**Ask Questions 15m**

**1. What syntax do you use to create a component in React?**

A. a generator

B. a function or a class

C. a service worker

D. a tag

**2. How do you add an id of heading to the following h1 element?**

let dish = <h1>Mac and Cheese</h1>;

A. let dish = <h1 id={heading}>Mac and Cheese</h1>;

B. let dish = <h1 id:"heading">Mac and Cheese</h1>;

C. let dish = <h1 id="heading">Mac and Cheese</h1>;

D. let dish = <h1 class="heading">Mac and Cheese</h1>;

**3. Which tool is not part of Create React App?**

A. React

B. webpack

C. ReactDOM

D. jQuery

**4. React is an open-source project but is maintained by which company?**

A. Twitter

B. Snapchat

C. Facebook

D. AirBnb

**5. The code below is rendering nothing, and there is an error that says "ReactDOM is not defined." How do you fix this issue?**

import React from 'react';

import { render } from 'react-dom';

const element = <h1>Hi</h1>;

ReactDOM.render(element, document.getElementById('root'));

A.render(element, document.getElementById("root"));

B. ReactDOM(element, document.getElementById("root"));

C. renderDOM(element, document.getElementById("root"));

D. DOM(element, document.getElementById("root"));

**6. What is the first file loaded by the browser in a basic React project?**

A. src/App.js

B. src/index.js

C. public/manifest.json

D. public/index.html

**7. What is wrong with this code?**

const MyComponent = ({ names }) => (

<h1>Hello</h1>

<p>Hello again</p>

);

A. React components cannot be defined using functions.

B. React does not allow components to return more than one element.

C. The component needs to use the return keyword.

D. String literals must be surrounded by quotes.

**8. What is setCount**

const [count, setCount] = useState(0);

A. a function to update the state

B. a state object

C. the initial state value

D. a variable

**9. Which class-based lifecycle method would be called at the same time as this effect Hook?**

useEffect(() => {

// do things

}, []);

A. componentWillUnmount

B. componentDidMount

C. render

D. componentDidUpdate

**10. Which class-based component is equivalent to this function component?**

const Greeting ({ name }) > <h1>Hello {name}!</h1>;

1. class Greeting extends React.Component {

constructor() {

return <h1>Hello {this.props.name}!</h1>;

}

}

1. class Greeting extends React.Component {

<h1>Hello {this.props.name}!</h1>;

}

1. class Greeting extends React.Component {

render() {

return <h1>Hello {this.props.name}!</h1>;

}

}

1. class Greeting extends React.Component {

render({ name }) {

return <h1>Hello {name}!</h1>;

}

}

**Interview Questions 15m**

**1. Why do we need keys for React lists?**

React uses the key attribute to associate the rendered element with its place in the rendered list. Basically it's the identifier for the item element in the list element.

For instance, the solution with the index would fail in the case of reordering the list, because the index would stay the same but the real item has changed its place.

Why do I need Keys in React Lists?

https://adhithiravi.medium.com/why-do-i-need-keys-in-react-lists-dbb522188bbb

Why do we need a React List Key:

https://www.robinwieruch.de/react-list-key/

**2. What is a ref? How do you use it?**

Refs provide a way to access DOM nodes or React elements created in the render method.

In the typical React dataflow, props are the only way that parent components interact with their children. To modify a child, you re-render it with new props. However, there are a few cases where you need to imperatively modify a child outside of the typical dataflow. The child to be modified could be an instance of a React component, or it could be a DOM element. For both of these cases, React provides an escape hatch.

When to Use Refs

There are a few good use cases for refs:

Managing focus, text selection, or media playback.

Triggering imperative animations.

Integrating with third-party DOM libraries.

Avoid using refs for anything that can be done declaratively.

For example, instead of exposing open() and close() methods on a Dialog component, pass an isOpen prop to it.

3. **What is the useEffect hook used for?**

https://reactjs.org/docs/hooks-effect.html

Hooks are a new addition in React 16.8. They let you use state and other React features without writing a class.

The Effect Hook lets you perform side effects in function components:

4. **Explain the role of Reducer.**

Reducers specify how the application's state changes in response to actions sent to the store. Reducer is a function that takes current state and action as arguments, returns new state. thus, state remains immutable

5. **How to pass data from Child Component to Parent Component?**

https://www.geeksforgeeks.org/how-to-pass-data-from-child-component-to-its-parent-in-reactjs/

Following are the steps to pass data from child component to parent component:

* In the parent component, create a callback function. This callback function will retrieve the data from the child component.
* Pass the callback function to the child as a props from the parent component.
* The child component calls the parent callback function using props and passes the data to the parent component.