

[2주차] 리액트 프로젝트 구성하기

CRA 로 프로젝트 구성하기

Prettier + ESLint 사용하기

리액트 컴포넌트 디버깅

React 의 라우팅 이해하기 (*react-router*)

[과제] 리액트 라우터 복습



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Microsoft MVP

TypeScript Korea User Group Organizer

Marktube (Youtube)

CRA

<https://facebook.github.io/create-react-app/>

Create React App

Set up a modern web app by running one command.

[GET STARTED](#)



```
→ npx create-react-app tic-tac-toe
```

```
-/fastcampus
```

```
└─$ npx create-react-app tic-tac-toe
```



npx

npm 5.2.0 이상부터 함께 설치된 커맨드라인 명령어

Finder 창에서 .nvm 폴더를 열었을 때의 내용입니다.

이미지에는 **npx** 파일이 선택되어 있고, 그 주변에 한글 설명이 포함되어 있습니다.

이런 곳에 있습니다.

이름	수정일	크기	종류
▶ alias	2018년 10월 18일 오후 4:43	--	폴더
bash_completion	2019년 7월 3일 오전 1:25	2KB	텍스트 편집기
CONTRIBUTING.md	2019년 7월 3일 오전 1:25	1KB	Markdo...ument
Dockerfile	2019년 7월 3일 오전 1:25	4KB	텍스트 편집기
install.sh	2019년 7월 3일 오전 1:25	13KB	Shell Script
LICENSE.md	2018년 10월 18일 오후 4:42	1KB	Markdo...ument
Makefile	2018년 10월 18일 오후 4:42	5KB	텍스트 편집기
■ nvm-exec	2018년 10월 18일 오후 4:42	344바이트	Unix 실행 파일
nvm.sh	2019년 7월 3일 오전 1:25	110KB	Shell Script
package.json	2019년 7월 3일 오전 1:25	2KB	JSON Document
README.md	2019년 7월 3일 오전 1:25	29KB	Markdo...ument
ROADMAP.md	2018년 10월 18일 오후 4:42	910바이트	Markdo...ument
▶ test	2018년 10월 18일 오후 4:42	--	폴더
update_testMocks.sh	2019년 7월 3일 오전 1:25	2KB	Shell Script
▼ versions	오늘 오후 9:52	--	폴더
▼ node	오늘 오후 9:52	--	폴더
▶ v6.10.3	2019년 1월 22일 오후 5:38	--	폴더
▶ v6.11.5	2019년 1월 8일 오전 4:21	--	폴더
▶ v8.12.0	2018년 10월 18일 오후 4:43	--	폴더
▶ v10.2.0	2019년 1월 16일 오후 5:43	--	폴더
▶ v10.13.0	2018년 11월 26일 오전 1:54	--	폴더
▶ v10.14.1	2018년 12월 1일 오후 6:55	--	폴더
▶ v10.14.2	2018년 12월 15일 오후 6:24	--	폴더
▶ v10.15.0	2019년 1월 1일 오후 11:59	--	폴더
▶ v10.15.3	2019년 3월 17일 오후 4:44	--	폴더
▼ v10.16.0	오늘 오후 9:53	--	폴더
▼ bin	2019년 5월 29일 오전 6:25	--	폴더
■ node	2019년 5월 29일 오전 6:25	41.8MB	Unix 실행 파일
npm	2019년 5월 29일 오전 6:25	38바이트	가상본
■ npx	2019년 5월 29일 오전 6:25	38바이트	가상본
CHANGELOG.md	2019년 5월 29일 오전 6:25	52KB	Markdo...ument
▶ include	2019년 5월 29일 오전 6:25	--	폴더
▶ lib	2019년 5월 29일 오전 6:25	--	폴더
LICENSE	2019년 5월 29일 오전 6:25	69KB	텍스트 편집기
README.md	2019년 5월 29일 오전 6:25	27KB	Markdo...ument
share	2019년 5월 29일 오전 6:25	--	폴더
▶ v12.0.0	2019년 5월 23일 오후 1:56	--	폴더
▶ v12.3.0	2019년 5월 22일 오후 1:29	--	폴더
▶ v12.3.1	2019년 5월 29일 오후 5:38	--	폴더

왜 **npx** 가 필요했을까요??

- 프로젝트의 로컬에 설치된 패키지의 실행 커맨드를 사용하려면,
 - **package.json** 의 **npm scripts** 에 명령어를 추가하여 사용해야 했다.
 - **npx** 로 바로 실행 가능
- 전역으로 실행하고 싶은 패키지가 있을 경우,
 - **npm i -g** 를 이용하여, 전역에 꼭 설치해서 사용해야 가능했다.
 - **npx** 로 최신 버전의 패키지를 받아 바로 실행 가능

npx create-react-app tic-tac-toe

npx create-react-app 프로젝트 이름

package.json

```
1 {  
2   "name": "tic-tac-toe",  
3   "version": "0.1.0",  
4   "private": true,  
5   "dependencies": {  
6     "react": "^16.8.6",  
7     "react-dom": "^16.8.6",  
8     "react-scripts": "3.0.1"  
9   },  
10  "scripts": {  
11    "start": "react-scripts start",  
12    "build": "react-scripts build",  
13    "test": "react-scripts test",  
14    "eject": "react-scripts eject"  
15  },  
16  "eslintConfig": {  
17    "extends": "react-app"  
18  },  
19  "browserslist": {  
20    "production": [  
21      ">0.2%",  
22      "not dead",  
23      "not op_mini all"  
24    ],  
25    "development": [  
26      "last 1 chrome version",  
27      "last 1 firefox version",  
28      "last 1 safari version"  
29    ]  
30  }  
31 }
```

- 리액트 핵심 모듈
 - "react": "^16.8.6"
 - "react-dom": "^16.8.6"
- *cra* 를 사용하는데 필요한 모듈
 - "react-scripts": "3.0.1"

- *npm start*
 - *react-scripts start*
 - ***Starting the development server...***
- *npm run build*
 - *react-scripts build*
 - ***Creating an optimized production build...***
- *npm test*
 - *react-scripts test*
 - ***Jest 를 통해 test code 를 실행합니다.***
- *npm run eject*
 - *react-scripts eject*

Compiled successfully!

You can now view **tic-tac-toe** in the browser.

Local: <http://localhost:3000/>

On Your Network: <http://172.30.1.11:3000/>

Note that the development build is not optimized.

To create a production build, use [npm run build](#).

개발용 서버를 띄웁니다.

소스 코드가 수정되었을 때,

다시 컴파일하고 웹페이지를 새로고침 합니다.

tic-tac-toe on ↵ master is 📦 v0.1.0 via 🐫 v10.16.0

→ npm run build

```
> tic-tac-toe@0.1.0 build /Users/mark/fastcampus/react-camp/tic-tac-toe
> react-scripts build
```

Creating an optimized production build ...

Compiled successfully.

File sizes after gzip:

36.97 KB	build/static/js/2.56cb80cd.chunk.js
1.14 KB	build/static/js/main.6b0ea52e.chunk.js
762 B	build/static/js/runtime~main.a8a9905a.js
574 B	build/static/css/main.eb74f3d0.chunk.css

The project was built assuming it is hosted at [the server root](#).

You can control this with the [homepage](#) field in your [package.json](#).

For example, add this to build it for GitHub Pages:

```
"homepage" : "http://myname.github.io/myapp",
```

The [build](#) folder is ready to be deployed.

You may serve it with a static server:

```
npm install -g serve
serve -s build
```

Find out more about deployment here:

<https://bit.ly/CRA-deploy>

tic-tac-toe on ↵ master is 📦 v0.1.0 via 🐫 v10.16.0 took 4s

→

OPEN EDITORS

TIC-TAC-TOE

```

build
static
css
  main.eb74f3d0.chunk.css
  main.eb74f3d0.chunk.css.map
js
  2.56cb80cd.chunk.js
  2.56cb80cd.chunk.js.map
  main.6b0ea52e.chunk.js
  main.6b0ea52e.chunk.js.map
  runtime~main.a8a9905a.js
  runtime~main.a8a9905a.js.map
asset-manifest.json
favicon.ico
index.html
manifest.json
precache-manifest.5a1a9d0be26acb29944962be132fe8ab.js
service-worker.js

```

node_modules

public

src

components

Board.jsx

OUTLINE

*Project 폴더 바로 아래
build 라는 폴더가 만들어지고,
그 안에 Production 배포를 위한
파일들이 생성됩니다.*

TERMINAL

...

