EVENING ASSIGNEMNT

1. Add an onClick handler to a button that logs “Clicked!” to the console.

import React from "react";

function ClickLogger() {

const handleClick = () => {

console.log("Clicked!");

};

return <button onClick={handleClick}>Click Me</button>;

}

function App() {

return (

<div>

<h1>4.1</h1>

<ClickLogger />

</div>

);

}

export default App;

2. Pass an argument to a function in an onClick event to display it in an alert.

import React from "react";

function AlertButton({ message }) {

const showAlert = (msg) => {

alert(msg);

};

return <button onClick={() => showAlert(message)}>Show Message</button>;

}

function App() {

return (

<div>

<h1>4.2</h1>

<AlertButton message="Hello from Button!" />

</div>

);

}

export default App;

3. Create an image gallery where clicking a thumbnail changes the main image.

import React, { useState } from "react";

function ImageGallery() {

const images = [

"https://via.placeholder.com/150/0000FF",

"https://via.placeholder.com/150/FF0000",

"https://via.placeholder.com/150/00FF00"

];

const [mainImage, setMainImage] = useState(images[0]);

return (

<div>

<img src={mainImage} alt="Main" width="200" />

<div>

{images.map((img, i) => (

<img

key={i}

src={img}

alt="Thumbnail"

width="50"

onClick={() => setMainImage(img)}

style={{ cursor: "pointer", margin: "5px" }}

/>

))}

</div>

</div>

);

}

function App() {

return (

<div>

<h1>4.3</h1>

<ImageGallery />

</div>

);

}

export default App;

4. Build a voting button where each click increases the vote count.

import React, { useState } from "react";

function VotingButton() {

const [votes, setVotes] = useState(0);

return (

<div>

<p>Votes: {votes}</p>

<button onClick={() => setVotes(votes + 1)}>Vote</button>

</div>

);

}

function App() {

return (

<div>

<h1>4.4</h1>

<VotingButton />

</div>

);

}

export default App;

5. Make a paragraph that changes color when clicked.

import React, { useState } from "react";

function ColorParagraph() {

const [color, setColor] = useState("black");

return (

<p

onClick={() => setColor(color === "black" ? "blue" : "black")}

style={{ color, cursor: "pointer" }}

>

Click me to change color

</p>

);

}

function App() {

return (

<div>

<h1>4.5</h1>

<ColorParagraph />

</div>

);

}

export default App;

6. Create a “Show/Hide” button for a paragraph using an onClick handler.

import React, { useState } from "react";

function ShowHideParagraph() {

const [show, setShow] = useState(true);

return (

<div>

<button onClick={() => setShow(!show)}>

{show ? "Hide" : "Show"} Paragraph

</button>

{show && <p>This is a paragraph.</p>}

</div>

);

}

function App() {

return (

<div>

<h1>4.6</h1>

<ShowHideParagraph />

</div>

);

}

export default App;

7. Build a quiz button that checks if the selected answer is correct when clicked.

import React from "react";

function QuizButton({ answer }) {

const correctAnswer = "React";

const checkAnswer = (ans) => {

alert(ans === correctAnswer ? "Correct!" : "Wrong!");

};

return <button onClick={() => checkAnswer(answer)}>Choose {answer}</button>;

}

function App() {

return (

<div>

<h1>4.7</h1>

<QuizButton answer="React" />

<QuizButton answer="Vue" />

</div>

);

}

export default App;

8. Create a button that adds a new item to a list on click.

import React, { useState } from "react";

function AddItemList() {

const [items, setItems] = useState(["Item 1", "Item 2"]);

return (

<div>

<ul>

{items.map((item, i) => (

<li key={i}>{item}</li>

))}

</ul>

<button onClick={() => setItems([...items, `Item ${items.length + 1}`])}>

Add Item

</button>

</div>

);

}

function App() {

return (

<div>

<h1>4.8</h1>

<AddItemList />

</div>

);

}

export default App;

9. Make a square <div> that changes its background color each time it’s clicked.

import React, { useState } from "react";

function ColorSquare() {

const colors = ["red", "green", "blue", "orange"];

const [index, setIndex] = useState(0);

return (

<div

onClick={() => setIndex((index + 1) % colors.length)}

style={{

width: "100px",

height: "100px",

backgroundColor: colors[index],

cursor: "pointer"

}}

></div>

);

}

function App() {

return (

<div>

<h1>4.9</h1>

<ColorSquare />

</div>

);

}

export default App;

10. Build a “Reset” button that clears an input field.

import React, { useState } from "react";

function ResetInput() {

const [text, setText] = useState("");

return (

<div>

<input

value={text}

onChange={(e) => setText(e.target.value)}

placeholder="Type something"

/>

<button onClick={() => setText("")}>Reset</button>

</div>

);

}

function App() {

return (

<div>

<h1>4.10</h1>

<ResetInput />

</div>

);

}

export default App;

