# **Theory**

## 1. Is JSX mandatory for react?

- JSX is not mandatory for react but it makes development faster.
- JSX is not a requirement for using React. Using React without JSX is especially convenient when you don't want to set up compilation in your build environment.

Ref:https://reactjs.org/docs/react-without-jsx.html#:~:text=JSX%20is%20not%20a%20requirement,%2C%20...children)%20.

## 2. Is ES6 mandatory for React?

• No ES6 is not mandatory for react.

Ref:https://reactjs.org/docs/react-without-es6.htmlhttps://medium.com/@rashmishehana\_48965/must-know-es6-features-for-react-97ad57468623

#### 3. {} vs {} in JSX ?

• Both syntax are the same.

#### 4. How can i write comment in JSX?

Using //

#### 5. What is <React.Fragment> </React.Fragment> and <> </>> ?

- React Fragment is a feature in React that allows you to return multiple elements from a React component by allowing you to group a list of children without adding extra nodes to the DOM.
- To return multiple elements from a React component, you'll need to wrap the element in a root element.
- Both syntax are indicating react fragment.

Ref:https://refine.dev/blog/how-react-fragments-is-works/#:~:text=Fragment%20in %20Action-,What%20is%20React%20Fragment%3F,element%20in%20a%20root %20element.

## 6. What is virtual dom and Reconciliation?

- The virtual DOM (VDOM) is a programming concept where an ideal, or "virtual", representation of a UI is kept in memory and synced with the "real" DOM by a library such as ReactDOM. This process is called reconciliation.
- In reconciliation diff algorithm working behind the scene.

#### Ref:https://reactjs.org/docs/faq-internals.htmlhttps://reactjs.org/docs/reconciliation.html

#### 7. What is React Fiber?

- React Fiber is a concept of ReactJS that is used to render a system faster and smoother. React is
  one of the popular JavaScript library used to create a responsive user interface. React makes
  coding simple as compared to other frameworks.
- React Fiber is a completely backward-compatible rewrite of the old reconciler. This new reconciliation algorithm from React is called Fiber Reconciler.

Ref: https://www.velotio.com/engineering-blog/react-fiber-algorithmhttps://github.com/acdlite/react-fiber-architecture

- 8. Why we need keys in React? When do we need keys in React?
- 9. Ref: <a href="https://betterprogramming.pub/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b7447cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b747cefchttps://lo-victoria.com/why-react-keys-matter-an-introduction-136b747cefchttps://lo-victoria.com/why

#### 10.Can we use index as keys in React?

• We don't recommend using indexes for keys if the order of items may change.

Ref:https://reactjs.org/docs/lists-and-keys.html#:~:text=We%20don't%20recommend %20using,an%20index%20as%20a%20key.

- 10.What is props in React ? Ref: <a href="https://reactjs.org/docs/components-and-props.htmlhttps://www.freecodecamp.org/news/how-to-use-props-in-react/">https://www.freecodecamp.org/news/how-to-use-props-in-react/</a>
- 11.What is Config Driven UI? Ref: <a href="https://medium.com/captech-corner/an-intro-to-configuration-driven-development-cdd-48a1c088baa9https://iamrajatsingh1.medium.com/config-driven-ui-c8e93b730993https://techmusings.dev/buildingAConfigDrivenUilnReactPart1">https://iamrajatsingh1.medium.com/config-driven-ui-c8e93b730993https://techmusings.dev/buildingAConfigDrivenUilnReactPart1</a>