1: zsh



The `build` folder is ready to be deployed.
You may serve it with a static server:

```
npm install -g serve
serve -s build
```

Find out more about deployment here:

<https://bit.ly/CRA-deploy>

tic-tac-toe on ↵ master is 📦v0.1.0 via 🐛v10.16.0 took 4s
→



```
1 npm install serve -g  
2 serve -s build
```

- **serve** 라는 패키지를 전역으로 설치합니다.
- **serve** 명령어를 **-s** 옵션으로 **build** 폴더를 지정하여 실행합니다.
 - **-s** 옵션은 어떤 라우팅으로 요청해도 *index.html* 을 응답하도록 합니다.

OPEN EDITORS

App.test.js src

TIC-TAC-TOE

build
node_modules
publicsrc
componentsBoard.jsx
Game.jsx
Square.jsx

App.css

App.js

App.test.js

index.css

index.js

logo.svg

serviceWorker.js

.gitignore

package-lock.json

package.json

README.md

App.test.js x

src > App.test.js > ...

```

1 import React from 'react';
2 import ReactDOM from 'react-dom';
3 import App from './App';
4
5 it('renders without crashing', () => {
6   const div = document.createElement('div');
7   ReactDOM.render(<App />, div);
8   ReactDOM.unmountComponentAtNode(div);
9 });
10

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

1: node

+ - ×

PASS src/App.test.js

✓ renders without crashing (20ms)

Test Suites: 1 passed, 1 total**Tests:** 1 passed, 1 total**Snapshots:** 0 total**Time:** 0.832s, estimated 1s

Ran all test suites.

Watch Usage: Press w to show more. ■

- *_tests_* 폴더 안의 .js 파일
- .test.js 로 끝나는 파일
- .spec.js 로 끝나는 파일

OUTLINE



```
tic-tac-toe on ↵ master is 📦 v0.1.0 via 🐫 v10.16.0
```

```
[→ npm run eject
```

```
> tic-tac-toe@0.1.0 eject /Users/mark/fastcampus/react-camp/tic-tac-toe
> react-scripts eject
```

```
NOTE: Create React App 2+ supports TypeScript, Sass, CSS Modules and more without ejecting: https://reactjs.org/blog/2018/10/01/create-react-app-v2.html
```

```
? Are you sure you want to eject? This action is permanent. (y/N) █
```

eject 를 이용하면, cra 로 만든 프로젝트에서 cra 를 제거합니다.

이는 돌이킬 수 없기 때문에 결정하기 전에 신중해야 합니다.

보통 cra 내에서 해결이 안되는 설정을 추가해야 할 때 합니다.

```
1 {  
2   "name": "tic-tac-toe",  
3   "version": "0.1.0",  
4   "private": true,  
5   "dependencies": {  
6     "@babel/core": "7.4.3",  
7     "@svgr/webpack": "4.1.0",  
8     "@typescript-eslint/eslint-plugin": "1.6.0",  
9     "@typescript-eslint/parser": "1.6.0",  
10    "babel-eslint": "10.0.1",  
11    "babel-jest": "^24.8.0",  
12    "babel-loader": "8.0.5",  
13    "babel-plugin-named-asset-import": "^0.3.2",  
14    "babel-preset-react-app": "^9.0.0",  
15    "camelcase": "^5.2.0",  
16    "case-sensitive-paths-webpack-plugin": "2.2.0",  
17    "css-loader": "2.1.1",  
18    "dotenv": "6.2.0",  
19    "dotenv-expand": "4.2.0",  
20    "eslint": "^5.16.0",  
21    "eslint-config-react-app": "^4.0.1",  
22    "eslint-loader": "2.1.2",  
23    "eslint-plugin-flowtype": "2.50.1",  
24    "eslint-plugin-import": "2.16.0",  
25    "eslint-plugin-jsx-ally": "6.2.1",  
26    "eslint-plugin-react": "7.12.4",  
27    "eslint-plugin-react-hooks": "^1.5.0",  
28    "file-loader": "3.0.1",  
29    "fs-extra": "7.0.1",  
30    "html-webpack-plugin": "4.0.0-beta.5",  
31    "identity-obj-proxy": "3.0.0",  
32    "is-wsl": "^1.1.0",  
33    "jest": "24.7.1",  
34    "jest-environment-jsdom-fourteen": "0.1.0",  
35    "jest-resolve": "24.7.1",  
36    "jest-watch-typeahead": "0.3.0",  
37    "mini-css-extract-plugin": "0.5.0",
```

- *react-scripts* 는 사라집니다.
- 드러내지 않고 *cra*에 의해 사용되던 각종 패키지가 *package.json*에 나타납니다.
- Jest, Babel, ESLint 설정이 추가됩니다.
- 각종 설정 파일이 config 폴더에 생성됩니다.

ESLint

The pluggable linting utility for JavaScript and JSX



ESLint

The pluggable linting utility for JavaScript and JSX

[Get Started »](#)

Welcome

ESLint is an open source project originally created by [Nicholas C. Zakas](#) in June 2013. Its goal is to provide a pluggable linting utility for JavaScript.

Latest News

- [ESLint v6.0.1 released](#) 24 June 2019

About

Learn more about ESLint and why it came about and the general philosophy behind it.

[Learn More »](#)

Rules

ESLint comes with a bunch of default rules to get you started. This is the complete list.

[See List »](#)

```
1 → mkdir eslint-test  
2  
3 → cd eslint-test  
4  
5 → npm init -y  
6  
7 → npm install eslint -D  
8  
9 → npx eslint --init
```

```
1 {
2   "env": {
3     "commonjs": true,
4     "es6": true,
5     "node": true
6   },
7   "extends": "eslint:recommended",
8   "globals": {
9     "Atomics": "readonly",
10    "SharedArrayBuffer": "readonly"
11  },
12  "parserOptions": {
13    "ecmaVersion": 2018
14  },
15  "rules": {
16    "semi": [
17      "error",
18      "always"
19    ]
20  }
21 }
```

rules 을 추가합니다.

fastcampus/react-camp/eslint-test is 📦 v1.0.0 via 🐫 v10.16.0

→ npx eslint index.js

/Users/mark/fastcampus/react-camp/eslint-test/index.js

1:21 error Missing semicolon semi

✖ 1 problem (1 error, 0 warnings)

1 error and 0 warnings potentially fixable with the `--fix` option.

fastcampus/react-camp/eslint-test is 📦 v1.0.0 via 🐫 v10.16.0

→

```
1 // index.js
2 console.log("hello")
```



ESLint

dbaeumer.vscode-eslint

Dirk Baeumer | 21,843,691 | ★★★★★ | Repository | License

Integrates ESLint JavaScript into VS Code.

[Disable ▾](#)[Uninstall](#)

This extension is recommended based on the files you recently opened. [Ignore Recommendation](#)

[Details](#) [Contributions](#) [Changelog](#)

VS Code ESLint extension

Azure Pipelines succeeded

Integrates [ESLint](#) into VS Code. If you are new to ESLint check the [documentation](#).

The extension uses the ESLint library installed in the opened workspace folder. If the folder doesn't provide one the extension looks for a global install version. If you haven't installed ESLint either locally or globally do so by running `npm install eslint` in the workspace folder for a local install or `npm install -g eslint` for a global install.

On new folders you might also need to create a `.eslintrc` configuration file. You can do this by either using the VS Code command [Create ESLint configuration](#) or by running the `eslint` command in a terminal. If you have installed ESLint globally (see above) then run `eslint --init` in a terminal. If you have installed ESLint locally then run `.\node_modules\.bin\eslint --init` under Windows and `./node_modules/.bin/eslint --init` under Linux and Mac.

Settings Options

This extension contributes the following variables to the [settings](#):

- `eslint.enable`: enable/disable ESLint. Is enabled by default.
- `eslint.provideLintTask`: whether the extension contributes a lint task to lint a whole workspace folder.
- `eslint.packageManager`: controls the package manager to be used to resolve the ESLint library. This has only an influence if the ESLint library is resolved globally. Valid values are "`npm`" or "`yarn`" or "`pnpm`".
- `eslint.options`: options to configure how ESLint is started using the [ESLint CLI Engine API](#). Defaults to an empty option bag. An example to point to a custom `.eslintrc.json` file is:

