

- Explain what the simple List component does.

Solution: Lists are utilized in Data (Api or predefined data) is displayed in an organized format and is primarily used to websites that present data in a tabular or listed format. In React, Lists can be created similar to how lists are created in JavaScript. Lists are continuous, vertical indexes of text or images.

```
import React from 'react'

export default function Basiclist() {
  const myList = ['Peter', 'Sachin', 'Kevin', 'Dhoni', 'Alisa'];
  const listItems = myList.map((myList)=>{
    return <li>{myList}</li>;
  });
  return (
    <ul>{listItems} </ul>
  )
}
```

List components are used to create, read, update, and delete list items from lists.

we use the map() function to take an array of numbers and double their values. We assign the new array returned by map() to the variable.

We usually give unique key for each list for its identification. Keys allow React to keep track of elements. This way, if an item is updated or removed, only that item will be re-rendered instead of the entire list.

Lists are important features of an app. A list of tasks like a calendar app, a list of pictures like Instagram, a list of items to shop for in a shopping cart, etc., There are many situations where lists can be used to enhance performance. Think of an application with a long list of videos or images that play as you scroll. This could hinder the app's performance. Performance being a key factor, using lists would guarantee that they are made for the best performance.

- What problems / warnings are there with code?

Solution:

1. `const [selectedIndex, setSelectedIndex] = useState();` , order was reverse `setSelected` is function it should be in second place in bracket.
2. In `onClick` in `WrappedSingleListItem` `onClickHandler` was wrongly assign.
3. Passing of `handleclick` from `WrappedListComponent` to `SingleListItem` was not in `bool` type. As it is clearly mentioned in `wrappedSingleListItem.propTypes` is that `isSelected` `propTypes` is `bool`.
4. Key was missing for each `li` of the `List` and we know key play important role in rendering each or whole components.
5. `Const items` were empty or null as `item.text` was not present in it.
6. In `WrappedListComponent.propTypes` the `items` `PropTypes.Shapeof` is not present in `PropTypes` therefore instead of `array` we had use `arrayOf` and instead of `shapeof` we had use `shape` `propTypes`. can use `PropTypes.shape()` as an argument to `PropTypes.arrayOf()`.
7. `useEffect` syntax was wrong `setSelectedIndex(items)`.