

## 1.2 Project Setup and create-react-app

### 1.2.1 Requirements

The tools and versions I used during the implementation of this app:

```
node v7.3.0  
npm v3.10.10
```



### 1.2.2 create-react-app

**creat-react-app** is a new tool open-sourced by Facebook for fast react application development, which allows you to easily start React applications without complex setups. You can easily install our project **react-tesla-range-calculator** and start the application right away with the following command:

- `npm install -g create-react-app`
- `create-react-app react-tesla-range-calculator`
- `cd react-tesla-range-calculator`
- `npm start`

```
Success! Created react-tesla-range-calculator at /Users/jinseok/blog/react-tesla-range-calculator  
Inside that directory, you can run several commands:
```

```
npm start  
Starts the development server.
```

```
npm run build  
Bundles the app into static files for production.
```

```
npm test  
Starts the test runner.
```

```
npm run 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 react-tesla-range-calculator  
npm start
```

**start application and see the app running**

```
Happy hacking!
```

Create a new application through **creat-react-app** and open **<http://localhost:3000/>** to check the generated application. If you see the screen

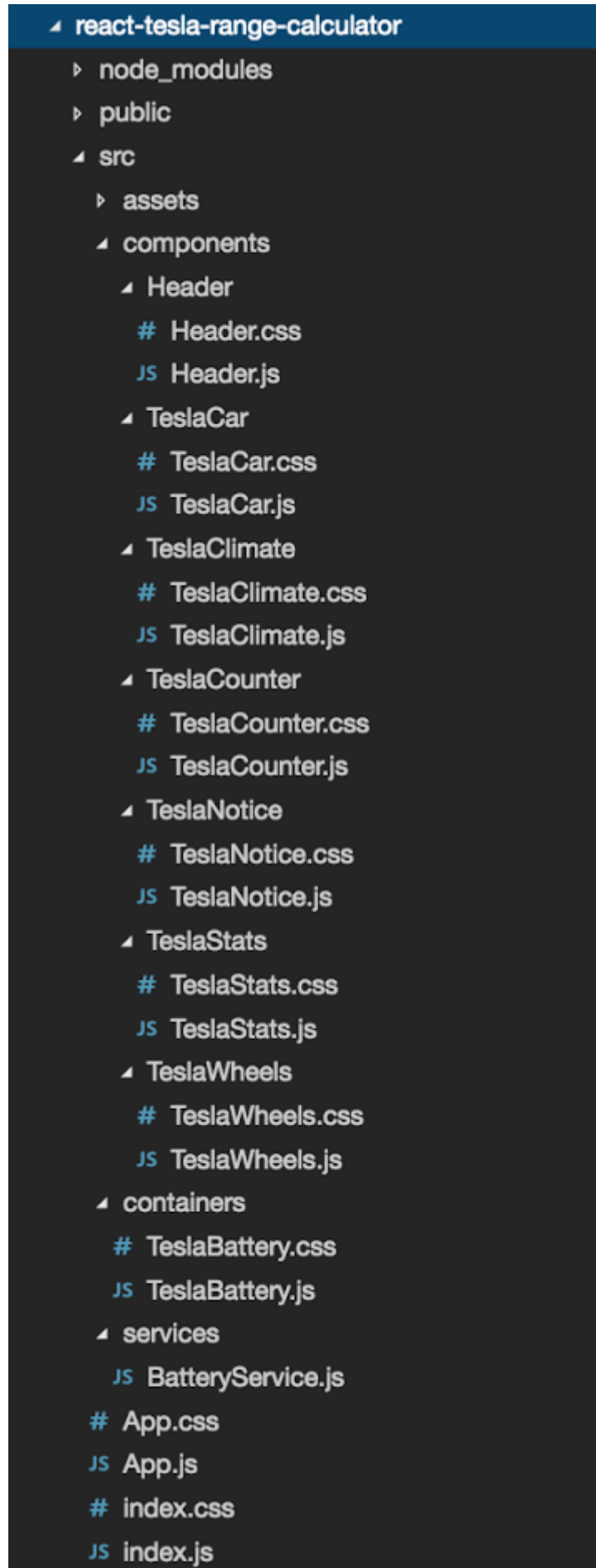
below, the project has been successfully set up.

```
<svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 841.9 595.3">
  <g fill="#61DAFB">
    <path d="M666.3 296.5c0-32.5-40.7-63.3-103.1-82.4 14.4-63.6 8-114.2-20.2-130.4-6.5-3.8-14.4-6.5-20.2-6.5-6.5 0-13 3.8-14.4 6.5-40.7 63.3-103.1 82.4-103.1 82.4" data-bbox="666.3 296.5 841.9 595.3"/>
    <circle cx="420.9" cy="296.5" r="45.7"/>
    <path d="M520.5 78.1z"/>
  </g>
</svg>
```

Before we start the project, we need to touch the project source structure. Just leave the files we need for the project and delete the rest. (Delete `App.test.js`, `logo.svg`) Now our `src` directory should look like this:

```
src
- App.css
- App.js
- index.css
- index.js
```

Here is project source structure :



## 1.2.3 Project Entry Point

First we need to set the entry point to start our Tesla app. Thankfully it's already

created by `create-react-app`.

`src/App.js` is the entry point for our app.

First up, change your `App.js` to this:

```
import React, { Component } from 'react';
import './App.css';
class App extends Component {
  render() {
    return (
      <div>
        <h2>Let's get started</h2>
      </div>
    );
  }
}
export default App;
```

When you save the file, it will be automatically compiled and you can see the updated screen.

```
import React, { Component } from 'react';
//import './App.css';
class App extends Component {
  render() {
    return (
      <div>
        <h2>Let's get started</h2>
      </div>
    );
  }
}
export default App;
```

## 1.2.4 Project images/assets

All images required for this project can be downloaded from:

- images [Download](#)
- favicon.ico [Download](#)

Unpack `assets.zip` and place all images in the `src/assets` directory and place the downloaded `favicon.ico` in the source root.

```
react-tesla-range-calculator/src/asstets
```

*Any time you feel like if you've missed something or unsure if you're doing right, you can refer to the [source code](#) as a reference.*

## 1.2.5 Data service

The data you can get from Tesla site is hard-coded and very large, so we'll use Todd's new version of the data to make it easier to use. [link](#)

We do not use the `Injectable decorator` used in Angular2, so we will copy only the `export` part, just save it in `src/services/BatteryService.js` for now. Later, we will use `import` it in `TeslaBattery` container.

We will revisit this data service later.