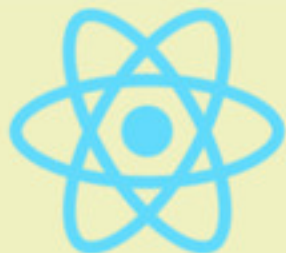


# React

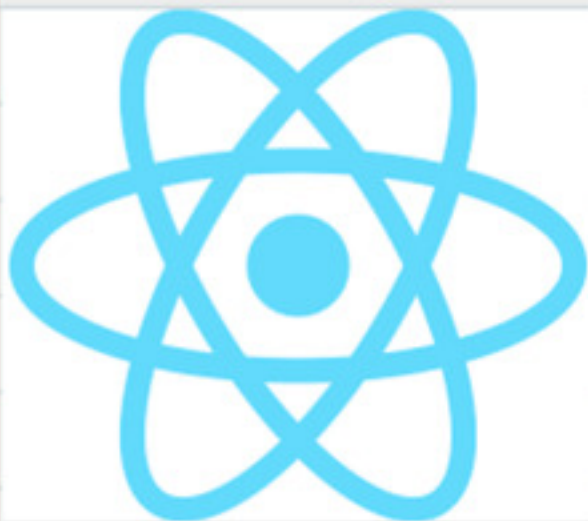


React JS

# What is React?

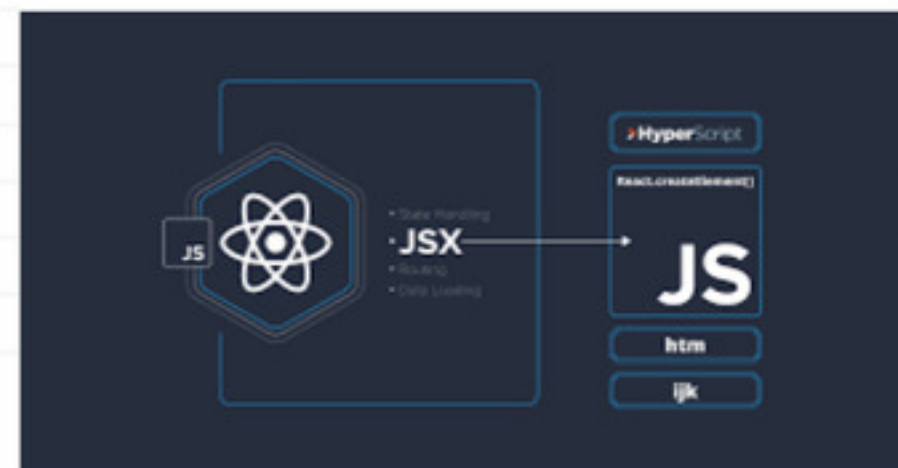
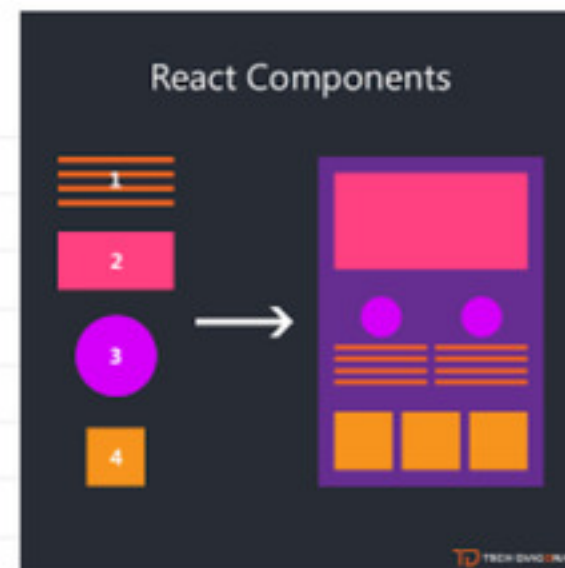
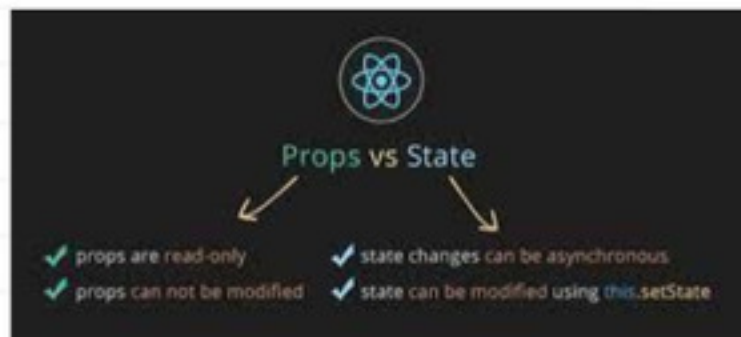
React is a JavaScript library that aims to simplify the development of visual interfaces.

