13. ReactJS-HOL

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

In this hands-on lab, you will learn how to:

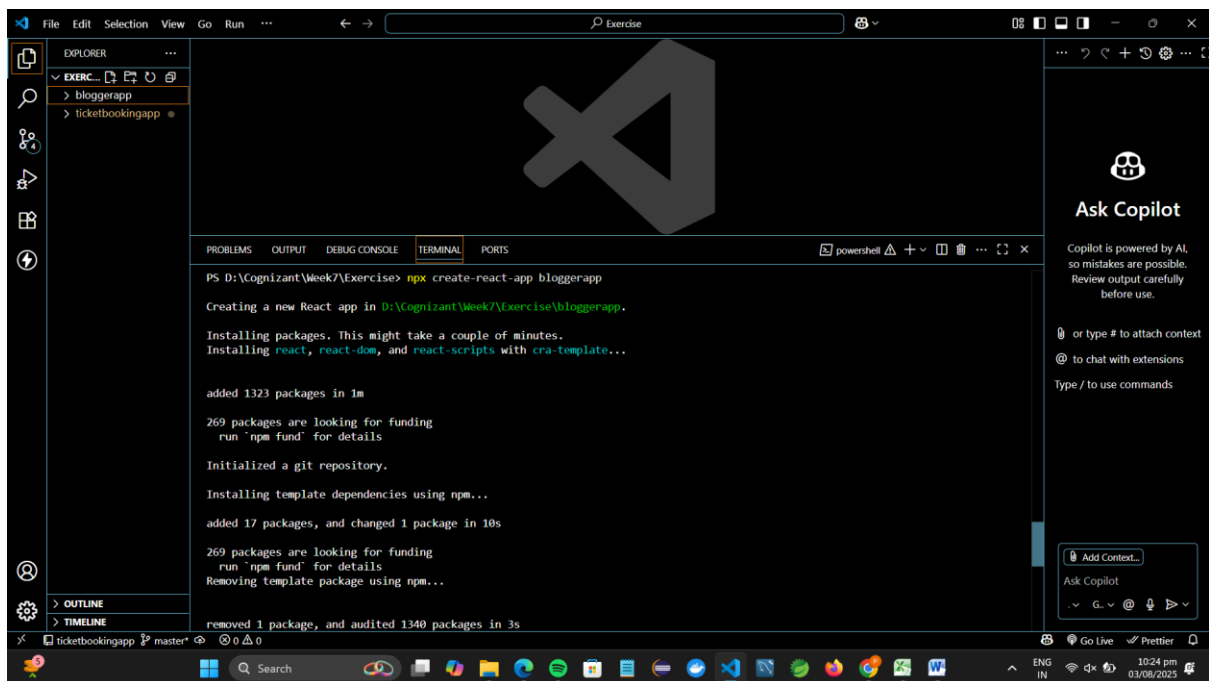- Implement conditional rendering in React applications

