# Week 5: Introduction And Instructions

In **Week 5: Working With Simple Components**, you'll focus on two exercises that will teach you how to manage state across components and how to fetch and render data using React. This week is designed to encourage you to engage deeply with the coding exercises and to create personal coding projects that you will need to share on GitHub repositories.

#### **Learning Outcomes**

## Course Learning Outcome Addressed

• Design and build UI components using React

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

- 1. Implement user-friendly UI and React components
- 2. Manage state of various UI elements
- 3. Validate form content in conjunction with state of other components
- 4. Practice communicating project specifications
- 5. Practice communicating technical decisions you made
- 6. Compare and contrast the functionality of Axios and fetch() for retrieving data
- 7. Identify the steps required to fetch and render external data
- 8. Identify the functionality of Axios and fetch()
- 9. Use React to fetch, manipulate, and render data

#### **Activities**

## Key Activities

- Knowledge Check 5.1
  - Fetching And Rendering Data
- Discussions
  - Share Your ATM Improvements
  - Comparing Axios And Fetch()
  - Fetch And Render Data Coding Challenge
- Coding Activities
  - Refactoring The ATM
- Coding Assignments
  - o Fetch And Paginate Data

# Self-Study Activities

- Map Hello World
- Map Markers
- Map Clustering
- Map Heatmap
- Map Animation
- Real-Time Bus Tracker