1.Explain what the simple List component does.

* List component in the code is used to display the list of items stored in an array in an unordered list. When you click on the index of text of the items colour changes to red i.e. handleClick() function is implemented.

2. What problems / warnings are there with code?

* Syntax Error in useState() : const [setSelectedIndex, selectedIndex] = useState(); setSelectedIndex should be 2nd params because value store in setSelected will update our state. const[selectedIndex,setSelectedIndex]=useState(); this is the correct syntax.
* Type Error in shape() function shapeOf () is not any function

WrappedListComponent.propTypes = {

items: PropTypes.arrayOf(

PropTypes.shape({

text: PropTypes.string.isRequired,

})

),

};

### 3.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 ? "red" : "green" }}

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

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

text={item.text}

index={index}

key={index}

isSelected={selectedIndex === index}

/>

))}

</ul>

);

};

WrappedListComponent.propTypes = {

items: PropTypes.arrayOf(

PropTypes.shape({

text: PropTypes.string.isRequired

})

)

};

WrappedListComponent.defaultProps = {

items: [

{ text: "Neha", index: 1 },

{ text: "Bange", index: 2 },

{ text: "code", index: 3 },

{ text: "hello", index: 4 }

]

};

const List = memo(WrappedListComponent);

export default List;