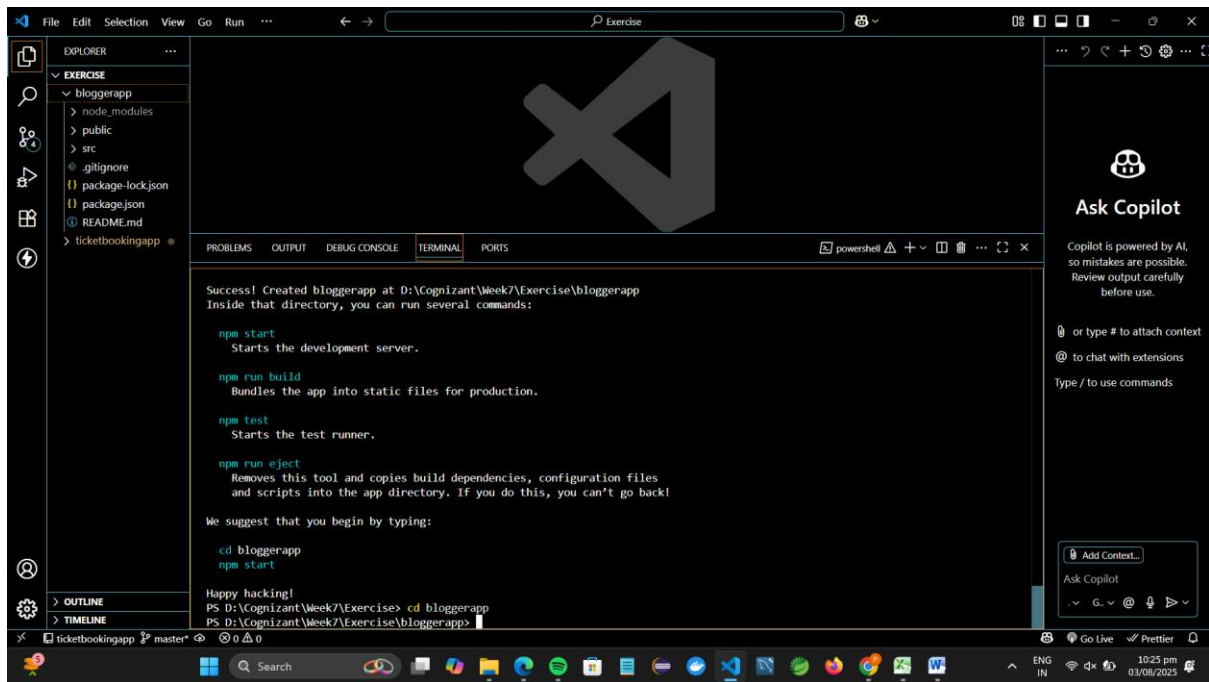Create a React App named "bloggerapp" in with 3 components.

1. Book Details
2. Blog Details
3. Course Details

Implement this with as many ways possible of Conditional Rendering.

Step 1: Create the React App

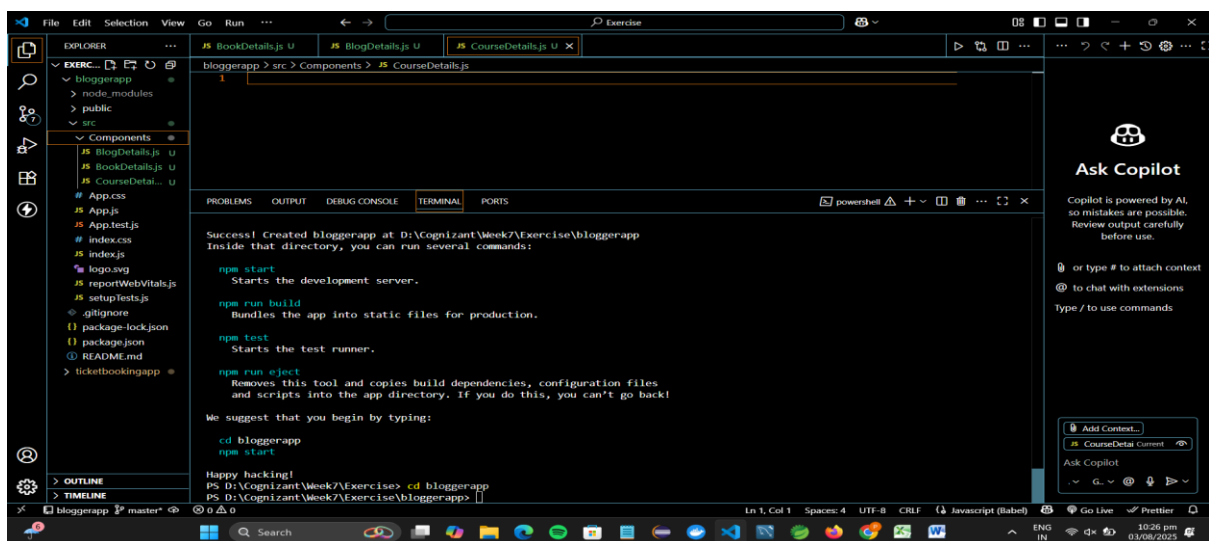npx create-react-app bloggerapp
cd bloggerapp