```
{  
  "eslint.options": { "configFile": "C:/mydirectory/.eslintrc.json" }  
}
```

- `eslint.run` - run the linter `onSave` or `onType`, default is `onType`.
- `eslint.autoFixOnSave` - enables auto fix on save. Please note auto fix on save is only available if VS Code's `files.autoSave` is either `off`, `onFocusChange` or `onWindowChange`. It will not work with `afterDelay`.



EXPLORER



OPEN EDITORS

JS index.js 1



ESLINT-TEST

node_modules



.eslintrc.json



JS index.js 1



package-lock.json



package.json

JS index.js x

JS index.js

1 console.log("hello")

2 ?



PROBLEMS 1

OUTPUT

DEBUG CONSOLE

TERMINAL

Filter. E.g.: text, **/*.ts...



OUTLINE

No symbols found in document
'index.js'



JS index.js 1

✖ Missing semicolon. eslint(semi) [1, 21]

x 1 ! 0

Ln 1, Col 21 Spaces: 4 UTF-8 LF JavaScript

```
1  {
2    "name": "tic-tac-toe",
3    "version": "0.1.0",
4    "private": true,
5    "dependencies": {
6      "react": "^16.8.6",
7      "react-dom": "^16.8.6",
8      "react-scripts": "3.0.1"
9    },
10   "scripts": {
11     "start": "react-scripts start",
12     "build": "react-scripts build",
13     "test": "react-scripts test",
14     "eject": "react-scripts eject"
15   },
16   "eslintConfig": {
17     "extends": "react-app",
18     "rules": {
19       "semi": [
20         "error",
21         "always"
22       ]
23     }
24   },
25   "browserslist": {
26     "production": [
27       ">0.2%",
28       "not dead",
29       "not op_mini all"
30     ],
31     "development": [
32       "last 1 chrome version",
33       "last 1 firefox version",
34       "last 1 safari version"
35     ]
36   }
37 }
```

.eslintrc.json

create-react-app/packages/esl... +

GitHub, Inc. [US] | https://github.com/facebook/create-react-app/tree/master/packages/eslint-config-react-app

15h

Search or jump to... Pull requests Issues Marketplace Explore

facebook / create-react-app Used by 759,048 Watch 1,813 Star 69,477 Fork 15,854

Code Issues 312 Pull requests 84 Projects 5 Security Insights

Branch: master create-react-app / packages / eslint-config-react-app / Create new file Upload files Find file History

TheBear44 and iansu Update peer dependencies in eslint-config-react-app (#7274) Latest commit bfee606 18 days ago

LICENSE Add license file to all packages (#5192) 9 months ago

README.md Update peer dependencies in eslint-config-react-app (#7274) 18 days ago

index.js fix: ESLint config overrides key should be an array, not object (#7219) 28 days ago

package.json Publish 2 months ago

<https://github.com/facebook/create-react-app/blob/master/packages/eslint-config-react-app/index.js>

eslint-config-react-app

This package includes the shareable ESLint configuration used by [Create React App](#). Please refer to its documentation:

- [Getting Started](#) – How to create a new app.
- [User Guide](#) – How to develop apps bootstrapped with Create React App.

Usage in Create React App Projects

The easiest way to use this configuration is with [Create React App](#), which includes it by default.

You don't need to install it separately in Create React App projects.

Usage Outside of Create React App

If you want to use this ESLint configuration in a project not built with Create React App, you can install it with the following steps:

Prettier

An opinionated code formatter

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GET PROFESSIONALLY SUPPORTED PRETTIER

[TRY IT OUT](#)[GET STARTED](#)[OPTIONS](#)

What is Prettier?

- An opinionated code formatter
- Supports many languages
- Integrates with most editors
- Has few options

Why?

- You press save and code is formatted
- No need to discuss style in code review
- Saves you time and energy
- And more

```
1 → mkdir prettier-test  
2  
3 → cd prettier-test  
4  
5 → npm init -y  
6  
7 → npm i prettier -D
```

fastcampus/react-camp/prettier-test is 📦 v1.0.0 via 🏙 v10.16.0

→ npx prettier index.js
console.log("hello");

fastcampus/react-camp/prettier-test is 📦 v1.0.0 via 🏙 v10.16.0

→

```
1 // index.js  
2 console.log('hello')
```

fastcampus/react-camp/prettier-test is 📦 v1.0.0 via 🐫 v10.16.0

→ npx prettier index.js
console.log("hello");

fastcampus/react-camp/prettier-test is 📦 v1.0.0 via 🐫 v10.16.0

* replace *

→ npx prettier --write index.js

fastcampus/react-camp/prettier-test is 📦 v1.0.0 via 🐫 v10.16.0

→

```
1 // index.js
2 console.log("hello")
```

EXPLORER



OPEN EDITORS

.prettierrc

PRETTIER-TEST

node_modules

.prettierrc

index.js

package-lock.json

package.json

OUTLINE

abc trailingComma

↔ singleQuote

.prettierrc

.prettierrc > ...

```
1  {
2      "singleQuote": true,
3      "trailingComma": "all"
4  }
5
```



Options - Prettier

https://prettier.io/docs/en/options.html

Prettier stable

Playground About Usage Blog Search Donate GitHub

About

- What is Prettier?
- Why Prettier?
- Prettier vs. Linters
- Option Philosophy
- Rationale

Usage

- Install
- CLI
- API
- Browser
- Plugins (Beta)
- Pre-commit Hook
- Watching For Changes
- Integrating with Linters
- Ignoring Code

Configuring Prettier

- Options
- Configuration File

Editors

- Editor Integration
- WebStorm Setup
- Vim Setup

Misc

- Technical Details
- Related Projects

Options

EDIT

Prettier ships with a handful of customizable format options, usable in both the CLI and API.

Print Width

Specify the line length that the printer will wrap on.

For readability we recommend against using more than 80 characters:

In code styleguides, maximum line length rules are often set to 100 or 120. However, when humans write code, they don't strive to reach the maximum number of columns on every line. Developers often use whitespace to break up long lines for readability. In practice, the average line length often ends up well below the maximum.

Prettier, on the other hand, strives to fit the most code into every line. With the print width set to 120, prettier may produce overly compact, or otherwise undesirable code.

See the [print width rationale](#) for more information.

Default	CLI Override	API Override
80	--print-width <int>	printWidth: <int>

(If you don't want line wrapping when formatting Markdown, you can set the [Prose Wrap](#) option to disable it.)

Tab Width

Specify the number of spaces per indentation-level.

Default	CLI Override	API Override
2	--tab-width <int>	tabWidth: <int>

Tabs

Print Width

Tab Width

Tabs

Semicolons

Quotes

Quote Props

JSX Quotes

Trailing Commas

Bracket Spacing

JSX Brackets

Arrow Function Parentheses

Range

Parser

File Path

Require pragma

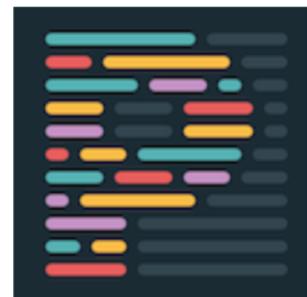
Insert Pragma

Prose Wrap

HTML Whitespace Sensitivity

End of Line

<https://prettier.io/docs/en/options.html>



Prettier - Code formatter

esbenp.prettier-vscode

Esben Petersen | ↗ 9,633,716 | ★★★★☆

Repository | License

VS Code plugin for prettier/pretty

[Disable ▾](#)[Uninstall](#)[Details](#) [Contributions](#) [Changelog](#)

Prettier formatter for Visual Studio Code

VS Code package to format your JavaScript / TypeScript / CSS using [Prettier](#).

Installation

Install through VS Code extensions. Search for [Prettier – Code formatter](#)

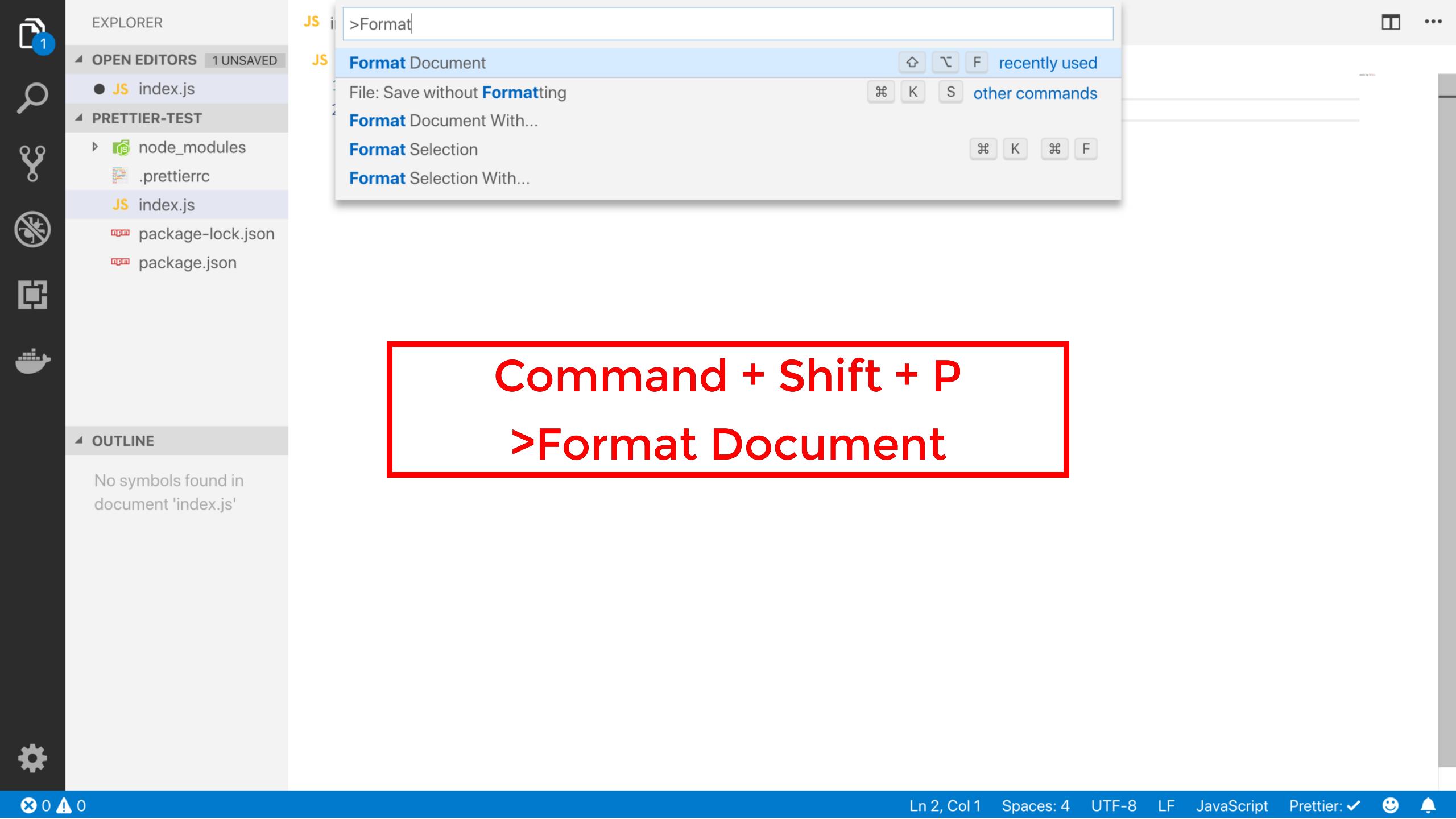
[Visual Studio Code Market Place: Prettier – Code formatter](#)

Can also be installed in VS Code: Launch VS Code Quick Open (Ctrl+P), paste the following command, and press enter.

