1. **Is JSX Mandatory for React?**

No, we can use React.createElement behind the scenes.

1. **Is ES6 mandatory for React?**

No

1. **How can I write comments in JSX?**

// This is a single-line comment.

/\* This is a multi-line comment. \*/

1. **What is <React.Fragment></React.Fragment> and <></> ?**

JSX can have only 1 parent. So if there are more than 1 tags present we have to wrap to around a <div> but it adds a extra node in the DOM. To avoid it we have a new component called <React.Fragnment> <></> syntax is a shorthand for React.fragment

1. **What is Virtual DOM?**

Virtual DOM is a representation of actual DOM.

*Need of Virtual DOM:* React uses an algorithm called **Reconcilliation**. It is a diff algo which compares the differences between the two trees to determine which part needs to be updated. And when it finds the differences it re-renders only that part not the whole UI.

*Need of keys:* Suppose there were 4 divs before and then we add another div now there are 5 divs. In this case React will render every div again because does not know the order or which div is added so to make it smart we add a key and it must be unique so then it exactly remembers what needs to be updated. If a component has different children then it uniquely identifies them by their tags then no need of keys.

1. **What is React Fiber?**

In React 16 the diff algo got changed. It introduced React Fibre, it is a new reconcillation engine for diff algo.

1. **Can we use index as keys in React?**

We can use index in the array as keys in React. Infact, react uses index as keys if we don’t specify a key at all, *but it is not recommended*. Because if the order of the items may change it will negatively affect the performance of the the app. There might be a possibility that if we modify the incoming data react may render them in unusual order. That’s why we should always use a unique data as a key

*No key << index key (last option) <<<<<<< Unique key (best practise)*

1. **What is props in React? Ways to**

Props stand for properties. Props are arguments passed in React components. They are used to pass data from one component to another (from parent to child) They are useful when we want the flow of data in our app to be dynamic

Ways to write props

function Avatar({ person, size }) {

return (

<img

className="avatar"

src={person.imageId}

alt={person.name}

width={size}

height={size}

/>

);

}

<Avatar

person={{ name: 'Lin Lanying', imageId: '1bX5QH6' }}

size={100}

/>

1. **What is a Config Driven UI ?**

A config driven UI is a user interface that uses a configuration file or data structure to define its layout, styles, and other properties. This allows dynamic and customizable UI’s without hard coding.

For eg. A food ordering website that wants to display it’s offers based on city can use CDUI.