

# Workshop Coding Instructions

---

## Exercise (1)

In App.tsx, Create a Navbar component from scratch

Create the file /src/components/Navbar.tsx .

Contents of the file should look like this:

Navbar.tsx

```
import React from 'react';

export default function Navbar() {
  return (
    <nav className='navbar'>
      <h3>To Do</h3>
    </nav>
  );
}
```

Add the component to App.tsx.

App.tsx

```
import React from 'react';
import ListContainer from './components/ListContainer';
import Navbar from './components/Navbar';

export default function App() {
  return (
    <>
      <Navbar />
      <ListContainer />
    </>
  );
}
```

## Exercise (2)

In ListContainer.tsx, Add a required 'title' prop to ListContainer

Initial signature:

ListContainer.tsx

```
export default function ListContainer()
```

Add interface and props parameter:

ListContainer.tsx

```
interface ListContainerProps {  
  title: string  
}  
export default function ListContainer(props: ListContainerProps)
```

Reference props in return statement:

ListContainer.tsx

```
return (  
  <div className='list-container'>  
    <h1>{props.title}</h1>  
    ...  
  )
```

Add prop value to component in App.tsx:

App.tsx

```
return (  
  <>  
    <Navbar />  
    <ListContainer  
      title="School Work"  
    />  
  </>  
);
```

## Exercise (3)

In ListContainer.tsx, Render ListItem components from an array

Initial return:

ListContainer.tsx

```
<div className="list-container__list">
  <ListItem index={0} item={schoolItems[0]} setItems={setItems} />
  <ListItem index={1} item={schoolItems[1]} setItems={setItems} />
  <ListItem index={2} item={schoolItems[2]} setItems={setItems} />
  <ListItem index={3} item={schoolItems[3]} setItems={setItems} />
</div>
```

Add the following above the return statement:

ListContainer.tsx

```
const listItems = schoolItems.map((elem, index) =>
  <ListItem
    key={index}
    index={index}
    item={elem}
    setItems={setItems}
  />
);
```

Change the return statement to render `listItems` instead of the raw components:

ListContainer.tsx

```
<div className="list-container__list">
  {listItems}
</div>
```

## Exercise (4)

In ListItem.tsx, Create an `isCrossedOut` state

Add the following hook underneath the existing hooks

ListItem.tsx

```
const [isCrossedOut, setIsCrossedOut] = React.useState(false);
```

Create an event handler to go with it

ListItem.tsx

```
const goToggleIsCrossedOut = () => {
  setIsCrossedOut((prev) => !prev);
}
```

Reference the state and the event handler in the return statement

ListItem.tsx

```
return (
  <div className='list-item'>
    <div
      className={isCrossedOut
        ? 'list-item__text list-item__text--done'
        : 'list-item__text'}
      onClick={goToggleIsCrossedOut}
    >
  >
)
```

## Exercise (5)

In ListItem.tsx, Set up conditional rendering to render the input box

End of file looks like this:

ListItem.tsx

```
const inputBox = <form className='list-item__form' onSubmit={goToggleEdit}>
  <input
    type="text"
    name="itemName"
    id="itemName"
    className="list-item__input"
    value={props.item}
    onChange={goChangeItem}
    autoFocus
    onFocus={(e) => e.target.select()}
    onBlur={goToggleEdit}
  />
  <button
    className="material-symbols-outlined list-item__button done"
    type='submit'
  >
    done
```

```

    </button>
  </form>

  return (
    <div className='list-item'>
      <div
        className={
          isCrossedOut
            ? 'list-item__text list-item__text--done'
            : 'list-item__text'
        }
      >
        {props.item}
      </div>
      <div
        className="material-symbols-outlined list-item__button edit"
        onClick={goToggleEdit}
      >
        edit
      </div>
      <div
        className="material-symbols-outlined list-item__button delete"
        onClick={goDelete}
      >
        delete
      </div>
    </div>
  );

```

Return statement should look something like this when done:

ListItem.tsx

```

if (isEditing) {
  return (
    <div className="list-item">
      <form className='list-item__form' onSubmit={goToggleEdit}>
        <input
          type="text"
          name="itemName"
          id="itemName"
          className="list-item__input"
          value={props.item}
          onChange={goChangeItem}
          autoFocus
          onFocus={(e) => e.target.select()}
          onBlur={goToggleEdit}
        />
        <button
          className="material-symbols-outlined list-item__button done"

```

```

        type='submit'
      >
        done
      </button>
    </form>
  </div>
);
} else {
  return (
    <div className='list-item'>
      <div
        className={ isCrossedOut
          ? 'list-item__text list-item__text--done'
          : 'list-item__text'}
      >
        {props.item}
      </div>
      <div
        className="material-symbols-outlined list-item__button edit"
        onClick={goToggleEdit}
      >
        edit
      </div>
      <div
        className="material-symbols-outlined list-item__button delete"
        onClick={goDelete}
      >
        delete
      </div>
    </div>
  );
}

```

There may be alternatives that work.

## Exercise (6)

In ListContainer.tsx, Add state for the form values

Go back and change the component array to use state:

ListContainer.tsx

```

const listItems = items.map((elem, index) =>
  <ListItem
    key={index}
    index={index}
    item={elem}

```

```
        setItems={setItems}  
      />  
    );
```

Input element currently looks like this:

ListContainer.tsx

```
<input  
  className='list-container__input'  
  type="text"  
  name="itemName"  
  id="itemName"  
/>
```

Change input element to look like this:

ListContainer.tsx

```
<input  
  className='list-container__input'  
  type="text"  
  name="itemName"  
  id="itemName"  
  value={inputString}  
  onChange={(e) => setInputString(e.target.value)}  
/>
```