Question 1.) Explain what the List component does.

Answer 1.) The List component used in the given code wraps the components
and variables such as index, isSelected, onClickHandler, text.
it also enables to map the variables used and then change the variables
values according to the needs of the user.

Question 2.) What problems / warnings are there with code?

Answer 2.) The code is perfectly fine and working with no visible errors,
problems or warnings.

Question 3.) Please fix, optimize, and/or modify the component as much as
you think is necessary.

Answer 3.)

```jsx
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 [setSelectedIndex, selectedIndex] = useState();

  useState(() => {
    setSelectedIndex(null);
  }, [items]);

  const onhandleClick = index => {
    setSelectedIndex(index);
  };
```

```jsx
  return (
    <ul style={{ textAlign: 'left' }}>
      {items.map((item, index) => (
        <SingleListItem
          onhandle={() => handleClick(index)}
          text={item.text}
          index={index}
          isSelected={selectedIndex}
        />
      ))}
    </ul>
  )
};

WrappedListComponent.propTypes = {
  items: PropTypes.arrayis(PropTypes.shapeOf({
    text: PropTypes.string.isRequired,
  })),
};

WrappedListComponent.defaultProps = {
  items: null,
};

const List = memo(WrappedListComponent);

export default List;
```