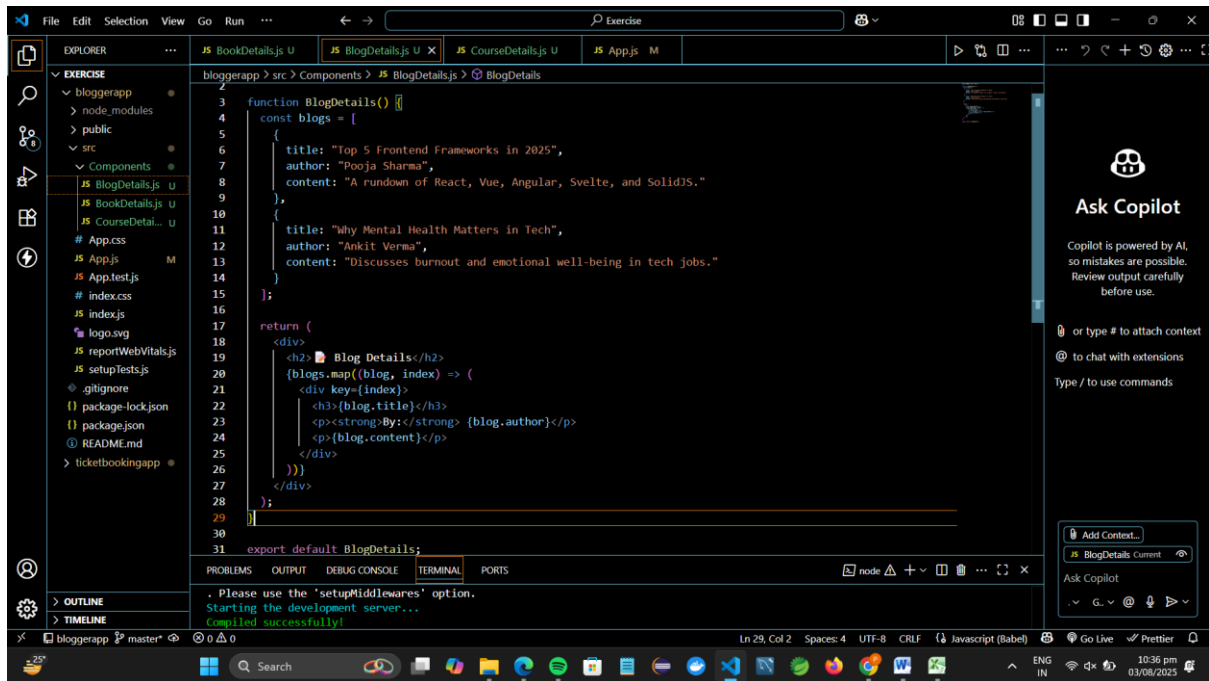## Step 2: Create Components Folder

Inside `src`, create a folder:

`Components`

Create **3 components** inside it:

