



Google Developer Student Clubs

# JavaScript #4

Follow Up & React JS



JINJAE KIM  
[Jinjae.dev@gmail.com](mailto:Jinjae.dev@gmail.com)

```
const filterByOrg = study => study.lead_organization === filterByOrg;
const filterStatus = filterByStatus ? study.status === filterByStatus : true;
const filterMatchStatus = matchStatus ? study.status === matchStatus : true;

function filterStudies({ studies, filterByOrg, filterByStatus, matchStatus }) {
  return studies.filter(study => filterByOrg(study) & filterStatus & filterMatchStatus);
}
```



# Follow Up

```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category.id === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization.id === filterByOrg);
    }
    return true;
  });
}
```

# What Have We Done?

## Review

- HTML / CSS
- JavaScript
- React JS Introduction



# React JS

```
function filterStudies({ studies, filterByOrg = false, filterByTitle = false }) {  
  return studies.filter(study => {  
    if (filterByOrg) {  
      return study.org === 'React.js Foundation'  
    }  
    if (filterByTitle) {  
      return study.title === 'React.js Foundation'  
    }  
    return true  
  })  
}
```

# Start

## Install node.js

- <https://nodejs.org/>
- <https://learn.microsoft.com/ko-kr/windows/dev-environment/javascript/nodejs-on-windows>



# Start a Small Project

npx create-react-app \${project\_name}

```
2023-02-Frontend-Session --zsh --84x37
[jinjiae@eajBook-Pro 2023-02-Frontend-Session % which npx
/opt/homebrew/bin/npx
[jinjiae@eajBook-Pro 2023-02-Frontend-Session % npx create-react-app live-activity-05
Creating a new React app in /Users/jinjiae/Documents/Code/2023-02-Frontend-Session/live-activity-05.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

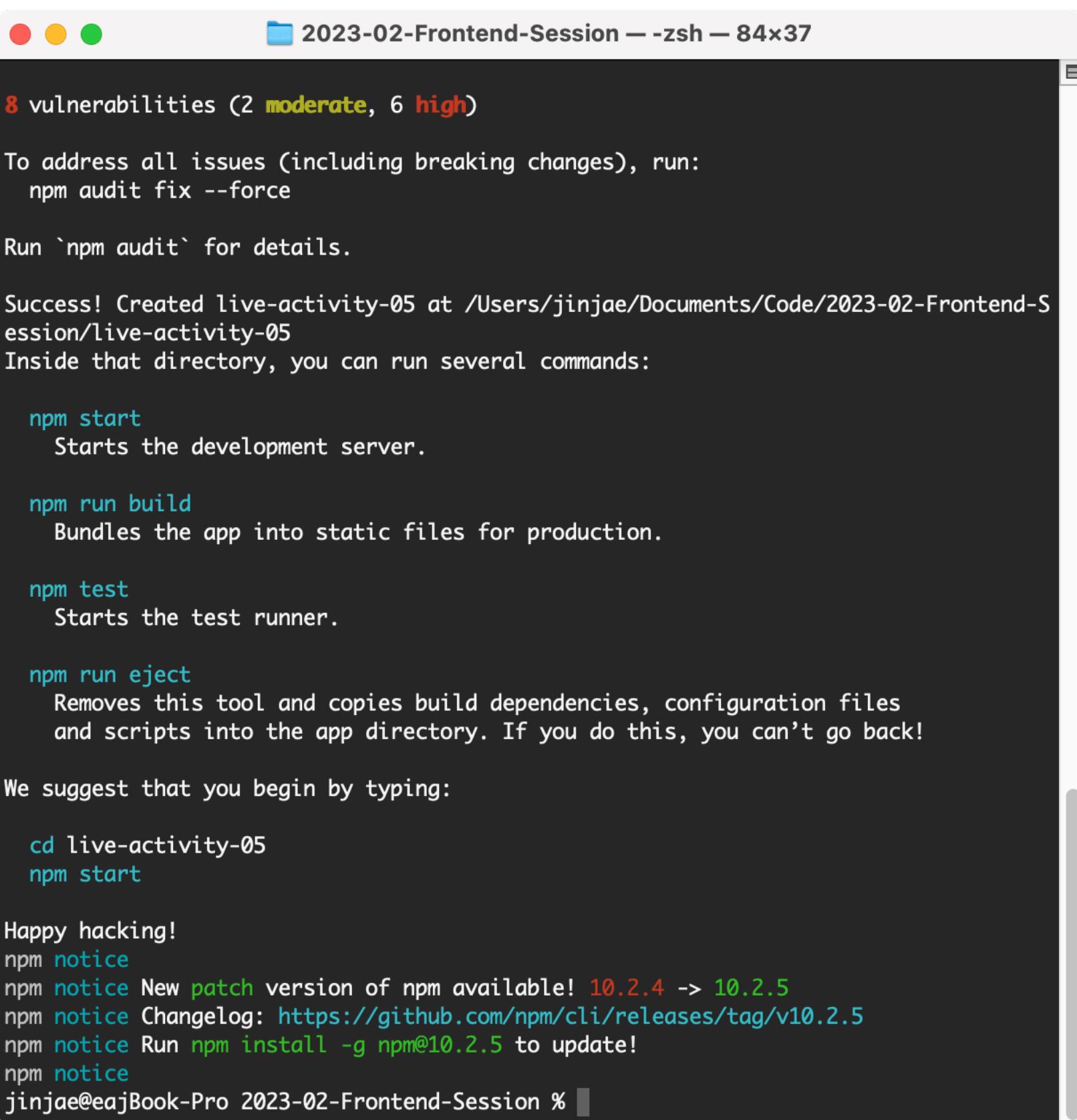
added 1486 packages in 42s
250 packages are looking for funding
  run `npm fund` for details
Installing template dependencies using npm...
added 61 packages in 2s
254 packages are looking for funding
  run `npm fund` for details
Removing template package using npm...

removed 1 package, and audited 1547 packages in 1s
254 packages are looking for funding
  run `npm fund` for details
8 vulnerabilities (2 moderate, 6 high)
To address all issues (including breaking changes), run:
  npm audit fix --force
Run `npm audit` for details.
```



