

## Assignment

### ❖ Is JSX mandatory for React?

- No, JSX not mandatory for react because JSX just help to write less code to achieve the same things that react doing.

### ❖ Is ES6 mandatory for React?

- ES6 helps us writing and reading code more standardization, readable and more accessible. We can write code in react without ES6 but then we have to use “create-react-class”

### ❖ How can I write comments in JSX?

- In JSX, we can write comments in the **curly bracket then forward slash and asterisk** like this `{/*this is a comments in JSX*/}`

### ❖ What is `<React.Fragment></React.Fragment>` and `<></>`?

- React.Fragment will allow us to return multiple elements from a react component in their child without adding any extra node in DOM.
- Both `<React.Fragment></React.Fragment>` and `<></>` is same.

### ❖ What is virtual DOM?

- React is using virtual DOM to render the update because it is lightweight to process, faster than normal DOM and many more cool features.
  - So virtual DOM is basically a kind of way to render the DOM, in this process it will create two virtual dom, one is with updated DOM and second is existing DOM after any object is updated it will compare with actual DOM to updated one and after find the update location it will apply to logic to update that part of node only.

### ❖ What is Reconciliation in React?

- The reconciliation process makes react work faster. Reconciliation is the process where React updates the browser DOM.
  - There are two types of process used by Reconciliation in order to makes process faster.
    - Virtual DOM
    - Diffing Algorithm

### ❖ What is React Fiber?

- React fiber is an ongoing reimplementation of React's core algorithm. It is a culmination of over two years research by the team of react.
- The goal of React Fiber is to increase its suitability for areas like animation, layout, and gestures.
- Its headline feature is incremental rendering.
- The ability to split rendering into chunks and spread it out over multiple frames.

### ❖ Why do we need keys in React? When do we need keys in React?

- Key is the unique identifier of a component.
- When we create or use multiple react components inside a component then we need to use a key because it will identify the element or component parents in order to place it or if we need to do some changes in it.

### ❖ Can we use index as keys in React?

- We can use it but not suggested by the react team.

### ❖ What is props in React? Ways to use react.

- Props is used to pass data from one component to other.
- It will be used just like we pass any arguments in a function and receive in function.

### ❖ What is a Config Driven UI?

- Config Driven UI is a type of UI that is being render/designed as per the API payload comes from the backend.