React

1. What is React?

Sol: React is a frontend and open-source JavaScript library which is useful in devoloping user interfaces specifically for applications with a single page. It is helpful in building complex and reusable user interface (UI) components of mobile and web applications.

2. What are the advantages of using React?

Sol: * <u>Use of Virtual DOM to improve efficiency</u>: React uses virtual DOM to render the view. As the name suggests, virtual DOM is a virtual represe-ntation of the real DOM. Each time the data changes in a react app, a new virtual DOM gets created. Creating a virtual DOM is much faster than rendering the UI inside the browser. Therefore, with the use of virtual DOM, the efficiency of the app improves.

* <u>Gentle learning curve</u>: React has a gentle learning curve when compared to frameworks like Angular. Anyone with little knowledge of javascript can start building web applications using React.

* <u>SEO friendly</u>: React facilitates a developer to develop an engaging user interface that can be easily navigated in various search engines

3. What are the biggest limitations of React?

Sol: * React is just a library. It is not a complete framework.
  * It has a huge library which takes time to understand
  * React uses inline templating and JSX, which may be difficult as a barrier.

4. What is JSX?

Sol: JSX stands for JavaScript XML. It is a React extension which allows writing Java Script code that looks similar to HTML. It makes HTML file easy to understand. The JSX file makes the React application robust and boosts its performance. JSX provides you to write XML-like syntax in the same file where you write JavaScript code, and then preprocessor transform these expression into actual JavaScript code

5. Why we use JSx?

Sol :- Browsers cannot read JSX directly because they can understand Java Script objects and JSX is not a regular Java Script Object. Thus we need to transform the JSXfileinto a Java Script object using transpilers like Babel.

6. Explain the purpose of render () in React

Sol: It is mandatory for each React component to have a render() function. Render function is used to return the HTML which you want to display in a component. If you need to rendered more than one HTML element, you need to grouped together inside single endosing tag such as <div>, <form>, <group>, etc.

7. What is Props?

Sol: Props stand for "Properties" in React. They are read-only inputs to components. Props are an object which store the value of attributes of a tag and work similar to the HTML attributes. Props are imm--utable so we cannot modify the props from inside the component. Inside the components, we can add attributes called props.

8. What is a state in React?

Sol: The state is an updatable structure which holds the data and inform--ation about the component. It may be changed over the lifetime of the component in response to user action or system event. It is the heart of the read component which determines the behavior of the component and how it will render.