# Start a Small Project

npx create-react-app \${project\_name}



2023-02-Frontend-Session --zsh -- 84x37

```
8 vulnerabilities (2 moderate, 6 high)
To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.

Success! Created live-activity-05 at /Users/jinjiae/Documents/Code/2023-02-Frontend-Session/live-activity-05
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd live-activity-05
  npm start

Happy hacking!
npm notice
npm notice New patch version of npm available! 10.2.4 -> 10.2.5
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.2.5
npm notice Run npm install -g npm@10.2.5 to update!
npm notice
jinjiae@ejBook-Pro 2023-02-Frontend-Session %
```



# Start a Small Project

```
npx create-react-app ${project_name}
```

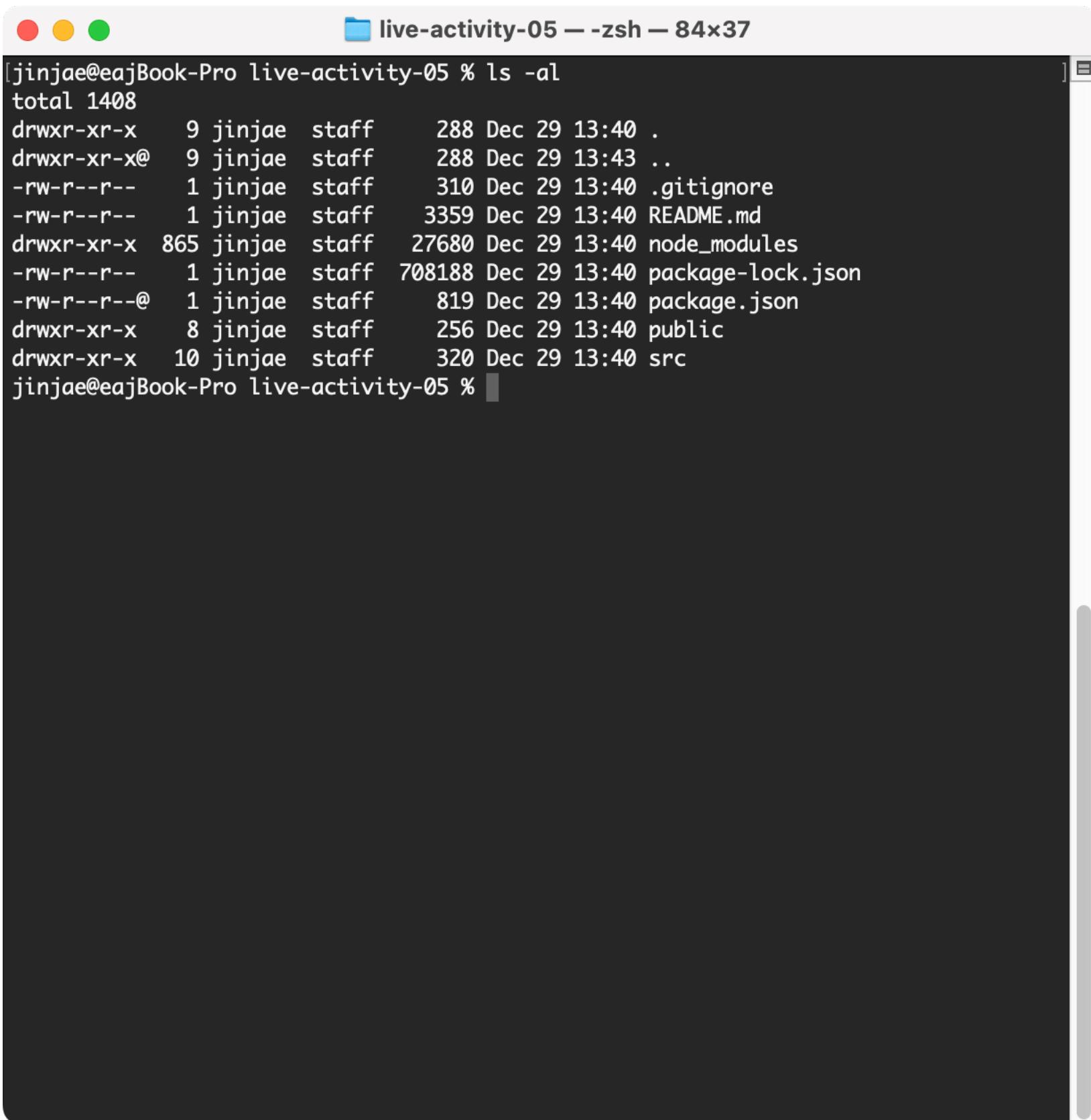
npx: Install library helper

create-react-app: React boilerplate code generator library



# Start a Small Project

```
npx create-react-app ${project_name}
```



```
[jinjae@eajBook-Pro live-activity-05 % ls -al
