React Native Explore

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2015.11.6

Background-React

- React

  - JvaScript library for building user interfaces.

  - First Release   2013.5.30

  - Github stars 30835

  - Features

    - Just the UI

    - Component Combination

    - Virtual Dom

    - Data Flow

Background~React

- React Example

```
var HelloMessage = React.createClass({
  render: function() {
    return <div>Hello {this.props.name}</div>;
  }
});


ReactDOM.render(
  <HelloMessage name="John" />,
  document.getElementById('container')
);
```
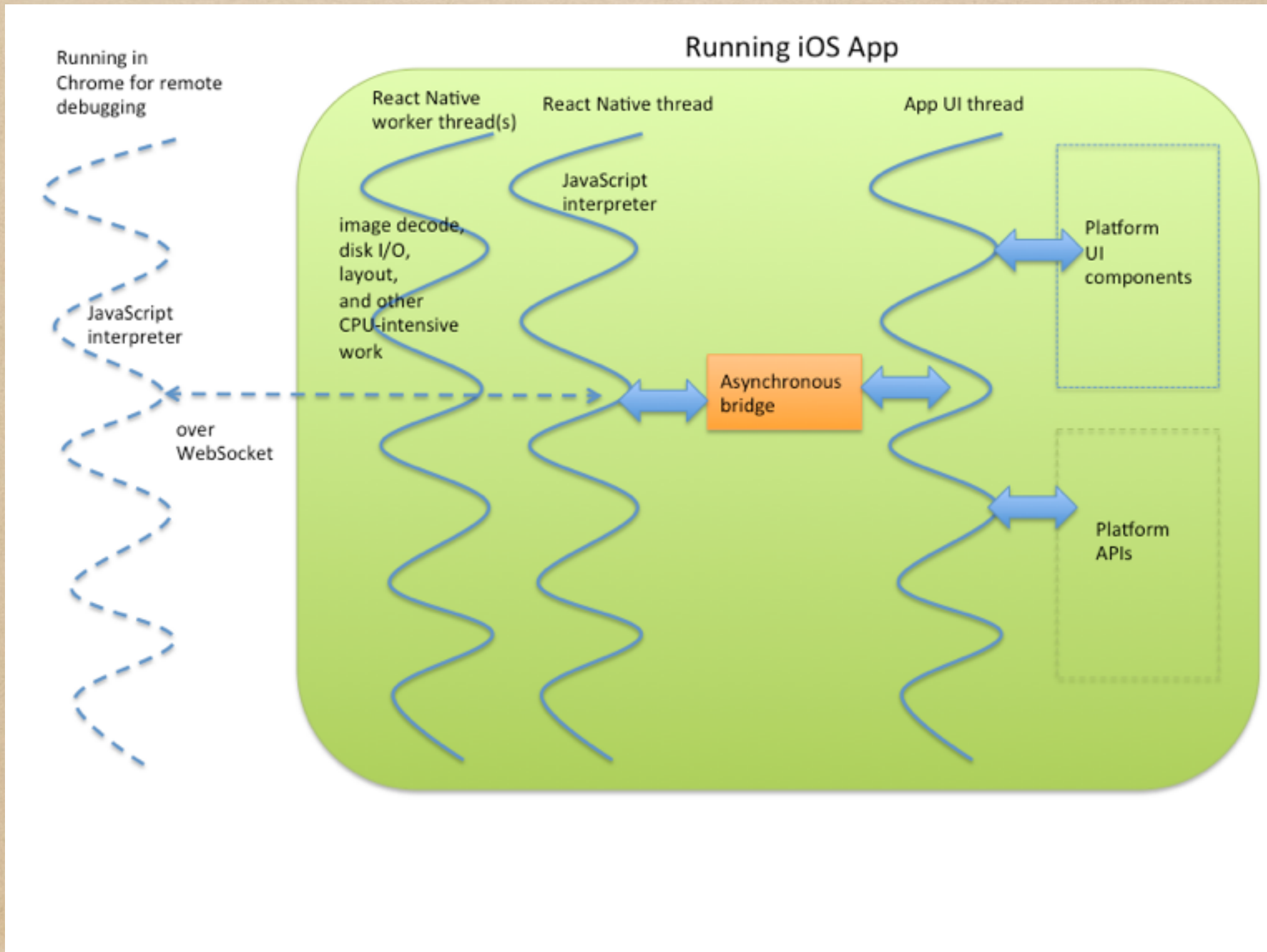
Background-React Native

- React Native

  - Use js build native mobile app

  - First Relase 2015.3.27 iOS support

  - 2015.10 android support

  - Github starts 22012

  - Features

    - based on React

    - map to native UI

    - learn once, write anywhere

Framework Comparison

	Native App	React Native	PhoneGap/ Ionic
performance	very fast	fast	slow
dev efficiency	very slow	fast	very fast
UI experience	native	native	not native

React Native Runtime Architecture

React Native-Components

- ActivityIndicatorIOS
- DatePickerIOS
- DrawerLayoutAndroid
- Image
- ListView
- MapView
- Navigator
- Modal
- NavigatorIOS
- PickerIOS
- ProgressBarAndroid
- ProgressViewIOS
- ScrollView

- SegmentedControlIOS
- SliderIOS
- SwitchAndroid
- SwitchIOS
- TabBarIOS
- TabBarIOS.Item
- Text
- TextInput
- ToolbarAndroid
- TouchableHighlight
- TouchableNativeFeedback
- TouchableOpacity
- TouchableWithoutFeedback

React Native-API

- ActionSheetIOS
- AlertIOS
- Animated
- AppRegistry
- AppStateIOS
- AsyncStorage
- BackAndroid
- CameraRoll
- Dimensions
- InteractionManager
- LayoutAnimation

- LinkingIOS
- NativeMethodsMixin
- NetInfo
- PanResponder
- PixelRatio
- PushNotificationIOS
- StatusBarIOS
- StyleSheet
- ToastAndroid
- VibrationIOS

React Native-Polyfills

- Flexbox

- Geolocation

- Network

- Timers

Risks

- android lack WebView

  - in dev plan

- extend ui components && native modules

  - should be easy according to doc

  - need more research

Live Example

- Demonstrate

  - tabBarIOS component

  - flexbox layout

  - WebView component

  - d3.js and highstock.js in WebView

TO Be Done

- how to pass data back and forth between WebView and js environment

- how to use <u>socket.io</u> in React Native

Resources

- React

  - React on Github

  - React home page

- React Native

  - React Native on Github

  - React Native home page

  - React Native: Into a new world of rapid iOS development

Q&A?