ReactJS Hands-On Lab Report: Blogger App

# Objectives

- Explain various ways of conditional rendering  
- Explain how to render multiple components  
- Define list component  
- Explain about keys in React applications  
- Explain how to extract components with keys  
- Explain React Map, map() function

# Lab Outcomes

In this hands-on lab, we will:  
- Implement conditional rendering in React applications  
- Create and render multiple components using buttons  
- Use map() function and keys to render list components  
- Extract reusable components from lists

# Prerequisites

- Node.js  
- NPM (comes with Node.js)  
- Visual Studio Code

# Step-by-Step Instructions

## 1. Create the React App

Open a terminal or command prompt and run the following commands:  
npx create-react-app bloggerapp  
cd bloggerapp  
code .

## 2. Create the Component Files

Inside the 'src' folder, create three new files:  
- BookDetails.js  
- BlogDetails.js  
- CourseDetails.js

## 3. Create BookDetails.js

import React from 'react';  
  
function BookDetails() {  
 const books = [  
 { id: 1, title: "Atomic Habits", author: "James Clear" },  
 { id: 2, title: "Ikigai", author: "Francesc Miralles" },  
 { id: 3, title: "Deep Work", author: "Cal Newport" }  
 ];  
  
 return (  
 <div>  
 <h2>📚 Book Details</h2>  
 <ul>  
 {books.map(book => (  
 <li key={book.id}>  
 <strong>{book.title}</strong> by {book.author}  
 </li>  
 ))}  
 </ul>  
 </div>  
 );  
}  
  
export default BookDetails;

## 4. Create BlogDetails.js

import React from 'react';  
  
function BlogDetails() {  
 const blogs = [  
 { id: 1, topic: "React Hooks", writer: "John Doe" },  
 { id: 2, topic: "State vs Props", writer: "Jane Smith" },  
 { id: 3, topic: "Conditional Rendering", writer: "Alex Ray" }  
 ];  
  
 return (  
 <div>  
 <h2>📝 Blog Details</h2>  
 {blogs.map(blog => (  
 <div key={blog.id}>  
 <p><strong>{blog.topic}</strong> - by {blog.writer}</p>  
 </div>  
 ))}  
 </div>  
 );  
}  
  
export default BlogDetails;

## 5. Create CourseDetails.js

import React from 'react';  
  
function CourseDetails() {  
 const courses = [  
 { id: 1, name: "React Basics", duration: "4 weeks" },  
 { id: 2, name: "Advanced React", duration: "6 weeks" },  
 { id: 3, name: "React with Redux", duration: "5 weeks" }  
 ];  
  
 return (  
 <div>  
 <h2>📘 Course Details</h2>  
 <ul>  
 {courses.map(course => (  
 <li key={course.id}>  
 {course.name} - Duration: {course.duration}  
 </li>  
 ))}  
 </ul>  
 </div>  
 );  
}  
  
export default CourseDetails;

## 6. Modify App.js

import React, { useState } from 'react';  
import './App.css';  
import BookDetails from './BookDetails';  
import BlogDetails from './BlogDetails';  
import CourseDetails from './CourseDetails';  
  
function App() {  
 const [active, setActive] = useState("book");  
  
 let component;  
 if (active === "book") {  
 component = <BookDetails />;  
 } else if (active === "blog") {  
 component = <BlogDetails />;  
 } else if (active === "course") {  
 component = <CourseDetails />;  
 }  
  
 return (  
 <div className="App">  
 <h1>📖 BloggerApp - Learn Through Books, Blogs, and Courses</h1>  
 <div>  
 <button onClick={() => setActive("book")}>Book Details</button>  
 <button onClick={() => setActive("blog")}>Blog Details</button>  
 <button onClick={() => setActive("course")}>Course Details</button>  
 </div>  
 <hr />  
 {component}  
 </div>  
 );  
}  
  
export default App;

## 7. Run the App

In the terminal, run:  
npm start  
  
The app will open at http://localhost:3000 and display:  
- Book Details (default)  
- Blog Details (when Blog button is clicked)  
- Course Details (when Course button is clicked)





