React Notes

Your First Component :

** there is a notes.js file in each exerecise in the repo that have all the things covered in there for referrence on syntax etc

This repo uses commonJS to require things

********https://github.com/staygrimm/sort-by#example**** sortBy library that rocks!!!

when writing html elements as functions in React you can use two diff styles, one being JSX which is generally preferred as it is more clear

```
1  // new ES6 syntax called destructering assignment which is the same as :
2  // var h1 = React.DOM.h1;
3  // var div = React.DOM.div;
4  // var ul = React.DOM.ul;
5  // var li = React.DOM.li;
6  var { h1, div, ul, li } = React.DOM;
7
8  var element = (
9    div({},          // this === div (f) w/ h1 & ul arg &-> ul arg contains li args
10     h1({}, "Hello"),
11     ul({},
12       li({}, "Mark with C"),
13       li({}, "Marc with K")
14     )
15   )
16 );
17
18 // element2 uses JSX but does the same things as the above
19 var element2 = (
20   <div>
21     <h1>Hello from JSX</h1>
22     <ul>
23       <li>Jewels</li>
24       <li>Julia</li>
25     </ul>
26   </div>
27 );
28
29 React.render(element, document.body);
30
31 // debugger keyword here lets you see app.js in dev tools and see what React does with above
   e
32 debugger;
```

```
1  // you can also make composite components like this below (it is the same thing as element2
   )
```

```
 2  var App = React.createClass({
 3    render () {
 4      return (
 5        <div> // you always have to wrap ui in a div element i
 6          <h1>Hello from JSX</h1>
 7          <ul>
 8            <li>Jewels</li>
 9            <li>Julia</li>
10          </ul>
11        </div>
12      );
13    }
14  });
15
16  // new ES6 features make it so you can't call App() directly & you have to make it into a
17  // factory first -- becuase of a new Class component/method(?) in ES6
18  App = React.createFactory(App);
19
20  React.render(App(), document.body);
```

sortBy library that rocks!!! ********https://github.com/staygrimm/sort-by#example************

The nice thing about React is you really just can use JavaScript to do what you need such as filter, sort and map instead of relying on methods built into the framework such as AngularJS does

Props:

** MOST IMPORTANT THING TO UNDERSTAND
properties that you pass into a component

```
 1  var React = require('react');
 2
 3  var input = <input type="checkbox" />
 4  //same as :
 5  //React.DOM.input({type: "checkbox"})
 6
 7  var Gravatar = React.createClass({
 8    render () {
 9      return <span>{this.props.email}</span>;
10    }
11  });
12
13  var element = <Gravatar email="giulz42@gmail.com" />
14
15  React.render(element, document.body);
16
```

`React Proptypes` in google search and you get this page: https://facebook.github.io/react/docs/reusable-components.html
which has many proptypes listed