total 1408
drwxr-xr-x  9 jinjaae  staff   288 Dec 29 13:40 .
drwxr-xr-x@  9 jinjaae  staff   288 Dec 29 13:43 ..
-rw-r--r--  1 jinjaae  staff   310 Dec 29 13:40 .gitignore
-rw-r--r--  1 jinjaae  staff  3359 Dec 29 13:40 README.md
drwxr-xr-x  865 jinjaae  staff 27680 Dec 29 13:40 node_modules
-rw-r--r--  1 jinjaae  staff 708188 Dec 29 13:40 package-lock.json
-rw-r--r--@  1 jinjaae  staff   819 Dec 29 13:40 package.json
drwxr-xr-x   8 jinjaae  staff   256 Dec 29 13:40 public
drwxr-xr-x  10 jinjaae  staff   320 Dec 29 13:40 src
jinjaae@eajBook-Pro live-activity-05 %
```



# Project Structure

## node\_modules

Stores modules

default: gitignore

```
node_modules
> .bin
> @aashutoshrathi
> @adobe
> @alloc
> @ampproject
> @apideck
> @babel
> @bcoe
> @csstools
> @eslint
> @eslint-community
> @humanwhocodes
> @isaacs
> @istanbuljs
> @jest
> @jridgewell
> @leichtgewicht
> @nicolo-ribaudo
> @nodelib
> @pkgjs
> @pmmmwh
> @rollup
> @rushstack
> @sinclair
> @sinonjs
> @surma
```