```
ext install esbenp.prettier-vscode
```

⚠ A word of warning-if you have any other code formatting extensions installed such as for example hugely popular [HookyQR.beautify](#) or [taichi.react-beautify](#) might take precedence and format your code instead of Prettier leading to unexpected results.





◀ OPEN EDITORS

JS index.js
✖ { } settings.json ~/Lib...

◀ PRETTIER-TEST

▷ node_modules
.prettierrc
JS index.js
package-lock.json
package.json

◀ OUTLINE

▷ { } [javascript]
abc editor.defaultForm...
{ } [typescript]
abc editor.fontFamily
abc editor.fontSize
abc editor.fontWeight
abc flow.pathToFlow
abc typescript.updateI...
abc vetur.format.default...
abc workbench.colorTh...
abc workbench.iconThe...
window.zoomLevel

Users > mark > Library > Application Support > Code > User > { } settings.json > ...

```
1  {
2      "editor.formatOnSave": true,
3      "window.zoomLevel": 3,
4      "editor.fontFamily": "Fira Code",
5      "editor.fontLigatures": true,
6      "editor.fontWeight": "400",
7      "workbench.colorTheme": "Visual Studio Light",
8      "workbench.iconTheme": "vscode-icons",
9      "flow.pathToFlow": "${workspaceRoot}/node_modules/.bin/flow",
10     "flow.showUncovered": true,
11     "typescript.updateImportsOnFileMove.enabled": "always",
12     "vetur.format.defaultFormatter.html": "none",
13     "[typescript)": {},
14     "[javascript)": {
15         "editor.defaultFormatter": "esbenp.prettier-vscode"
16     }
17 }
18 }
```

"editor.formatOnSave": true

prettier/eslint-config-prettier x + GitHub, Inc. [US] | https://github.com/prettier/eslint-config-prettier 15h

앱 aws protopie Facebook GitHub 강의 deno 기타 북마크

eslint-config-prettier

build passing

Turns off all rules that are unnecessary or might conflict with Prettier.
This lets you use your favorite shareable config without letting its stylistic choices get in the way when using Prettier.

Note that this config only turns rules off, so it only makes sense using it together with some other config.

Contents

- Installation
- CLI helper tool
- Example configuration
- Special rules
 - arrow-body-style and prefer-arrow-callback
 - curly
 - lines-around-comment
 - max-len
 - no-confusing-arrow
 - no-mixed-operators
 - no-tabs
 - no-unexpected-multiline
 - quotes
 - Enforce backticks
 - Forbid unnecessary backticks
 - Example double quote configuration
 - Example single quote configuration
 - vue/html-self-closing
- Other rules worth mentioning
 - no-sequences
- Contributing
- License

Installation

```
1 {
2 ...
3 "eslintConfig": {
4   "extends": [
5     "react-app",
6     "prettier"
7   ],
8 },
9 ...
10 }
```

React Developer Tools

개발 모드

facebook/react-devtools: An e... + GitHub, Inc. [US] | https://github.com/facebook/react-devtools

14h

App etc aws protopie Facebook GitHub 강의 deno 기타 북마크

React Developer Tools

build passing

React Developer Tools lets you inspect the React component hierarchy, including component props and state.

It exists both as a browser extension (for [Chrome](#) and [Firefox](#)), and as a [standalone app](#) (works with other environments including Safari, IE, and React Native).

The screenshot shows the React Developer Tools interface. At the top, there's a search bar and a dropdown menu. Below that, a component tree is displayed for a 'Todos' component. The tree shows various nested components like 'Wrap', 'div', 'Todos', 'TodoItems', 'Filter', and 'OldStyle'. To the right of the tree, the component's state is shown in a sidebar. The state object has an 'todos' array containing three items. The first item is a todo with the title 'Complete all the things', completed status 'true', and ID '1'. The second item is a todo with ID '2'. The third item is a todo with ID '3'. A 'filter' property is also present in the state object, set to 'All'. At the bottom of the interface, there's a search bar labeled 'Search by Component Name'.

Things to do

Awesome +

- Complete all the things
- Profit!!
- Profit!!

All Completed Remaining

