```
1: /**
2: * 19 Map 1
3: * https://github.com/kobkrit/learn-react-native
4: * @flow
 5: */
 6:
 7: import React, {Component} from 'react';
8: import {AppRegistry, StyleSheet, Text, View} from 'react-native'; 9: import MapView from 'react-native-maps';
10:
11: export default class 19_map extends Component {
12: render() {
13:
      return (
          <View style={styles.container}>
14:
15:
            <MapView initialRegion={{</pre>
16:
               latitude: 37.78825,
17:
               longitude: -122.4324,
18:
               latitudeDelta: 0.0922,
               longitudeDelta: 0.0421
19:
             }}/>
20:
21:
           </View>
22:
        );
      }
23:
24: }
25:
26: const styles = StyleSheet.create({
27:
     container: {
       flex: 1,
28:
29:
        justifyContent: 'center',
30:
        alignItems: 'center',
31:
        backgroundColor: '#F5FCFF'
32:
33: });
34:
35: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
1: /**
 2: * 19 Map 10
 3:
    * https://github.com/kobkrit/learn-react-native
    * @flow
 4:
 5:
 6:
 7: import React, {Component} from 'react';
 8: import {
9:
      AppRegistry,
10:
      StyleSheet,
11:
      Text,
12:
      View,
13:
      Dimensions,
14:
      Image
15: } from 'react-native';
16: var {height, width} = Dimensions.get('window');
17: import MapView from 'react-native-maps';
18:
19: export default class 19_map extends Component {
20:
      constructor(props) {
21:
        super(props);
22:
        this.state = {
23:
          region: {
24:
            latitude: 13.764884,
25:
             longitude: 100.538265,
26:
             latitudeDelta: 0.005,
27:
            longitudeDelta: 0.005
28:
          },
29:
          markers: [
30:
             {
31:
               latlng: {
32:
                 latitude: 13.764884,
33:
                 longitude: 100.538265
34:
35:
               image: require('./images/attention.png'),
               photo: require('./images/Victory_Monument.jpg'),
36:
               title: "Victory Monument",
37:
38:
               description: "A large military monument in Bangkok, Thailand."
39:
40:
41:
               latlng: {
42:
                 latitude: 13.763681,
43:
                 longitude: 100.538125
44:
               image: require('./images/music.png'),
photo: require('./images/Saxophone.jpg'),
45:
46:
               title: "Saxophone Club",
47:
48:
               description: "A music pub for saxophone lover"
49:
50:
               latlng: {
                 latitude: 13.764595,
51:
52:
                 longitude: 100.537438
53:
               image: require('./images/shopping.png'),
photo: require('./images/coco.jpg'),
54:
55:
               title: "Coco Depertment Store",
56:
57:
               description: "Fashion Department Store"
58:
59:
          ]
        };
60:
61:
        this.onRegionChange = this.onRegionChange.bind(this);
62:
63:
64:
      onRegionChange(region)
65:
        this.setState({region});
66:
67:
68:
      render() {
69:
        let coordinates = this.state.markers.map(marker => marker.latlng);
70:
        return (
71:
           <View style={styles.container}>
             <MapView style={styles.map} region={this.state.region}</pre>
72:
73:
               onRegionChange={this.onRegionChange}>
74:
               <MapView.Circle center={this.state.markers[0].latlng}</pre>
75:
                radius="100" strokeWidth={5} fillColor="#0f0a"/>
76:
               <MapView.Polyline coordinates={coordinates}</pre>
                 strokeWidth={5} strokeColor="#00fa"/>
77:
```

```
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   78:
                  <MapView.Polygon coordinates={coordinates}</pre>
   79:
                    strokeWidth={5} strokeColor="#00fa" fillColor="#0aaa"/>
   80:
                  {this.state.markers.map((marker, i) => (
   81:
                    <MapView.Marker key={i} coordinate={marker.latlng} title={marker.title} descript</pre>
ion={marker.description}>
                      <View style={styles.pin}>
   83:
                        <Image style={styles.pinImage} source={marker.image}/>
                        <Text style={styles.pinText}>
   84:
   85:
                           {marker.title}
   86:
                        </Text>
   87:
                      </View>
                      <MapView.Callout>
   88:
   89:
                        <View style={styles.callout}>
   90:
                           <Image style={styles.calloutPhoto} source={marker.photo}/>
   91:
                           <Text style={styles.calloutTitle}>{marker.title}</Text>
   92:
                           <Text>{marker.description}</Text>
   93:
                        </View>
   94:
                      </MapView.Callout>
   95:
                    </MapView.Marker>
                  ))}
   96:
   97:
                </MapView>
   98:
                <View style={styles.container}>
   99:
                  <Text>
  100:
                    Latitude: {this.state.region.latitude}{'\n'}
  101:
                    Longitude: {this.state.region.longitude}{'\n'}
                    Latitude Delta: \ \{this.state.region.latitude Delta\} \{\,' \setminus n'\,\}
  102:
  103:
                    LongitudeDelta: {this.state.region.longitudeDelta}
  104:
                  </Text>
                </View>
  105:
  106:
             </View>
  107:
           );
         }
  108:
  109: }
  110:
  111: const styles = StyleSheet.create({
         container: {
  112:
  113:
           flex: 1.
  114:
           justifyContent: 'center',
  115:
           alignItems: 'center',
  116:
           backgroundColor: '#F5FCFF'
  117:
         },
         map: {
  118:
  119:
           width: width,
  120:
           height: height*2/3
  121:
  122:
         pin: {
  123:
           backgroundColor: '#fffa',
           justifyContent: 'center',
  124:
  125:
           alignItems: 'center',
  126:
           borderColor: 'black',
           borderWidth: 2,
  127:
  128:
           padding: 5,
  129:
           borderRadius: 10
  130:
  131:
         pinImage: {
  132:
           width: 25,
  133:
           height: 25
  134:
         },
  135:
         pinText: {
           color: 'red'
  136:
         },
  137:
  138:
         callout:{
  139:
           flex: 1,
  140:
           paddingRight: 10,
  141:
           paddingBottom: 10,
  142:
           marginRight: 10,
  143:
           marginBottom: 10
  144:
         },
  145:
         calloutPhoto:{
  146:
           flex: 1,
  147:
           width: 166,
  148:
           height: 83
```

