WHAT IS CREATE-REACT-APP

Not required for React but awfully convenient

create-react-app (CRA) is a **program**

- Creates a directory for a new react application
- Creates/configures package.json
- Installs npm packages
- Common configs
- Webpack for bundling
- Eslint for linting
- Babel for transpiling
- Notable: fairly un-opinionated

INSTALLING AND USING CRA

```
npm install -g create-react-app
```

WAIT!!!

What do you mean, a global install !?

Yes - this is a tool, not part of the code we're writing

```
create-react-app demo
```

WHAT DID THAT DO?

- Took a long time to install a lot
- Gave us some instructions (also in the README)
- Installed a `package.json` and the dependencies
    - "react-scripts" is another package that wraps webpack/babel/etc
    - "react-scripts" ALSO has the configs for those packages
    - Some config is in package.json directly
- Created a `/src` directory
- Created a `/public` directory

WHAT NOW?

Some commands are defined in `package.json`:

- `npm eject` - removes CRA, leaves the code/configs
    - Don't use this, but try it out on a test project
- `npm build` - makes static HTML and JS in `/build`
    - NO SERVER - you have to write or use one
- `npm start` - starts a dev server
    - Auto reloads/rebuilds when the code changes
    - Great to develop against
    - Not for final use - use `npm build` and use the `/build` results for a real server

WHAT DO WE HAVE?

- in `/public` the `index.html` file has no real content
  - but does have `<div id="root"></div>`
- in `/src/` the `index.js` loads `App` and injects it into `#root`

But what is `App`?

What are these `import` commands?

To make ME happy, rename `src/App.js` to `src/App.jsx`

BUILD PROCESS

This code is all being bundled with `webpack` and transpiled by `babel`

Actual JS will be different than you see.

Run `npm start`

- This starts a server (keeps terminal busy)
- This transpiles and bundles the code

Fancy, but we saw this already - this is just pre-assembled

NON-JS IMPORTS

`import` is a standard, even though it requires a bundler/transpiler.

Some **non-standard** transpiling extensions are often used to bring CSS and/or images into a web-page

- requires a **configured** transpiler/bundler to do
- CRA gives you that config

```
import React from 'react'; // standard library import
import ReactDOM from 'react-dom'; // standard library import
import './index.css'; // NON-STANDARD, adds CSS to page
import App from './App'; // standard local file import
```