

React Native

Kyeongwon Lee

WEBD3000 - Gap Analysis



1. What Is React Native?

Concept

- JavaScript framework
- For writing real, natively rendering mobile applications
- For iOS and Android
- Based on React, Facebook's JS library

Native rendering APIs in Objective-C (for iOS) or Java (for Android)

Advantages

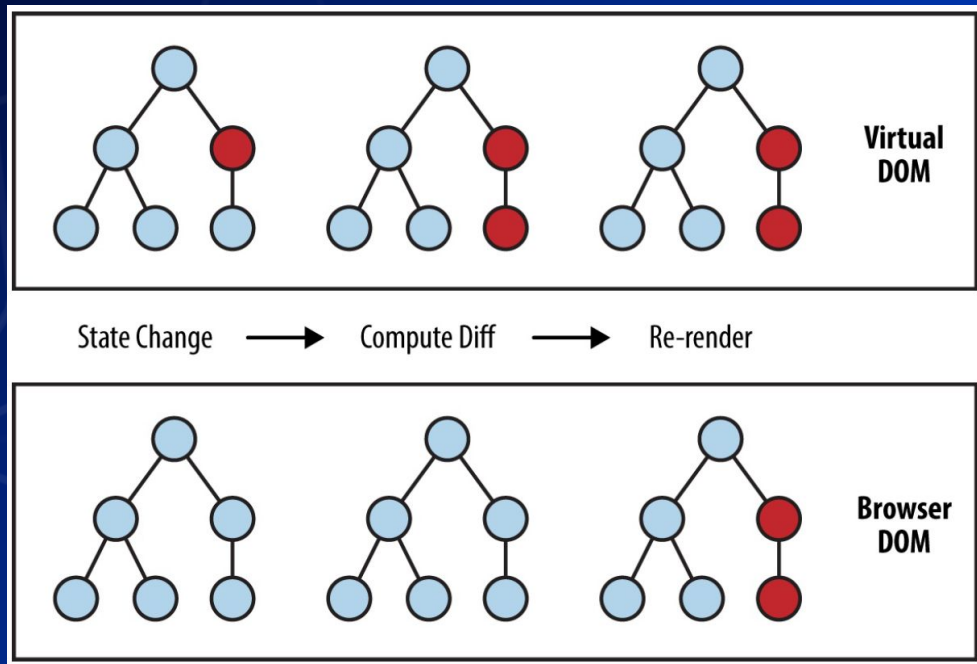
- Renders using its host platform's standard rendering APIs
- Existing methods using JS, HTML, CSS
 - Performance drawbacks
 - Usually don't have access to the host platform's native UI elements
- React Native translates the markup to real, native UI elements
 - Rather than using HTML/CSS markup



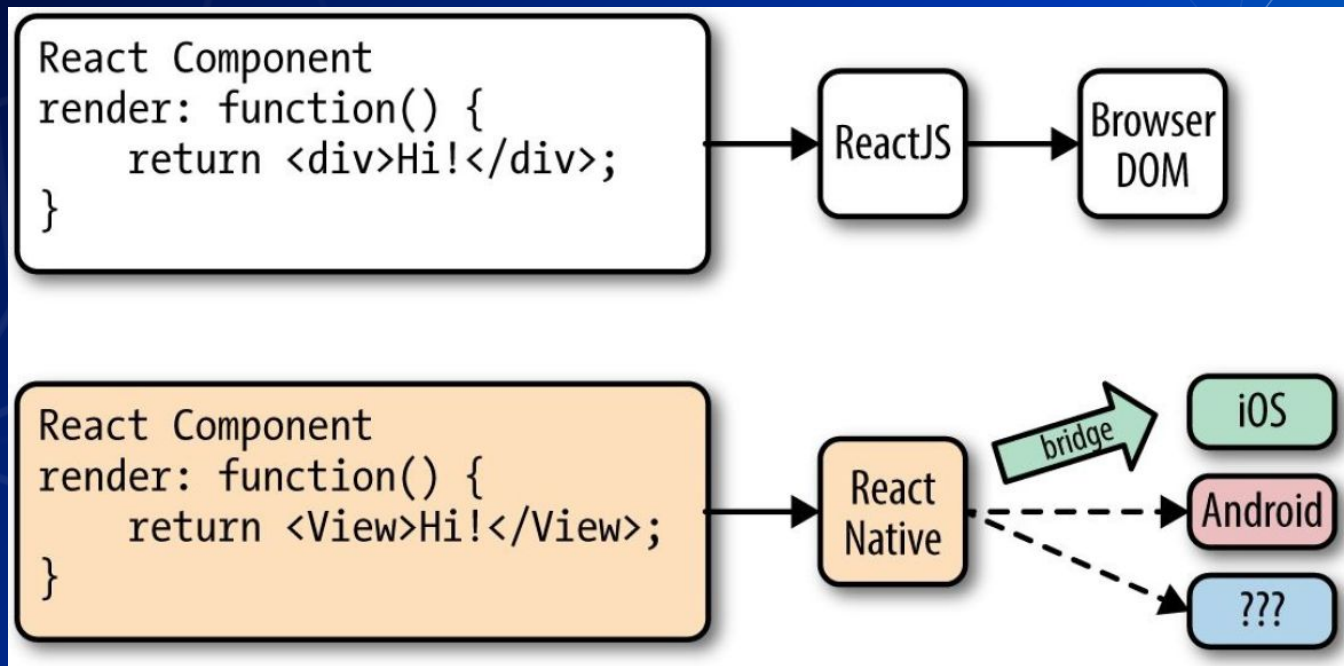
2.