149: 150:

151:

152: } 153: });

calloutTitle:{

fontSize: 16,

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154

155: AppRegistry.registerComponent('19_map', () => 19_map);

```
1: /**
 2: * 19 Map 2
3: * https://github.com/kobkrit/learn-react-native
4: * @flow
 5: */
 6:
 7: import React, {Component} from 'react';
 8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native'; 9: var {height, width} = Dimensions.get('window');
10: import MapView from 'react-native-maps';
12: export default class 19_map extends Component {
13:
    render() {
14:
        return (
15:
         <View style={styles.container}>
16:
            <MapView style={styles.map} initialRegion={{</pre>
17:
               latitude: 37.78825,
               longitude: -122.4324,
18:
19:
               latitudeDelta: 0.9,
20:
              longitudeDelta: 1.8
             }}/>
21:
22:
          </View>
        );
23:
24: }
25: }
26:
27: const styles = StyleSheet.create({
28:
    container: {
29:
        flex: 1,
        justifyContent: 'center',
30:
31:
        alignItems: 'center',
        backgroundColor: '#F5FCFF'
32:
33:
     },
34:
     map:{
35:
       width: width,
36:
        height: height
37:
38: });
39:
40: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
1: /**
 2: * 19 Map 3
 3:
    * https://github.com/kobkrit/learn-react-native
    * @flow
 5:
 6:
7: import React, {Component} from 'react';
8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native';
9: var {height, width} = Dimensions.get('window');
10: import MapView from 'react-native-maps';
12: export default class 19_map extends Component {
13:
      constructor(props){
14:
        super(props);
15:
        this.state = {
16:
          region: {
17:
             latitude: 37.78825,
18:
             longitude: -122.4324,
19:
            latitudeDelta: 0.0922,
20:
            longitudeDelta: 0.0421,
21:
        };
22:
        this.onRegionChange = this.onRegionChange.bind(this);
23:
24:
25:
26:
      onRegionChange(region) {
27:
        this.setState({ region });
28:
29:
30:
      render() {
31:
        return (
32:
          <View style={styles.container}>
33:
             <MapView style={styles.map}
34:
               region={this.state.region}
35:
               onRegionChange={this.onRegionChange}
36:
37:
             <View style={styles.container}>
38:
               Latitude: {this.state.region.latitude}{'\n'}
39:
40:
               Longitude: \{this.state.region.longitude\} \{ \verb|'\n'| \}
               LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
41:
               {\tt LongitudeDelta: \{this.state.region.longitudeDelta\}}
42:
43:
               </Text>
44:
             </View>
45:
          </View>
46:
        );
47:
      }
48: }
49:
50: const styles = StyleSheet.create({
51:
      container: {
52:
        flex: 1,
        justifyContent: 'center',
53:
54:
        alignItems: 'center',
        backgroundColor: '#F5FCFF'
55:
      },
56:
57:
      map:{
58:
        width: width,
59:
        height: height*2/3
60:
61: });
62:
63: AppReqistry.registerComponent('19_map', () => 19_map);
```

```
1: /**
 2: * 19 Map 4
 3:
    * https://github.com/kobkrit/learn-react-native
    * @flow
 5:
 6:
 7: import React, {Component} from 'react';
 8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native';
9: var {height, width} = Dimensions.get('window');
10: import MapView from 'react-native-maps';
12: export default class 19_map extends Component {
13:
      constructor(props){
14:
        super(props);
15:
        this.state = {
16:
          region: {
17:
             latitude: 37.78825,
18:
             longitude: -122.4324,
19:
            latitudeDelta: 0.0922,
20:
            longitudeDelta: 0.0421,
21:
        };
22:
23:
        this.onRegionChange = this.onRegionChange.bind(this);
24:
25:
26:
      onRegionChange(region) {
27:
        this.setState({ region });
28:
29:
30:
      render() {
31:
        return (
32:
          <View style={styles.container}>
33:
            <MapView style={styles.map}
34:
               mapType="terrain"
35:
               showsUserLocation={true}
36:
               followsUserLocation={true}
37:
               showsCompass={false}
38:
               showsPointOfInterest={false}
39:
               region={this.state.region}
40:
               onRegionChange={this.onRegionChange}
41:
             />
42:
             <View style={styles.container}>
43:
               <Text>
44:
               Latitude: {this.state.region.latitude}{'\n'}
45:
               Longitude: {this.state.region.longitude}{'\n'}
               LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
46:
               LongitudeDelta: {this.state.region.longitudeDelta}
47:
48:
               </Text>
49:
             </View>
50:
          </View>
51:
        );
52:
      }
53: }
54:
55: const styles = StyleSheet.create({
56:
      container: {
57:
        flex: 1,
58:
        justifyContent: 'center',
59:
        alignItems: 'center',
        backgroundColor: '#F5FCFF'
60:
      },
61:
      map:{
62:
63:
        width: width,
64:
        height: height*2/3
65:
66: });
67:
68: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
1: /**
 2: * 19 Map 5
 3:
    * https://github.com/kobkrit/learn-react-native
    * @flow
 5:
 6:
7: import React, {Component} from 'react';
8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native';
9: var {height, width} = Dimensions.get('window');
10: import MapView from 'react-native-maps';
12: export default class 19_map extends Component {
13:
      constructor(props){
14:
        super(props);
15:
        this.state = {
16:
          region: {
17:
            latitude: 13.764884,
18:
            longitude: 100.538265,
19:
            latitudeDelta: 0.005,
20:
            longitudeDelta: 0.005,
21:
        };
22:
23:
        this.onRegionChange = this.onRegionChange.bind(this);
24:
25:
26:
      onRegionChange(region) {
27:
        this.setState({ region });
28:
29:
30:
      render() {
31:
        return (
32:
          <View style={styles.container}>
33:
            <MapView style={styles.map}
34:
              region={this.state.region}
35:
               onRegionChange={this.onRegionChange}
36:
37:
38:
            <MapView.Marker
                coordinate={{latitude: 13.764884, longitude: 100.538265}}
39:
40:
                title="Victory Monument"
41:
                description="A large military monument in Bangkok, Thailand."
42:
             />
43:
            </MapView>
44:
            <View style={styles.container}>
45:
               <Text>
               Latitude: \{this.state.region.latitude\}\{' \ n'\}
46:
              Longitude: {this.state.region.longitude}{'\n'}
47:
48:
               LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
49:
              LongitudeDelta: {this.state.region.longitudeDelta}
50:
               </Text>
            </View>
51:
52:
          </View>
        );
53:
54:
      }
55: }
56:
57: const styles = StyleSheet.create({
58:
     container: {
59:
        flex: 1,
        justifyContent: 'center',
60:
        alignItems: 'center',
61:
        backgroundColor: '#F5FCFF'
62:
63:
      },
64:
      map:{
65:
        width: width,
66:
        height: height*2/3
67:
68: });
69:
70: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
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```

