

# Assignment 3: Conditional Rendering and Lists

Awareness, Application, Mastery, Influence

Gaurab Wagle

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## Overview of the Assignment

This assignment focuses on the concepts of rendering components based on the state or props by handling the scenarios like showing loading states and empty lists.

## GitHub Repository Link

Get the complete code and project details on my GitHub repository:

<https://github.com/gxaurab/Tangible/tree/main/Asg1PoW/src/components/Part3>

## 1 Awareness

- **Rubric:** Use simple conditional rendering with if, ternary ? :, or logical AND to display content based on state or props.
- **Proof of Work:** Show a welcome message only if a user is "logged in" using a boolean variable.

### 1.1 Approach

In addition to that, I also made two custom hooks: useAuth and useToggle, which could handle the button click and show the modal. I also applied the previous knowledge of the modal.

## 1.2 Outcome

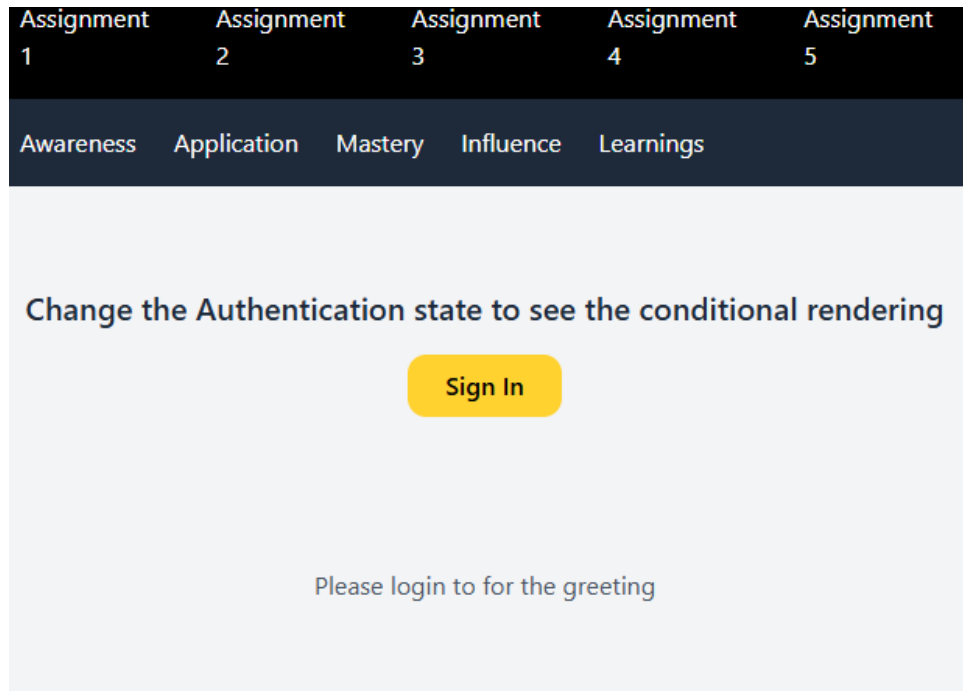


Figure 1: Basic Implementation

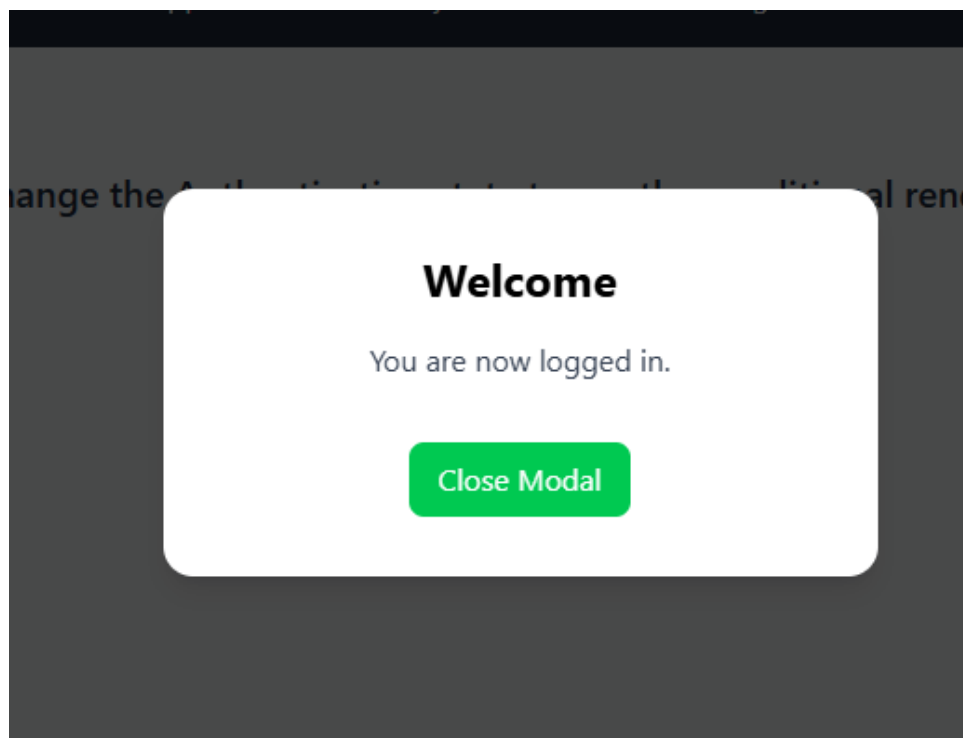


Figure 2: Implementation with modal too

## 2 Application

- **Rubric:** Render lists of items using `.map()` and assign unique keys to each item to avoid warnings.