```
<Wrap more="a",2,"c"... str="thing" awesome=1>
  <div>
    <div style={position: "absolute", top: 20, left: 20, ...}>this is an iframe</div>
    <Todos>
      <div style={fontSize: 20, fontFamily: "sans-serif", padding: 30, ...}>
        <h1 style={margin: 0, fontSize: 25, marginBottom: 10}>Things to do:</h1>
        <Todo onAdd={fn} ...><NewTodo>
          <TodoItems todos={[{}, {}, {}]} filter="All" onToggleComplete={fn} ...><TodoItems>
            <Filter onSort={fn} onFilter={fn} filter="All"></Filter>
          </TodoItems>
        </NewTodo>
      </div>
    </Todos>
    <OldStyle awesome=2></OldStyle>
  </div>
</Wrap>
```

<Todos> (sr in the console)

Props: Empty object

State:

- todos: Array[3]
 - 0: {}
 - title: "Complete all the things"
 - completed: true
 - id: 1
 - 1: {}
 - 2: {}
- filter: "All"

Installation

Pre-packaged

The official extensions represent the current stable release.

- [Chrome extension](#)

React Developer Tools - Chrome X +

https://chrome.google.com/webstore/detail/react-developer-tools/fmkadmapgofadoplbjkpfkoienihi

14h

铬 Web Store chrome 웹 스토어 2woongjae@gmail.com

Home > 확장 프로그램 > React Developer Tools

React Developer Tools

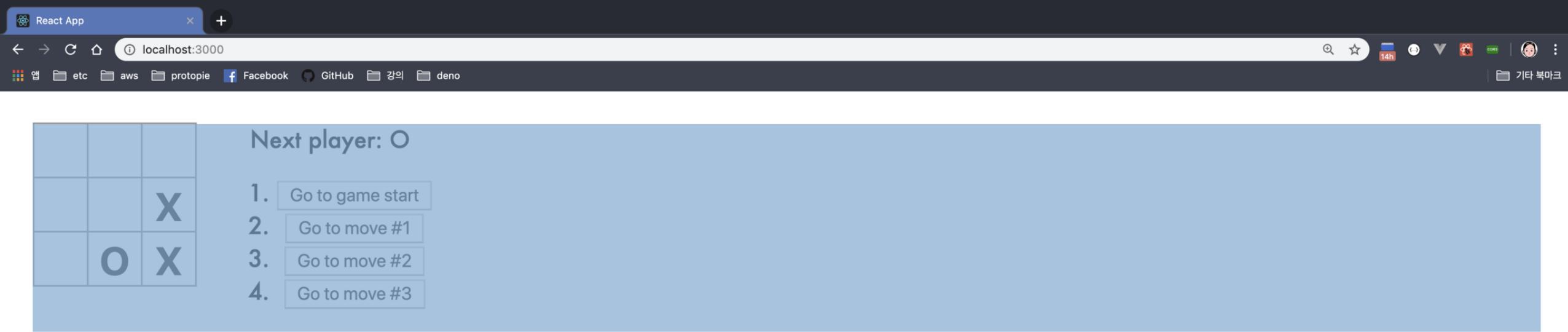
제공자: Facebook

★★★★★ 1,119 | 개발자 도구 | 사용자 1,672,352명

Chrome에서 삭제

개요 리뷰 지원 관련 프로그램

The screenshot shows the React Developer Tools extension page on the Chrome Web Store. The extension is developed by Facebook and has a rating of 1,119 stars. It has over 1,672,352 users. A large blue button allows users to remove the extension from Chrome. Below the main information, there are tabs for '개요' (Overview), '리뷰' (Reviews), '지원' (Support), and '관련 프로그램' (Related Programs). A preview window shows a browser window with the TodoMVC application. The developer tools sidebar is open, displaying the React tab with the component tree for a todo item. The component tree shows the structure of the React components, including props and state.



App | 920px x 126.5px



Elements Profiler

Search (text or /regex/)

Props

Empty object

> <App>...</App> == \$r

App

/Users/mark/fastcampus/react-camp/tic-tac-toe/src/index.js:7

React App × +

localhost:3000 14h

App aws protopie Facebook GitHub 강의 deno 기타 북마크

Next player: O

1. Go to game start
2. Go to move #1
3. Go to move #2
4. Go to move #3

Elements Console Sources Network Performance Memory Application Security Audits React

Elements Profiler

Search (text or /regex/)

<App>

<div className="App">

<Game> == \$r

<div className="game">

<div className="game-board">

<Board>...</Board>

</div>

<div className="game-info">

<div>Next player: 0</div>

<li key="0">

<button>Go to game start</button>

<li key="1">

<button>Go to move #1</button>

<li key="2">

Props

Empty object

State

history: Array[4]

stepNumber: 3

xIsNext: false

/Users/mark/fastcampus/react-camp/tic-tac-toe/src/App.js:8

React App × +

localhost:3000 14h

App aws protopie Facebook GitHub 강의 deno 기타 북마크

Next player: O

1. Go to game start
2. Go to move #1
3. Go to move #2
4. Go to move #3

Board | 99px x 99px

Elements Console Sources Network Performance Memory Application Security Audits React

Elements Profiler

Search (text or /regex/)

Props

- ▶ onClick: onClick()
- ▶ squares: Array[9]

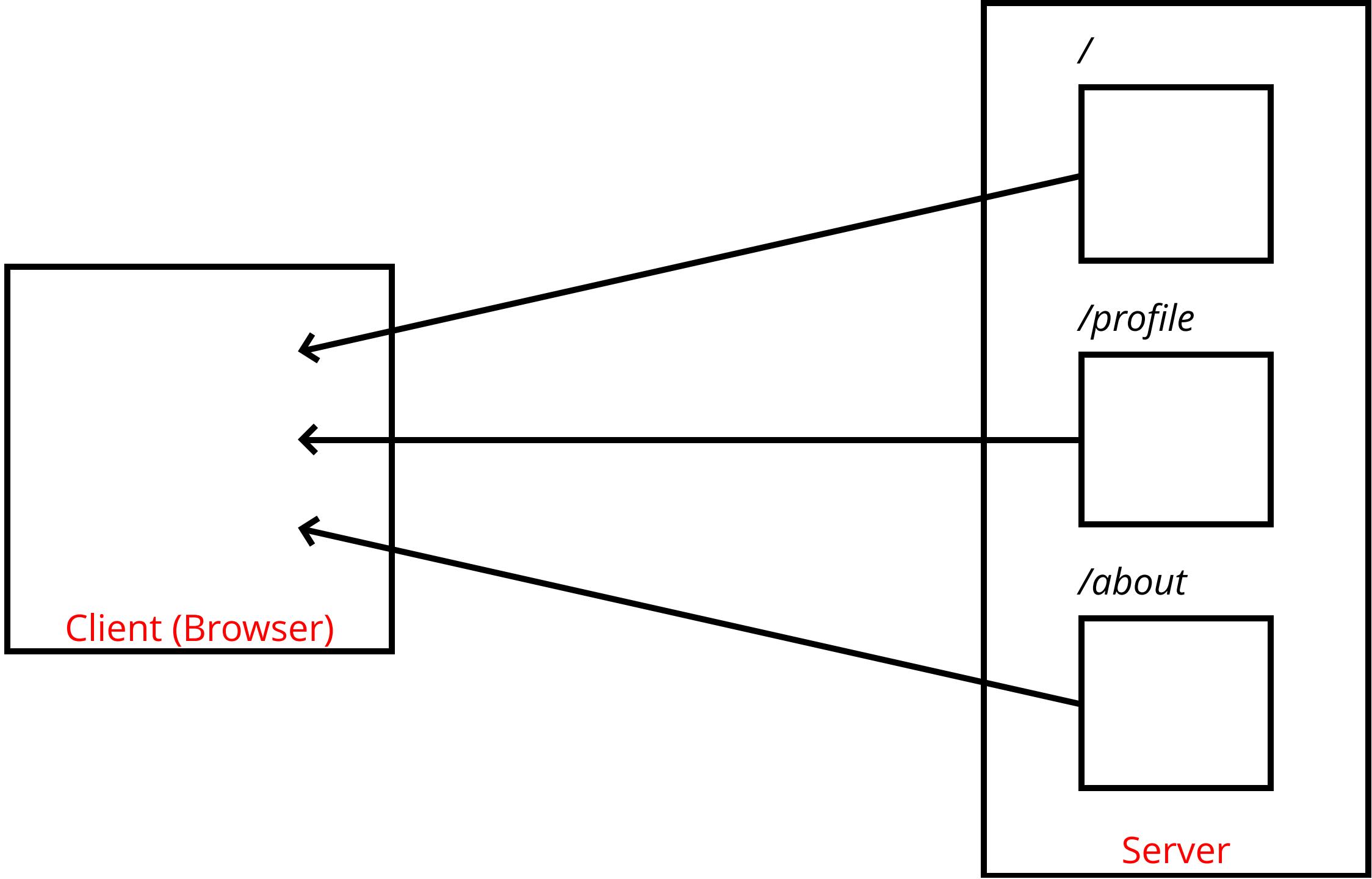
```
▼ <App>
  ▼ <div className="App">
    ▼ <Game>
      ▼ <div className="game">
        ▼ <div className="game-board">
          ▶ <Board>...</Board> == $r
        </div>
      ▼ <div className="game-info">
        <div>Next player: O</div>
      ▼ <ol>
        ▼ <li key="0">
          <button>Go to game start</button>
        </li>
        ▼ <li key="1">
          <button>Go to move #1</button>
        </li>
        ▼ <li key="2">
```

App div Game div div Board

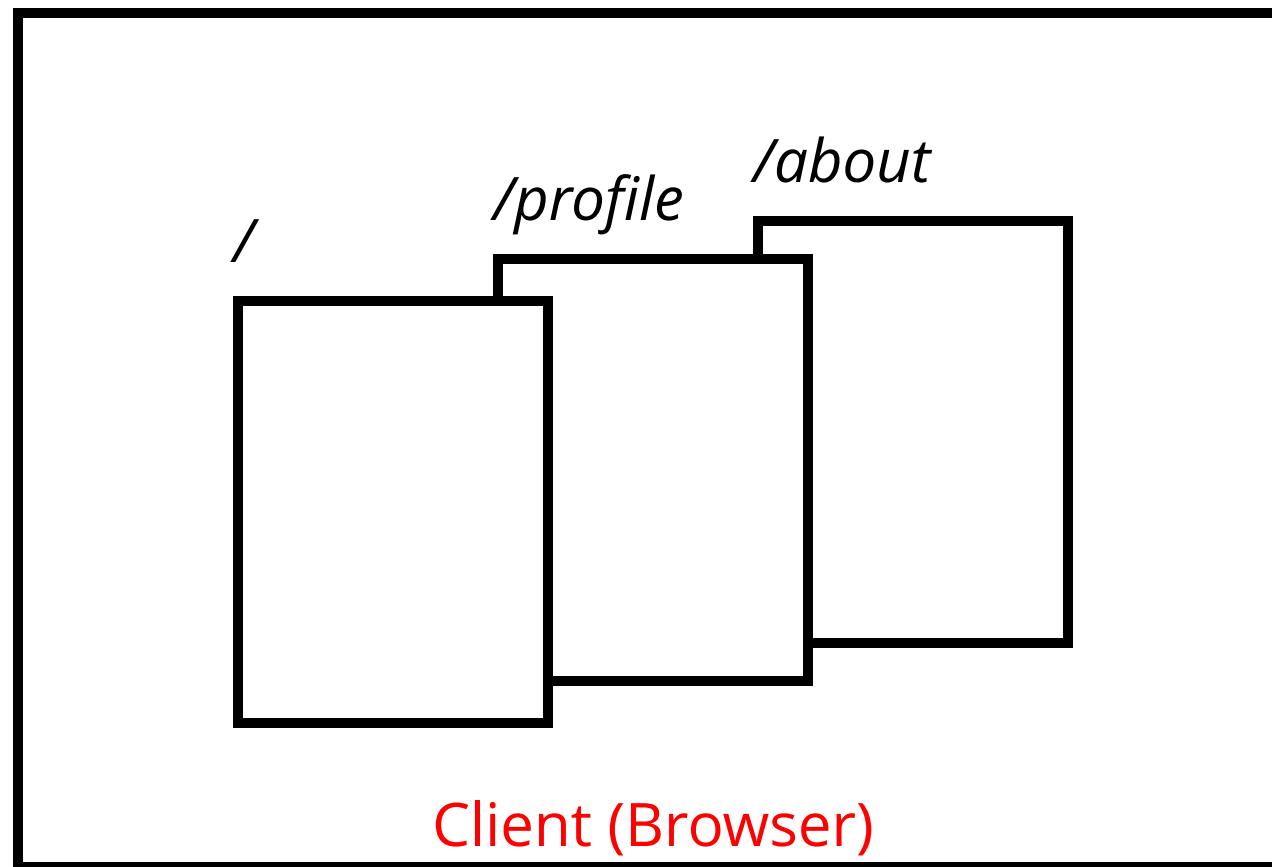
/Users/mark/fastcampus/react-camp/tic-tac-toe/src/components/Game.jsx:68

React 의 라우팅 이해하기

react-router-dom



Single Page Application



SPA 라우팅 과정

1. 브라우저에서 최초에 '/' 경로로 요청을 하면,
2. React Web App 을 내려줍니다.
3. 내려받은 React App 에서 '/' 경로에 맞는 컴포넌트를 보여줍니다.
4. React App 에서 다른 페이지로 이동하는 동작을 수행하면,
5. 새로운 경로에 맞는 컴포넌트를 보여줍니다.