```
1: /**
    2: * 19 Map 6
        * https://github.com/kobkrit/learn-react-native
    3:
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native';
9: var {height, width} = Dimensions.get('window');
   10: import MapView from 'react-native-maps';
   12: export default class 19_map extends Component {
   13:
         constructor(props){
   14:
            super(props);
   15:
            this.state = {
   16:
              region: {
                latitude: 13.764884,
   17:
   18:
                longitude: 100.538265,
   19:
                latitudeDelta: 0.005,
   20:
                longitudeDelta: 0.005,
              },
   21:
   22:
              markers:[
                {latlng: {latitude: 13.764884, longitude: 100.538265},
   23:
   24:
                  title: "Victory Monument" , description: "A large military monument in Bangkok, Th
ailand."},
   25:
                {latlng: {latitude: 13.763681, longitude: 100.538125},
                title: "Saxophone Club" , description: "A music pub for saxophone lover"}, {latlng: {latitude: 13.764595, longitude: 100.537438},
   26:
   27:
                  title: "Coco Depertment Store" , description: "Fashion Department Store" },
   28:
              ]
   29:
   30:
            };
   31:
            this.onRegionChange = this.onRegionChange.bind(this);
   32:
   33:
   34:
         onRegionChange(region) {
   35:
            this.setState({ region });
   36:
   37:
   38:
         render() {
   39:
           return (
   40:
              <View style={styles.container}>
                <MapView style={styles.map}
   41:
   42:
                  region={this.state.region}
   43:
                  onRegionChange={this.onRegionChange}
   44:
                {this.state.markers.map((marker,i) => (
   45:
   46:
                  <MapView.Marker
   47:
                    key={i}
   48:
                    coordinate={marker.latlng}
   49:
                     title={marker.title}
                     description={marker.description}
   50:
   51:
   52:
                ))}
   53:
                </MapView>
                <View style={styles.container}>
   54:
   55:
                  <Text>
   56:
                  Latitude: {this.state.region.latitude}{'\n'}
   57:
                  Longitude: {this.state.region.longitude}{'\n'}
   58:
                  LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
                  LongitudeDelta: {this.state.region.longitudeDelta}
   59:
   60:
                  </Text>
                </View>
   61:
   62:
              </View>
   63:
            );
   64:
          }
   65: }
   66:
   67: const styles = StyleSheet.create({
   68:
         container: {
   69:
            flex: 1,
   70:
            justifyContent: 'center',
   71:
            alignItems: 'center',
   72:
            backgroundColor: '#F5FCFF'
   73:
         },
   74:
         map:{
            width: width,
   75:
   76:
            height: height*2/3
```