Developed at Facebook and released to the world in 2013, it drives some of the most widely used apps, powering Facebook and Instagram among countless other applications.



**React in itself has a very small API, and you basically need to understand 4 concepts to get started:**

- Components
- JSX
- State
- Props





# How much JavaScript do you need to know to use React

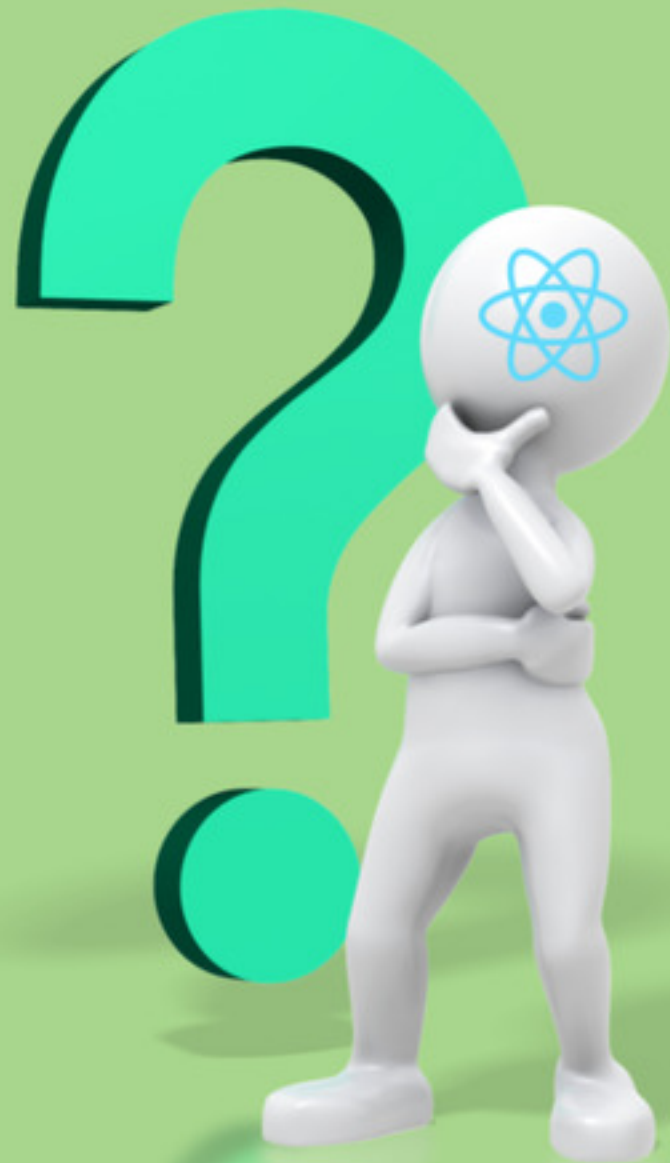


You don't have to be a JavaScript expert, but I think you need a good overview of:

- Variables
- Arrow functions
- Work with objects and arrays using Rest and Spread
- Object and array destructuring
- Template literals
- Callbacks
- ES Modules

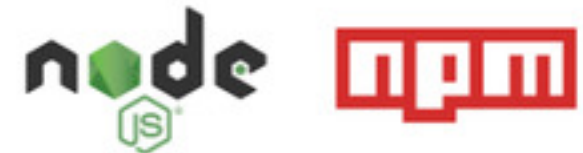
If those concepts sound unfamiliar, I've provided you with some links to find out more about those subjects.

