Project Assignment 1: Arrays and Loops

Start Assignment

* **Due** Sunday by 11:59pm

* **Points** 100

* **Submitting** a text entry box, a website url, a media recording, or a file upload

* **Available** Jan 19 at 12am - Mar 23 at 11:59pm

Project Overview

This week, you’ll create a menu-based program using arrays, for loops, and while loops. The goal is to practice manipulating arrays and using loops in a real project. The default project is a Task Manager App, but you are welcome to choose a different project as long as it follows the same basic structure (menu-based with arrays and loops).

Instructions

Choose Your Project:

**Option 1: Task Manager App (Default)**  
Create an app where users can:

* View a list of tasks.
* Add new tasks.
* Remove tasks by number.
* Exit the program.

**Option 2: Choose a Similar Project**  
You can choose a project similar to a task manager that still uses arrays, for loops, and while loops. Here are some suggestions:

* Shopping List App: Add, view, and remove items from a shopping list.
* Contact List App: Add, view, and remove contacts.
* Collection Inventory App: Add, view, and remove collectibles from an inventory.

If you choose a different project, make sure it:

* Uses an array to store data.
* Includes a menu with options to view, add, remove, and exit the program.

Requirements

Use an Array to Store Data:

Your program should store tasks (or other items, if you choose a different project) in an array.  
Each task/item should be represented as a string (or an object if you plan to add details like due dates or priority in future weeks).

Create a Menu with Options:

Display a menu with options to:

* View all items (tasks, contacts, etc.)
* Add a new item.
* Remove an item.
* Exit the program.

Use a while Loop to Keep the Program Running:

The program should keep running until the user chooses the option to exit.  
After each action (view, add, remove), display the menu again to allow the user to perform another action.

Use a for Loop to Display All Items:

When the user chooses to view items, use a for loop to display all tasks or items in the array.  
Format the display so that each item is shown with its index (e.g., "1. Task 1").

Handling Invalid Input:

If the user enters an invalid option (e.g., a non-number or a number outside the available choices), prompt them to try again.

Testing Your Code

Test in the Browser or an Online Compiler:

To test your project, follow these steps:

1. Create two files:
   * **index.html** (to link to your JavaScript file)

<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Task Manager</title>  
</head>  
<body>

  <h1>Task Manager</h1>

  <div id="output"></div>

  <script src="task-manager.js"></script>

</body>  
</html>

* + **task-manager.js** (your JavaScript code)

1. **Test in a browser**:  
   Open the index.html file in any web browser. This will allow you to test your JavaScript without needing a console. You will interact with the program through prompt and alert dialogs.

**Note**: You cannot test this directly in the console, as it will result in an error due to the way the prompt() and alert() functions work with the browser window. Instead, open the HTML file in a browser to run and test your program.

1. **Test in an online compiler**:  
   If you prefer to use an online compiler, you can also test your JavaScript by using platforms like **JSFiddle**, **Programiz**, or **OneCompiler**. These platforms allow you to run JavaScript directly in the browser.

Test the Menu Options:

Make sure all the menu options work as expected:

* Can you view tasks correctly?
* Does the program add tasks properly?
* Can you remove tasks by number?
* Does the program exit when you choose that option?

Submission Instructions

Submit Your JavaScript File:

Save your JavaScript file (task-manager.js) and submit it via Canvas.

Optional: Upload to GitHub:

If you'd like, you can also upload your project to your GitHub repository. Include a URL link to the repository in your submission.

[Previous](https://canvas.seattlecolleges.edu/courses/31505/modules/items/1587184)[Next](https://canvas.seattlecolleges.edu/courses/31505/modules/items/1593496)