# Project Structure

public

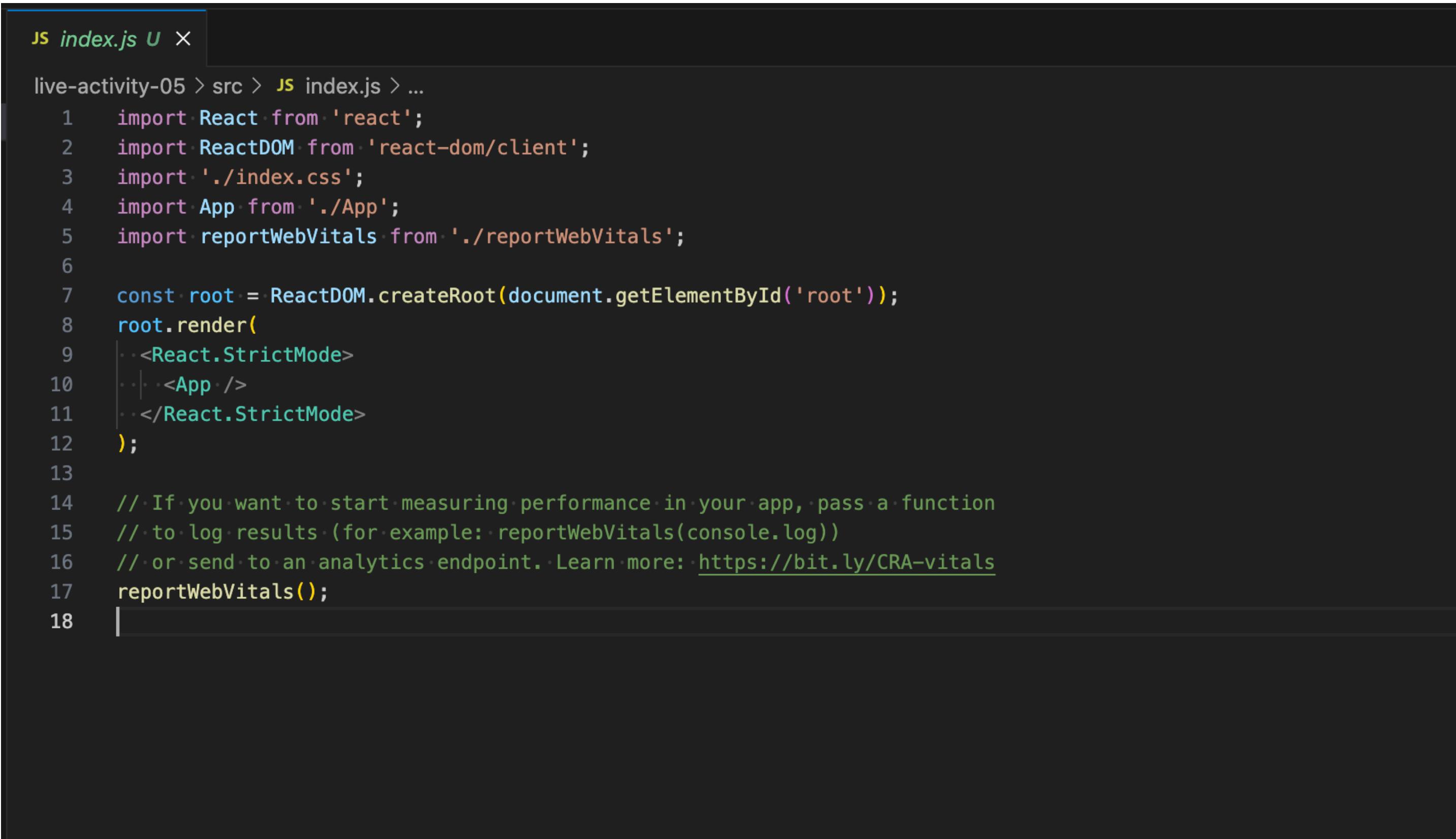
Stores image (public data)



# Project Structure

src

Source code



The image shows a screenshot of a code editor with a dark theme. The title bar says "js index.js U X". The code editor displays the following content:

```
live-activity-05 > src > js index.js > ...
1 import React from 'react';
2 import ReactDOM from 'react-dom/client';
3 import './index.css';
4 import App from './App';
5 import reportWebVitals from './reportWebVitals';
6
7 const root = ReactDOM.createRoot(document.getElementById('root'));
8 root.render(
9   <React.StrictMode>
10   <App/>
11 </React.StrictMode>
12 );
13
14 // If you want to start measuring performance in your app, pass a function
15 // to log results (for example: reportWebVitals(console.log))
16 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
17 reportWebVitals();
18 |
```



# Live Activity