```
./19_map_6.js Thu Apr 27 10:50:40 2017 2
77:  }
78: });
79:
80: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
./19_map_7.js Thu Apr 27 10:50:40 2017
```

```
1: /**
    2: * 19 Map 7
        * https://github.com/kobkrit/learn-react-native
    3:
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {AppRegistry, StyleSheet, Text, View, Dimensions} from 'react-native'; 9: var {height, width} = Dimensions.get('window');
   10: import MapView from 'react-native-maps';
   12: export default class 19_map extends Component {
   13:
         constructor(props){
   14:
           super(props);
   15:
            this.state = {
   16:
              region: {
                latitude: 13.764884,
   17:
   18:
                longitude: 100.538265,
   19:
                latitudeDelta: 0.005,
   20:
               longitudeDelta: 0.005,
              },
   21:
   22:
              markers:[
                {latlng: {latitude: 13.764884, longitude: 100.538265},
   23:
   24:
                  image: require('./images/attention.png'),
   25:
                  title: "Victory Monument" , description: "A large military monument in Bangkok, Th
ailand."},
                {latlng: {latitude: 13.763681, longitude: 100.538125},
   26:
                  image: require('./images/music.png'),
   27:
                  title: "Saxophone Club" , description: "A music pub for saxophone lover"},
   28:
                {latlng: {latitude: 13.764595, longitude: 100.537438},
   29:
   30:
                  image: require('./images/shopping.png'),
   31:
                  title: "Coco Depertment Store" , description: "Fashion Department Store" },
   32:
             1
   33:
           };
   34:
            this.onRegionChange = this.onRegionChange.bind(this);
   35:
   36:
   37:
         onRegionChange(region) {
   38:
            this.setState({ region });
   39:
   40:
   41:
         render() {
   42:
           return (
   43:
              <View style={styles.container}>
   44:
                <MapView style={styles.map}
   45:
                  region={this.state.region}
   46:
                  onRegionChange={this.onRegionChange}
   47:
   48:
                {this.state.markers.map((marker,i) => (
   49:
                  <MapView.Marker
   50:
                    key={i}
   51:
                    coordinate={marker.latlng}
   52:
                    image={marker.image}
   53:
                    title={marker.title}
                    description={marker.description}
   54:
   55:
                  />
   56:
                ))}
   57:
                </MapView>
   58:
                <View style={styles.container}>
   59:
                  <Text>
   60:
                  Latitude: {this.state.region.latitude}{'\n'}
   61:
                  Longitude: {this.state.region.longitude}{'\n'}
   62:
                  LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
   63:
                  LongitudeDelta: {this.state.region.longitudeDelta}
   64:
                  </Text>
   65:
                </View>
   66:
              </View>
   67:
           );
         }
   68:
   69: }
   70:
   71: const styles = StyleSheet.create({
   72:
         container: {
   73:
           flex: 1,
   74:
            justifyContent: 'center',
   75:
           alignItems: 'center',
           backgroundColor: '#F5FCFF'
   76:
```

```
./19_map_7.js         Thu Apr 27 10:50:40 2017         2

77:     },
78:     map:{
79:         width: width,
80:         height: height*2/3
81:     }
82: });
83:
84: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
./19_map_8.js Thu Apr 27 10:50:40 2017
```

