React 102

Stateless functional components

"This function is a valid React component because it accepts a single "props" object argument with data and returns a React element. We call such components "functional" because they are literally JavaScript functions."

```
1   import React from 'react';
2
3   class MyComponent extends React.Component {
4     render() {
5       return(
6         <h1>Hi</h1>
7       )
8     }
9   }
10
11  const MyStatelessFunctionalComponent = () => {
12    return(
13      <h1>Hi</h1>
14    )
15  }
16
17  export {MyStatelessFunctionalComponent, MyComponent}
18
```

```
1   import React, { Component } from 'react';
2   import {MyComponent, MyStatelessFunctionalComponent} from './MyComponent'
3
4   class App extends Component {
5
6     render() {
7       return (
8         <div>
9           <MyComponent />
10          <MyStatelessFunctionalComponent />
11        </div>
12      );
13    }
14  }
15
16  export default App;
17
```

ES6 stuff

"Object Literals"

```
const key = 5;
const anotherValue= 6
const obj = {
  key: key,
  anotherKey: anotherValue
}
```

==

```
const key = 5;
const anotherValue= 6
const obj = {key, anotherKey}
```

ES6 stuff

"Destructuring objects"

```
const obj = {value: 5,
doNotCare: 10}

const {value} = obj;

console.log(value) // 5
```

Destructuring props

```jsx
import React from 'react';

const MyComponent = (props) => {
  return(
    <h1>Hi {props.name}</h1>
  )
}

export {MyComponent}
```

```jsx
import React from 'react';

const MyComponent = ({name}) => {
  return(
    <h1>Hi {name}</h1>
  )
}

export {MyComponent}
```

ES6 stuff

"Import/Export"

Exporting object {MyComponent: MyComponent}

```
1   import React from 'react';
2
3   const MyComponent = () => {
4     return(
5       <h1>Hi</h1>
6     )
7   }
8
9   export {MyComponent}
10
```

Importing MyComponent from obj exported

```
1   import React, { Component } from 'react';
2   import {MyComponent} from './MyComponent'
3
4   class App extends Component {
5
6     render() {
7       return (
8         <div>
9           <MyComponent />
10        </div>
11      );
12    }
13  }
14
15  export default App;
16
```

"Import/Export" default

Does not matter what you import as.

```
1    import React from 'react';
2
3    const MyComponent = (props) => {
4        return(
5            <h1>Hi {props.name}</h1>
6        )
7    }
8
9    export default MyComponent
10   |
```

```
1    import React, { Component } from 'react';
2    import Whatever from './MyComponent'
3
4    class App extends Component {
5
6        render() {
7            return (
8                <div>
9                    <Whatever name='bob'/>
10               </div>
11           );
12       }
13   }
14
15   export default App;
16
```

Workshop

- Take filter list from last workshop:
  https://github.com/tswayne/react-workshop/tree/solution
- Move components into own files
- Turn components into functional components
- Turn filter list into shopping/todo list that
  - Has an "add" button beside input
  - When you click "add" text from input is added to list
  - List is displayed below input
  - When you click on a list item it crosses/uncrosses off item