- `BookDetails.js`
- `BlogDetails.js`
- `CourseDetails.js`
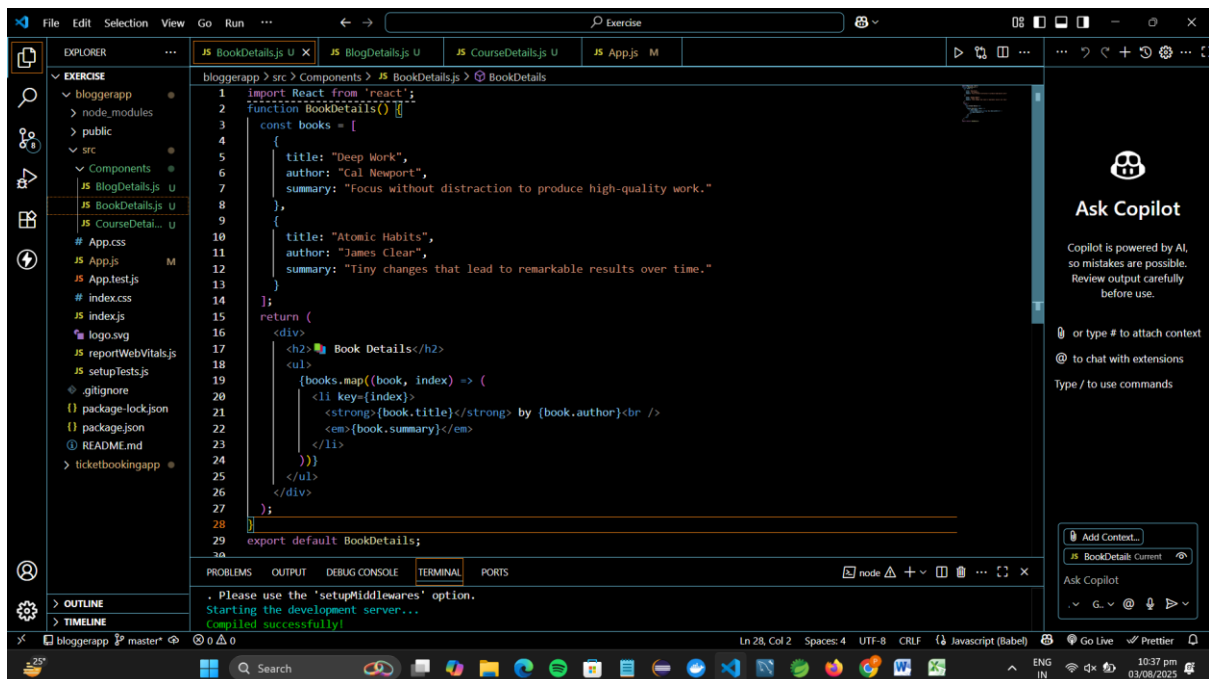
BlogDetails.js:


```javascript
function BlogDetails() {
  const blogs = [
    {
      title: "Top 5 Frontend Frameworks in 2025",
      author: "Pooja Sharma",
      content: "A rundown of React, Vue, Angular, Svelte, and SolidJS."
    },
    {
      title: "Why Mental Health Matters in Tech",
      author: "Ankit Verma",
      content: "Discusses burnout and emotional well-being in tech jobs."
    }
  ];

  return (
    <div>
      <h2>📝 Blog Details</h2>
      {blogs.map((blog, index) => (
        <div key={index}>
          <h3>{blog.title}</h3>
          <p><strong>By:</strong> {blog.author}</p>
          <p>{blog.content}</p>
        </div>
      ))}
    </div>
  );
}

export default BlogDetails;
```