```
1: /**
    2: * 19 Map 8
    3:
        * https://github.com/kobkrit/learn-react-native
    4:
        * @flow
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {
    9:
         AppRegistry,
   10:
         StyleSheet,
   11:
         Text,
   12:
         View,
   13:
         Dimensions,
   14:
         Image
   15: } from 'react-native';
   16: var {height, width} = Dimensions.get('window');
   17: import MapView from 'react-native-maps';
   18:
   19: export default class 19_map extends Component {
   20:
         constructor(props) {
   21:
           super(props);
   22:
           this.state = {
   23:
             region: {
   24:
               latitude: 13.764884,
   25:
                longitude: 100.538265,
   26:
                latitudeDelta: 0.005,
   27:
               longitudeDelta: 0.005
   28:
             },
   29:
             markers: [
   30:
                {
   31:
                  latlng: {
   32:
                    latitude: 13.764884,
   33:
                    longitude: 100.538265
   34:
   35:
                  image: require('./images/attention.png'),
   36:
                  title: "Victory Monument",
                  description: "A large military monument in Bangkok, Thailand."
   37:
   38:
                }, {
   39:
                  latlng: {
   40:
                    latitude: 13.763681,
                    longitude: 100.538125
   41:
   42:
   43:
                  image: require('./images/music.png'),
   44:
                  title: "Saxophone Club",
   45:
                  description: "A music pub for saxophone lover"
   46:
   47:
                  latlng: {
   48:
                    latitude: 13.764595,
   49:
                    longitude: 100.537438
   50:
                  image: require('./images/shopping.png'),
   51:
   52:
                  title: "Coco Depertment Store",
   53:
                  description: "Fashion Department Store"
   54:
   55:
             1
   56:
           };
   57:
            this.onRegionChange = this.onRegionChange.bind(this);
   58:
   59:
         onRegionChange(region) {
   60:
   61:
           this.setState({region});
   62:
   63:
   64:
         render() {
   65:
           return (
   66:
              <View style={styles.container}>
   67:
                <MapView style={styles.map} region={this.state.region} onRegionChange={this.onRegion</pre>
Change}>
                  {this.state.markers.map((marker, i) => (
   68:
   69:
                    <MapView.Marker key={i} coordinate={marker.latlng} title={marker.title} descript</pre>
ion={marker.description}>
   70:
                      <View style={styles.pin}>
   71:
                        <Image style={styles.pinImage} source={marker.image}/>
   72:
                        <Text style={styles.pinText}>
   73:
                          {marker.title}
                        </Text>
   74:
   75:
                      </View>
```

1

```
76:
                  </MapView.Marker>
 77:
                 ))}
              </MapView>
 78:
 79:
              <View style={styles.container}>
 80:
                <Text>
 81:
                  Latitude: {this.state.region.latitude}{'\n'}
 82:
                   Longitude: {this.state.region.longitude}{'\n'}
                   LatitudeDelta: {this.state.region.latitudeDelta}{'\n'}
LongitudeDelta: {this.state.region.longitudeDelta}
 83:
 84:
 85:
                 </Text>
 86:
              </View>
 87:
            </View>
 88:
          );
       }
 89:
 90: }
 91:
 92: const styles = StyleSheet.create({
 93:
       container: {
 94:
         flex: 1,
 95:
          justifyContent: 'center',
 96:
          alignItems: 'center',
 97:
          backgroundColor: '#F5FCFF'
 98:
       },
 99:
       map: {
100:
          width: width,
          height: *2 / 3
101:
102:
103:
       pin: {
104:
          backgroundColor: '#fffa',
          justifyContent: 'center',
105:
          alignItems: 'center',
borderColor: 'black',
106:
107:
          borderWidth: 2,
108:
109:
         padding: 5,
110:
         borderRadius: 10
111:
112:
       pinImage: {
113:
          width: 25,
114:
         height: 25
115:
       },
116:
       pinText: {
         color: 'red'
117:
118:
119: });
120:
121: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
./19_map_9.js
                    Thu Apr 27 10:50:40 2017
```

```
1
    1: /**
    2: * 19 Map 9
    3:
        * https://github.com/kobkrit/learn-react-native
        * @flow
    4:
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {
    9:
         AppRegistry,
   10:
         StyleSheet,
   11:
         Text,
   12:
         View,
   13:
         Dimensions,
   14:
         Image
   15: } from 'react-native';
   16: var {height, width} = Dimensions.get('window');
   17: import MapView from 'react-native-maps';
   18:
   19: export default class 19_map extends Component {
   20:
         constructor(props) {
   21:
            super(props);
   22:
            this.state = {
   23:
              region: {
   24:
                latitude: 13.764884,
   25:
                longitude: 100.538265,
                latitudeDelta: 0.005,
   26:
   27:
                longitudeDelta: 0.005
              },
   28:
   29:
              markers: [
   30:
                {
   31:
                  latlng: {
   32:
                     latitude: 13.764884,
   33:
                    longitude: 100.538265
   34:
   35:
                  image: require('./images/attention.png'),
                  photo: require('./images/Victory_Monument.jpg'),
   36:
                  title: "Victory Monument",
   37:
   38:
                  description: "A large military monument in Bangkok, Thailand."
   39:
   40:
   41:
                  latlng: {
   42:
                    latitude: 13.763681,
   43:
                     longitude: 100.538125
   44:
                  image: require('./images/music.png'),
photo: require('./images/Saxophone.jpg'),
   45:
   46:
                  title: "Saxophone Club",
   47:
   48:
                  description: "A music pub for saxophone lover"
   49:
                }, {
   50:
                  latlng: {
                    latitude: 13.764595,
   51:
   52:
                     longitude: 100.537438
   53:
                  image: require('./images/shopping.png'),
photo: require('./images/coco.jpg'),
   54:
   55:
                  title: "Coco Depertment Store",
   56:
   57:
                  description: "Fashion Department Store"
   58:
   59:
              ]
            };
   60:
   61:
            this.onRegionChange = this.onRegionChange.bind(this);
   62:
   63:
   64:
          onRegionChange(region)
   65:
            this.setState({region});
   66:
   67:
   68:
         render()
   69:
           return (
   70:
              <View style={styles.container}>
   71:
                <MapView style={styles.map} region={this.state.region} onRegionChange={this.onRegion</pre>
Change \} >
   72:
                   {this.state.markers.map((marker, i) => (
   73:
                     <MapView.Marker key={i} coordinate={marker.latlng} title={marker.title} descript</pre>
ion={marker.description}>
   74:
                       <View style={styles.pin}>
   75:
                         <Image style={styles.pinImage} source={marker.image}/>
```

