

# Decentralized social media design training

## episode 1: set up design env, intro to basic CSS

# Steps to set up env.

- Nodejs and npm

1. download nodejs package and `sudo chmod 755 node-v12.19.0-linux-x64.tar.xz`

2. `sudo mv node_modules/ /usr/lib/`

3. `sudo ln -s ../lib/node_modules/npm/bin/npm-cli.js npm`

`sudo ln -s ../lib/node_modules/npm/bin/npm-cli.js npx`

`sudo cp node /usr/bin`

- Install reactjs

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

# Intro to React

- React is easy, don't be discouraged! If we keep in mind the motivation of SPA and front-end server, ie, the historical problems the react framework is trying to solve we can easily understand each component of react! This applies to other framework
- Talking is cheap, lest begin with coding. We can pick up the knowledge of React, html, css, etc... by building this interesting project. Just like the way we pick a language, for instance, we did not start learning English only after we have finished the whole Dictionary and grammar. We only remember these that we need!

# The structure of hello world

- Why it is SPA. The whole project is designed to render only one page, which is index.html under public folder as shown below, dynamically according to user input.

The screenshot shows a code editor with the following structure:

- File Explorer (Left):**
  - FRONTEND
    - node\_modules
    - public
      - index.html
- index.html (Top Window):**

```
19 <title>React App</title>
20 </head>
21 <body>
22   <noscript>You need to enable JavaScript to run this app.</noscript>
23   <div id="root">
24
25   </div>
26 </body>
27 </html>
28
```
- index.js (Bottom Left Window):**

```
6
7 ReactDOM.render(
8   <React.StrictMode>
9     <App />
10  </React.StrictMode>,
11  document.getElementById('root')
12 );
```
- App.js (Bottom Right Window):**

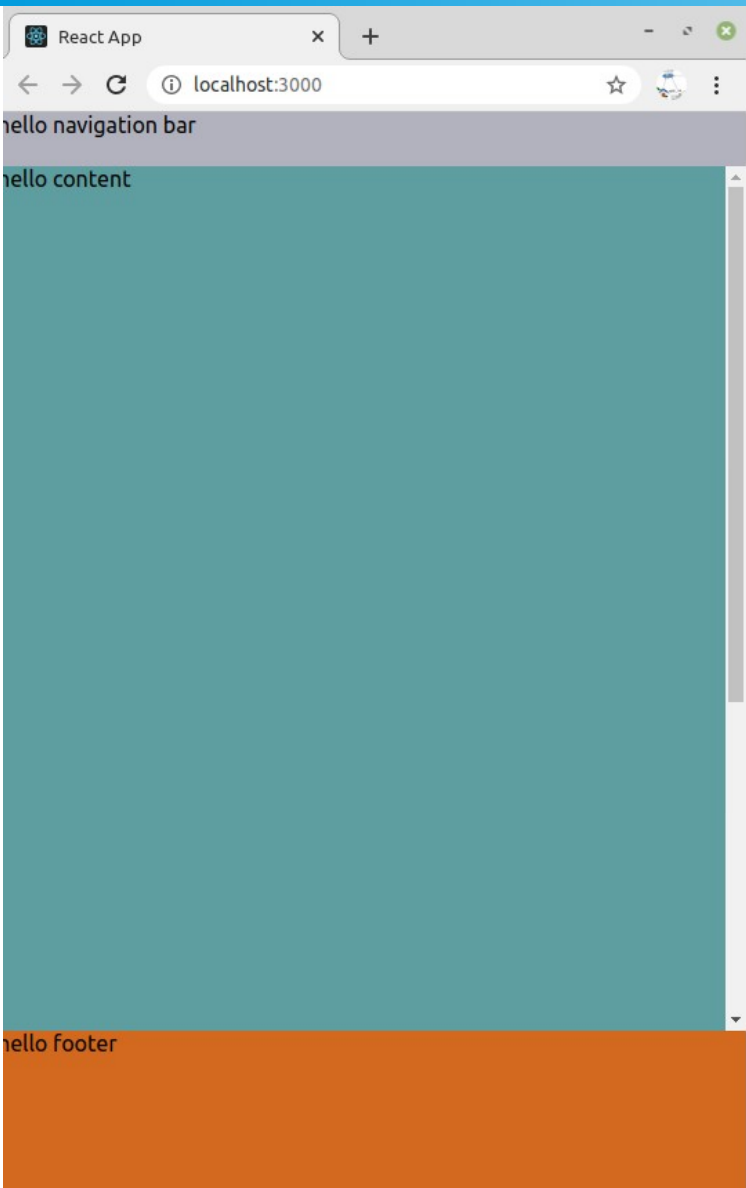
```
6 function App() {
7   return (
8     <div className="App">
9       <Nav />
10      <Content />
11      <Footer />
12    </div>
13  );
14 }
```

Arrows indicate the rendering flow: from `<App />` in `index.js` to the `<div id="root">` in `index.html`, and from the `App` component in `App.js` to the `<div id="root">` in `index.html`.

Index.js renders `<App />` component to root div under the `<body>` of html file

`<App />` component is further divided into navigation bar `<Nav />`, page content `<Content />` and footer `<Footer />`, then we can further divide each component like so. By designing website like so, we only have to update the corresponding component of the web page when required, so it increases the user experience

# The structure of hello world



# Intro to css flex and grid

- Flex-grow, flex-shrink, flex-basis