BookDetails.js:


```javascript
import React from 'react';
function BookDetails() {
  const books = [
    {
      title: "Deep Work",
      author: "Cal Newport",
      summary: "Focus without distraction to produce high-quality work."
    },
    {
      title: "Atomic Habits",
      author: "James Clear",
      summary: "Tiny changes that lead to remarkable results over time."
    }
  ];
  return (
    <div>
      <h2>📖 Book Details</h2>
      <ul>
        {books.map((book, index) => (
          <li key={index}>
            <strong>{book.title}</strong> by {book.author}<br />
            <em>{book.summary}</em>
          </li>
        ))}
      </ul>
    </div>
  );
}
export default BookDetails;
```
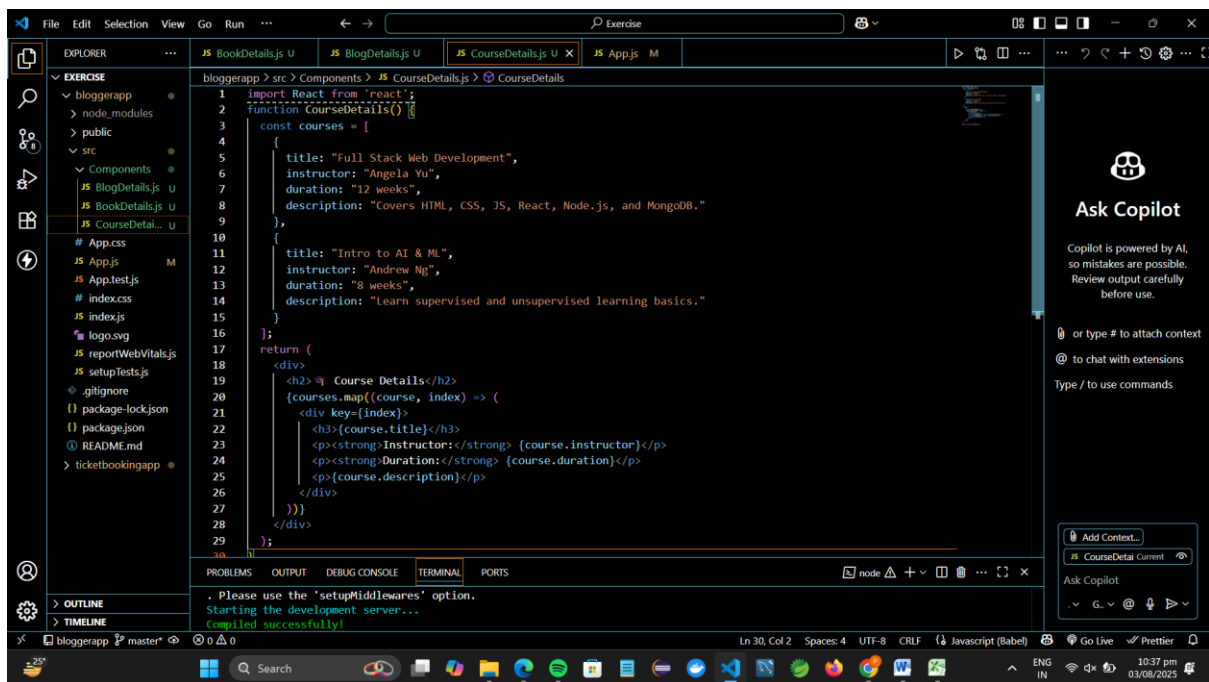
CourseDetails.js:


```
1  import React from 'react';
2  function CourseDetails() {
3    const courses = [
4      {
5        title: "Full Stack Web Development",
6        instructor: "Angela Yu",
7        duration: "12 weeks",
8        description: "Covers HTML, CSS, JS, React, Node.js, and MongoDB."
9      },
10     {
11       title: "Intro to AI & ML",
12       instructor: "Andrew Ng",
13       duration: "8 weeks",
14       description: "Learn supervised and unsupervised learning basics."
15     }
16   ];
17   return (
18     <div>
19       <h2>📚 Course Details</h2>
20       {courses.map((course, index) => (
21         <div key={index}>
22           <h3>{course.title}</h3>
23           <p><strong>Instructor:</strong> {course.instructor}</p>
24           <p><strong>Duration:</strong> {course.duration}</p>
25           <p>{course.description}</p>
26         </div>
27       ))}
28     </div>
29   );
```

Step 3: Update `App.js` to Use All Components

Replace everything in `src/App.js` with:

