

React Navigation - Switch Navigator— Wireless Buzzer App

React Navigation Switch Navigator



What we did:

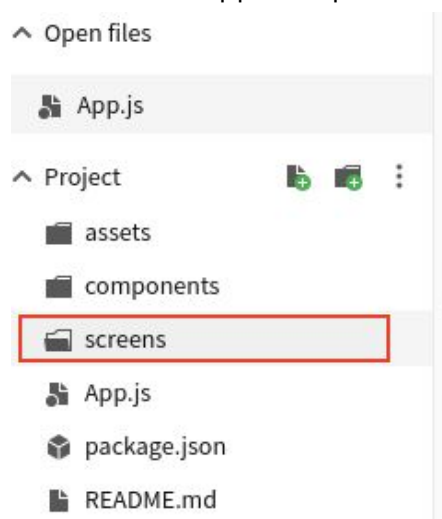
- Created Switch Navigation to move from one screen to another.
- Passed data from one screen to another.

We revised the following:

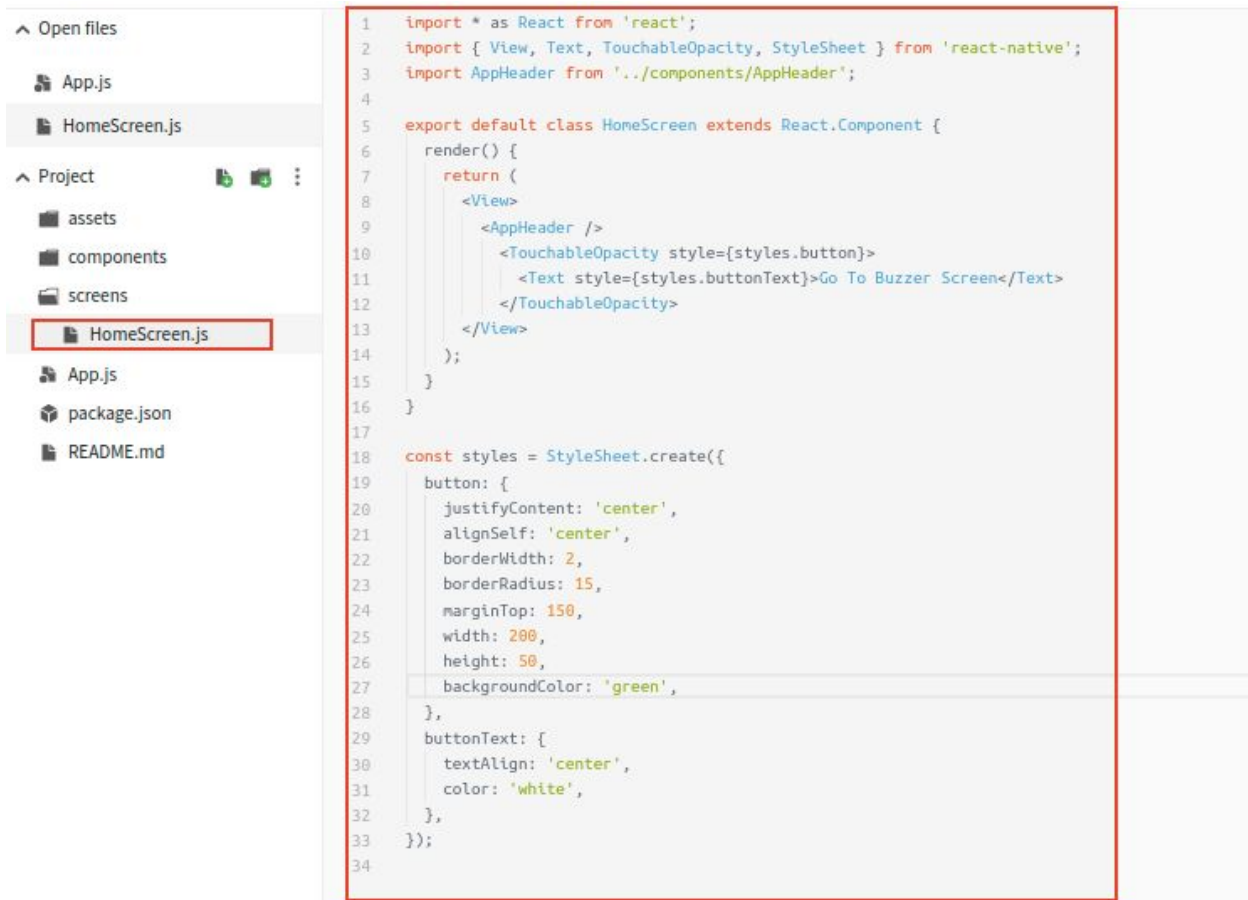
- Creating a style for the components using StyleSheet.
- Creating independent components such as App Header, Buzzer Button, and how to export/ import them in our files.

