

Lists and Keys Lab (CodeGrade)

 (<https://github.com/learn-co-curriculum/react-hooks-lists-and-keys-lab>)  (<https://github.com/learn-co-curriculum/react-hooks-lists-and-keys-lab/issues/new>)

Learning Goals

- Transform a list of values into a list of components
- Use the `key` prop correctly with the list of components

Introduction

We'll keep building our portfolio site and add the ability to display a list of projects based on an array of project data.

Here is an image of what we want once we are finished:

...and here is a tree view of our component parent-child structure:

```
└── App
    ├── NavBar
    ├── Home
    ├── About
    |   └── Links
    └── ProjectList
        ├── ProjectItem
        ├── ProjectItem
        └── ProjectItem
```

Deliverables

It's recommended that you run `npm start` and work on this in the browser **before** running tests — try to get your app to match the demo! Once you've built out the components below, run `npm test` to see if your code passes the tests.

NavBar

In the `NavBar` component, there is an array with three strings representing each link on the page. For each of those strings, create an `<a>` tag that looks like this:

```
<a href="#home">home</a>
```

Make sure each `<a>` element also gets a unique `key` prop.

ProjectList

In the `ProjectList` component, a prop of `projects` is being passed down from the `App` component with an array of objects. For each object in the array, render one `ProjectItem` component with the correct props. Use the `id` of the project for the `key` prop.

ProjectItem

The `ProjectItem` component should get a prop of `technologies` passed down from `ProjectList`. For each element in this array of technologies, create a `` tag that displays the name of the technology.

Resources

- [Lists and Keys ↗\(https://reactjs.org/docs/lists-and-keys.html\)](https://reactjs.org/docs/lists-and-keys.html)

This tool needs to be loaded in a new browser window

Load Lists and Keys Lab (CodeGrade) in a new window