# Why should you learn React?





**A lot of tooling today is built using React at the core. Popular frameworks and tools like Next.js, Gatsby, and many others use React under the hood**



React promotes several good development practices, including code reusability and component-driven development. It is fast, it is lightweight, and the way it makes you think about the data flow in your application perfectly suits a lot of common scenarios.



**Take 7 minutes to watch the next video**



# 100 *SECONDS OF*



**React in 100 Seconds**

# How to install React?

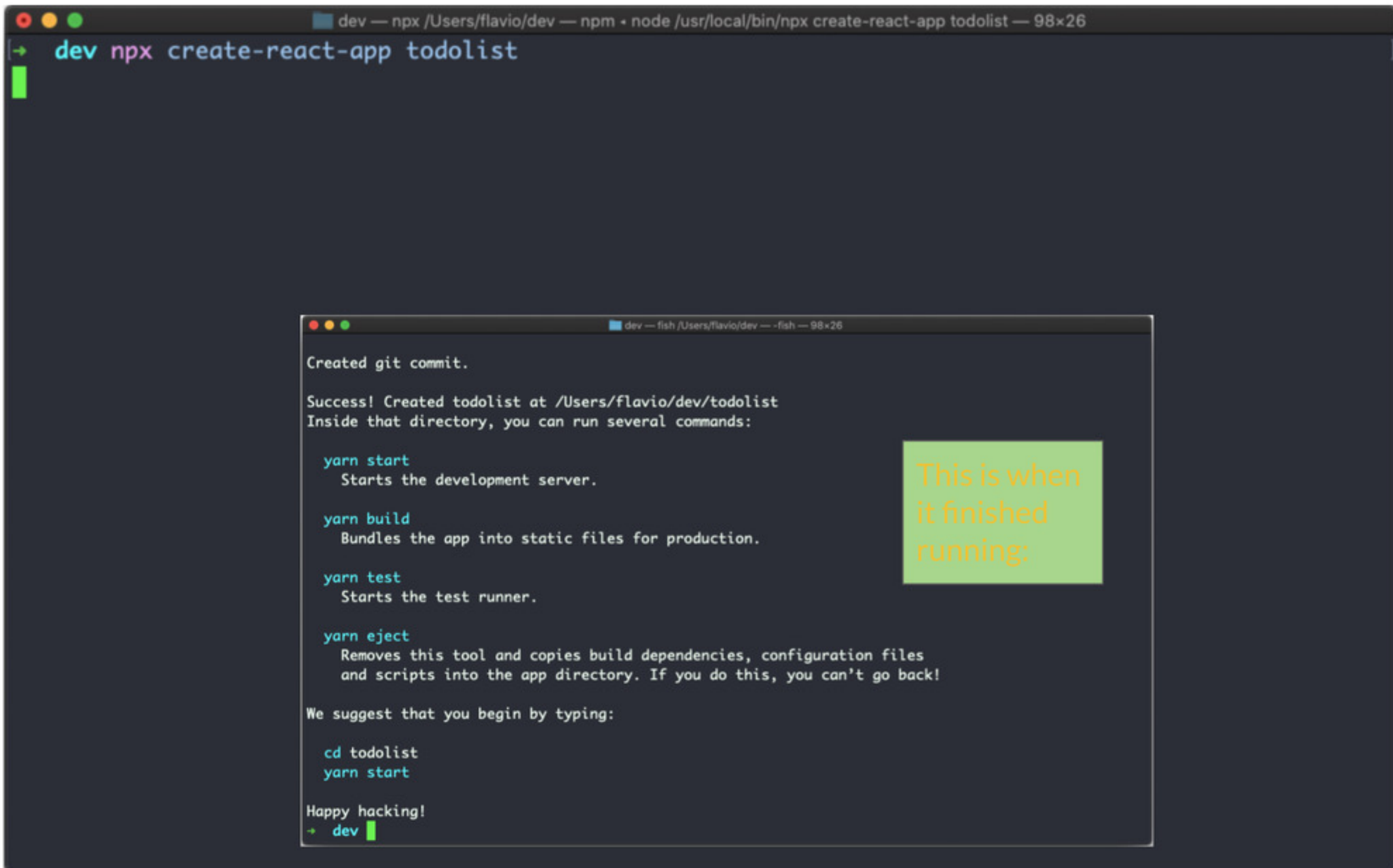




Install create-react-app ( Global )  
`npm install -g create-react-app`

When you run `npx create-react-app <app-name>`,  
npx is going to *download* the most recent  
create-react-app release, run it, and then remove  
it from your system.

```
npx create-react-app todolist
```



```
dev — npx /Users/flavio/dev — npm • node /usr/local/bin/npx create-react-app todolist — 98x26
→ dev npx create-react-app todolist

Created git commit.

Success! Created todolist at /Users/flavio/dev/todolist
Inside that directory, you can run several commands:

  yarn start
    Starts the development server.

  yarn build
    Bundles the app into static files for production.

  yarn test
    Starts the test runner.

  yarn 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 todolist
  yarn start

Happy hacking!
→ dev
```

This is when it finished running:

