1. **What are some advantages of React?**
    a. React helps in building user-interfaces.
        i. These user-interfaces are called web applications
            1. A web application is different from a website in the sense that a web application is highly dynamic in nature with the prime focus being *interacting* with users.
    b. React follows the latest specifications of the ECMAScript which covers JavaScript syntax.
    c. A lot of people use React as the ‘V’ as in the ‘View’ in the ‘Model View Architecture’ (MVC)
        i. This is possible as React doesn’t make any assumptions about the rest of your technology stack.
        ii. This helps you build new features in React without any need for rewriting or shipping code.
    d. DOM Manipulation with React is super fast and easy.
        i. Virtual DOM is something that is not visible to users on UI
        ii. Real DOM is something that is visible to users on UI
        iii. Whenever an element needs to be updated, the Virtual DOMs state is captured and stays in memory. When the update happens, the virtual DOM gets re-rendered.
        iv. This re-rendering of the Virtual DOM is super fast than re-rendering on the Real DOM.
        v. The current state of the Virtual DOM is compared to the previous state. ONLY the elements that have changed their state are found, and such elements are updated on the Real DOM.
        vi. This is when the user gets to see the changes.
        vii. This solves the problem of re-rendering the entire DOM again, and finding the element to change in the large DOM tree.
        viii. React Library itself supports a large number of other open-source libraries.

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2. **What are MPAs?**
    a. A multi-page-application (MPA) consists of several pages with navigation to other pages embedded into it.

3. **What happens when you move from one page to another in an MPA?**
    a. When we move from one page to another, the browser will:
        i. Reload the page completely, and
        ii. Downloads all the resources again even if the components are repeated throughout all the pages.

4. **What are the advantages of SPAs over MPAs?**
    a. Faster loading of the page; no need of downloading resources all over again
    b. Effective caching; easy local data storage
    c. Easy debugging; technologies provide their own debugger tools
    d. Decoupling of front-end and back-end
    e. Simplified mobile development; the same back-end can be used for web applications as well as native mobile applications
    f. Rich in responsiveness; better user experience

5. **What are the advantages of MPAs over SPAs?**
    a. Better Search Engine Optimization (SEO); architecture being native to search engine crawlers; the flexibility to add meta tags to each page
    b. Better in terms of analytics
    c. Unlimited scalability; new features can be added easily
    d. JavaScript not mandatory
    e. Better security; access control at a functional level

6. **What are components?**
    a. Components are independent, and reusable pieces of code.

7. **What are the different types of components?**
    a. Functional Components (Stateless)
    b. Class Components (Stateful)

8. **What are props?**
    a. Props help you to pass values from a parent component to a child component so that they can be accessed within the child component.

9. **What are Events?**
    a. An event is an action to be taken as a result of user interactions. An event handler is a method to be called when an event occurs.

10. **What are the different component lifecycles in React?**
    a. Mounting: Instance of the component being created and inserting into the DOM.
    b. Updating: When components get updated by props or state.
    c. Unmounting: When a component is removed from the DOM.

11. **Give differences between Smart & Dumb Components:**
    a. Dumb Components are called UI Components. They're also called presentational components as they're mainly used to present something.
    b. Smart components can wrap other components and can pass data to them. A smart component can also be called a container component.
    c. Dumb components describe how things look, whereas smart components describe how things work.