1. Explain what the simple List component does.
2. In React, Lists can be created in a similar way as we create lists in JavaScript. The List component allows us to display a list of pages or links.
3. What problems / warnings are there with code?
4. In this piece of code, I added an arrow function to Onclickhandler and changed the syntax from SetSelectedIndex, SelectedIndex to SelectedIndex, SetSelectedIndex and added a? Marks in the items list to check and added a key function and then === operator to check the items removed the Of function for array and added the Of function to the shape.
5. Please fix, optimize, and/or modify the component as much as you think is necessary.

import React, { useState, useEffect, memo } from "react";

import PropTypes from "prop-types";

// Single List Item

const WrappedSingleListItem = ({ index, isSelected, onClickHandler, text }) => {

return (

<li

style={{ backgroundColor: isSelected ? "green" : "red" }}

onClick={() => onClickHandler(index)}

>

{text}

</li>

);

};

WrappedSingleListItem.propTypes = {

index: PropTypes.number,

isSelected: PropTypes.bool,

onClickHandler: PropTypes.func.isRequired,

text: PropTypes.string.isRequired,

};

const SingleListItem = memo(WrappedSingleListItem);

// List Component

const WrappedListComponent = ({ items }) => {

const [SelectedIndex, setSelectedIndex] = useState();

useEffect(() => {

setSelectedIndex(null);

}, [items]);

const handleClick = (index) => {

setSelectedIndex(index);

};

return (

<ul style={{ textAlign: "left" }}>

{items?.map((item, index) => (

<SingleListItem

key={item.id}

onClickHandler={() => handleClick(index)}

text={item.text}

index={index}

isSelected={selectedIndex === index}

/>

))}

</ul>

);

};

WrappedListComponent.propTypes = {

items: PropTypes.arrayOf(

PropTypes.shape({

text: PropTypes.string.isRequired,

})

),

};

WrappedListComponent.defaultProps = {

items: null,

};

const List = memo(WrappedListComponent);

export default List;

Root file:

import { appendFile } from "fs";

import React from "react";

import List from "./";

const App = () => {

const items = [

{ id: 1, text: "one" },

{ id: 2, text: "two" },

{ id: 3, text: "three" },

{ id: 4, text: "four" },

{ id: 5, text: "five" },

];

return (

<div className="App">

<List items={items}/>

</div>

);

};

export default App;