**WEEK – 07**

**ReactJS-HOL**

**Superset ID: 6262264**

**EXERCISE 13:**

**Objectives:**

**1.Explain Various Ways of Conditional Rendering in React**

Conditional Rendering means showing different components or content based on some condition (like user login, button click, etc.).

| **Method** | **Example** | **Use When** |
| --- | --- | --- |
| if-else | if (isLoggedIn) { return <Home /> } else { return <Login /> } | Full control |
| Ternary operator | isDark ? <Dark Mode /> : <LightMode /> | Short decision |
| Logical && | isAdmin && <AdminPanel /> | Show if true |
| Switch-case | For multiple views like tabs | Organized logic |

**2. How to Render Multiple Components**

We can render multiple components by just including them together inside JSX:

**EXAMPLE:**

function App() {

return (

<div>

<Header />

<Navbar />

<Content />

<Footer />

</div>

);

}

Also possible using .map() when rendering lists of components dynamically.

**3. Define a List Component**

A list component displays a list of data like books, courses, users, etc.

**Example:**

function BookList() {

const books = ["React", "Angular", "Vue"];

return (

<ul>

{books.map((book, index) => <li key={index}>{book}</li>)}

</ul>

);

}

**4. What are Keys in React?**

Keys are special props used when rendering lists. They help React identify which item changed, added, or removed.

Why important?

Without keys, React will re-render inefficiently.

**Example:**

const users = [{id:1, name:'Ruby'}, {id:2, name:'Murugan'}];

users.map(user => <li key={user.id}>{user.name}</li>);

**5. How to Extract Components with Keys**

If the list item is complex, extract it as a component:

**EXAMPLE:**

function User({ name }) {

return <li>{name}</li>;

}

function UserList() {

const users = [{ id: 1, name: 'Ruby' }, { id: 2, name: 'GPT' }];

return (

<ul>

{users.map(user => <User key={user.id} name={user.name} />)}

</ul>

);

}

**6. Explain React Map, map() function.**

In React, the map() function is used to loop through an array and render a list of JSX elements or components dynamically.

**Example:**

const courses = ["React", "Angular", "Vue"];

function CourseList() {

return (

<ul>

{courses.map((course, index) => (

<li key={index}>{course}</li>

))}

</ul>

);

}

**Create a React App named “bloggerapp” in with 3 components.**

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

***BookDetails.js:***

import React from 'react';

import { books } from '../BooksData';

const BookDetails = () => {

return (

<div className="bookstyle">

<h1>Book Details</h1>

<ul>

{books.map(book => (

<div key={book.id}>

<h3>{book.bname}</h3>

<h4>{book.price}</h4>

</div>

))}

</ul>

</div>

);

};

export default BookDetails;

***BlogDetails.js:***

import React from 'react';

const BlogDetails = () => {

return (

<div className="blogstyle">

<h1>Blog Details</h1>

<h3>React Learning</h3>

<p><strong>Stephen Biz</strong></p>

<p>Welcome to learning React!</p>

<h3>Installation</h3>

<p><strong>Schwezdenier</strong></p>

<p>You can install React from npm.</p>

</div>

);

};

export default BlogDetails;

***CourseDetails.js:***

import React from 'react';

const CourseDetails = () => {

return (

<div className="coursestyle">

<h1>Course Details</h1>

<h3>Angular</h3>

<p>4/5/2021</p>

<h3>React</h3>

<p>6/3/2021</p>

</div>

);

};

export default CourseDetails;

***BooksData.js:***

export const books = [

{ id: 101, bname: 'Master React', price: 670 },

{ id: 102, bname: 'Deep Dive into Angular 11', price: 800 },

{ id: 103, bname: 'Mongo Essentials', price: 450 }

];

***App.js:***

import React from 'react';

import BookDetails from './components/BookDetails';

import BlogDetails from './components/BlogDetails';

import CourseDetails from './components/CourseDetails';

import './App.css';

function App() {

return (

<div className="container">

<CourseDetails />

<BookDetails />

<BlogDetails />

</div>

);

}

export default App;

***App.css:***

.container {

display: flex;

justify-content: space-evenly;

margin-top: 50px;

text-align: left;