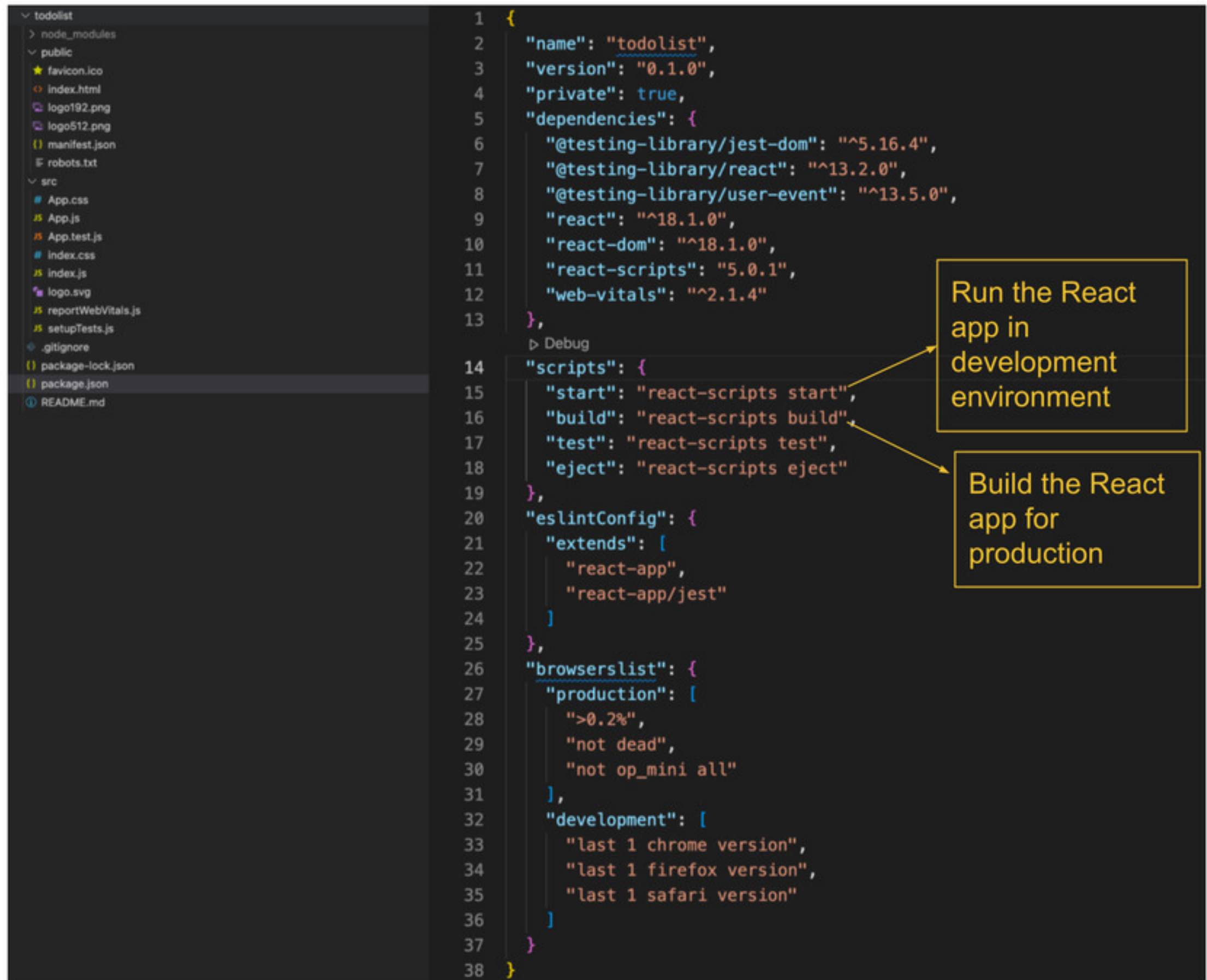


`create-react-app` created a file structure in the folder you told it to (todolist in this case), and initialized a Git repository.

# React file and folders structure



## It also added a few commands in the `package.json` file:



```
1 {
2   "name": "todolist",
3   "version": "0.1.0",
4   "private": true,
5   "dependencies": {
6     "@testing-library/jest-dom": "^5.16.4",
7     "@testing-library/react": "^13.2.0",
8     "@testing-library/user-event": "^13.5.0",
9     "react": "^18.1.0",
10    "react-dom": "^18.1.0",
11    "react-scripts": "5.0.1",
12    "web-vitals": "^2.1.4"
13  },
14  "scripts": {
15    "start": "react-scripts start",
16    "build": "react-scripts build",
17    "test": "react-scripts test",
18    "eject": "react-scripts eject"
19  },
20  "eslintConfig": {
21    "extends": [
22      "react-app",
23      "react-app/jest"
24    ]
25  },
26  "browserslist": {
27    "production": [
28      ">0.2%",
29      "not dead",
30      "not op_mini all"
31    ],
32    "development": [
33      "last 1 chrome version",
34      "last 1 firefox version",
35      "last 1 safari version"
36    ]
37  }
38 }
```

Run the React app in development environment

Build the React app for production



So you can immediately start the app by going into the newly created application folder and running `npm start`.

```
todolist — npm /Users/flavio/dev/todolist — node • npm HOME=/Users/flavio LC_CTYPE=UTF-8 — 73x16
```

```
Compiled successfully!
```

```
You can now view todolist in the browser.
```