```
→ npm i react-router-dom
```

- cra 에 기본 내장된 패키지가 아닙니다.
- react-router-dom 은 facebook 의 공식 패키지는 아닙니다.
- 가장 대표적인 라우팅 패키지입니다.

특정 경로에서 보여줄 컴포넌트를 준비합니다.

- '/' => Home 컴포넌트
- '/profile' => Profile 컴포넌트
- '/about' => About 컴포넌트

/

```
1 // src/pages/Home.jsx
2 import React from 'react';
3
4 export default function Home() {
5   return <div>Home 페이지 입니다.</div>;
6 }
```

/profile

```
1 // src/pages/Profile.jsx
2 import React from 'react';
3
4 export default function Profile() {
5   return <div>Profile 페이지 입니다.</div>;
6 }
```

/about

```
1 // src/pages/About.jsx
2 import React from 'react';
3
4 export default function About() {
5   return <div>About 페이지 입니다.</div>;
6 }
```

```
1 // src/App.js
2 import React from 'react';
3 import { BrowserRouter, Route } from 'react-router-dom';
4 import Home from './pages/Home';
5 import Profile from './pages/Profile';
6 import About from './pages/About';
7
8 function App() {
9   return (
10   <BrowserRouter>
11     <Route path="/" component={Home} />
12     <Route path="/profile" component={Profile} />
13     <Route path="/about" component={About} />
14   </BrowserRouter>
15 );
16 }
17
18 export default App;
```

- Route 컴포넌트에 경로(path) 와 컴포넌트(component) 를 설정하여 나열해줍니다.
- BrowserRouter 로 Route 들을 감싸줍니다.
- 브라우저에서 요청한 경로에 Route 의 path 가 들어있으면 해당 component 를 보여줍니다.

/

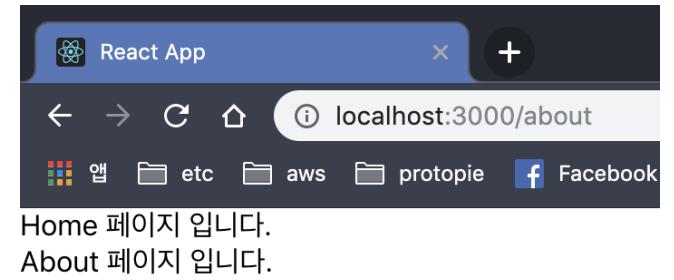
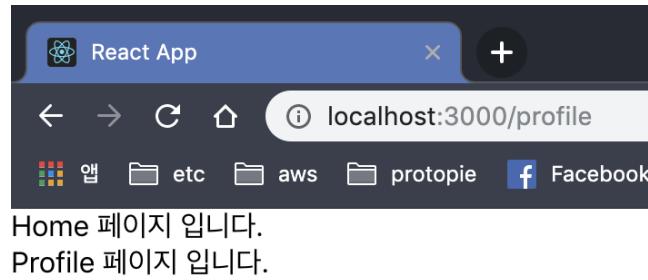
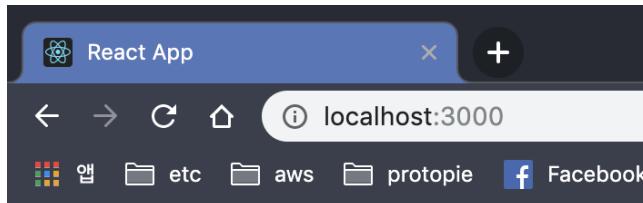
/profile

- /

- /
- /profile

/about

- /
- /about



```
<Route path="/" exact component={Home} />
```

/profile/1

```
<Route path="/profile/:id" component={Profile} />
```

```
import React from "react";
import { BrowserRouter, Route } from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";

function App() {
  return (
    <BrowserRouter>
      <Route path="/" exact component={Home} />
      <Route path="/profile" exact component={Profile} />
      <Route path="/profile/:id" component={Profile} />
      <Route path="/about" component={About} />
    </BrowserRouter>
  );
}

