

SteelEye Assessment

FontEnd

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Q1: Explain what the simple List component does.

- The ``List`` component is a simple React component that displays a list of items. It takes an ``items`` prop, which is an array of objects with a ``text`` property. The component maps over the ``items`` array and renders a ``SingleListItem`` component for each item.
- The ``SingleListItem`` component displays the ``text`` property of the item and has a click handler that calls the ``handleClick`` function in the ``List`` component with the index of the clicked item. The ``handleClick`` function updates the ``selectedIndex`` state value to the index of the clicked item.
- The ``List`` component also has a ``use Effect`` hook that resets the ``selectedIndex`` state value to ``null`` whenever the ``items`` prop changes.

Q2: What problems / warnings are there with code?

- `propTypes.default.shapeOf` is not a correct syntax.
- `setSelectedIndex` is not a function, It's a state setter.
- Wrong dependency in `useEffect` hook.
- Items set to null (which results, that doesn't show anything on to the screen).
- Automatically invokes the `onClickHandler` function without clicking on it.
- Each child in a list should have a unique "key" prop.
- The memo hook is used for both components, which was not necessary for `WrappedSingleList` Item.

Q3: Please fix, optimize, and/or modify the component as much as you think is necessary.

- Changing `propTypes.default.shapeOf` to `propTypes.default.shape`
- Inside `useState` hook setting the function i.e., `setSelectedIndex` correctly (rectifying syntax error).
- removing dependency `"items"` from `useEffect` hook, so that we can avoid calling `useEffect` hook whenever the state changes.
- Adding items i.e., `"item1"`, `"item2"` and so on that are passed further as props into the list component.
- putting `"onClickHandler"` function inside arrow function which invokes this function only by clicking on the items.
- Adding unique key prop to `singleListItem` component.
- Deleting the unnecessary memo.