

**Q1:-**Tell us the differences between uncontrolled and controlled components.

**Ans:- Uncontrolled components--** Uncontrolled components refer to form elements whose state is managed by the browser. This means that their values are not stored in state, and are instead accessed directly from the DOM when needed. They are useful for simple forms where you don't need to perform any validation or complex operations on the input data.

**Controlled components--** Controlled components, on the other hand, refer to form elements whose state is managed by the application. Their values are stored in state, and are updated via callbacks or event handlers. Controlled components are useful where you need to perform validation or manipulate the input data in some way.

**Q2:-**How to validate React props using PropTypes?

**Ans:-**

- The prop can be of any data type
- The prop should be a Boolean.
- The prop should be a number.
- The prop should be a string
- The prop should be a function.
- The prop should be an array.

**Q3:-**Tell me the difference between nodejs and express js?

**Ans:-Node Js--** Node.js is a JavaScript runtime built on the Chrome V8 JavaScript engine. It allows developers to run JavaScript on the server side, enabling them to build fast and scalable network applications. Node.js provides a powerful set of APIs for handling network requests, and accessing the file system and other resources on the server.

**Express Js--** On the other hand, is a popular web application framework built on top of Node.js. It provides a simple and flexible way to build web applications with Node.js. Express.js provides features such as routing, handling requests and responses, handling middleware, and more.

**Q4:-**What is a custom hook, and why will I create a custom hook?

**Ans:-**Custom hooks are useful for abstracting away stateful logic that would otherwise be duplicated across components. For example, if you have two components that need to fetch data from an API, you could create a custom hook that encapsulates the fetch logic and returns the data to the components. This way, you can reuse the fetch logic across multiple components without having to repeat the same code.