Working with React Native

Virtual DOM, revisited



Rendering to different targets



Working with Views

React	React Native
<code><div></code>	<code><View></code>
<code></code>	<code><Text></code>
<code>, </code>	<code><ListView></code>
<code></code>	<code><Image></code>

```
<DatePickerIOS
  date={this.state.date}
  mode="date"
  timeZoneOffsetInMinutes={this.state.timeZoneOffsetInHours * 60}
/>
```

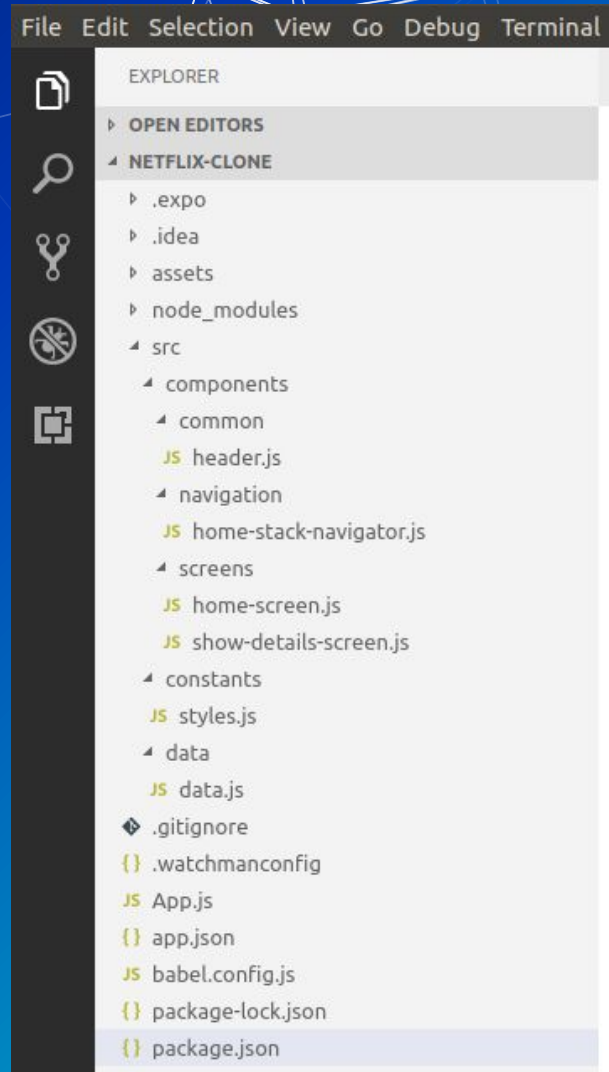
January	15	2012
February	16	2013
March	17	2014
April	18	2015
May	19	2016
June	20	2017
July	21	2018
August	22	2019



3. Give It a Try

Setting Up

- <http://expo.io/tools>
- `$ npm install expo-cli --global`
- `$ expo init my-project`
- `$ cd my-project`
- `$ expo start`
- Alternatively, <http://snack.expo.io>



Import { ... } from 'react-native';

