1. What is React?

ReactJS is JavaScript library used for building reusable UI components. Mostly React is used as the V in MVC. React abstracts away the DOM from you, offering a simpler programming model and better performance. React can also render on the server using Node, and it can power native apps using React Native. React implements one-way reactive data flow, which reduces the boilerplate and is easier to reason about than traditional data binding.

1. What are the major features of React?
   1. **JSX** − JSX is JavaScript syntax extension. It isn't necessary to use JSX in React development, but it is recommended.
   2. **Components** − React is all about components. You need to think of everything as a component. This will help you maintain the code when working on larger scale projects.
   3. **Unidirectional data flow and Flux** − React implements one-way data flow which makes it easy to reason about your app. Flux is a pattern that helps keeping your data unidirectional.
   4. **License** − React is licensed under the Facebook Inc. Documentation is licensed under CC BY 4.0.
2. What is JSX?

JSX stands for JavaScript XML.

JSX allows us to write HTML in React.

JSX makes it easier to write and add HTML in React.

1. What is the difference between Element and Component?

React Element - It is a simple object that describes a DOM node and its attributes or properties you can say. It is an immutable description object and you can not apply any methods on it.

Eg -

<button class="blue"></button>

React Component - It is a function or class that accepts an input and returns a React element. It has to keep references to its DOM nodes and to the instances of the child components.

const SignIn = () => (

<div>

<p>Sign In</p>

<button>Continue</button>

<button color='blue'>Cancel</button>

</div>

);

1. How to create components in React?

Class Component:

class App extends React.Component{

render(){

return(

<div>hello</div>

)

}

}

Function Component:

Function App(){

Return <h2>Hi</h2>

}

1. When to use a Class Component over a Function Component?

If you need a state in your component you need to create a class component otherwise you can create a function component.

1. What are Pure Components?

Components can be termed as pure if they return same output for same input values at any point of time.

If state or props references new object, PureComponent will re-render every time.

1. What is state in React?

The state object is where you store property values that belongs to the component.

When the state object changes, the component re-renders.

1. What are props in React?

Props are arguments passed into React components.

Props are passed to components via HTML attributes.

1. What is the difference between state and props?

|  |  |
| --- | --- |
| State | Props |
| Mutable | Immutable |
| State holds information about the components. | Props allow you to pass data from one component to other components as an argument. |
|  |  |
| Stateless components cannot have state | Stateless components can have props |
| States can be used for rendering dynamic changes with the component. | Props are used to communicate between components |