# Exploring a React Project Directory Structure

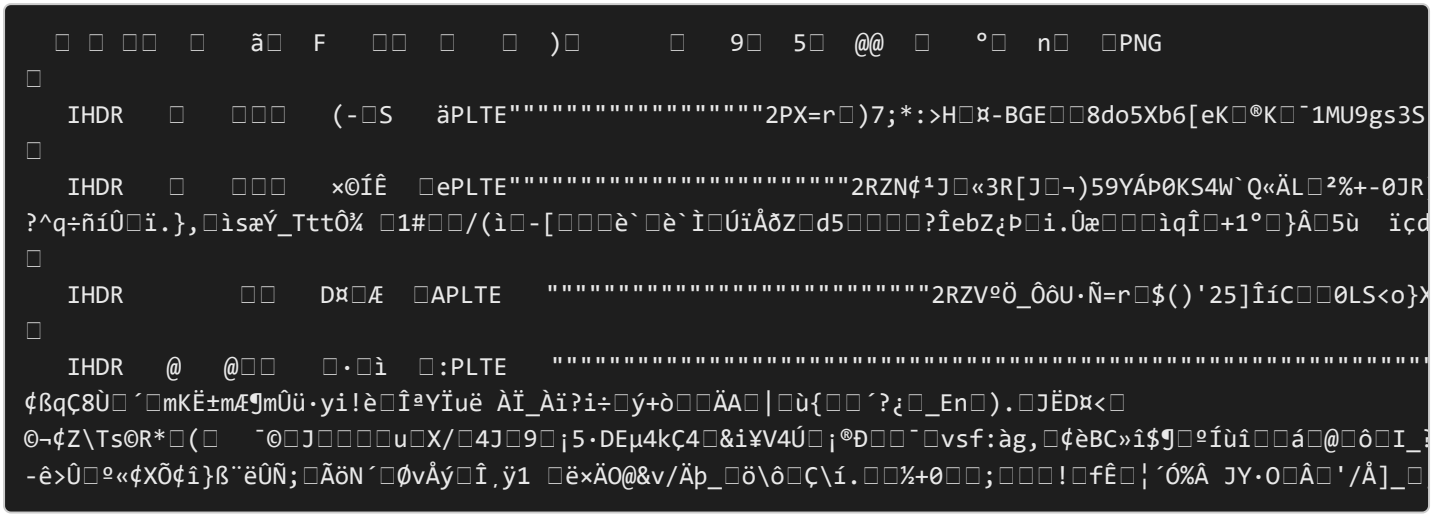
This lesson will provide the guideliness to set up a react project.

**We'll cover the following**

- Project structure
- Exercises:

In the Road to React, we'll use create-react-app to bootstrap your application. It's an opinionated yet zero-configuration starter kit for React introduced by Facebook in 2016, which is recommended for beginners by 96% of React users. In *create-react-app*, the tools and configurations evolve in the background, while the focus remains on the application's implementation.

> 📜 **Note:** You can find the steps for the local setup in the Appendix chapter. But with Educative, you can see the live execution of the code using **Educative SPA widget**.



## Project structure #

The react App project structure on Educative SPA is as follows:

```
--public/
--src/
```

```
----App.css
----App.js

----App.test.js
----index.css
----index.js
----logo.svg
--.gitignore
--package-lock.json
--package.json
--README.md
```

This is a breakdown of the most important folders and files:

- **README.md:** The *.md* extension indicates the file is a markdown file. Markdown is a lightweight markup language with plain text formatting syntax. Many source code projects come with a *README*.md file that gives instructions and useful information about the project. When we push projects to platforms like GitHub, the *README.md* file usually displays information about the content contained in its repositories. Because you used create-react-app, your *README.md* should be the same as the official create-react-app GitHub repository.

- **node_modules/:** This folder contains all node packages that have been installed via npm. Since we used create-react-app, a couple of node modules are already installed. We'll not touch this folder, since node packages are usually installed and uninstalled with npm via the command line.

- **package.json:** This file shows you a list of node package dependencies and other project configurations.

- **package-lock.json:** This file indicates npm to break down all node package versions. We'll not touch this file. This file is hidden in Educative SPA widget.

- **.gitignore:** This file displays all files and folders that shouldn't be added to your git repository when using git, as such files and folders should be located only in your local project. The *node_modules/* folder is one example. It is enough to share the *package.json* file with others, so they can install dependencies on their end with `npm install` without your entire dependency folder.

- **public/:** This folder holds development files, such as *public/index.html*. The

index file is displayed on *localhost:3000* when the app is in development or on a domain that is hosted elsewhere. The default setup handles relating this *index.html* with all the JavaScript from *src/*.

In the beginning, everything you need is located in the *src/* folder. The main focus lies on the *src/App.js* file which is used to implement React components. It will be used to implement your application, but later you might want to split up your components into multiple files, where each file maintains one or more components on its own.

Additionally, you will find a *src/App.test.js* file for your tests, and a *src/index.js* as an entry point to the React world. You will get to know both files intimately in later sections. There is also a *src/index.css* and a *src/App.css* file to style your general application and components, which comes with the default style when you open them. You will modify them later as well.

## Exercises: #

- Read a bit more through React's create-react-app documentation and getting started guide.
  - Read more about the supported JavaScript features in create-react-app.
- Read more about the folder structure in create-react-app.
  - Go through all of your React project's folders and files one by one.
- Read more about the scripts in create-react-app.
  - Note that your React application is already started with `npm start` on the command line from the backend. You can now check it out in the browser by using the link given above the SPA output tab.
- Every time we change something in our code throughout the coming learning experience, make sure to check the output in your browser for getting visual feedback.