React Native Basic

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GOALS

1. Intro
2. Installing (RN CLI)
3. Components
4. Debugging
5. Styling

1. Intro

Why React Native?

iOS	Android
Native development uses Swift	Uses JAVA for native development

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Why Is React Native Different?

Web Developers
Use existing skills to build mobile apps

React Native
Generates a true native app

Web view
Other hybrid platforms use a web view

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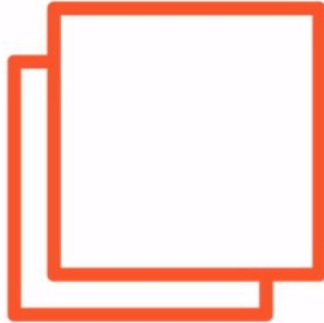# Advantages of React Native

True native app from JavaScript

Performance on par with native

Easy to learn

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Advantages of React Native

Shared codebase
Same code for iOS or Android

Community
Solid infrastructure of plugins and services

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2. Installing (RN CLI)

- Requirements:
- Android: NodeJS, JDK, Android Studio/Emulator/AVD/Physical device
- iOS: NodeJS, JDK, XCode, Physical device
- Installing dependencies:
- Android:
  Install Android SDK, Configure ANDROID_HOME
- iOS:
  ```
  brew install node, tap AdoptOpenJDK/openjdk, cask install adoptopenjdk8
  ```
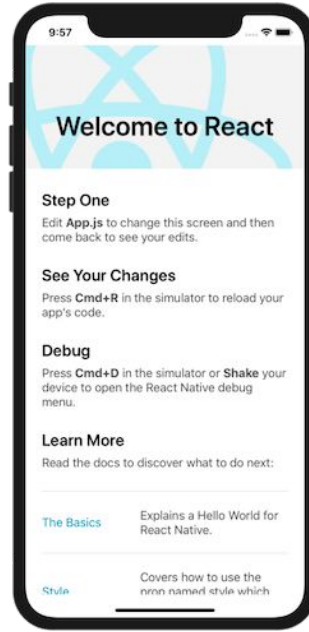
For more details: https://facebook.github.io/react-native/docs/getting-started

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- npm install -g react-native-cli
- react-native init AwesomeProject

android

cd AwesomeProject
react-native run-android

Welcome to React

Step One
Edit App.js to change this screen and then come back to see your edits.

See Your Changes
Press Cmd+R in the simulator to reload your app's code.

Debug
Press Cmd+D in the simulator or Shake your device to open the React Native debug menu.

Learn More
Read the docs to discover what to do next:

The Basics   Explains a Hello World for React Native.

Style   Covers how to use the prop named style which

react-native start

cd AwesomeProject
react-native run-ios

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Another way...
Please welcome =>

```js
import React from 'react';
import { StyleSheet, Text, View } from 'react-native';

export default class App extends React.Component {
  render() {
    return (
      <View style={styles.container}>
        <Text>Open up App.js to start working on your app!</Text>
        <Text>Changes you make will automatically reload.</Text>
        <Text>Shake your phone to open the developer menu.</Text>
      </View>
    );
  }
}

const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: '#fff',
    alignItems: 'center',
    justifyContent: 'center',
  },
});
```

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3. Components

Components

React uses components to build apps

React Native includes many components ready for use

React Native components translate to native features

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```
import React, { Component } from 'react';
import { Text, View } from 'react-native';