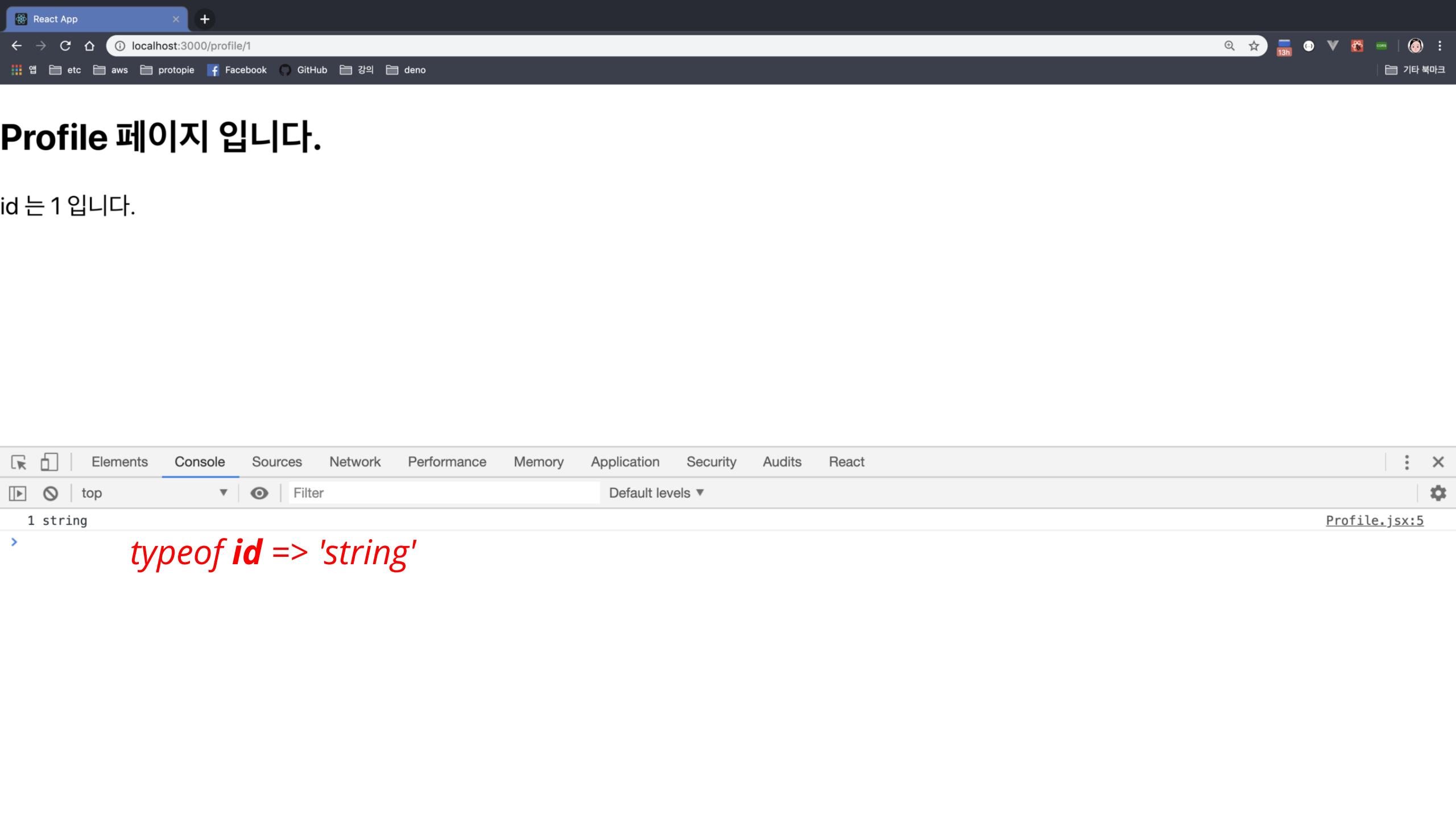
export default App;
```

/profile/1

props.match.params.id

```
import React from "react";

export default function Profile(props) {
  const id = props.match.params.id;
  console.log(id, typeof id);
  return (
    <div>
      <h2>Profile 페이지 입니다.</h2>
      {id && <p>id 는 {id} 입니다.</p>}
    </div>
  );
}
```



Profile 페이지 입니다.

id 는 1 입니다.

```
Elements Console Sources Network Performance Memory Application Security Audits React
top | Filter Default levels ▾
1 string
> typeof id => 'string' Profile.jsx:5
```

/about?name=mark

```
<Route path="/about" component={About} />
```

```
import React from "react";
import { BrowserRouter, Route } from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";

function App() {
  return (
    <BrowserRouter>
      <Route path="/" exact component={Home} />
      <Route path="/profile" exact component={Profile} />
      <Route path="/profile/:id" component={Profile} />
      <Route path="/about" component={About} />
    </BrowserRouter>
  );
}

export default App;
```

/about?name=mark

```
new URLSearchParams(props.location.search);
```

```
// src/pages/About.jsx
import React from "react";

export default function About(props) {
  const searchParams = new URLSearchParams(props.location.search);
  const name = searchParams.get("name");
  console.log(name);
  return (
    <div>
      <h2>About 페이지 입니다.</h2>
      {name && <p>name 는 {name} 입니다.</p>}
    </div>
  );
}
```

/about?name=mark

```
const query = queryString.parse(props.location.search);
```

```
// src/pages/About.jsx
import React from "react";
import queryString from "query-string";

export default function About(props) {
  const query = queryString.parse(props.location.search);
  const { name } = query;
  console.log(name);
  return (
    <div>
      <h2>About 페이지 입니다.</h2>
      {name && <p>name 는 {name} 입니다.</p>}
    </div>
  );
}
```

sindresorhus/query-string: Par + GitHub, Inc. [US] | https://github.com/sindresorhus/query-string 13h

앱 aws protopie Facebook GitHub 강의 deno 기타 북마크

readme.md

query-string build passing

Parse and stringify URL query strings

npm i query-string -S

Install

\$ npm install query-string

This module targets Node.js 6 or later and the latest version of Chrome, Firefox, and Safari. If you want support for older browsers, or, if your project is using create-react-app v1, use version 5: `npm install query-string@5`.

Usage

```
const queryString = require('query-string');

console.log(location.search);
//=> '?foo=bar'

const parsed = queryString.parse(location.search);
console.log(parsed);
//=> {foo: 'bar'}

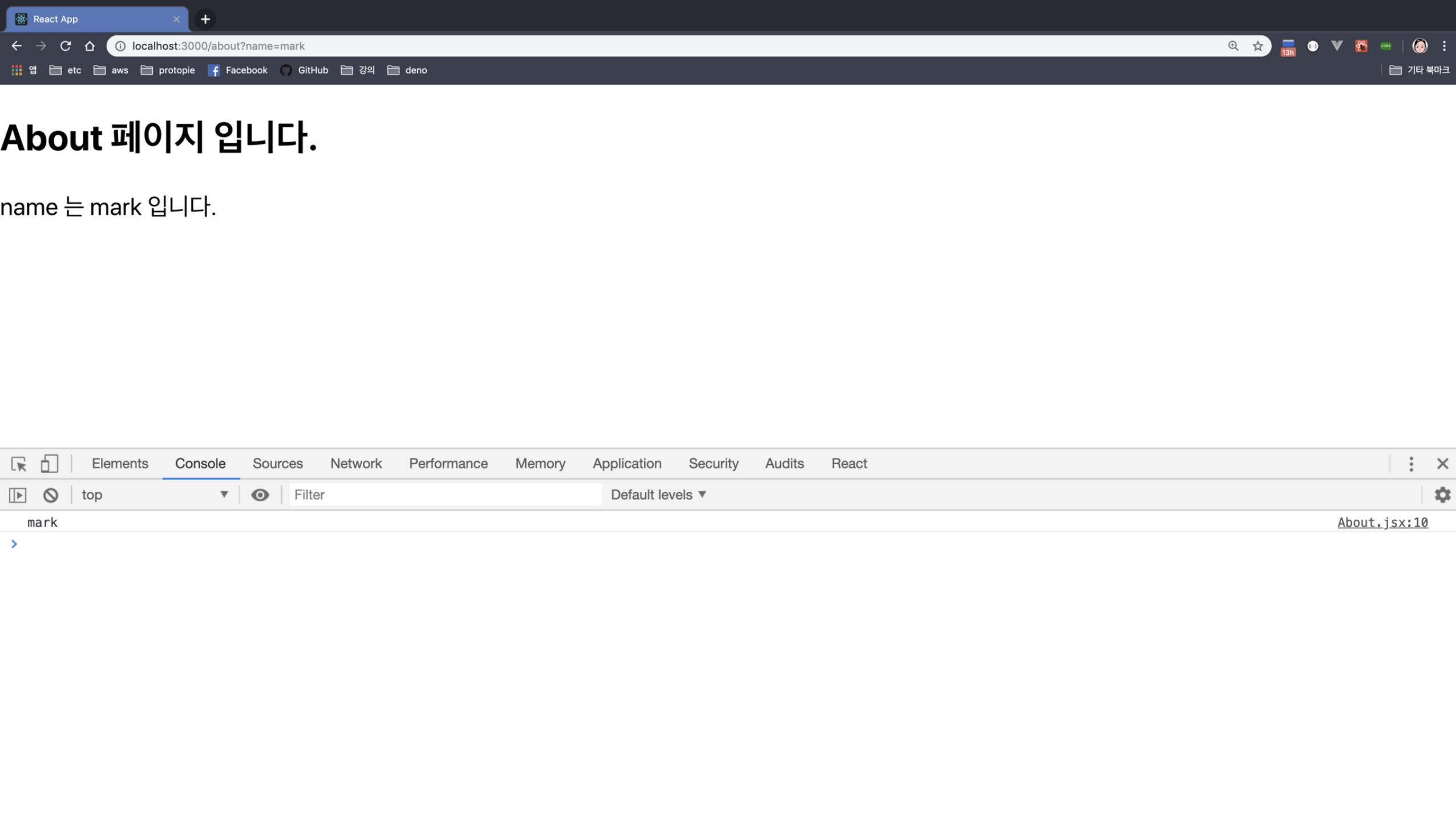
console.log(location.hash);
//=> '#token=bada55cafe'