```
./19_map_9.js
                       Thu Apr 27 10:50:40 2017
   76:
                        <Text style={styles.pinText}>
   77:
                          {marker.title}
   78:
                        </Text>
   79:
                      </View>
   80:
                      <MapView.Callout>
   81:
                        <View style={styles.callout}>
                          <Image style={styles.calloutPhoto} source={marker.photo}/>
   82:
   83:
                          <Text style={styles.calloutTitle}>{marker.title}</Text>
   84:
                          <Text>{marker.description}</Text>
   85:
                        </View>
   86:
                      </MapView.Callout>
   87:
                    </MapView.Marker>
   88:
                  ))}
   89:
               </MapView>
   90:
               <View style={styles.container}>
   91:
                 <Text>
   92:
                   Latitude: {this.state.region.latitude}{'\n'}
   93:
                    Longitude: {this.state.region.longitude}{'\n'}
   94:
                   Latitude Delta: \ \{this.state.region.latitude Delta\} \{ ' \ ' \}
   95:
                   LongitudeDelta: {this.state.region.longitudeDelta}
   96:
                 </Text>
   97:
               </View>
   98:
             </View>
   99:
           );
 100:
         }
 101: }
 102:
 103: const styles = StyleSheet.create({
 104:
         container: {
 105:
           flex: 1,
 106:
           justifyContent: 'center',
           alignItems: 'center'
 107:
 108:
           backgroundColor: '#F5FCFF'
 109:
         },
 110:
         map: {
 111:
           width: width,
 112:
           height: height*2/3
 113:
         },
 114:
         pin: {
 115:
           backgroundColor: '#fffa',
           justifyContent: 'center',
 116:
           alignItems: 'center',
 117:
           borderColor: 'black',
 118:
 119:
           borderWidth: 2,
 120:
           padding: 5,
 121:
           borderRadius: 10
 122:
         },
 123:
         pinImage: {
 124:
           width: 25,
 125:
           height: 25
 126:
 127:
         pinText: {
 128:
           color: 'red'
 129:
 130:
         callout:{
 131:
           flex: 1,
 132:
           paddingRight: 10,
 133:
           paddingBottom: 10,
 134:
           marginRight: 10,
 135:
           marginBottom: 10
         },
 136:
 137:
         calloutPhoto:{
 138:
           flex: 1,
           width: 166,
 139:
           height: 83
 140:
 141:
         },
 142:
         calloutTitle:{
 143:
           fontSize: 16,
 144:
 145: });
 146:
```

147: AppRegistry.registerComponent('19_map', () => 19_map);

```
./19_map_travel.js
                             Thu Apr 27 10:50:40 2017
                                                                  1
    1: /**
    2: * 19 Map Travel
       * https://github.com/kobkrit/learn-react-native
    3:
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {AppRegistry, StyleSheet, Text, View, Dimensions, TouchableOpacity} from 'react-nativ
e';
    9: var {height, width} = Dimensions.get('window');
   10: import MapView from 'react-native-maps';
   11: import LocationButton from './19_map_travel_locationButton.js';
   12:
   13: export default class 19_map extends Component {
         constructor(props) {
   14:
   15:
           super(props);
   16:
           this.state = {
   17:
             region: {
   18:
               latitude: 13.764884,
   19:
               longitude: 100.538265,
   20:
               latitudeDelta: 0.005,
   21:
               longitudeDelta: 0.005
             },
   22:
   23:
             markers: [
   24:
               {
   25:
                 latlng: {
   26:
                    latitude: 13.764884,
   27:
                    longitude: 100.538265
   28:
   29:
                 image: require('./images/attention.png'),
   30:
                 title: "Victory Monument",
   31:
                 description: "A large military monument in Bangkok, Thailand."
   32:
   33:
                 latlng: {
   34:
                   latitude: 13.763681,
   35:
                   longitude: 100.538125
   36:
   37:
                 image: require('./images/music.png'),
   38:
                 title: "Saxophone Club",
   39:
                 description: "A music pub for saxophone lover"
   40:
   41:
                 latlng: {
   42:
                   latitude: 13.764595,
                   longitude: 100.537438
   43:
   44:
                 image: require('./images/shopping.png'),
   45:
   46:
                 title: "Coco Depertment Store",
   47:
                 description: "Fashion Department Store"
   48:
   49:
             ]
           };
   50:
   51:
           this.onRegionChange = this.onRegionChange.bind(this);
   52:
           this.moveMaptoLocation =
   53:
               this.moveMaptoLocation.bind(this);
   54:
   55:
   56:
         onRegionChange(region)
   57:
          this.setState({region});
   58:
   59:
   60:
         moveMaptoLocation(latlng) {
   61:
           this.setState({
   62:
             region: {
   63:
               latitudeDelta: 0.002,
   64:
               longitudeDelta: 0.002,
               ...latlng,
   65:
   66:
   67:
           });
         }
   68:
   69:
   70:
         render() {
   71:
```

<MapView style={styles.map} region={this.state.region} onRegionChange={this.onRegion</pre>

.latlng} image={marker.image} title={marker.title} description={marker.description}/>))}

{this.state.markers.map((marker, i) => (<MapView.Marker key={i} coordinate={marker

72:

73: Change}>

74:

<View style={styles.container}>

