Nimisha Jagtap

Assignment Questions 8

**Q.1** Whats React and its pros and cons?

Ans:-   
React is an open-source JavaScript library for building user interfaces. It is used by many popular websites and applications, including Facebook, Instagram, and Netflix.

some of the pros of using React:

* **Easy to learn and use.**
* **High performance.**
* **Reusable components.**
* **Large community.**

some of the cons of using React:

* **Can be complex**
* **Lack of documentation**
* **JSX.**

**Q.2** What do you understand by Virtual Dom?

Ans:-   
A virtual DOM (VDOM) is a lightweight JavaScript representation of the Document Object Model (DOM). It is used by many modern JavaScript frameworks, such as React, Vue.js, and Elm.

**Q.3** Difference between Virtual Dom vs Real Dom?

Ans:-   
The main difference between the virtual DOM and the real DOM is that the virtual DOM is a lightweight copy of the real DOM, while the real DOM is the actual representation of a web page's structure and content.

**Q.4** Whats component? Types of component?

Ans:-   
A component is a self-contained piece of code that encapsulates its own state and behavior. Components are the building blocks of React applications. They are used to create reusable UI elements, such as buttons, forms, and lists.

* **Functional components:**
* **Class components:**

**Q.5** Difference between class & function based component?

**Ans:** Class components are a more traditional way of writing React components. They are based on ES6 classes and have a render() method that returns the component's UI. Class components also have lifecycle methods that are called at different stages of the component's lifecycle.

Function-based components are a newer way of writing React components. They are pure functions that take props as input and return JSX as output. Function-based components do not have lifecycle methods, but they can use hooks to access the same functionality.

**Q.6** Explain react component life cycle?

**Ans:-** the main lifecycle methods in React:

* constructor(): This method is called when the component is first created. It is a good place to initialize the component's state.
* getDerivedStateFromProps(): This method is called after the component's props have been updated. It is a good place to update the component's state based on the new props.
* render(): This method is called whenever the component needs to be rendered. It is a good place to return the component's UI.
* componentDidMount(): This method is called after the component has been rendered for the first time. It is a good place to perform any actions that need to be done after the component has been rendered.
* componentDidUpdate(): This method is called whenever the component's props or state have been updated. It is a good place to update the component's UI based on the new props or state.
* componentWillUnmount(): This method is called before the component is removed from the DOM. It is a good place to perform any cleanup tasks

**Q.7** Explain Prop Drilling in React & Ways to avoid it?

**Ans:-** Prop drilling is a term used in React to describe the practice of passing data from a parent component to a child component through a long chain of props. This can make the code more difficult to read and maintain, and it can also lead to performance problems.

There are a few ways to avoid prop drilling:

* **Use a context API.**
* **Use a state management library.**
* **Refactor your components.**

Question 7

Ans:- <https://github.com/jagtapnimisha2/flipkart_Question_10>