App.js:


```
1  import React, { useState } from 'react';
2  import BookDetails from './Components/BookDetails';
3  import BlogDetails from './Components/BlogDetails';
4  import CourseDetails from './Components/CourseDetails';
5
6  function App() {
7    const [visibleComponent, setVisibleComponent] = useState('books');
8
9    return (
10     <div style={{ padding: '20px', fontFamily: 'Arial' }}>
11       <h1>Blogger App</h1>
12       <div>
13         <button onClick={() => setVisibleComponent('books')}>Show Books</button>
14         <button onClick={() => setVisibleComponent('blogs')}>Show Blogs</button>
15         <button onClick={() => setVisibleComponent('courses')}>Show Courses</button>
16       </div>
17
18       <hr />
19
20       {visibleComponent === 'books' && <BookDetails />}
21       {visibleComponent === 'blogs' && <BlogDetails />}
22       {visibleComponent === 'courses' && <CourseDetails />}
23     </div>
24   );
25  }
26
27  export default App;
28
```
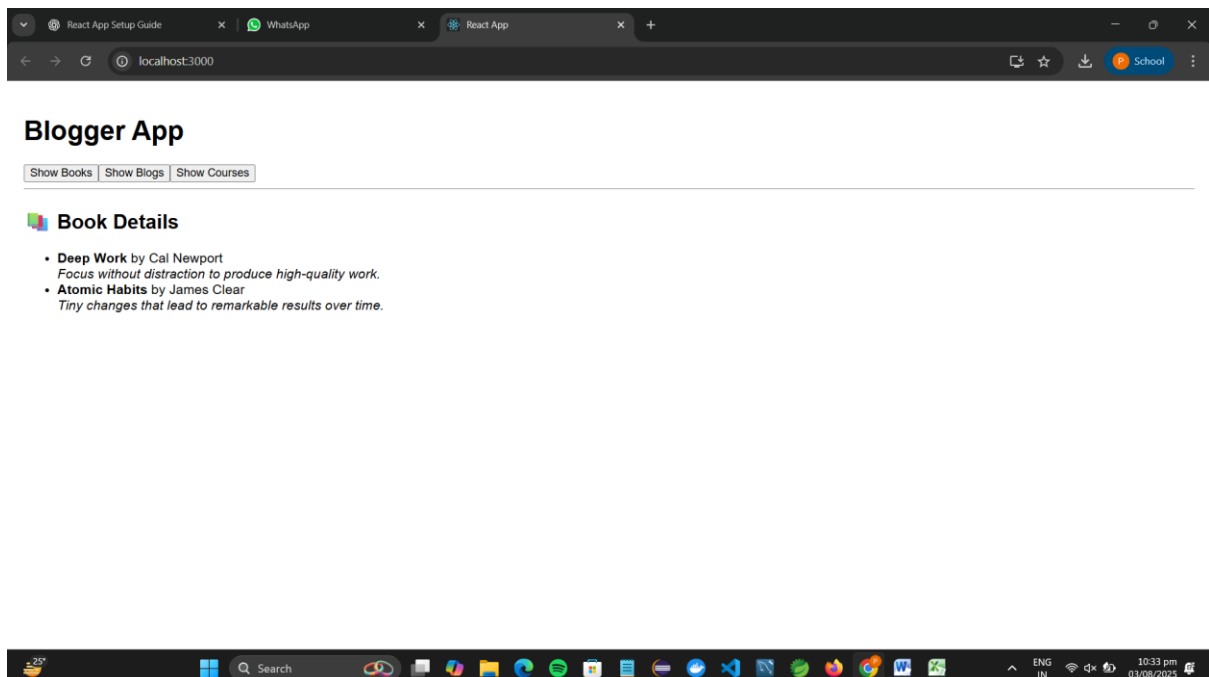
Step 4: Run the App

```
npm start
```


Result:

Blogger App

Show Books | Show Blogs | Show Courses

📝 Blog Details

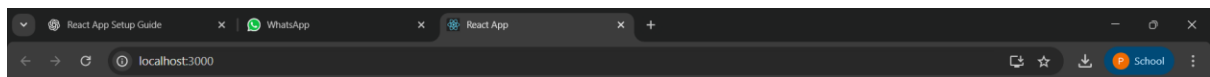**Top 5 Frontend Frameworks in 2025**

By: Pooja Sharma

A rundown of React, Vue, Angular, Svelte, and SolidJS.

Why Mental Health Matters in Tech

By: Ankit Verma

Discusses burnout and emotional well-being in tech jobs.

Blogger App

Show Books | Show Blogs | Show Courses

🎓 Course Details

Full Stack Web Development

Instructor: Angela Yu

Duration: 12 weeks

Covers HTML, CSS, JS, React, Node.js, and MongoDB.

Intro to AI & ML

Instructor: Andrew Ng

Duration: 8 weeks

Learn supervised and unsupervised learning basics.