- ScrollView
- StatusBar
- TouchableWithoutFeedback
- TouchableOpacity

- Open files
- App.js
- Project
- assets
 - components
 - App.js
 - package.json
 - README.md

```
1 import * as React from 'react';
2 import { Text, View } from 'react-native';
3 import { Constants } from 'expo-constants';
4
5 // You can import from 'react-native'
6 import { Asset } from 'react-native-image-crop-picker';
7
8 // or any pure js module
9 import { Card } from 'react-native-paper';
10
11 export default function App() {
12   render() {
13     return (
14       <View style={styles.container}>
15         <Text>Hello, World!</Text>
16         <Card>
17           <Asset
18             source={require('assets/images/unicorn.jpg')}
19             style={styles.image}
20           />
21         </Card>
22       </View>
23     );
24   }
25 }
26
27 const styles = StyleSheet.create({
28   container: {
29     flex: 1,
30     justifyContent: 'center',
31     padding: 10,
32     backgroundColor: '#f0f0f0',
33   },
34   image: {
35     width: 100px,
36     height: 100px,
37     margin: 0 auto,
38   },
39 });
```

Import git repository

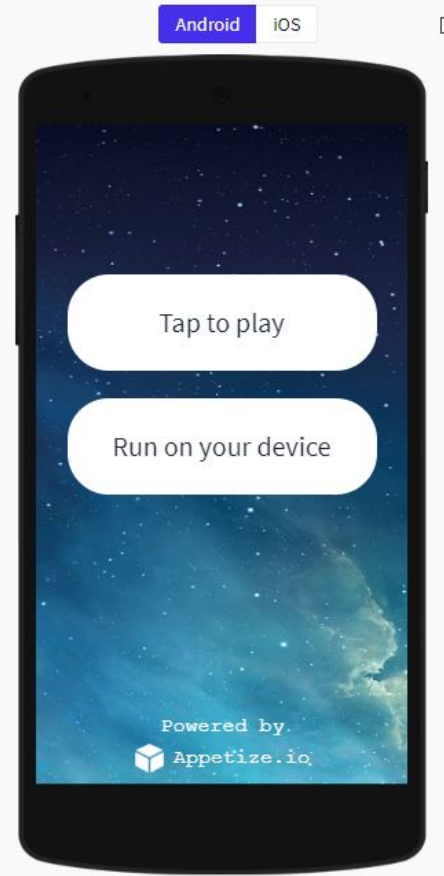
Import an Expo project from a Git repository.

Git URL

<https://github.com/The-Kyle/netflix-clone.git>

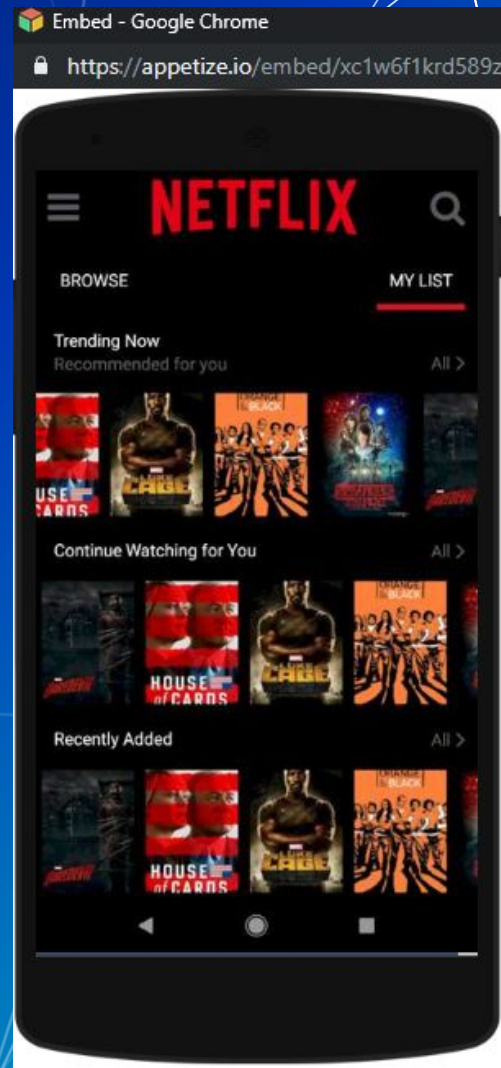
Show advanced options

Import repository



Expo Snack

Powered by
appetize.io



Demo

snack.expo.io

<https://github.com/The-Kyle/netflix-clone.git>

References

- Learning React Native, Bonnie Eisenmann, O'Reilly Media, 2016.
- Getting Started with Expo React Native and Styled Components using a Netflix Clone example, JM Myers