- **Proof of Work:** Display a static list of books or movies from a hardcoded array, rendering each item's title and author.

### 2.1 Approach

This part of the assignment required me to understand the use of the map function. First, I went through the MDN documentation about the map function.

The map function in JavaScript basically returns a new array with our operation on it. It does not modify the original array. I therefore created a dummy array of objects and used the map function to display it.

### 2.2 Outcome

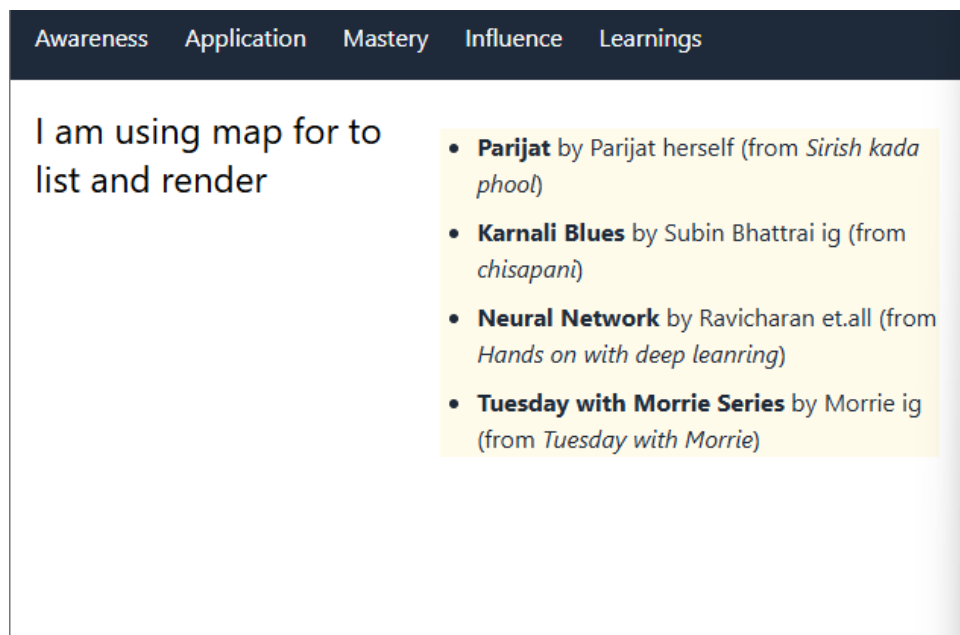


Figure 3: Implementation

## 3 Mastery

- **Rubric:** Combine conditional rendering and list filters to show dynamic subsets of lists.
- **Proof of Work:** Allow filtering of the books list by genre, showing only matching items, and update UI accordingly.

### 3.1 Approach

This part of the assignment required me to implement the conditional rendering with the filter/map function. I had a dummy array object exported from a file, which I then used to conditionally render. I used the browser's dropdown feature to implement the selection and according to the selected values, I then filtered the objects which were later rendered in the UI by using the map function.