5. Components – Practice Tasks

1. Create a functional component Header that displays a title.

import React from "react";

function Greeting() {

return <h2>Hello, World!</h2>;

}

function App() {

return (

<div>

<h1>5.1</h1>

<Greeting />

</div>

);

}

export default App;

2. Create a class component Footer that displays the current year.

import React, { Component } from "react";

class Footer extends Component {

render() {

const currentYear = new Date().getFullYear();

return <footer>© {currentYear}</footer>;

}

}

function App() {

return (

<div>

<h1>2. Footer Example</h1>

<Footer />

</div>

);

}

export default App;

3. Make a Sidebar component and render it alongside a MainContent component.

import React from "react";

function Sidebar() {

return (

<aside style={{ width: "200px", background: "#eee", padding: "10px" }}>

<h3>Sidebar</h3>

<p>Links and stuff</p>

</aside>

);

}

function MainContent() {

return (

<main style={{ padding: "10px" }}>

<h3>Main Content</h3>

<p>This is the main content area.</p>

</main>

);

}

function App() {

return (

<div style={{ display: "flex" }}>

<Sidebar />

<MainContent />

</div>

);

}

export default App;

4. Create a Button component and reuse it in three different places with different labels.

import React from "react";

function Button({ label, onClick }) {

return <button onClick={onClick}>{label}</button>;

}

function App() {

return (

<div>

<h1>4. Reusable Button</h1>

<Button label="Click Me" onClick={() => alert("Clicked 1")} />

<Button label="Submit" onClick={() => alert("Submitted")} />

<Button label="Cancel" onClick={() => alert("Cancelled")} />

</div>

);

}

export default App;

5. Build a ProfileCard component that displays profile picture, name, and description.

import React from "react";

function ProfileCard({ image, name, description }) {

return (

<div style={{ border: "1px solid gray", padding: "10px", width: "200px" }}>

<img src={image} alt={name} style={{ width: "100%" }} />

<h3>{name}</h3>

<p>{description}</p>

</div>

);

}

function App() {

return (

<div>

<h1>5. Profile Card</h1>

<ProfileCard

image="https://via.placeholder.com/150"

name="John Doe"

description="Web Developer"

/>

</div>

);

}

export default App;

6. Create a Weather component that takes temperature and condition as props.

import React from "react";

function Weather({ temperature, condition }) {

return (

<div>

<h3>Temperature: {temperature}°C</h3>

<p>Condition: {condition}</p>

</div>

);

}

function App() {

return (

<div>

<h1>6. Weather</h1>

<Weather temperature={28} condition="Sunny" />

</div>

);

}

export default App;

7. Build a NavBar component with links to Home, About, and Contact.

import React from "react";

function NavBar() {

return (

<nav style={{ background: "#333", color: "white", padding: "10px" }}>

<a href="#home" style={{ margin: "0 10px", color: "white" }}>Home</a>

<a href="#about" style={{ margin: "0 10px", color: "white" }}>About</a>

<a href="#contact" style={{ margin: "0 10px", color: "white" }}>Contact</a>

</nav>

);

}

function App() {

return (

<div>

<h1>7. NavBar</h1>

<NavBar />

</div>

);

}

export default App;

8. Create a Counter component with + and – buttons, and render it inside another component.

import React, { useState } from "react";

function Counter() {

const [count, setCount] = useState(0);

return (

<div>

<h3>Count: {count}</h3>

<button onClick={() => setCount(count + 1)}>+</button>

<button onClick={() => setCount(count - 1)}>-</button>

</div>

);

}

function App() {

return (

<div>

<h1>8. Counter</h1>

<Counter />

</div>

);

}

export default App;

9. Make a Notification component that displays a message and an “X” button to close it.

import React, { useState } from "react";

function Notification({ message }) {

const [visible, setVisible] = useState(true);

if (!visible) return null;

return (

<div style={{ background: "#ffeb3b", padding: "10px", margin: "10px 0" }}>

{message}

<button style={{ marginLeft: "10px" }} onClick={() => setVisible(false)}>

X

</button>

</div>

);

}

function App() {

return (

<div>

<h1>9. Notification</h1>

<Notification message="This is a notification!" />

</div>

);

}

export default App;

10. Build a Post component that contains PostHeader, PostBody, and PostFooter as child

components.

import React from "react";

function PostHeader({ title }) {

return <h2>{title}</h2>;

}

function PostBody({ content }) {

return <p>{content}</p>;

}

function PostFooter({ author }) {

return <small>By {author}</small>;

}

function Post({ title, content, author }) {

return (

<div style={{ border: "1px solid gray", padding: "10px" }}>

<PostHeader title={title} />

<PostBody content={content} />

<PostFooter author={author} />

</div>

);

}

function App() {

return (

<div>

<h1>10. Post with Child Components</h1>

<Post

title="React Components"

content="Components make UI reusable and maintainable."

author="John Doe"

/>

</div>

);

}

export default App;