what is indexroute, If you want a child route to be used as the default when no other child matches, you use a special route called <IndexRoute>, what are links, The primary way to allow users to navigate around your application. <Link> will render a fully accessible anchor tag with the proper href.

A <Link> can know when the route it links to is active and automatically apply an activeClassName and/or activeStyle when given either prop. The <Link> will be active if the current route is either the linked route or any descendant of the linked route. To have the link be active only on the exact linked route, use <IndexLink> instead or set the onlyActiveOnIndex prop.,why use link,link is used for routing,what is router in react,Step 1 - Install React Router

Step 2 - Create Components

Step 3 - Add Router, what is router in react, Each route will be identified in a <Route> component. The <Route> component will take two properties: path and component. When a path matches the path given to the <Route> component, it will return the component specified.

routing is different from what you might have seen in other UI frameworks and it is known as component routing. It is very easy to reason about because routes are also treated the same way components are treated. Routes are first class components., what is component, Components let you split the UI into independent, reusable pieces, and think about each piece in isolation. Conceptually, components are like JavaScript functions. They accept arbitrary inputs (called "props") and return React elements describing what should appear on the screen., what is dom, The DOM is not a programming language, but without it, the JavaScript language wouldn't have any model or notion of the web pages, XML pages and elements with which it is usually concerned (EG: Node.js). Every element in a document—the document as a whole, the head, tables within the document, table headers, text within the table cells—is part of the document object model for that document, so they can all be accessed and manipulated using the DOM and a scripting language like JavaScript., what is dom, The Document Object Model (DOM) is a programming interface for HTML and XML documents. It provides a structured representation of the document and it defines a way that the structure can be accessed from programs so that they can change the document structure, style and content. The DOM provides a representation of the document as a structured group of nodes and objects that have properties and methods. Essentially, it connects web pages to scripts or programming languages., what are props, The main difference between state and props is that props are immutable. This is why container component should define state that can be updated and changed, while the child components should only pass data from the state using props., difference between state and prop, For parent-child communication, simply pass props. Use state to store the data your current page needs in your controller-view. Use props to pass data & event handlers down to your child components.

These lists should help guide you when working with data in your components.

Props

immutable (let's react do fast reference checks) used to pass data down from your view-controller(your top level component) better performance, use this to pass data to child components State

Should be managed in your view-controller(your top level component) mutable worse performance don't access this to from child components, pass it down with props instead, difference between state and prop, props

Props (short for properties) are a Component's configuration. They are received from above and immutable as far as the Component receiving them is concerned. A Component cannot change its props, but it is responsible for putting together the props of its child Components. Props do not have to just be data -- callback functions may be passed in as props.

state

The state is a data structure that starts with a default value when a Component mounts. It may be mutated across time, mostly as a result of user events.

A Component manages its own state internally. Besides setting an initial state, it has no business fiddling with the state of its children. You might conceptualize state as private to that component., What is stateless function, React v0.14.0 introduces "stateless" components, which takes a more functional approach to creating chunks of JSX and templates. In my previous article on creating a tab component I created the components using the traditional way, using React.createClass() or ES6 Classes that extend React.Component., What is stateless function, stateless components that are pure functions to their props, state must be managed elsewhere. In other words state must be managed externally and passed down to the components as props., what are lifecycle method, React enables to create components by invoking the React.createClass() method which expects a render method and triggers a lifecycle that can be hooked into via a number of so called lifecycle methods. This short article should shed light into all the applicable functions.

Understanding the component lifecycle will enable you to perform certain actions when a component is created or destroyed. Further more it gives you the opportunity to decide if a component should be updated in the first place and to react to props or state changes accordingly, what is state?, State is the place where the data comes from. You should always try to make your state as simple as possible and minimize number of stateful components. If you have, for example, ten components that need data from the state, you should create one container component that will keep the state for all of them., what is jsx, JSX is an XML/HTML-like syntax used by React that extends ECMAScript so that XML/HTML-like text can co-exist with JavaScript/React code. The syntax is intended to be used by preprocessors (i.e., transpilers like Babel) to transform HTML-like text found in JavaScript files into standard JavaScript objects that a

JavaScript engine will parse., what is jsx, JSX is a preprocessor step that adds XML syntax to JavaScript. You can definitely use React without JSX but JSX makes React a lot more elegant. Just like XML, JSX tags have a tag name, attributes, and children. If an attribute value is enclosed in quotes, the value is a string., what are synthetic event in react, Your event handlers will be passed instances of Synthetic Event, a crossbrowser wrapper around the browser's native event. It has the same interface as the browser's native event, including stopPropagation() and preventDefault(), except the events work identically across all browsers., what is reactDOM, The react-dom package provides DOM-specific methods that can be used at the top level of your app and as an escape hatch to get outside of the React model if you need to. Most of your components should not need to use this module..what is virtual dom. Virtual DOM is a node tree that lists elements and their attributes and content as objects and properties. React's render() method creates a node tree from React components and updates this tree in response to mutations in the data model, caused by actions., what is virtual dom, React JS — is a JavaScript library for building user interfaces developed by Facebook. It actually populated the virtual DOM idea. React library creates a lightweight tree from JavaScript objects that mimic a DOM tree. Then creates HTML from it and append / insert it to some HTML element., difference between virtual dom and dom. Since the DOM itself was already an abstraction, the virtual DOM is, in fact, an abstraction of an abstraction. ... It allows React to do its computations within this abstract world and skip the "real" DOM operations, often slow and browser-specific. There's no big difference between the "regular" DOM and the virtual DOM.