```
</MapView>
 75:
 76:
             <View style={styles.container}>
 77:
               {this.state.markers.map((marker, i) => (
 78:
                 <LocationButton key={i}</pre>
 79:
                   moveMaptoLocation={this.moveMaptoLocation}
 80:
                   marker={marker}/>
 81:
               ))}
 82:
             </View>
 83:
           </View>
 84:
         );
       }
 85:
 86: }
 87:
 88: const styles = StyleSheet.create({
 89:
      container: {
 90:
         flex: 1,
         justifyContent: 'center',
 91:
 92:
         alignItems: 'center',
        backgroundColor: '#F5FCFF'
 93:
 94:
       },
 95:
       map: {
 96:
         width: width,
         height: height*2/3
 97:
 98:
 99: });
100:
101: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
1: import React, {Component} from 'react';
    2: import {AppRegistry, StyleSheet, Text, View, Dimensions, TouchableOpacity} from 'react-nativ
e';
    4\colon \mathsf{export} \ \mathsf{default} \ \mathsf{class} \ \mathsf{LocationButton} \ \mathsf{extends} \ \mathsf{Component} \ \{
    5: render(){
    6:
    7:
              <TouchableOpacity style={styles.button} onPress={()=>
    8:
                 this.props.moveMaptoLocation(this.props.marker.latlng)}>
    9:
                <Text>{this.props.marker.title}</Text>
   10:
              </TouchableOpacity>
   11:
            );
   12:
          }
   13: }
   14:
   15: const styles = StyleSheet.create({
   16:
        button:{
   17:
            borderRadius: 10,
   18:
            padding: 10,
   19:
            backgroundColor: 'lightgray',
   20:
           borderColor: 'black',
   21:
            margin: 10
   22:
   23: });
```

```
1: import React, {Component} from 'react';
    2: import {AppRegistry, StyleSheet, Text, View, Dimensions, TouchableOpacity} from 'react-nativ
e';
    4\colon \mathsf{export} \ \mathsf{default} \ \mathsf{class} \ \mathsf{LocationButton} \ \mathsf{extends} \ \mathsf{Component} \ \{
    5: render(){
    6:
    7:
              <TouchableOpacity style={styles.button} onPress={()=>
    8:
                 this.props.moveMaptoLocation(this.props.marker.latlng, this.props.name)}>
    9:
                <Text>{this.props.marker.title}</Text>
   10:
              </TouchableOpacity>
   11:
            );
   12:
          }
   13: }
   14:
   15: const styles = StyleSheet.create({
   16:
        button:{
   17:
            borderRadius: 10,
   18:
            padding: 10,
   19:
            backgroundColor: 'lightgray',
   20:
           borderColor: 'black',
   21:
            margin: 10
   22:
   23: });
```