const parsedHash = queryString.parse(location.hash);
console.log(parsedHash);
//=> {token: 'bada55cafe'}

parsed.foo = 'unicorn';
parsed.ilike = 'pizza';

const stringified = queryString.stringify(parsed);
//=> 'foo=unicorn&ilike=pizza'

location.search = stringified;
// note that `location.search` automatically prepends a question mark
console.log(location.search);
//=> '?foo=unicorn&ilike=pizza'
```



Switch

```
import React from "react";
import { BrowserRouter, Route, Switch } from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";

function App() {
  return (
    <BrowserRouter>
      <Switch>
        <Route path="/profile/:id" component={Profile} />
        <Route path="/profile" component={Profile} />
        <Route path="/about" component={About} />
        <Route path="/" component={Home} />
      </Switch>
    </BrowserRouter>
  );
}

export default App;
```

- 여러 Route 중 먼저 맞는 하나로만 보여줍니다.
- exact 를 뺄 수 있습니다.

```
<a href="/">Home</a>
```

- 앱을 새로고침하면서 경로를 이동합니다.

```
<Link to="/">Home</Link>
```

- *import { Link } from 'react-router-dom';*
- 브라우저의 주소를 바꾸고,
- 맞는 Route 로 화면을 변경합니다.

```
import React from "react";
import { BrowserRouter, Route, Switch, NavLink } from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";

const activeStyle = {
  color: "green"
};

function App() {
  return (
    <BrowserRouter>
      <ul>
        <li>
          <NavLink exact to="/" activeStyle={activeStyle}>
            Home
          </NavLink>
        </li>
        <li>
          <NavLink exact to="/profile" activeStyle={activeStyle}>
            Profile
          </NavLink>
        </li>
        <li>
          <NavLink to="/profile/1" activeStyle={activeStyle}>
```

- *import { NavLink } from 'react-router-dom';*
- activeClassName, activeStyle 처럼 active 에 대한 스타일 지정이 가능합니다.
- Route 의 path 처럼 동작하기 때문에 exact 가 있습니다.

```
import React from "react";
import { BrowserRouter, Route, Switch, NavLink } from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";

const activeStyle = {
  color: "green"
};

function App() {
  return (
    <BrowserRouter>
      <ul>
        <li>
          <NavLink exact to="/" activeStyle={activeStyle}>
            Home
          </NavLink>
        </li>
        <li>
          <NavLink exact to="/profile" activeStyle={activeStyle}>
            Profile
          </NavLink>
        </li>
        <li>
          <NavLink to="/profile/1" activeStyle={activeStyle}>
            Profile/1
          </NavLink>
        </li>
        <li>
          <NavLink
            to="/about"
            activeStyle={activeStyle}
            isActive={(match, location) => {
              if (location.pathname !== "/about") return false;
              const searchParams = new URLSearchParams(location.search);
              return !searchParams.has("name");
            }}
          >
            About
          </NavLink>
        </li>
      </ul>
    </BrowserRouter>
  );
}

export default App;
```

<NavLink>

```
activeClassName: string
activeStyle: object
exact: boolean
strict: boolean
isActive: function
location: object
aria-current: string
```

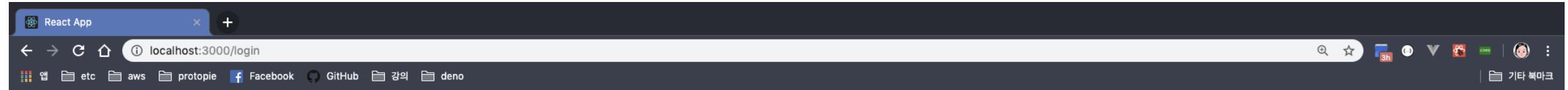
JSX 말고 JS로 페이지 이동하기

```
props.history.push("/");
```

```
// src/pages/Login.jsx
import React from "react";

export default function Login(props) {
  console.log(props);
  function login() {
    setTimeout(() => {
      props.history.push("/");
    }, 1000);
  }
  return (
    <div>
      <h2>Login 페이지 입니다.</h2>
      <button onClick={login}>로그인하기</button>
    </div>
  );
}
```

<Route component={컴포넌트} />



Login 페이지 입니다.

The screenshot shows the browser's developer tools with the React tab selected. The left pane displays the component tree, and the right pane shows the props for the current component. A red box highlights the 'Props' section, which contains the following items:

- *history*
- *location*
- *match*

Props

- **history: {…}**
 - action: "PUSH"
 - block: block()
 - createHref: createHref()
 - go: go()
 - goBack: goBack()
 - goForward: goForward()
 - length: 50
 - listen: listen()
 - location: {…}
 - push: push()
 - replace: replace()
- **location: {…}**
 - hash: ""
 - key: "7qseaw"
 - pathname: "/login"
 - search: ""
- **match: {…}**
 - isExact: true**
 - **params: {…}**
 - Empty object
 - path: "/login"
 - url: "/login"

App BrowserRouter Router Router.Provider Switch Router.Consumer Route Router.Consumer Router.Provider Login

withRouter()

```
// src/pages/Login.jsx
import React from "react";
import LoginButton from "../components/LoginButton";

export default function Login(props) {
  return (
    <div>
      <h2>Login 페이지 입니다.</h2>
      <LoginButton />
    </div>
  );
}
```

```
// src/components/LoginButton.jsx
import React from "react";

export default function LoginButton(props) {
  console.log(props);
  function login() {
    setTimeout(() => {
      props.history.push("/");
    }, 1000);
  }
  return <button onClick={login}>로그인하기</button>;
}
```

TypeError: Cannot read property 'push' of undefined

(anonymous function)

src/components/LoginButton.jsx:7

```
4 | console.log(props);
5 | function login() {
6 |   setTimeout(() => {
> 7 |     props.history.push("/");
8 |   ^ }, 1000);
9 | }
10 | return <button onClick={login}>로그인하기</button>;
```

This screen is visible only in development. It will not appear if the app crashes in production.

Open your browser's developer console to further inspect this error.

The screenshot shows the Chrome DevTools interface with the 'Console' tab selected. At the top, there are tabs for Elements, Console, Sources, Network, Performance, Memory, Application, Security, Audits, and React. Below the tabs is a toolbar with icons for back, forward, search, and refresh. The main area is the 'Console' tab, which displays the following content:

- A collapsed object indicator: ▶ { }.
- An error message: **Uncaught TypeError: Cannot read property 'push' of undefined**, preceded by a red 'x' icon.
- The error occurred at [LoginButton.jsx:7](#).
- A link to the source code: [LoginButton.jsx:7](#).

withRouter()

```
export default withRouter(LoginButton);
```

```
import React from "react";
import { withRouter } from "react-router-dom";

function LoginButton(props) {
  console.log(props);
  function login() {
    setTimeout(() => {
      props.history.push("/");
    }, 1000);
  }
  return <button onClick={login}>로그인하기</button>;
}

export default withRouter(LoginButton);
```

<Redirect />

```
<Redirect to="/" />
```

```
import React from "react";
import {
  BrowserRouter,
  Route,
  Switch,
  NavLink,
  Redirect
} from "react-router-dom";
import Home from "./pages/Home";
import Profile from "./pages/Profile";
import About from "./pages/About";
import Login from "./pages/Login";

const activeStyle = {
  color: "green"
};

const isLoggedIn = true;

function App() {
  return (
    <BrowserRouter>
```

Git Repository

<https://github.com/2woongjae/react-router-example>