Let's make a todo list app with React Native!

First workshop!

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UMN ADC

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UMN App Developers

Logistics...

Streaming

- https://z.umn.edu/adc-zoom
- Recordings will be posted as unlisted YouTube videos as linked at https://adcumn.org/meetings

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In-person

- Tuesdays 6-7pm
- Tate Hall 120

Officer openings!

- Workshop instructors

DM us on the discord!

https://z.umn.edu/ADCdiscord

Guide

We will be following this guide: https://github.com/ADC-UMN/todotorial. Feel free to go ahead of the workshops at your own pace.

What is React?

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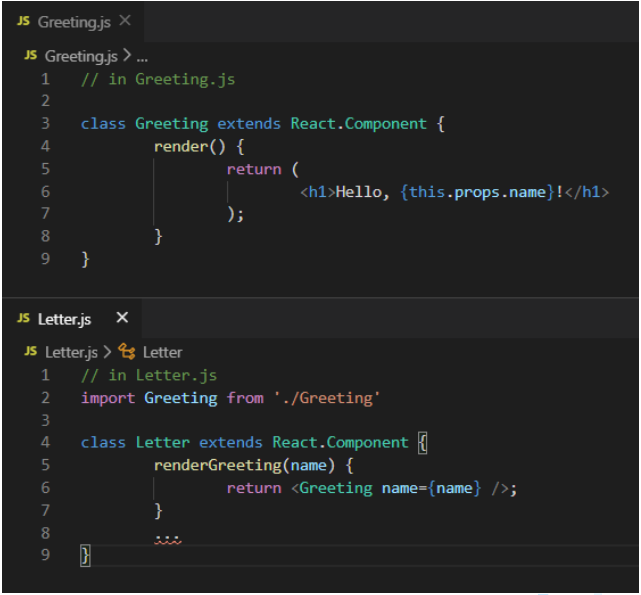
It is *declarative*. The building blocks are *components*, which may be *functional* or *class components*.

React class components



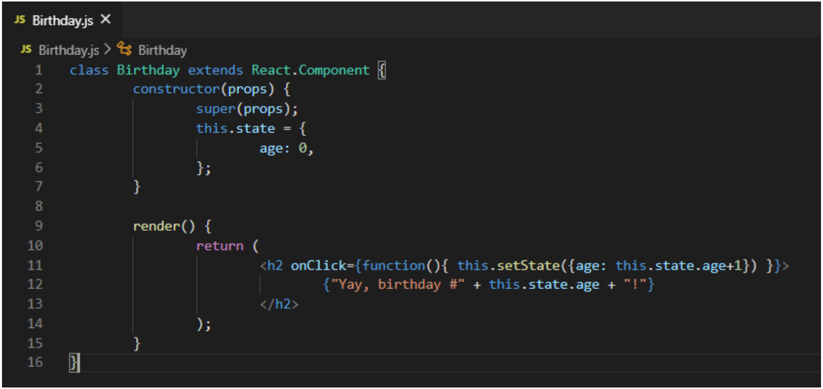
```
// in Greeting.js

class Greeting extends React.Component {
        render() {
                return (
                        <h1>Hello, {this.props.name}!</h1>
                );
        }
}
```

```
// in Letter.js
import Greeting from './Greeting'

class Letter extends React.Component {
        renderGreeting(name) {
                return <Greeting name={name} />;
        }
        ...
}
```

State



```
class Birthday extends React.Component {
        constructor(props) {
                super(props);
                this.state = {
                        age: 0,
                };
        }

        render() {
                return (
                        <h2 onClick={function(){ this.setState({age: this.state.age+1}) }}>
                                {"Yay, birthday #" + this.state.age + "!"}
                        </h2>
                );
        }
}
```

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Built-in components

React Native	Android	iOS	HTML
<View>	<ViewGroup>	<UIView>	<div>
<Text>	<TextView>	<UITextView>	<p>
<Image>	<ImageView>	<UIImageView>	<img>

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See https://reactnative.dev for more.

Getting started

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You should instead use the Expo command line interface (CLI) so that you can build your app locally and upload it for distribution.

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Confirm your installation and Node version with `node -v`.

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Run `npm install -g expo-cli`. You can now create a template for a new project with `expo init` and test it with `expo start`.

A look at what's ahead

1. Components, Styling, and Testing
2. Data Manipulation and State Handling
3. Persistent Lists using AsyncStorage
4. Deployment to Google Play Store

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Here's the finished product: https://snack.expo.dev/@nathanielbd/todotorial. What data should be kept track of using the state?