Basic React Interview Questions and Answers

1. What is React?

React is a JavaScript library for building user interfaces, maintained by Facebook. It's used to build single-page applications (SPAs) and mobile apps.

2. What are the major features of React?

JSX (JavaScript XML), Virtual DOM, one-way data binding, component-based architecture, declarative programming, and a rich ecosystem for state management (e.g., Redux).

3. What is JSX?

JSX stands for JavaScript XML. It's a syntax extension that allows mixing HTML-like syntax directly within JavaScript code, making the UI structure easier to visualize.

4. What is the Virtual DOM, and how does it work?

The Virtual DOM is a lightweight in-memory representation of the actual DOM. When the state of a React component changes, the Virtual DOM updates the changes in memory and then efficiently updates only the part of the real DOM that has changed.

5. Explain the concept of components in React.

Components are the building blocks of a React application. Each component represents a piece of the UI, and components can be reused across different parts of an application.

6. What is the difference between functional and class components?

Class components: Use ES6 classes, can have state, and lifecycle methods.

Functional components: Simple JavaScript functions that can accept props, and with React hooks, they can also manage state and side effects.

7. What are props in React?

Props (short for properties) are read-only inputs that are passed to components to configure or customize them. They are immutable and allow data to flow from parent to child components.

8. What is state in React?

State is an object that represents parts of the app that can change. Unlike props, state is managed within the component and can be updated via setState in class components or the useState hook in

functional components.

9. What is the difference between state and props?

Props are immutable and passed from parent to child components. State is mutable and local to the component, controlling the component's dynamic behavior.

10. What is a higher-order component (HOC)?

A Higher-Order Component is a function that takes a component and returns a new component, allowing you to reuse logic across multiple components.