

Week 5

Callback Functions, you will learn how to write callback functions. A callback function is a function that is passed into another function as an argument and invoked to perform a specific task. Callbacks enable you to write more complex programs and ensure that a given task is performed only after another task has been completed. This week, you will explore different types of callback functions that allow you to sort, filter, map, and reduce while manipulating data. Callback functions can be a challenging concept at first, so you need to practice writing callback functions right away to see how they work.

Learning Outcomes

Course Learning Outcomes Addressed

- Explain the key web programming concepts
- Build web applications using JavaScript, HTML, and CSS
- Design and code user interactions on web pages

By the end of this week, you will be able to:

1. Explain use cases of callback functions versus regular functions
2. Explain how to capture web page events and user actions and respond to them using callback functions
3. Use callback functions to filter, sort, and map arrays and objects in JavaScript
4. Use string manipulation functions
5. Discuss use of callback functions and asynchronous programming

Activities

Key Activities

- Knowledge Checks 5.1 and 5.2
- Discussions
 - Callbacks versus Regular Function Expressions Discussion
 - Callbacks and Asynchronous Programming Discussion
 - Creating a Callback Function Reflection
- Coding Activities
 - Using For Each Loops
 - Working with Callbacks
- Coding Assignments
 - Find the Most Common Words Assignment

Self-Study Activities

- For Each Exercise
- Filter Exercise: Find the Graffiti
- Sort Exercise: Sort and Chart Salaries
- Map Exercise
- Reduce Exercise
- Word Count Exercise