### 3.2 Outcome

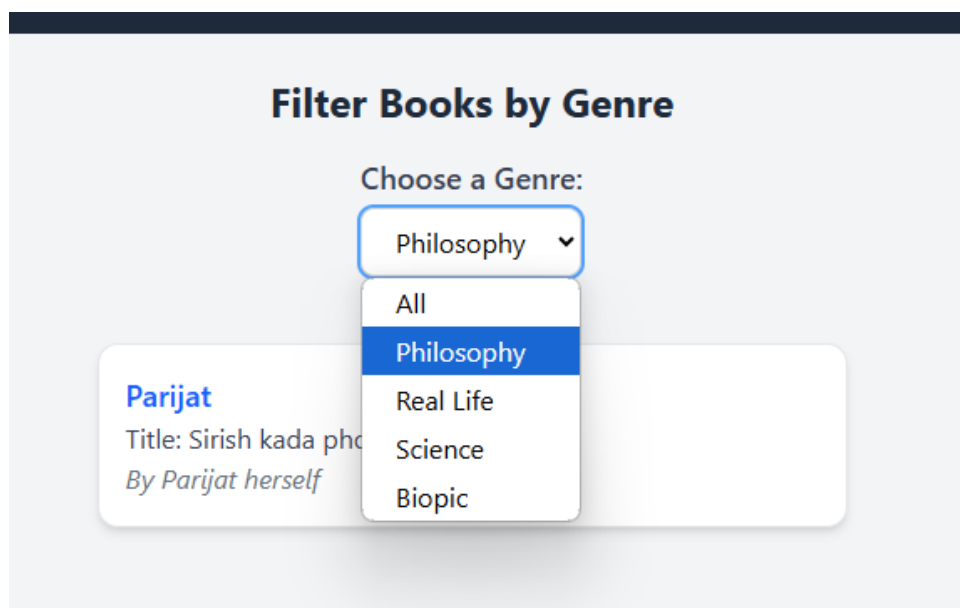


Figure 4: Dropdown Implementation and Rendering

## 4 Influence

- **Rubric:** Create reusable list components that accept data and rendering logic as props for flexible use.
- **Proof of Work:** Build a generic ListRenderer component that takes any array and a render function to display list items dynamically.

### 4.1 Approach

For this assignment, I took help from AI because I couldn't really understand what it was actually asking me to do. Later I figured out that it wants me to make a reusable list component. I learned that we could pass entire blocks of code in the props and use it, which is basically what I did here.

## 4.2 Outcome

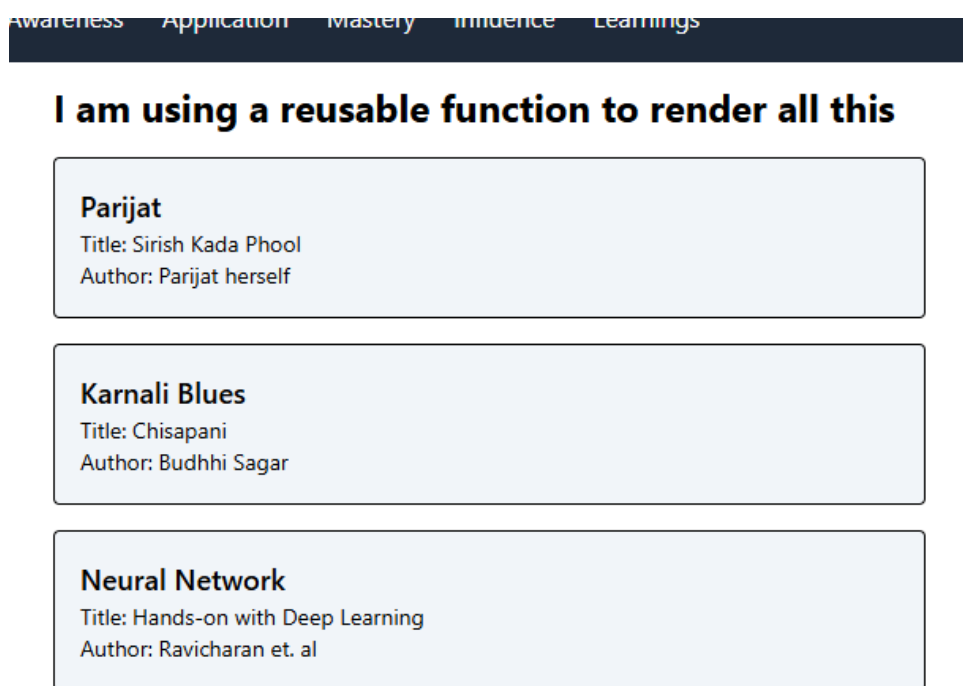


Figure 5: Implementation