```
./19_map_travel_smooth.js
                                     Thu Apr 27 10:50:40 2017
                                                                          1
    1: /**
    2: * 19 Map Travel
       * https://github.com/kobkrit/learn-react-native
    3:
    5:
    6:
    7: import React, {Component} from 'react';
    8: import {AppRegistry, StyleSheet, Text, View, Dimensions, TouchableOpacity} from 'react-nativ
e';
    9: var {height, width} = Dimensions.get('window');
   10: import MapView from 'react-native-maps';
   11: import LocationButton from './19_map_travel_locationButton.js';
   12:
   13: export default class 19_map extends Component {
   14:
         constructor(props) {
   15:
           super(props);
   16:
           this.state = {
   17:
             region: {
   18:
               latitude: 13.764884,
   19:
               longitude: 100.538265,
               latitudeDelta: 0.005,
   20:
   21:
               longitudeDelta: 0.005
   22:
             },
   23:
             markers: [
   24:
               {
   25:
                 latlng: {
   26:
                    latitude: 13.764884,
   27:
                    longitude: 100.538265
   28:
   29:
                 image: require('./images/attention.png'),
   30:
                 title: "Victory Monument",
   31:
                 description: "A large military monument in Bangkok, Thailand."
   32:
   33:
                 latlng: {
   34:
                   latitude: 13.763681,
   35:
                   longitude: 100.538125
   36:
   37:
                 image: require('./images/music.png'),
   38:
                 title: "Saxophone Club",
   39:
                 description: "A music pub for saxophone lover"
   40:
   41:
                 latlng: {
   42:
                   latitude: 13.764595,
   43:
                   longitude: 100.537438
   44:
                 image: require('./images/shopping.png'),
   45:
   46:
                 title: "Coco Depertment Store",
   47:
                 description: "Fashion Department Store"
   48:
   49:
             ]
           };
   50:
   51:
           this.onRegionChange = this.onRegionChange.bind(this);
   52:
           this.moveMaptoLocation = this.moveMaptoLocation.bind(this);
   53:
   54:
   55:
         onRegionChange(region) {
   56:
           this.setState({region});
   57:
   58:
   59:
         moveMaptoLocation(latlng) {
   60:
           this.refs.map.animateToRegion({
   61:
             latitudeDelta: 0.002,
   62:
             longitudeDelta: 0.002,
   63:
             ...latlng,
           }, 3000);
   64:
   65:
         }
   66:
   67:
         render()
   68:
           return (
   69:
             <View style={styles.container}>
               <MapView ref="map" style={styles.map} region={this.state.region} onRegionChange={thi</pre>
   70:
s.onRegionChange}>
                  {this.state.markers.map((marker, i) => (<MapView.Marker key={i} coordinate={marker
.latlng} image={marker.image} title={marker.title} description={marker.description}/>))}
```

</MapView>

<View style={styles.container}>

{this.state.markers.map((marker, i) => (

72: 73:

74:

```
75:
                <LocationButton key={i}</pre>
76:
                  moveMaptoLocation={this.moveMaptoLocation}
77:
                  marker={marker}/>
78:
             ))}
79:
           </View>
80:
         </View>
       );
81:
82:
     }
83: }
84:
85: const styles = StyleSheet.create({
86: container: {
87:
       flex: 1,
        justifyContent: 'center',
88:
89:
       alignItems: 'center',
       backgroundColor: '#F5FCFF'
90:
91:
    },
92:
     map: {
93:
      width: width,
94:
      height: height*2/3
95:
96: });
97:
98: AppRegistry.registerComponent('19_map', () => 19_map);
```

```
1: /**
 2: * 19 Map Travel
 3:
    * https://github.com/kobkrit/learn-react-native
 4:
 5:
 6:
 7: import React, {Component} from 'react';
 8: import {
9:
      AppRegistry,
10:
     StyleSheet,
11:
     Text,
12:
     View,
13:
     Dimensions,
14:
     TouchableOpacity
15: } from 'react-native';
16: var {height, width} = Dimensions.get('window');
17: import MapView from 'react-native-maps';
18: import LocationButton from './19_map_travel_locationButton_opencallout.js';
19:
20: export default class 19_map extends Component {
21:
     constructor(props) {
22:
        super(props);
23:
        this.state = {
24:
          region: {
25:
            latitude: 13.764884,
26:
            longitude: 100.538265,
27:
            latitudeDelta: 0.005,
28:
            longitudeDelta: 0.005
29:
          },
30:
          markers: [
31:
           {
32:
              latlng: {
33:
                latitude: 13.764884.
34:
                longitude: 100.538265
35:
              },
              image: require('./images/attention.png'),
36:
              title: "Victory Monument",
37:
38:
              description: "A large military monument in Bangkok, Thailand."
39:
40:
              latlng: {
41:
                latitude: 13.763681,
                longitude: 100.538125
42:
43:
44:
              image: require('./images/music.png'),
45:
              title: "Saxophone Club",
              description: "A music pub for saxophone lover"
46:
47:
            }, {
48:
              latlng: {
49:
                latitude: 13.764595,
50:
                longitude: 100.537438
51:
52:
              image: require('./images/shopping.png'),
53:
              title: "Coco Depertment Store",
54:
              description: "Fashion Department Store"
55:
56:
          ]
57:
        };
58:
        this.onRegionChange = this.onRegionChange.bind(this);
59:
        this.moveMaptoLocation = this.moveMaptoLocation.bind(this);
60:
61:
62:
      onRegionChange(region) {
63:
        this.setState({region});
64:
65:
66:
      moveMaptoLocation(latlng, key) {
67:
        this.refs.map.animateToRegion({
68:
          latitudeDelta: 0.002,
69:
          longitudeDelta: 0.002,
70:
          ...latlng
71:
        }, 1000);
72:
        setTimeout(() => {
73:
          console.log(this.refs, key);
74:
          this.refs[key].showCallout();
        }, 1500);
75:
      }
76:
77:
```

99:

100:

101:

102: } 103: }); 104:

map: {

width: width,

height: height*2 / 3

105: AppRegistry.registerComponent('19_map', () => 19_map);