



WEBINAR

React Native Navigation

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NAVIGATION



- Like routing in a React app
 - one difference is that React Native pages do not have URLs
- Three main kinds
 - **tab-based** - at top or bottom; create a component for each tab
 - **stack-based** - go forward and backward by pushing pages onto and popping pages off of a stack
 - **drawer-based** - side menu of options like a hamburger menu
- Can combine approaches within an app
 - ex. top navigation can be tab-based and some tabs can use stack-based for sub-pages

top app component can be a navigation component



NAVIGATION LIBRARIES



- None provided by React Native
- **React Navigation**
- **React Native Navigation**

REACT NAVIGATION



- Cross-platform library at <https://facebook.github.io/react-native/docs/navigation#react-navigation>
- Only supports React Native, not React
- Easy to use
- Our focus
- **`npm install react-navigation`**



REACT NATIVE NAVIGATION



- Cross-platform library at <https://github.com/wix/react-native-navigation>
- Not as easy, but provides native look and feel
- Not covered here



REACT NAVIGATION ...

TRY THIS!



- `npm install react-navigation`
- Example

```
import {createBottomTabNavigator, createStackNavigator} from 'react-navigation';
const options = {
  navigationOptions: {
    headerStyle: {
      backgroundColor: someColor
    },
    headerTintColor: someColor
  }
};
const StackNav = createStackNavigator({
  Name1: {screen: Component1},
  Name2: {screen: Component2}
}, options);
const Tabs = createBottomTabNavigator({
  Tab1Text: {screen: StackNav},
  Tab2Text: {screen: SomeComponent}
});
export default Tabs;
```

import `Tabs` in another component and render it

```
<Tabs screenProps={someObj} />
```

`someObj` is passed to all screens;
can include data and callback functions

```
import {createDrawerNavigator} from 'react-navigation';
const DrawerNav = createDrawerNavigation(screens);
```


... REACT NAVIGATION



- To navigate to a different screen in a navigation
 - `this.props.navigation.navigate(screenName) ;`
- Every screen component
 - is passed the props **screenProps** and **navigation**
 - **navigation** object has **state.params** prop and **navigate** method
 - can define a static **navigationOptions** property
 - can be an object or a function that takes the props and returns an object
 - configures several things like **title** and **headerTitleStyle** (object containing CSS properties)

verify use of screenProps!

verify

What animation options are available for screen transitions?

STACK NAVIGATOR



- See health-app for example!



SWITCH NAVIGATOR



- What does `createSwitchNavigator` do?



DRAWER NAVIGATOR



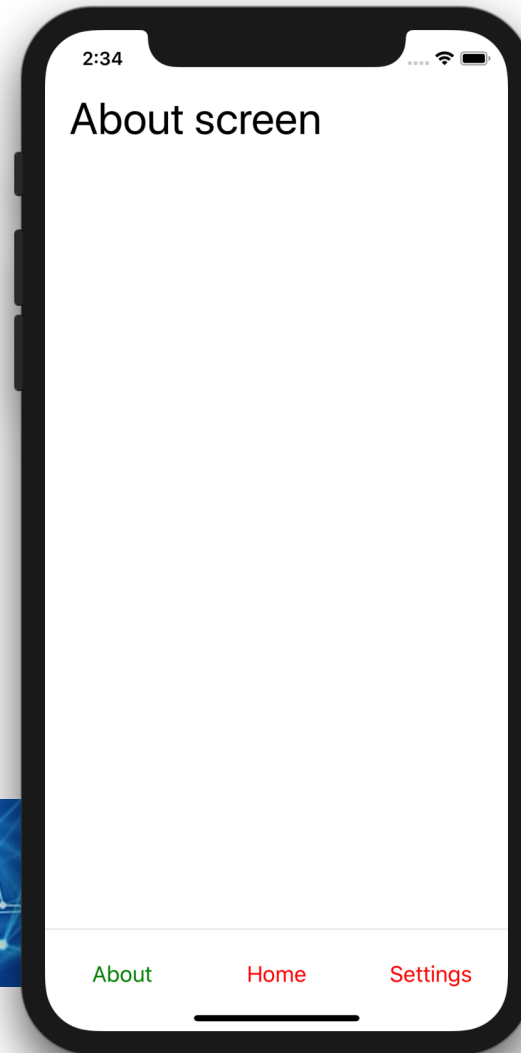
TOP TAB NAVIGATOR



- `createTopNavigator` - deprecated
- `createMaterialTopNavigator`

BOTTOM TAB NAVIGATOR

- `createBottomTabNavigator`
- `createMaterialBottomTabNavigator`



BOTTOM TAB NAVIGATOR EXAMPLE ...



```
import React from 'react';
import {StyleSheet, Text, View} from 'react-native';
import {createAppContainer, createBottomTabNavigator} from 'react-navigation';

const About = () => (
  <View style={styles.container}>
    <Text style={styles.title}>About screen</Text>
  </View>
);

const Home = () => (
  <View style={styles.container}>
    <Text style={styles.title}>Home screen</Text>
  </View>
);
```

... BOTTOM TAB NAVIGATOR EXAMPLE

```
const Settings = () => (  
  <View style={styles.container}>  
    <Text style={styles.title}>Settings screen</Text>  
  </View>  
  
const tabBarOptions = {  
  activeTintColor: 'green',  
  inactiveTintColor: 'red',  
  labelStyle: {  
    fontSize: 18  
  },  
  style: {  
    paddingBottom: 10  
  },  
  tabStyle: {  
    alignItems: 'center',  
    justifyContent: 'center'  
  }  
};
```


... BOTTOM TAB NAVIGATOR EXAMPLE

```
const TabNav = createBottomTabNavigator(  
  {About, Home, Settings},  
  {tabBarOptions}  
);  
  
const styles = StyleSheet.create({  
  container: {  
    paddingHorizontal: 20,  
    paddingTop: 50  
  },  
  title: {  
    fontSize: 36  
  }  
});  
  
export default createAppContainer(TabNav);
```