# Week 4: Introduction And Instructions

In **Week 4 - Working with Lists in React**, you'll work through three exercises. You'll begin by creating a To-Do list application. This will be an opportunity for you to learn how to set state in a React app and how to refactor code so you can separate the functionality into separate components. From there, you'll learn about React Hooks, which enable you to share state logic across components. This keeps your code clean, concise, and easy to control. You'll start using the useEffect and useState Hooks in the Rendering Lists exercises and in the Shopping Cart With Multiple Lists exercise.

#### **Learning Outcomes**

### Course Learning Outcomes Addressed

- Build, test, and deploy a React application
- Explain key React concepts such as JSX and Hooks
- Design and build UI components using React

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

- 1. Identify state in React
- 2. Define the role of the Babel compiler
- 3. Identify the workflow for using an HTTP server
- 4. Style components in a separate CSS file for a React application
- Explain React Hooks
- 6. Use the onClick event handler with any element
- 7. Identify use cases for Hooks and props
- 8. Identify useState and useEffect Hooks
- 9. Identify the functionality patterns of ReactDOM
- 10. Use state in a React application
- 11. Create a ToDo list application

#### **Activities**

## **Key Activities**

- Knowledge Checks
  - o 14.1 State In React
  - o 14.2 React Hooks
- Discussions
  - Share Your Styled ToDo List
  - o Introduction To React Hooks
  - React Hooks Reflection
- Coding Activities
  - Styling A Task Tracker
  - OnClick Elements
- Coding Assignments
  - Shopping Cart- Clothing Store

# **Self-Study Activities**

- ToDo List Application
- Rendering Lists
- Shopping Cart With Multiple Lists