}

.coursestyle, .bookstyle, .blogstyle {

border-left: 3px solid green;

padding: 20px;

width: 25%;

}

h1 {

text-align: center;

}

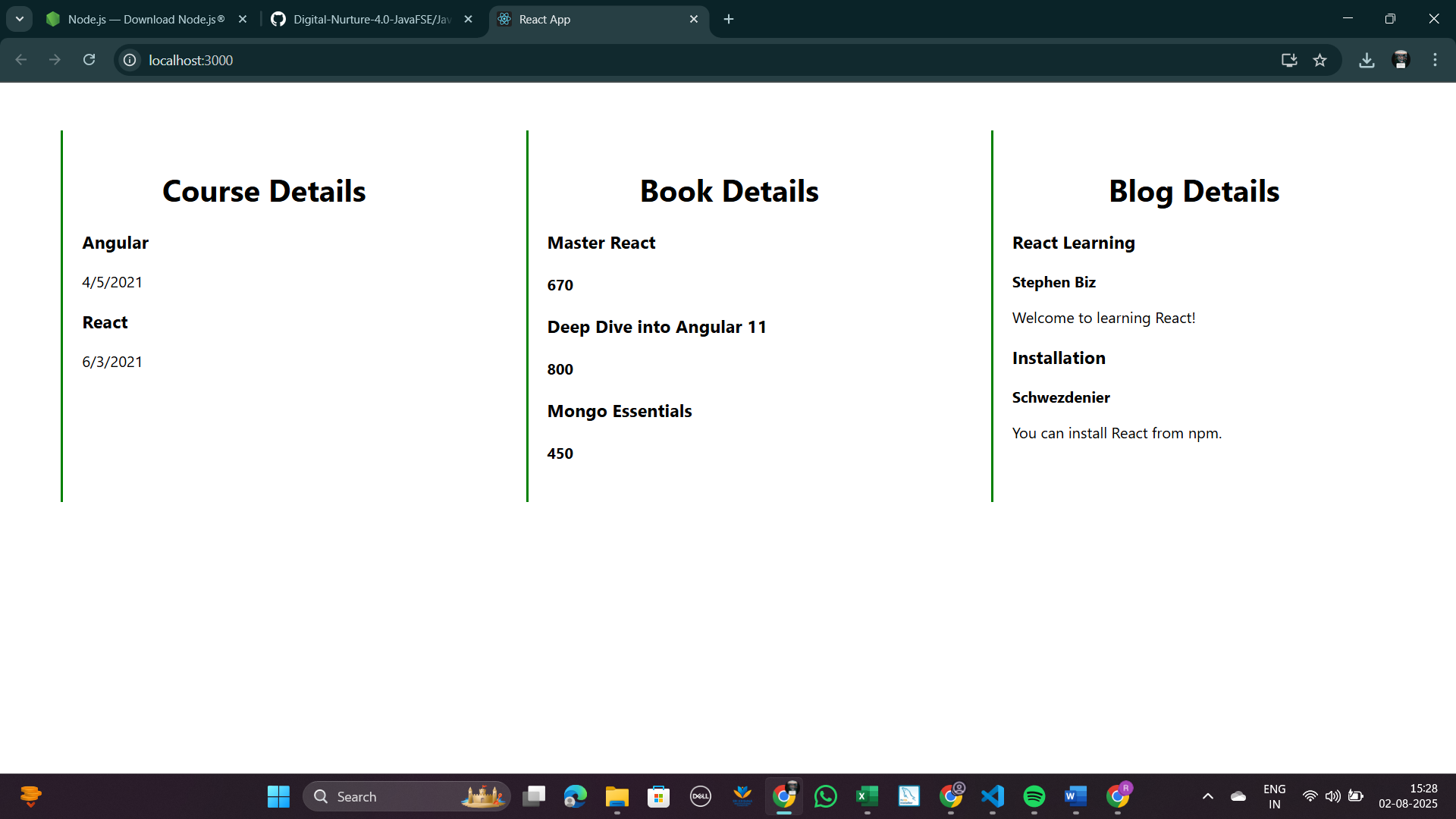
ul {

list-style-type: none;

padding: 0;

}

**OUTPUT:**



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