export default class HelloWorldApp extends Component {
  render() {
    return (
      <View style={{ flex: 1, justifyContent: "center", alignItems: "center"
}}>
        <Text>Hello, world!</Text>
      </View>
    );
  }
}
```

11:56

Hello, world!

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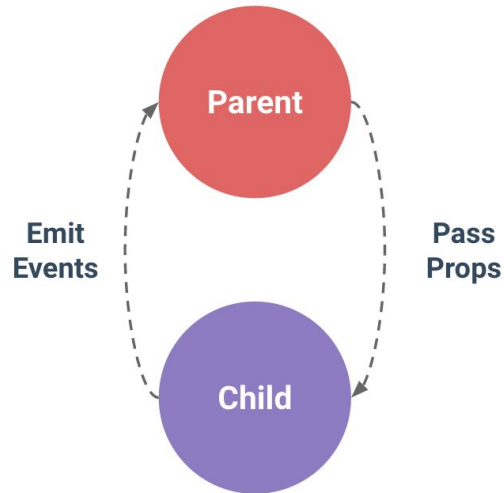## Parent-Child Components

In React the data flows in one direction: from the parent to the child.
To unify components that are separate from the parent we need the default
export method and call the component on the parent.

State and Props

- State is internal to a component, while props are passed to a component. State can Change — Mutable
- Props are short for *Properties*. Props are Unchangeable — Immutable

Notice:

Keep in mind not to update state directly using *this.state.* Always use *setState* to update the state objects. Using *setState* re-renders the component and all the child components.

Conditional Rendering

- IF-ELSE
- Ternary Operation
- Logical && Operator
- Switch case
- Enums
- Multi-Level
- Higher Order Components (HOCs)
- External Templating Components

```
condition ? expr1 : expr2
```

```
function LoadingIndicator({ isLoading }) {
  return (
    <div>
      { isLoading && <p>Loading...</p> }
    </div>
  );
}
```
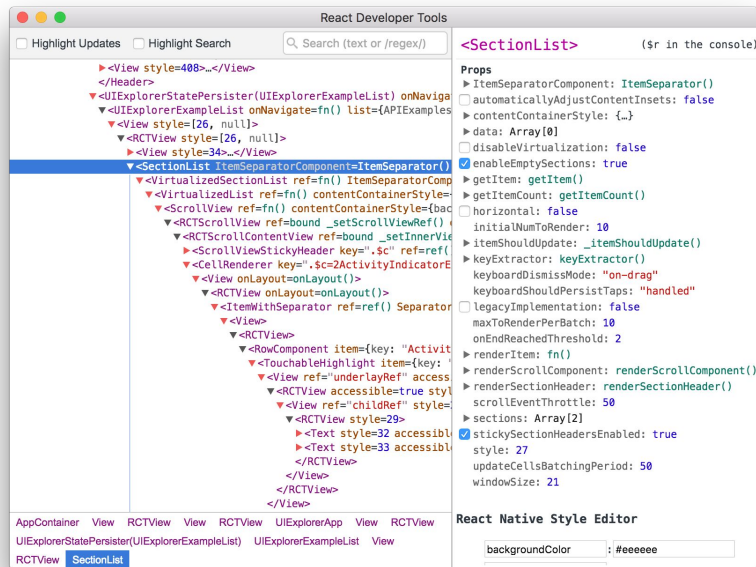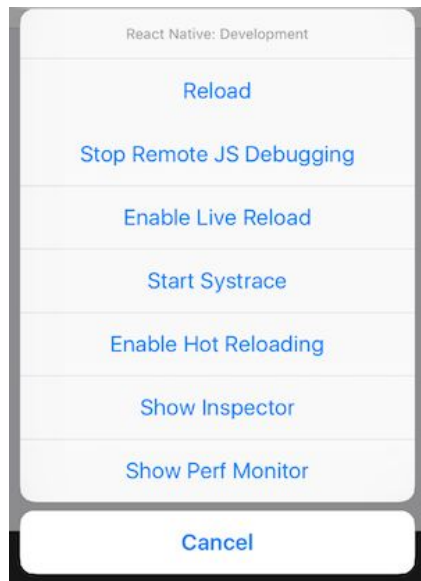
For more details: https://www.robinwieruch.de/conditional-rendering-react

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4. Debugging

Use the: ⌘D / ⌘M / Ctrl+M

```
npm install -g react-devtools
react-devtools
```


For more details: https://facebook.github.io/react-native/docs/debugging

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5. Styling

```
    <View style={styles.container}>
      <Text>Open up App.js to start working on your app!</Text>
      <Text>Changes you make will automatically reload.</Text>
      <Text>Shake your phone to open the developer menu.</Text>
    </View>
  );
 }
}

const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: '#fff',
    alignItems: 'center',
    justifyContent: 'center',
  },
});
```

Applying multiple styles to a component

```
<View style={[styles.generic, styles.specific, { color: 'blue' }]} />
```

Explore: Flexbox & React Native UI Library

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Exercise

Create Form Login ;)