

React native

Installation and overview

Installation

- On Mac (see tutorialsPoint tutorial)
 - Download Xcode from app store
 - Install command line tools (look in preferences)
 - Open the terminal window
 - Install homebrew: see link on tutorialspoint → React Native – Environment Setup
 - Install Watchman: see link on tutorialspoint → React Native – Environment Setup
 - Install node.js: <https://nodejs.org/en/download/>
 - DO NOT do step 3 of tutorialspoint. Instead, go to the Facebook ReactNative tutorial.
 - `npm install -g create-react-native-app`
 - Continue the tutorial
 - Download the Expo client (see class web site, reference → React Native → Expo)

Installation

- On Windows
 - Install Node.js: <https://www.wikihow.com/Install-Node.Js-on-Windows>
 - go to the Facebook ReactNative tutorial
 - Open a command line window and type:
 - `npm install -g create-react-native-app`
 - Continue the tutorial
 - Download the Expo client (see class web site, reference → React Native → Expo)

React Native

- There are two ways to develop apps
 - The tool create-react-native-app
 - A quicker, easier install
 - Only supports pure-JavaScript applications
 - Better for testing and prototyping
 - Run apps on Android and iOS using the Expo app
 - react-native-cli
 - Must have Android Studio and Xcode installed
 - Create native apps
 - Must use this to put apps in the appropriate App Store

We'll use this approach for most of this class

expo

- Expo is an app (both iOS and Android)
 - Can run apps that you create in create-react-native-app
 - Must have an account on Expo
 - Email address that you use to create account must be the same as the email address on your device
- Running an app
 - `npm start`
 - Choose 's' and enter your email address or phone number. Link will be sent to you
 - Click on the link in your device. Expo app will load it.

expo

- Updating app
 - ^c to quit npm
 - Edit App.js file
 - Rerun: npm start
 - Shake device to get to the developer menu
 - Click on “refresh”
 - Your app should reload

Hello world

Must import everything you use; import is ES6 syntax

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

Component: often something you see on the screen

```
export default class HelloWorldApp extends Component {
```

Notice the class syntax:
"class" and "extends"

```
  render() {  
    return (  
      <View>
```

render() causes the component to be displayed

```
        <Text>Hello world!</Text>
```

JSX: XML embedded in JavaScript

```
      </View>
```

```
    );
```

```
  }
```

This is in App.js

```
}
```

```
{ Component } from 'react';  
// this is destructuring syntax from ES6  
// same as:  
import React from "react";  
let Component = React.Component;
```