How we did it:

Creating a multi-screen app: We created two screens as separate files and then call them in our app. We created a "screens" folder in our file directory that holds all the different screens in our app as separate files.



We created a screen/ file in the folder called "HomeScreen.js"



```
1  import * as React from 'react';
2  import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3  import AppHeader from '../components/AppHeader';
4
5  export default class HomeScreen extends React.Component {
6    render() {
7      return (
8        <View>
9          <AppHeader />
10         <TouchableOpacity style={styles.button}>
11           <Text style={styles.buttonText}>Go To Buzzer Screen</Text>
12         </TouchableOpacity>
13       </View>
14     );
15   }
16 }
17
18 const styles = StyleSheet.create({
19   button: {
20     justifyContent: 'center',
21     alignSelf: 'center',
22     borderWidth: 2,
23     borderRadius: 15,
24     marginTop: 150,
25     width: 200,
26     height: 50,
27     backgroundColor: 'green',
28   },
29   buttonText: {
30     textAlign: 'center',
31     color: 'white',
32   },
33 });
34
```

We created a 'BuzzerScreen.js' file in our screens folder.

```
1  import * as React from 'react';
2  import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3  import AppHeader from '../components/AppHeader';
4  import SoundButton from '../components/SoundButton';
5
6  export default class HomeScreen extends React.Component {
7    render() {
8      return (
9        <View>
10         <AppHeader />
11         <SoundButton />
12       </View>
13     );
14   }
15 }
16
```

We imported two more components in our App.js file -

- 'createSwitchNavigator': It will allow us to create our AppNavigator which we will use to navigate the screens.
- 'createAppContainer': It holds the two screens and our App Navigator together.

```
1  import * as React from 'react';
2  import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3  import AppHeader from '../components/AppHeader';
4  import SoundButton from '../components/SoundButton';
5
6  export default class HomeScreen extends React.Component {
7    render() {
8      return (
9        <View>
10         <AppHeader />
11         <SoundButton />
12       </View>
13     );
14   }
15 }
16
```

```
1 import * as React from 'react';
2 import { View } from 'react-native';
3 import HomeScreen from './screens/HomeScreen'
4 import BuzzerScreen from './screens/BuzzerScreen'
5 import { createAppContainer, createSwitchNavigator } from 'react-navigation';
6
7 export default class App extends React.Component {
8   render() {
9     return (
10       <View>
11       </View>
12     );
13   }
14 }
15
```

We created SwitchNavigator' takes a JSON object

```
1 import * as React from 'react';
2 import { View } from 'react-native';
3 import HomeScreen from './screens/HomeScreen'
4 import BuzzerScreen from './screens/BuzzerScreen'
5 import { createAppContainer, createSwitchNavigator } from 'react-navigation';
6
7 export default class App extends React.Component {
8   render() {
9     return (
10       <View>
11       </View>
12     );
13   }
14 }
15
16
17 var AppNavigator = createSwitchNavigator({
18   HomeScreen: HomeScreen,
19   BuzzerScreen : BuzzerScreen
20 });
21
```

