

React Native

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Hybrid Apps

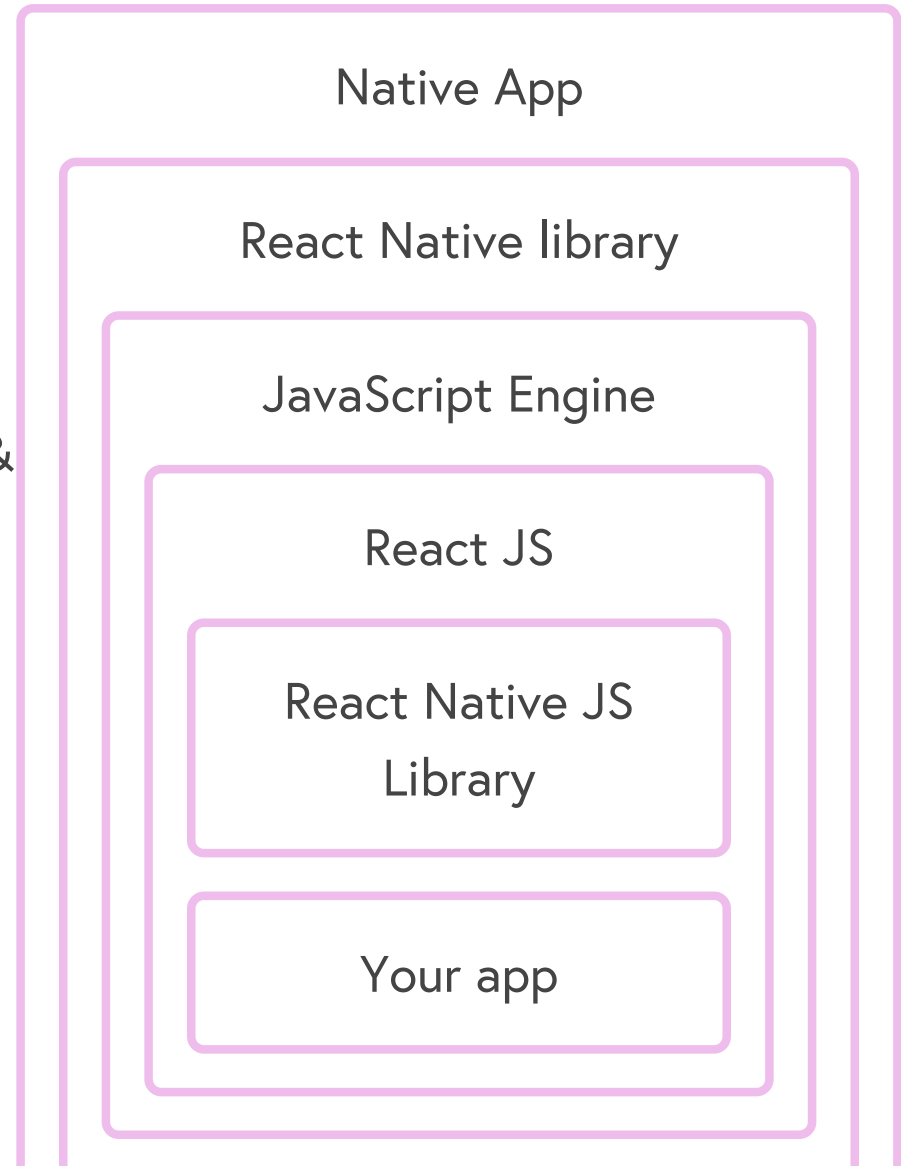
Hybrid Apps Are

- A web view
- running a web app
- with access to native APIs
- that you build once and deploy everywhere

React Native Is An
Extension of Hybrid

What Is It?

- An embedded instance of **JavaScriptCore**.
- React components with bindings to native UI components.
- Manipulating calls into Objective C & Java for behavior.
- And polyfills for some web APIs



Polyfills

- XMLHttpRequest & Fetch
- `window.requestAnimationFrame`
- `navigator.geolocation`
- CSS (Flexbox)!

Getting Started

- Install Node
- `brew install watchman`
- `brew install flow (optional)`
- `npm install -g react-native-cli`

Create a New Project

```
react-native init ProjectName
```

```
react-native run-ios
```

```
react-native run-android
```


Platform Specific Extensions

```
// MyComponent.ios.js  
// MyComponent.android.js
```

```
import MyComponent from './components/MyComponent';
```

Flexbox

Show Me
the Code

Components

```
class MyComponent extends Component {  
  render() {  
    return (  
      <View style={styles.container}>  
        <Text style={styles.welcome}>  
          Welcome to React Native!  
        </Text>  
        <Text style={styles.instructions}>  
          To get started, edit index.android.js  
        </Text>  
        <Text style={styles.instructions}>  
          Shake or press menu button for dev menu  
        </Text>  
      </View>  
    );  
  }  
}  
  
AppRegistry.registerComponent('MyComponent', () => MyComponent);
```

Styles

```
const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    backgroundColor: '#F5FCFF',
  },
  welcome: {
    fontSize: 20,
    textAlign: 'center',
    margin: 10,
  },
  instructions: {
    textAlign: 'center',
    color: '#333333',
    marginBottom: 5,
  },
});
```

Debugging

More Debugging



Touch

TouchableHighlight and Touchable*

Gesture Responder System &
PanResponder

Network

```
fetch('https://mywebsite.com/endpoint/', {  
  method: 'POST',  
  headers: {  
    'Accept': 'application/json',  
    'Content-Type': 'application/json',  
  },  
  body: JSON.stringify({  
    firstParam: 'yourValue',  
    secondParam: 'yourOtherValue',  
  })  
});
```

Animations

- Declarative
- Composable: parallel, sequence & stagger
- Gestures and events can drive animations

Navigator

- Will feel familiar
- Stack based
- Push/pop states
- `renderScene` callback decides what to render

Timers

`setTimeout` ↔ `clearTimeout`

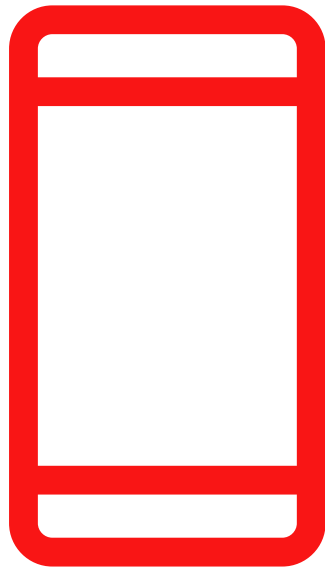
`setInterval` ↔ `clearInterval`

`setImmediate` ↔ `clearImmediate`

`requestAnimationFrame` ↔

`cancelAnimationFrame`

Why use it?



**Native
Look and
Feel**



Performance

True Multi-Threading

JavaScript has it's own thread. We can move image processing, data manipulations, etc. to a different thread.

Developer Efficiency

**React Native is
Extensible**

Learn Once, Write Anywhere

Thank You!

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github.com/winkerVSbecks/spotify-artist-lookup

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