**WEEK 7**

**16.ReactJS-HOL**

**1. Explain React Forms validation**

**React form validation ensures user input meets specified rules before submission. You can:**

* **Use manual validation in event handlers (e.g., check length, email format)**
* **Use libraries like Formik or React Hook Form for advanced validation**
* **Display error messages using conditional rendering**

**2. Identify the differences between React Form and HTML Form**

| **Feature** | **HTML Form** | **React Form** |
| --- | --- | --- |
| **Data handling** | **Browser handles it** | **Controlled by React state** |
| **Validation** | **Uses HTML attributes** | **Uses JavaScript logic** |
| **Submission** | **Reloads page by default** | **Uses onSubmit + preventDefault()** |
| **Input control** | **Uncontrolled** | **Controlled (value from state)** |

**3. Explain about controlled components**

**Controlled components are input elements whose values are tied to React state. Every user input updates the state using onChange.**

**Example:**

**<input type="text" value={name} onChange={e => setName(e.target.value)} />**

**4. Identify various React Form input controls**

**React supports all form input types, including:**

* **Text input (<input type="text" />)**
* **Textarea (<textarea />)**
* **Checkbox (<input type="checkbox" />)**
* **Radio button (<input type="radio" />)**
* **Dropdown (<select><option>...</option></select>)**

**5. Explain how to handle React Forms**

**Handling a form in React involves:**

* **Managing input values using useState**
* **Updating state via onChange**
* **Using a single or multiple handlers to manage data**

**const [name, setName] = useState('');**

**<input value={name} onChange={e => setName(e.target.value)} />**

**6. Explain about submitting forms in React**

**To submit a form:**

* **Use the onSubmit handler in the <form> tag**
* **Prevent the default page reload using e.preventDefault()**
* **Process the state values inside the handler**

**Example:**

**function handleSubmit(e) {**

**e.preventDefault();**

**alert("Form submitted with: " + name);**

**}**