

# REACT NATIVE BASICS CHEAT SHEET

Learn the basics of creating an app using React Native.

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## Basic Component Structure

```
// Importing basic components
import React, {useState, useEffect} from 'react';
import { View, Text, StyleSheet } from 'react-native';
import MyCustomComponent from './MyFolder/CustomComponentFile';

const myApp = () => {
  return (
    <View style={styles.myViewStyle}>
      <Text style={styles.myText}>Hello World</Text>
    </View>
  );
};

const styles = StyleSheet.create({
  body: {
    flex: 1,
    alignItems: 'center',
    justifyContent: 'center',
  },
  myText: {
    color: '#aaaaff',
    fontSize: 20,
  },
});

export default myApp;
```

## List Components

Component	Description
<ScrollView>	Makes a list of components scroll-able. Renders all components at once (performance may drops on very long lists).
<FlatList>	Makes a list of scrollable components. Render components lazily.
<SectionList>	Like a FlatList, but you can make sections.

## Basic Components

Component	Description	Props
<Button>	Simple button. Don't forget it's title.	title [str] onPress [func] color [str]
<Text>	Displays text.	
<TextInput>	Allows users to input text using keyboard.	onChange [func] value [str] placeholder [str] maxLength [num] multiline [bool]
<Image>	Displays image.	resizeMode [str] source [str]
<ImageBackground>	Displays an image in background (under all its childs elements). Same props of <Image>.	
<View>	Container to create layouts. Think it like a <div> in HTML.	

PS: Some components doesn't need to have a closing tag, you can close it using <Component/>. Not all props are listed here; the 'style' prop for example, is common to almost all components.

## Touchable Components (custom buttons)

Component	Description
<TouchableWithoutFeedback>	Makes its childs touchable (pressable), but without any visual feedback.
<TouchableHighlight>	Same as above, but decreases opacity to show na underlay color. Props: <i>activeOpacity [num]</i> , <i>underlayColor[str]</i> .
<TouchableOpacity>	Opacity decreases and can be controlled by an <Animated.View>.
<Pressable>	Makes its child pressable, and handle many stages of press interactions.

Use onPress [func] in any of these to handle interactions. <Pressable> can handle too: *onHoverIn*, *onHoverOut*, *onLongPress*, *onPressIn* and *onPressOut*.

## useState Hook

```
const myApp = () => {
  const [myName, setMyName] = useState("foo");
  setMyName(myName + " bar"); // myName changed to "foo bar"
  // now you can use it like <Text>{myName}</Text>
  // use whatever you like (string, number, object, boolean, etc)
  const [page, setPage] = useState({id: 1, title: "Home"});
}
```

## useEffect Hook

```
// Second param is dependencies array. Leave it empty to make
// it call only once. If you omit this parameter, the hook will run
// every re-render of the component.
useEffect(() => {
  // Do stuff
  conn.login();
  return () => {
    // Runs whenever this environment is deleted.
    conn.logout();
  }
}, []); // [myName] will make it run every time myName changes.
```

## Example displaying lists

```
const dataArray = [
  {id: 1, text: 'First' },
  {id: 2, text: 'Second' },
  {id: 3, text: 'Third' }, ];

<ScrollView> {
  dataArray.map((i) => {
    return ( <View key={i.id}> <Text>{i.text}</Text> </View> )
  })
}</ScrollView>

<FlatList
  // SectionList uses sections = { dataArray }
  data = { dataArray }
  keyExtractor = { (item, index) => index.toString() }
  // SectionList uses renderSectionHeader too
  renderItem = { ({item}) => <Text>{item.text}</Text> }
  refreshControl = {
    <RefreshControl refreshing={isRefreshing} onRefresh={handleFunc} />
  }
}/>
```

## Basic StyleSheet Syntax

```
import { StyleSheet } from 'react-native'; // don't forget to include

const styles = StyleSheet.create({
  myText: {
    color: '#00f',
    fontFamily: 'Helvetica',
    fontStyle: 'italic',
    fontWeight: 'bold',
    letterSpacing: 4,
    textAlign: ['center', 'auto', 'left', 'right', 'justify'(only iOS)],
    textTransform: ['uppercase', 'lowercase', 'capitalize'],
    // see too: textShadow[Color|Offset|Radius]
    // see textDecoration[Line|Color|Style]
  },
  myView: {
    backgroundColor: '#0f0',
    flex: 1,
    flexDirection: 'column', // row, [row|column]-reverse
    margin: 10,
    padding: 10,
    width: 50, // (see [min|max]Width)
    height: "90%", // (see [min|max]Height)
    alignItems: ['center', 'flex-[start|end]', 'stretch', 'baseline'],
    // flex-[start|end], space-[between|around|evenly]
    justifyContent: 'center',
    overflow: ['hidden', 'visible', 'scroll'],
    position: ['absolute', 'relative'],
    top: 150, // used with position: 'absolute'
    right: "100", // used with position: 'absolute'
  },
  myImage: {
    opacity: 90,
    resizeMode: ['stretch', 'cover', 'contain', 'repeat', 'center'],
    // see too: border[Color|Radius],
  }
});
```

PS: not all properties are listed here, only the most important. Take only one value from styles with arrays.