We created the AppContainer using 'createAppContainer'.

```
1  import * as React from 'react';
2  import { View } from 'react-native';
3  import HomeScreen from './screens/HomeScreen'
4  import BuzzerScreen from './screens/BuzzerScreen'
5  import { createAppContainer, createSwitchNavigator } from 'react-navigation';
6
7  export default class App extends React.Component {
8    render() {
9      return (
10        <View>
11          <AppContainer />
12        </View>
13      );
14    }
15  }
16
17
18  var AppNavigator = createSwitchNavigator({
19    HomeScreen: HomeScreen,
20    BuzzerScreen : BuzzerScreen
21  });
22
23  const AppContainer = createAppContainer(AppNavigator)
```

We passed the key name of the screen as an argument to 'props.navigation.navigate()'

```
1  import * as React from 'react';
2  import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3  import AppHeader from '../components/AppHeader'
4
5  export default class HomeScreen extends React.Component {
6
7      goToBuzzerScreen=()=> {
8          this.props.navigation.navigate('BuzzerScreen')
9      }
10
11      render(){
12          return(
13              <View>
14                  <AppHeader/>
15                  <TouchableOpacity
16                      style={styles.button}
17                      onPress={this.goToBuzzerScreen}>
18                      <Text style={styles.buttonText}>Go To Buzzer Screen</Text>
19                  </TouchableOpacity>
20              </View>
21          )
22      }
23
24
25      const styles = StyleSheet.create({
26          button:{
```

We passed some random color to BuzzerScreen which we will use to create the color of the SoundButton.


```
1 import * as React from 'react';
2 import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3 import AppHeader from '../components/AppHeader'
4
5 export default class HomeScreen extends React.Component {
6
7   goToBuzzerScreen={() => {
8     this.props.navigation.navigate('BuzzerScreen', {color: 'blue'})
9   }}
10  render(){
11    return(
12      <View>
13        <AppHeader/>
14        <TouchableOpacity
15          style={styles.button}
16          onPress={this.goToBuzzerScreen}>
17          <Text style={styles.buttonText}>Go To Buzzer Screen</Text>
18        </TouchableOpacity>
19      </View>
20    )
21  }
22 }
23
24
25 const styles = StyleSheet.create({
26   button:{
27     justifyContent : 'center',
28     alignSelf : 'center',
29     borderWidth : 2,
```

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We created a prop called 'color' in our 'SoundButton'.

```

1  import * as React from 'react';
2  import { View, Text, TouchableOpacity, StyleSheet } from 'react-native';
3  import AppHeader from '../components/AppHeader'
4  import SoundButton from '../components/SoundButton'
5
6
7  export default class HomeScreen extends React.Component {
8    render(){
9      return(
10       <View>
11         <AppHeader/>
12         <SoundButton color={this.props.navigation.getParam('color')}/>
13       </View>
14     )
15   }
16 }
17

```

styles.button' and '{backgroundColor: this.props.color}' are objects passed to style prop inside an array.



```

1  import * as React from 'react';
2  import { Text, View, TouchableOpacity, StyleSheet } from 'react-native';
3  import { Audio } from 'expo-av';
4
5  class SoundButton extends React.Component {
6    playSound = async () => {
7      await Audio.Sound.createAsync(
8        { uri: 'http://soundbible.com/mp3/Buzzer-SoundBible.com-188422102.mp3' },
9        { shouldPlay: true }
10     );
11   }
12
13   render() {
14     return (
15       <TouchableOpacity
16         style={[styles.button, {backgroundColor: this.props.color}]}
17         onPress={this.playSound}>
18         <Text
19           style={styles.buttonText}>
20           Press Me
21         </Text>
22       </TouchableOpacity>
23     );
24   }
25 }
26
27 const styles = StyleSheet.create({
28   button: {
29     marginTop: 100,
30     marginLeft: 80,
31   },
32   buttonText: {
33     color: 'blue',
34     font-weight: 'bold',
35   },
36 });
37

```

What's next?:

In the next class, you will learn to identify who pressed the button first and our app will be almost done.