1)Explain React events

React Events are objects that represent user interactions with the application, such as mouse clicks, form submissions, typing input, etc. React wraps the browser’s native events inside its own SyntheticEvent system to provide consistent behavior across all browsers.

React event handling is very similar to handling events in plain HTML/JavaScript, but uses camelCase for event names and function references instead of strings.

Key Features of React Events

* Based on SyntheticEvent (cross-browser wrapper)
* Use camelCase instead of lowercase
* You pass a function reference, not a string
* Works similarly to DOM events but with better performance and consistency

Common events:

| Category | Event | Description |
| --- | --- | --- |
| Mouse Events | onClick | Triggered when user clicks |
|  | onDoubleClick | Double click |
|  | onMouseEnter | Mouse hovers over element |
| Keyboard Events | onKeyDown | Key is pressed down |
|  | onKeyUp | Key is released |
| Form Events | onChange | Input field changes |
|  | onSubmit | Form is submitted |
|  | onFocus | Input field gets focus |
|  | onBlur | Input field loses focus |

Mouse Event Example: onClick

function ClickButton() {

const handleClick = () => {

alert('Button Clicked!');

};

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

}

2) Explain about event handlers

An event handler is a function that is triggered in response to a user event, such as clicking a button, typing in a textbox, submitting a form, or hovering over an element.

In React, event handlers are used to control what happens in your application when a specific event occurs.

Key Points

* Event handlers are JavaScript functions.
* In React, event names are written in camelCase (onClick, onChange, etc.).
* You pass a function reference as the event handler, not a string.

Syntax

elementName eventName={eventHandlerFunction}

Example:

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

Here, handleClick is the event handler function that executes when the button is clicked.

3)Define Synthetic event

A Synthetic Event is React’s way of handling events like click, submit, or change in a way that works the same in every browser.

Example:

<button onClick={(event) => console.log(event.type)}>

Click Me

</button>

Here, event is a Synthetic Event, and event.type will return "click" regardless of the browser you use.

* To avoid browser compatibility issues
* To improve performance by using React’s event delegation system

4) Identify React event naming convention

React follows a specific naming convention for events that is different from plain HTML.

🔹 1. CamelCase instead of lowercase

* In HTML:

<button onclick="doSomething()">Click</button>

* In React:

<button onClick={doSomething}>Click</button>

onClick, onChange, onSubmit — all follow camelCase in React.

🔹 2. JSX uses functions, not strings

* In HTML:

<button onclick="alert('Hello')">Click</button>

* In React:

<button onClick={() => alert('Hello')}>Click</button>

React uses function references, not strings.