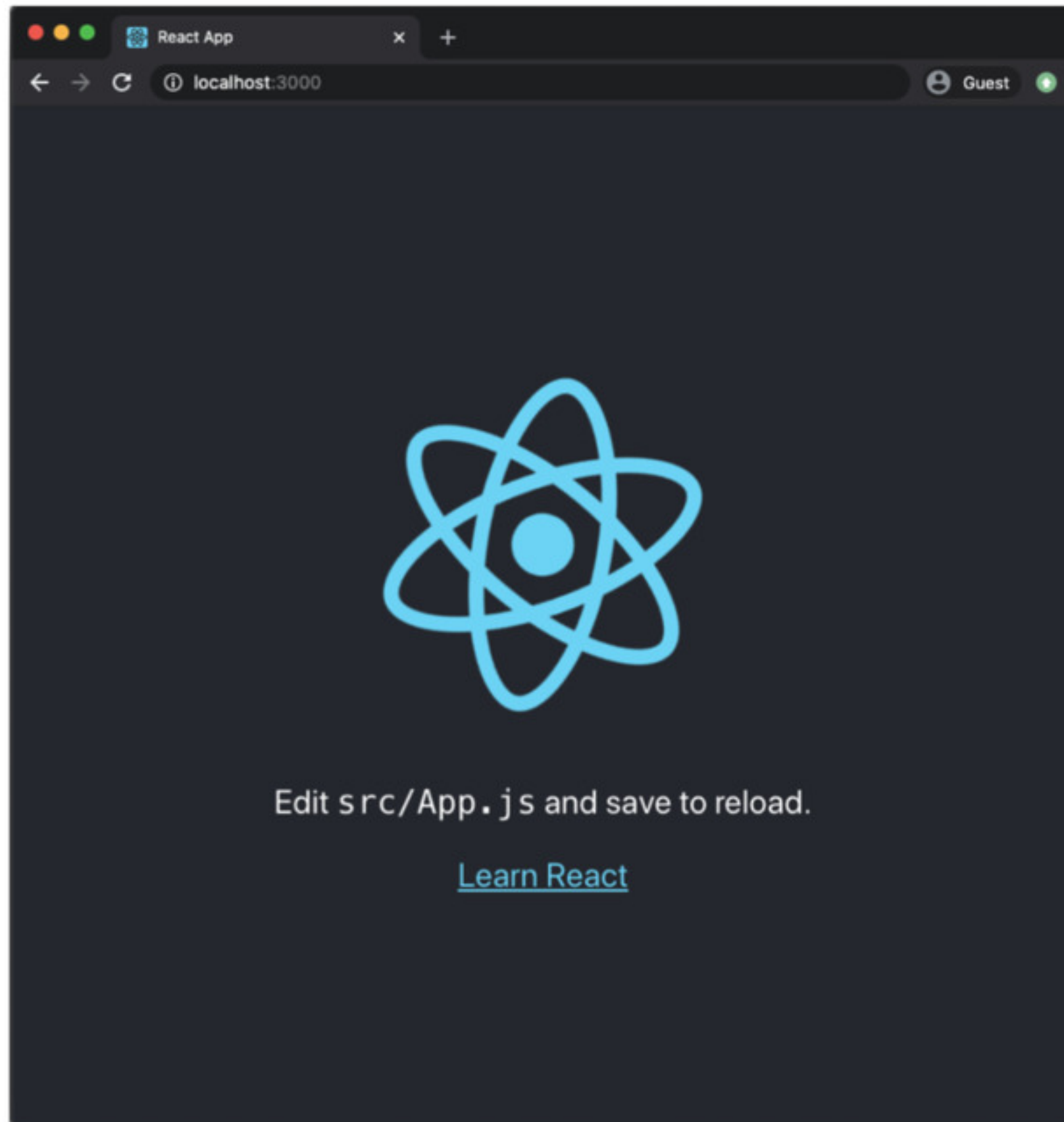
```
Local: http://localhost:3000
```

```
On Your Network: http://192.168.1.37:3000
```

```
Note that the development build is not optimized.  
To create a production build, use yarn build.
```



By default this command launches the app on your local port **3000**, and it opens your browser showing you the welcome screen:



Time To  
Climb







