React-9

**Project Title: CricketApp – React Application Using ES6 Features**

**Objectives**

* List the key features of **ES6 (ECMAScript 2015)**.
* Explain the usage of:
  + let and const
  + Differences between var and let
  + ES6 classes and class inheritance
  + Arrow functions
  + set() and map() objects
* Demonstrate ES6 fundamentals including:
  + Arrow functions
  + Destructuring
  + Use of map()

**Learning Outcomes**

After completing this lab, the learner will be able to:

* Use ES6's map() method to handle arrays.
* Apply **arrow functions** to filter data.
* Implement **destructuring** for array element management.
* Merge arrays and render data conditionally using a flag variable.

**Prerequisites**

The following tools are necessary to complete this hands-on lab:

* Node.js
* NPM
* Visual Studio Code

**Estimated Time**

* Approximately 60 minutes.

**Implementation Instructions**

1. **Project Setup**
   * Create a new React application named cricketapp.
2. **Component 1: ListofPlayers**
   * Declare an array of **11 players** containing their **names** and **scores**.
   * Use the ES6 map() method to iterate through and display player details.
   * Filter out players with scores below 70 using **arrow functions**.
3. **Component 2: IndianPlayers**
   * Use **destructuring** to display:
     + Odd team players
     + Even team players
   * Declare two arrays:
     + T20players
     + RanjiTrophyPlayers
   * Merge both arrays and display the combined result using **ES6 array merging** features.
4. **Conditional Rendering**
   * Display both components on the homepage.
   * Use a **flag variable**:
     + If flag = true: Show the first output layout.
     + If flag = false: Show the alternate layout.