**ReactJS Tutorial #2: ReactJS Directory Structure -** [Teman Ngoding](https://temanngoding.medium.com/?source=post_page-----7e5dde8102c6--------------------------------) Apr 26, 2022

In this tutorial Part 2, we will continue to discuss the ReactJS tutorial. This time we will discuss the directory of ReactJS.

To make the installation easier, to install ReactJS, we must first have NPM. Because it will be easier for the application creation process compared to all friends using the CDN that has been provided.

**Preparation**

ReactJS apps are maintained by Facebook and can work on any platform, e.g. macOS, Windows, Linux, etc. To create your React Project using create-react-app, you need to install the following on your system.

Node version >= 8.10  
NPM version >= 5.6

Let’s all friends check the version of Node and NPM that we have, here I use Node v14.17.0 and npm 7.18.1

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**Install ReactJS**

We can install React using the npm package manager by using the following command. No need to worry about the hassle of installing React. The create-react-app npm package will manage everything needed for a React project.

npm install -g create-react-app

**Create New Project**

After a successful React installation, you can create a new React project using the create-react-app command. Here, I chose the name “friend-project” for my project.

create-react-app reactprojectnpx create-react-app reactproject

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The above command will take some time to install React and create a new project with the name “friend-project” Now, we can see the terminal as below.

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Now you can try to open the project that we have created with VS Code, then we will get a file structure like below.

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We have finished creating our first project with create-react-app.

**React Project Directory Structure**

Berikut ini adalah struktur direktori dari proyek React.

* 📁 node\_modules berisi paket-paket modul Nodejs; semua libaray yang kita install dengan npm akan disimpan di sini.
* 📁 public berisi file untuk publik seperti HTML, CSS, icon, dan gambar, dan aset publik lainnya;
* 📄 index.html adalah file HTML yang akan digunakan aplikasi React untuk render komponen.
* 📁 src berisi kode dari aplikasi Reactjs, di sinilah kita akan membuat komponen;
* 📄 App.js berisi kode untuk komponen App atau komponen utama dari aplikasi;
* 📄 App.test.js berisi kode untuk testing komponen App;
* 📄 index.js berisi kode untuk render komponen App ke Real DOM;
* 📄 serviceWorker.js berisi kode untuk *service worker*, ini kita butuhkan nanti saat membuat aplikasi PWA *(Progressive Web Apps)*;
* 📄 setTests.js berisi kode untuk testing aplikasi.
* 📄 .gitignore berisi kode-kode yang akan diabaikan oleh [Git](https://www.petanikode.com/tutorial/git/).
* 📄 package.json file JSON yang berisi keterangan proyek dan daftar modul-modul yang dibutuhkan.
* 📄 yarn.lock adalah file yang digunakan Yarn untuk mengunci versi-versi modul Nodejs yang digunakan.

**Understanding Tools in ReactJS Project**

In React projects, we will often use the following tools:

**1. NPM and Yarn**

NPM and Yarn are tools used for project management in Nodejs.

You can use one. If you are comfortable using Yarn, please use it. But you can also use NPM.

NPM and Yarn Functions:

* Install the tools and libraries needed in the project
* Running scripts for webserver and build
* Running Tests, and others.

**2. Jest**

Jest is a testing framework whose function is to run tests.

This is not what we need in the early stages of learning React. But later at the advanced level, you have to learn how to test your application with Jest or other frameworks. The goal is that the applications we make are safe from bugs.

**3. React Script**

React scripts run from NPM and Yarn. Its function is to combine or compile sources into one so that it can be opened from a browser.

React Script uses Webpack in it. So for those of you who have studied Webpack, you will understand the React Script function.

**4. Git**

Git is a version control system (VCS). We need Git when working in a team to log any changes in the source code. For the learning stage, we do not need these tools.

If you want to learn Git, you can follow the tutorial below.

[Git flow tutorials — Basic workflow](https://temanngoding.com/tutorial-git-flow/)

And friends, you can learn the previous ReactJS tutorials:

[React JS Tutorial Part #1: Introduction to React JS Basics](https://temanngoding.com/tutorial-reactjs-1-pengenalan-dasar-reactjs/)