         default: {
44             alert("Error: Input out of range!");
45             break;
46         }
47     }
48
49     if (userInput != 4) {
50         continueSelection = parseInt(prompt("Do you want to continue?\n[1] Yes | [2] No"));
51
52         if (continueSelection == 1) {
53             continue;
54         } else if (continueSelection == 2) {
55             break;
56         }
57     }
58 } while (userInput != 4);
59
60 alert("Thank you for using the program!");
```

Output:

Main Menu:

localhost:5500 says

Library Menu:

[1] View All Books

[2] Add New Book

[3] Remove Book

[4] Exit the Program

OK

Cancel

- Input: 1

localhost:5500 says

View All Books:

[1]: 1984

[2]: To Kill a Mockingbird

[3]: The Great Gatsby

[4]: Moby Dick

[5]: Pride and Prejudice

OK

- Input: 2

localhost:5500 says

Input the title of the book:

OK

Cancel

localhost:5500 says

Book is now added.

OK

- Input: 3

localhost:5500 says

Remove Book:

List of Books:

[1]: 1984

[2]: To Kill a Mockingbird

[3]: The Great Gatsby

[4]: Moby Dick

[5]: Pride and Prejudice

[6]: The Courage To Be Disliked

Select the number of the book to be removed:

OK **Cancel**

localhost:5500 says

Book has been removed.

OK

(Sample input is 7)

localhost:5500 says

Error: The book does not exist!

OK

- **Input: 4**

localhost:5500 says

Thank you for using the program!

OK

- **Input: Out of range**

localhost:5500 says

Error: Input out of range!

OK

- **If user want to continue of not:**

localhost:5500 says

Do you want to continue?

[1] Yes | [2] No

OK

Cancel