**Time to Climb**

**Time To Climb**

# Poll

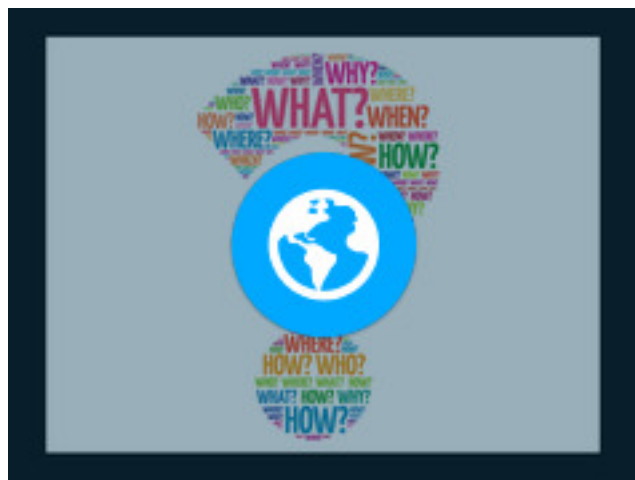


**How confident do you feel about your understanding of React introduction?**

- ☐ I feel comfortable with the topic.
- ☐ I need more practice.
- ☐ I don't understand parts of React introduction.

# Open Ended Question





Questions and feedback: If you have any questions or suggestions feel free to share them with us ??

# Time to practice

